MITI'S INDUSTRIAL POLICY AND JAPANESE INDUSTRIAL ORGANIZATION

—A Retrospective Evaluation—

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MANY PEOPLE believe that the Ministry of International Trade and Industry (MITI) should be relegated to infamy, others contend that MITI uses its "administrative guidance" (*gyōsei shidō*) in a constant attempt to emasculate anti-trust legislation. Still others say that MITI is in cahoots with financial and business leaders to put Japanese industry into blocked off, closely linked, vertically organized groupings. For those who have received their training in the modern economics (price theory, industrial organization, etc.) developed particularly in the postwar United States, the actions of the ministry are considered repugnant. Students of economics such as these are likely to decry Japanese industry and its organization, feeling that its entire direction is away from the spirit of the anti-monopoly laws.

Despite these disclaimers, Japan's economy has progressed in the post–World War II years in a way that makes foreign observers stand gaping in awe. One of things achieved is that in terms of value added per employee big corporations in the growing industries, steel, automobiles, electrical machines, and petrochemicals have reached about the same level as their counterparts in America and two or three times as high as those in Europe. Another is that the export/production ratio in major industries has continued to climb. For example, the passenger car export ratio was 4.2 per cent in 1960 but went up to 40.0 per cent by 1975. The export ratio for steel climbed from 11.4 per cent in 1960 to 30.3 per cent in 1975. In addition to these increases, there was a rapid growth in foreign investment from $159 million in 1965 to $3,280 million in 1975. This more than twenty-fold increase signals a new era in the internationalization of the Japanese enterprises.

Some people observe that these achievements have come from the vitality and agressiveness of individual corporations, and they have no relation either to industrial organization or to MITI's policy. However, many foreign critics assume Japan's industrial organization is rigidly controlled from the top by MITI; then, it would have been impossible to have the kind of performance that the economy has displayed. If not impossible, then the entire situation would be a mystery. In order to give a better idea of what has been going on, it will be necessary to look into the question of whether or not calling the Japanese economic framework "Japan, Incorporated" is justified.

A. *The Image of the Japan, Inc.*

The economy of Japan would have to be considered very group-oriented in contrast to the model of individually oriented economy and society where free competition between economic units precludes groups like Mitsubishi and Mitsui, and the existence of business hierarchy and subcontractor networks. With the premises of modern economics, many people believe that the Japanese economy is far from the ideal of pure competition. The impression that Japanese industry is comprised of horizontal and vertical strata of business groups and subcontractors with MITI standing at the top of it all is strong among foreign observers, who feel rather uneasy when they see the kind of exceptional growth that has been achieved. There are probably also a number of people who feel that growth will have to decline because of the factors completely different from worsening environment or inflation. For the people holding the customary schema of equilibrium theory, the Japanese economy appears to be a preposterous aberration from the state of optimum resource allocation.

The publication of the 1972 U.S. Department of Commerce Report, *Japan: The Government-Business Relationship* [4] swept this odd image of the economy out of the door. The report says that there is no giant group conspiracy between business and government as its many harsh detractors of Japan, Inc. would have us believe. According to the report, "Japan, Incorporated is not a monolithic system in which government leads and business follows blindly," but there is cooperative interaction between government and business. "What makes government-business interaction in Japan different from what takes place in other countries is the extent and the scale of such interaction and a qualitative difference, a style peculiar to the Japanese, derived from Japan's history and culture with its emphasis on the consensual approach, a tradition of government leadership in industrial development, and a generally shared desire to advance the interest of the Japanese nation." In sum, the report says "interaction between government and business is pervasive in the Japanese economy but not all-encompassing. The managers of Japan, Incorporated focus their attention mainly on the growth sectors of the Japanese economy."

During times that I participated in the Council on Industrial Structure as a public member of the Steel Industry Investment Coordination Committee, neither I nor other members ever had the feeling that MITI was forcing its will on the proceeding of that council. Rather than imposing its desires on the council, MITI was conspicuous in its position as arbitrator between, for example, Kawasaki Steel and Sumitomo Metal who at that time were very dissatisfied and trying to pressure events, and Yawata and Fuji Steel who were on the defensive.

But there may be instances, besides this particular case, where MITI's intervention was unilateral, causing harm, but this of course, depends on the interpretation. MITI's intervention may have been too extreme when it was involved in legislation on the Special Industry Promotion Bill defeated in the Diet during the early sixties. However, looking at the situation from a more realistic viewpoint and in light of the actual performances obtained shows that MITI has gone to great lengths to confer with industry, and with this feedback, it sets guidelines to strengthen the growth posture of important industries. Nevertheless, some students of industrial organization believe that MITI unilaterally forces its decisions on industry, with industry finding it difficult to change those decisions and just having to accept them.

In coordinating investment in the steel industry, it has been much more effective to have the negotiations mediated, leading to a great deal less redundant equipment than if investment were made by a disunified approach. Moreover, companies can then attempt an enormous amount of investment needed, without worrying about future risks so much, since they are assured that MITI will step in if difficulties arise.

Steel is a highly capital-intensive industry. In the Fuji-Yawata merger of 1970, the tangible fixed assets (excluding construction in process) outstanding in major industries were as follows:

	Number of Companies	¥ billion
Steel	6	3,431
Automobile	6	1,231
Petrochemical	5	848
Heavy electric	9	834
Synthetic fiber	6	773
Oil refining	6	501
Machine tool	8	58

Steel stands out conspicuously among these major industries. After the first part of the 1970s, technological innovation made necessary increases in equipment size, such as, for example, an increased blast furnace capacity of 3,000 to 5,000 cubic meters. Rather than having every company strain in competition for fixed investment and being beset by risks of overcapacity, industry leaders felt it better to have MITI act as mediator. The possibilities for steady, and yet fast, industrial growth were considered much better with occasional reliance upon MITI's coordination.

A major problem is that Japanese industrial society has a structure which makes it difficult to quickly disassemble into small atomistic firms. Given such a situation, progress would be rather difficult if MITI's industrial policy was allowed to fall behind. I am convinced that the unprecedented economic growth of the postwar period would not have been possible without the group-oriented psychology and social structure unique to Japan. This conviction may seem too farfetched for those totally inured in the thinking of modern economics since they would require a much more static situation with more atomistic industrial organization.

At this point in time though, the issue is totally a thing of the past and the historically accepted target of industrial policy based on supremacy in export and growthmanship is now something which must be relegated to antiquity. However, the important role that MITI policy played has not been adequately emphasized.

In Japan with only a partially developed economy, a late starter on the road to industrialization, the general consensus was to obtain economically advanced status as quickly as possible. To reach this goal, it was necessary for the government to take the lead in guidance and direction. It was often necessary for the government be the mediator to placate vital and active firms in the private sector. It was no mistake that government provided supportive industrial measures for those businesses with comparatively higher income elasticity and with relatively higher speed in technical progress.

Now that developed economic status has been attained, however, drastic policy transformation had to be attempted. MITI's change was already apparent from about 1970.

B. *A Peculiarity of Japanese Industrial Organization—Monopsonistic Aspect*

The peculiar characteristics of industrial structure, part of the substructure of Japan, Inc., should be examined. In order to do this, a look has to be taken at the internal organization of individual industries; an entire range of facets must be studied, such as concentration and dispersion, oligopoly and competition, entry barriers, pricing and profit structure, cartels, subcontractors, affiliate networks, business groups, and distribution network. In current research on industrial organization in Japan, too much emphasis has been placed on seller's monopoly, and buyer's monopoly (monopsony) as unique characteristics of the business hierarchy or subcontracting has rather been disregarded. It is considered that enterprises are linked in this monopsony network as hierarchical relations between big corporations and subcontractors under them. When Toyota orders auto parts from parts producers in its affiliated network, there is one buyer and several sellers, a situation that establishes a buyer's monopoly. When Toray supplies thread to weavers in its network, it also has these companies weave the yarn into cloth and pays them weaving and processing fees. Such actions establish a relationship between one buyer and several sellers. Of course, on occasion, this develops into a buyer's oligopoly, and it is possible that the relationship will weaken when the subcontractors expand their sales channels and go outside the network.

It is quite evident that the prevailing system of subcontracting created through buyer's monopolies is a strikingly unique part of Japanese industrial organization. However, in the recent analyses by Japanese economists of their industrial organization emulated from abroad, the focus is mostly on seller's monopoly or oligopoly exactly as with the analyses in the United States. Only in special cases are medium and small enterprises ever considered among the Japanese analysts of industrial organization, and this is an unthinkable oversight. In their research on industrial organization, they never studied small and medium size enterprises from the angle of monopsony, rarely citing extensive literature on Japanese small and medium firms. Of course, the theories of industrial organization often take into account business groups (like Mitsui and Mitsubishi), an issue recently taken up by the Fair Trade Commission. Generally speaking, when American industrial organization analyses are applied by Japanese modern economists, they tend to forget that allowances have to be made for the uniqueness of Japan's industrial society. Thus, a simplistic imitation of American theory is evident in their analyses. However, only recently, we had a few exceptions. Among the works recently published are *Kasen-taisei to chūshō-kigyō* [Oligopoly systems and small and medium enterprises] by Yoshio Satō [2], and "Kaite-kōzō to shijō-seika" [Monopsonistic structure and market performance] by M. Baba, Y. Kusuda, R. Fukubayashi, and H. Yokokura [1].

C. *Loose Structure of Business Groups*

There have been a lot of discussions about business groups such as Mitsui, Mitsubishi, Sumitomo, and Fuyō that the corporations in each of these groups are considered to have a very high degree of interdependence in terms of mutual stock holdings and consequent high level of linkage. For instance, it is said that the rate of mutually held stocks in the Mitsubishi group was 27 per cent in 1974. However, this means the percentage of "total" stock shares of Mitsubishi companies that are held by others in the same group. An examination of the percentage of stocks held on a firm-to-firm basis shows that control is not as high as it first seems. Mitsubishi Shōji, for example, holds only 2.4 per cent of the shares of Mitsubishi Heavy Industries, 2.0 per cent of Mitsubishi Rayon, and 1.7 per cent of Mitsubishi Electric. This same situation holds for all business groups. In addition, the level of linkage within each group is not as high as the 27 per cent for Mitsubishi would suggest. Since each individual firm has only from 2 to 5 per cent of any of the other's stock, the linkage is really rather loose.

Fuji Bank, a member of the Fuyō group, is another good example. Fuji Bank does not do all financing for the Fuyō group as Hilferding's *Das Finanzkapital* suggests. In 1960, the greatest loan by Fuji Bank went to Marubeni, but in 1975 this position was held by Mitsui Bussan which does not belong to the Fuyō group. In addition, loans to companies outside the Fuyō group such as Nissan Auto, Tōa Fuel, and Nippon Steel have rapidly increased. The information on all business groups shows that the financing system is exceedingly flexible and it has changed along with unbalanced industrial and technological development. It also clearly shows that linkage within each business group is loose.

The claim is often made that each group takes unified control over any new industry in its ranks and that group banks give priority in financing their fellow companies; thus, the tendency to compete between business groups financially supported by the group network is often pointed out. But there is actually much greater flexibility than this, and the links of the groups are loose enough so that each company can display great "capacity to transform" by itself. Thus, the structure of the Japanese business group is not rigid. As aforementioned, there is flexibility in the superstructure of Japan, Inc. and there is always continual feedback between MITI and industry. The substructure, business groups, has even greater flexibility, providing a cushion against rapid change in the economy.

D. *Relative Rigidity in Vertical Networks*

Large firms in the groups—such as Mitsubishi Heavy Industries or Mitsubishi

Shōji—have a great number of affiliated firms tied to them in vertical hierarchy. According to a 1975 survey by Tōyō Keizai Shimpōsha (Oriental Economist Co.), the share of the number of affiliates, more than 70 per cent of whose stocks are owned by the parent company, are as follows: Mitsubishi Heavy Industries, 65 per cent; Nippon Electric, 49 per cent; Shōwa Denkō, 50 per cent; Toray, 43 per cent; and Mitsui Bussan, 75 per cent. For twenty large firms chosen at random, the average became 62.9 per cent. This is an excellent evidence for the argument that ties are extremely strong between large companies and their affiliates. When the secondary and tertiary networks underpinning the affiliates and subcontracting are considered, there is a strong orientation toward buyer's monopoly or monopsony, an important characteristic probably unique to the Japanese industrial organization.

In my opinion, the coexistence of flexibility and rigidity in the industrial organization offers a number of advantages. For one thing, the flexible structure of business groups provides a cushion in the rapid economic growth process. Although there may be some harmful effects in the rigid structure of affiliates, the situation differs from that of prewar affiliates and subcontractors, for they now receive technical assistance as well as assistance in sales channels and financing by receiving technicians and managers transferred from the parent firm. Moreover, through specialized concentration on certain areas of production, the affiliate derives cost reduction due to mass production and there is greater efficiency in the specialized arrangements in sales and other areas. A first glance might lead to the conclusion that this organizational rigidity is a cause of paralysis in competition. However, the system promotes competition in various areas such as technology, pricing, and sales routes with other firms in other business group's vertical network.

The subcontractors of the prewar period were merely mechanisms through which they were exploited by the parent company. Undeniably, some of this flavor remains in the present vertical network, but the point still remains that direct linkage with the parent company and the consequent division of labor promotes efficiency.

There are those who contend that this combination of rigidity and flexibility worked to hinder growth, but in my opinion the ingeniousness of the system played an important role in providing a base to accelerate economic growth. The Japanese postwar economy's record of higher growth rates than in any other country, a record that lasted for almost thirty years, was achieved by offering a type of economic development quite different from the static, atomistic variety prevalent in modern economic theory. Success was achieved by harnessing the economy to a dynamic combination of flexibility and rigidity. A situation creating an atomistic dissolution of the system would have meant the loss of dynamism. This system was of course not developed out of direct planning but came about naturally, spontaneously, giving a structure appropriate to high growth. A totally rigid system is a barrier to growth as the experience of the socialist nations suggests. This unique system of combining rigidity and flexibility was very effective and successful.

There is another point to be considered in regard to this kind of industrial organization and that is, in spite of the fact that, in comparison to the prewar period, there has been a much lower degree of exploitation in the vertical networks by means of monopsony, some exploitation, of course, still remains. According to a 1973 study by the Fair Trade Commission, 985 cartels were exempt from the stipulations of the fair trade and anti-monopoly laws, and 607, almost two-thirds, were cartels comprised of small and medium-sized firms. The utmost effort should be made to eliminate large firm cartels and ensure that they have to compete in a truly fair manner, but reservations have to be made for small and medium-sized firms. Cartels created by these smaller companies work to strengthen "countervailing power" vis-à-vis the large corporations and this is even more so when those small companies are tied by buyer's monopoly into vertical networks. Abolitions of these cartels would be cause for the restoration of what Joan Robinson calls monopsonistic exploitation.

There is a general tendency to assume that cartels are bad, not taking into consideration whether these cartels are composed of large companies or smaller ones. In an industrial organization where vertical networks are ubiquitous, it is doubtful that abolition of cartels would stimulate active competition as many people believe. If they were done away with, firms organized in vertical networks on the basis of monopsony would be confronted with excess competition rather than the ideal of pure free competition that advocates of total abolition envisage. There are quite a number of people caught in this trap of thinking, most outstanding among them being the Japanese industrial organization scholars.

E. *General Trading Companies and Industry*

Between 1960 and 1973, 49.9 per cent of Japan's exports and 62.8 per cent of imports were handled by the ten largest trading companies. These traders are responsible for more than 40 per cent of overseas investment including that in which they are actively engaged as partners. Japan's general trading companies are unique, they have tele-communication equipments and intelligence gathering networks that rival anything the CIA or Pentagon can come up with, enormous marketing strength in international markets, ability to procure massive capital at home and abroad, and excellent organizational capability as demonstrated in the way that they have mobilized many manufacturers to enter overseas markets. The general trading companies have been the focus of a great deal of attention in other nations.

These trading companies have played an invaluable role in import, export, and overseas investment, and in their methods of operation lies one of the secrets of Japan's high export growth. Manufacturing firms have made major contributions to progress in "hardware" technology, but to move into overseas markets most of them neither have the international experience nor affluent fund to effectively manage sales. The arrangement in which manufacturers give their undivided attention to technological advancement in their field while the traders concentrate on know-how and "software" technology of overseas sales is an excellent demonstration of economy of scale. The trading company is very important to Japanese industry.

Moreover, the general trading company does not exist in other advanced countries, so it is not too much to say that in Japan the trading companies are in "comparative advantage," thus making possible the persistence of higher rate of export growth than those in other countries. In other words, the general trading companies are one of the mainsprings of Japan's export acceleration, by utilizing highly organized "soft" technology and scale merits in exceedingly dynamic fashion.

However, with the 1975 Fair Trade Commission report and the imbroglio of Lockheed and other scandalous events, the trading company is now the subject of intense criticism. Whatever the position taken one would have to consider the trading companies conglomerate position, and give close scrutiny to the way that these companies exercise their influence and control over affiliated firms whether it be through stockholdings, finance, or allocation of personnel.

The FTC report has not been influenced by the argument that the general trading companies are indispensable to the expansion of Japanese business, because it takes the position that similar organizations do not exist in the United States, Great Britain, or West Germany. However, the report's understanding of the facts is quite misleading. If Japan were satisfied with the growth rate of other industrialized nations, then the trading company would have been unnecessary. If the high growth rate of exports was indispensable to the Japanese economy in the past, then the trading companies were likewise indispensable as an integral part of the growth structure.

The importance of their role in Japanese business cannot be ignored. If these large trading companies are disbanded, the effects on the economy can only be imagined for the manufacturers would be faced with tremendous problems in expanding international sales without the needed experience.

Two unique characteristics distinguishing Japanese industrial society are vertical networks developed from monopsony and the expansion of overseas trade by trading companies. There are, of course, harmful effects from these two elements which have been more than adequately discussed elsewhere. I feel that the important thing here is to point out the inadequacies of certain recent theories which are premised on maximizing "static" efficiency and totally disregard the "dynamic" efficiency with which the economy has mobilized itself. However, these theorists would spend their time more profitably if they directly compared the merits and demerits of industrial organization in France and the United States with that of Japan. This would certainly bear something more fruitful than what has so far been given us.

F. *Industrial Policy and Large-Scale Mergers*

An evaluation has to be made here of MITI's industrial policy, something which is looked on unfavorably by the vast body of Japanese economists. These scholars seem to think that saying anything favorable about MITI would hurt them professionally, and for that reason alone, they seem to oppose. One has said that "industrial policy means MITI's policy" and in Japan industrial policy has always at least partially meant this. My opinion has for a long time been in the minority, that evaluates MITI's industrial policy.

The MITI's 1970 recommendation that Fuji Steel and Yawata Steel merge is a case in point. After the merger, the new company "Nippon Steel" was to control 36 per cent of the production volume. Several criticisms of the merger were made: one that MITI was emasculating the anti-monopoly laws and aiding industry to make profit, another that the merger would restrict competition and further solidify oligopolistic pricing. The social influence of the merger was also another problem. However, I discussed that, on conditions that both investment co-ordination through the mediation of MITI and the "open sales system" be abolished, the merger should be realized.

At the time, a questionnaire was sent to 100 economists asking whether or not the merger would result in the economy of scale. Two replied that the effects would be very great indeed, thirty-six said that there would emerge some economies of scale but they would not be of very great size, forty-five stated that there would be no benefit and efficiency would drop, and seven replied in the "other" category. Since I was one of the two who selected the first category, my opinion was decidedly in the minority.

In 1970, the year of the merger, Nippon Steel's ratio of technology export to import was 2.54, but by 1974 it had increased to an amazing 20.33. The expansion of research personnel and facilities resulted immediately from the merger. In 1973, the number of employees in research departments was 2,767 or 35 out of every 1,000 employees. The rate in the steel industry as a whole was not greater than 10 in every 1,000. The number of patent applications almost doubled from 1970 to 1973: from 1,061 to 2,090. It is now generally accepted that no other firm in the industry can match Nippon Steel's technological level and progress.

Due to the merger, the Ōita Mill in Kyūshū was able to go on full "continuous casting." The usual process of revolving furnace, ingot, blooming, and slab was shortened by eliminating the intermediate ingot and blooming step. There are several advantages with complete continuous casting; 20 per cent reduction of equipment costs, improvement of slab/hot metal ratio, reduction of per unit energy requirements by one-third, and 20 per cent labor saving. There are limitations, however, to the types of steel that can be produced by the continuous casting process (killed steel). Moreover, the company is obliged to flexibly adapt to the customer orders on type and size. Therefore, the operation of a steel mill entirely under the continuous casting, the annual production of which is 4 million tons as in the case of the Ōita Mill, is only possible just when the company as a whole can assure the annual production of about 40 million tons, as is the case of Nippon Steel. Nippon Steel did this because of its size and the size enabled it to achieve an advanced position. No other firm was able to manage a complete continuous casting plant. Because corporate scale was increased by the merger, the Ōita Mill was able to fully operate the continuous casting process.

Plant input capacity increases to a great extent if a larger volume is produced as concerned smaller items. The seven plants of Yawata and Fuji had a total number of 221 rolling molds for section steel but this dropped to 134 after the merger, because of the coordination of sizes. This raised monthly production capacity for large-scale mills in Sakai and Hirohata respectively by 20,000 tons (before the merger each mill produced 80,000–90,000 tons a month). Thus, change in composition of input alone had the same effect as building a new rolling mill with a monthly 40,000 ton capacity. All effects of the merger cannot be listed here, but improved financial position is one of the most important. Prior to the merger, Fuji and Yawata's financial condition was worse than either Sumitomo Metal or Kawasaki Steel, but after the merger Nippon Steel's position was better.

At any rate, a splendid blow was dealt to the predictions of the vast majority of economists, those who said that the merger would cause technology to stagnate. The MITI's industrial policy of larger-scale merger was a success, one with very satisfactory results. Beginning in 1970 and lasting until quite recently, there has been a dramatic increase in the size of blast furnace from 3,000 to 5,000 cubic meters, concomitant with developments in steel producing equipments, such as strip, rolling, and continuous casting mills. This process of expansion may, though, stop in the near future. However, the generally held notion of economists at that time that "big does not mean good" was totally mistaken in view of the trends in Japanese steel technology, as far as the performances for the past several years are concerned. The idea that the concepts of a stagnant American steel industry could be applied without any modification to the dynamic Japanese steel industry was sadly mistaken.

G. *Nurture of Infant Industries*

Since steel's international competitiveness was amply demonstrated even before the merger, MITI's aim of making steel firms internationally competitive seems rather odd.

However, MITI's overall postwar industrial policy should now be traced back from another viewpoint that it was quite effective in nurturing infant industries. MITI adopted measures such as administrative guidance, import restriction, coordination of investment in plant and equipment, merger and other methods of production consolidation, approval of cartels, postponing of liberalization of direct investment from outside, tax incentives for leading industries, low interest loans, and other measures. Because of these measures, steel and automobile industries, for example, have now acquired a leading world position, whose international competitiveness had not been high at the time when their products' prices in the world market were relatively expensive.

After the Trade Liberalization Plan was agreed upon in 1960, the rate of trade liberalization was raised from 44 per cent of October 1960, to 93 per cent in October 1964. In October 1965, import of passenger cars was liberalized. However, import restrictions were still in effect on eighty items in January 1971, and by April 1975 this figure had dropped to thirty (seven in mining and manufacturing and twenty-three in agriculture). With the conclusion of the Kennedy Rounds in 1972, Japan's tariff rate was lowered to around 6 per cent. In the first half of 1968, the tariff rate for small passenger cars was 40 per cent, but it has been 6.4 per cent since November 1972.

A number of additional steps have been taken in capital liberalization since the first major one in July 1967. The fifth was in May 1973, bringing about a 100 per cent liberalization, at least in principle. There are, however, some industries which have been granted some extensions and several industries that are exempt and required approval such as agriculture, fishing, oil, and leather goods and manufacturing. Also, in the mining industry, liberalization is only 50 per cent.

Japan's move to liberalize trade and direct investment was, however, somewhat behind other developed nations. MITI's industrial policy is, in this sense, protectionist ostensibly aimed at protecting infant industry. Although the line that Japan followed seems similar to that taken by contemporary developing nations, in actuality it was different. In the developing nations, capital and technology were scarce and restrictions on their inflow were rather loosened to let capital and technology flow in, but, after that, objectives of "indigenization" of capital and staff were introduced. Japan, on the other hand, did not take the first major steps toward liberalization until it reached a point where domestic firms became sufficiently competitive, by developing and introducing the majority of required capital and technology by their own efforts. In that sense the purposes of the policy were preventive rather than protective towards foreign capital incursion. Viewed with the advantage of hindsight, Japanese firms did have the capability to meet those goals.

There are two characteristics peculiar to the MITI's policy for infant industry. First is that even if nurturing measures were taken, they did not work for the indefinite continuation of rigid, close relationships between government and industry. Second, these nurturing measures covered almost all modern industries under MITI's jurisdiction, although with differences according to relative importance. Strengthening the international competitive stance was a goal not limited to a few designated industries.

One reason for opposition to these measures was the fear that their continuation would lead to an all too close relationship between government and industry as clearly expressed in a discussion on a newspaper between F. A. Hayek and Saburō Ōkita published in 1973. Hayek stated that he was opposed to protective measures for infant industries, because once adopted, they tend to become permanent due to the extremely close affiliation developed between government and business. Yet, he added that he would have to change his thinking if Japan actually abolished the protective measures after some years of nurturing period and relied thereafter on competition alone, for it would be the first time in history that this had been done.

In general, the nurturing of infant industries is limited to a certain period of time and to a certain number of industries. In Japan, however, these measures were across the board and applied to almost all industries. This Japanese-type view on infant industry may not be admissible from the generally accepted premises of international economics, for one of its fundamental concepts is international division of labor through free trade. Because of the vastly extended promotion of infant industries and across the board encouragement of exports, the MITI's approach ran counter to the basic principles of modern international economics.

Some might think this overall nurturing of infant industries impossible without a strong centralized system of protection, but the MITI's method of strengthening international competitiveness is not very high-handed. What were the conditions provided and the background that made this promotion of infant industries succeed, and why was it successful throughout the entire range of modern industry? Was this just a matter of luck or did it result from the workings of an economic system which can be clearly explained?

One of the important features of this development was the maintenance of an exchange rate of ¥360 to the dollar. As I have mentioned on several other occasions [3], this undervalued exchange rate made it possible to sustain persistently the high rate of growth in export over the long postwar years. Here, I do not use the term "undervalued" as one that keep international payments in the black, according to the "balance of payments" criteria. Rather, I would use the term according to "purchasing power parity," or commodity price ratio for two countries. It was this ratio that operated to increase exports more than what it could have done in some other countries. At the time the ¥360 exchange rate was set up, it would probably have been difficult to achieve an equilibrium in international balance of payments, but with the normalization of the world economy, and with Japanese industries reaching a situation where they could have a large network of foreign branches, the potential for excess in exports grew larger. Then, the Japanese economy did not absorb the excess by accumulating foreign exchange reserves; it was more prudent to absorb them through continuing the high domestic expansion. The rapid growth in exports rebounded, turning into a boom in domestic investment, and this boom then worked to create a boom in export by decreasing unit costs. Thus a "virtuous" circle was created between investment and exports. The MITI's industrial policy might not have succeeded in another country, but its feasibility in Japan, with the undervalued exchange rate, is one of the secrets of the nation's phenomenal economic growth.

Another point is that a resulting export expansion, together with a parallel expansion of "domestic market," has accelerated mass production and lowered unit costs, leading to a greater export competitive power. Until the labor shortage trend appeared, there was no fear that this would stimulate inflation.

The MITI's approach of "administrative guidance," continually looking for feedback from dialogues through deliberative councils and other forums, has not used forceful unilateral action. By means of this approach, beginning in the 1960s, Japan's major growing industries have increased their dependency on export. This was shown in the fact that the industrial community, acting on MITI's policy, was capable to have a growth pattern which consisted of virtuous circle between investment and exports. Their desire to expand in both export and investment directions was exceedingly strong.

H. *The Lesson of Japanese Industrial Policy*

One reason why industrialization by means of import substitution has not been successful in many developing countries is that it only worked to intensify the dual structure of the domestic economy. It neither raised the level of indigenous industries having played major role in the economy nor improved the general standard of living. Another reason is that even with the introduction of modern industry, industrialization by import substitution was not necessarily directly connected with export promotion and the products of new industries created were still relatively expensive in comparison with international price levels. This only contributed to worsened balance of payments problems.

Japan was able to effectively connect import substitution over time by introducing foreign technology with export promotion. This was due, first to the fact that private industry had a high degree of capability and vitality. It was also due to the fact that MITI created a good environment in which these private firms could demonstrate those capabilities to the highest. Import restriction and postponement of capital liberalization provided a preparatory period in which firms could strengthen their competitive position through technological advance and other means. By the time the first steps were taken for capital liberalization, the Japanese corporation became strong enough that it was of little concern to them. The fact that MITI's liberalization program came too late is something which has been thoroughly discussed both in Japan and abroad. However, when a country starting late on the path to development has a strong desire to catch up with industrialized nations, I do not feel that a delay of this order is something to be rued. On the contrary, I believe that such nations have every right to do so in the early or intermediate stages of development. Moreover, after the levels of the other industrialized nations were reached, Japan admirably went through with its measures for liberalization. The U.S. Department of Commerce report called MITI's policy less of a whip than a carrot, saying that the policy functioned more through exchange of opinion than through issuance of orders. MITI's administrative guidance, its persuasion structured on dialogues with the business community in order to arrive at consensus, combined with firmness in subcontracting networks, is characteristic to the traits of Japanese industrial organization.

In addition to the economic conditions already mentioned, Japanese societal structure and national character are such that consensus is easily reached and cooperation is a hallmark of behavior. These psychological aspects have played an important role in making MITI's policy succeed. Because of these features, I do not believe that the same policy could be used in all countries. But, at the same time, one should not consider them useless for those nations with a fervent desire to catch up with the industrialized group. Many economists, totally weighed down by modern economic theory, believe that decentralized political systems and democratic economic policy should be applicable to all developing nations. I strongly disagree with any such notion. Because of population growth rates of 3 or 4 per cent and crippling political corruption, many of the developing nations are destined to slide further into the abyss of poverty. In such a situation, it would be far more desirable to have the disorder and chaos cleared away by a strong government which would pave the way for stable development. To urge decentralized governmental forms on such nations is equivalent to ignoring their plight, or even to making it worse.

When I was a student in the United States in 1955, there was an economist belonging to the Mont Pelerin Society, who urged the developing countries to establish strong, authoritative governments. A liberal economist as he was, this made a deep impression on me. I do not want to give an unfair impression of what his concepts were, for undoubtedly he did not wish some military dictatorship on the emerging nations, but he was talking about the creation of institutions for development that are mandatory to progress in these nations. Even if the policies derived from theoretical systems dealing with atomistic competition have been temporarily beneficial to countries in achieving a high economic standard, this does not mean that the same thing will have a validity in the emerging nations. On the contrary, direct application may cause great harm. In this sense, then, Japan's postwar road to industrial development is heretical compared to that of other advanced nations. But this experience does offer a lesson to the developing nations that are eager for economic progress. At the present time, several of the Southeast Asian nations have established boards of investment to coordinate and allocate the flow of incoming foreign capital and to implement tax incentives for investment that is welcome. This pattern is, in one sense, merely a matter of course. There are many points on which the policies correspond to those used by MITI.

When MITI's policy is discussed in Japan, the vast majority of economists assume a rather negative, one might even say, derisive attitude. Almost inevitably they will come out with comment that MITI actions run counter to the spirit of the anti-monopoly laws. They also maintain the orthodox policy systems of the advanced nations covering a wide range of fields, government expenditure, finance, anti-monopoly, energy, and environment, but not the industrial policy. But, in Japan, it cannot be denied that the unique industrial policy by MITI plays a very important role in the whole policy systems. There are few advanced nations which have an industrial policy like that of MITI; moreover, there is no nation where its focus is on a general, wide-ranging policy of infant industry promotion. Even Friedrich List, the man who first developed the theory of infant industry protection, would be surprised at the thoroughgoing manner in which these ideas have been applied. The reason for these policies was to implement the program designed by MITI, that is, to strengthen the international competitive position. This policy has, however, taken a 180 degree turn during the 1970s, shifting away from strengthening of international competitiveness towards domestic needs and welfare issues.

Now that their mission has been completed, I believe that MITI's industrial policy should be revaluated from a much broader perspective, both by Japanese and by people from other nations. I also believe that economic historians, economists, sociologists, political scientists, anthropologists, and others in the world will sooner or later be greatly interested in the thirty postwar years of

Japanese growth and be tempted to explore them, since, of all the economic policy programs that have appeared, those devised by MITI are quite unique.

I do not mean that an evaluation of these policies should be made from a narrow perspective such as that offered by industrial organization analyses developed in the United States. The study I recommend would look into such questions as the relationship between Japanese industrial society and rapid economic growth, and what sort of impact government policy had on the industrial development. If such research is not made and published for reference throughout the world, then the true picture of Japanese industrial policy will be buried under a mountain of scholarly disfavor, relegated forever to mysteries of economic freakdom.

The general tendency of the Japanese government policy makers is to look only to the future, and in the halls of the bureaucracy important historical documents are apt to be scattered, lost in the shuffle. The documents and records of Japan's postwar economic growth are something of value to the entire world. It is extremely important that these memoirs and statements by people involved in the actual workings of policy be collected and published as a legacy to the future.

Japan is the first nation to have successfully achieved advanced nation status from a position of backwardness. It is something unique, a nation being able to raise industrial standards the fastest in the post–World War II period. The detailed reports dealing with the realities of the situation, the role of industrial policy, industrial organization, and the societal or anthropological background supporting this postwar development, are very important.

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