

J apanese Industrial Policy —Myth and Reality

By Tsutsumi Tomio

Is industrial policy an anachronism?

The recent currency crisis in Southeast Asia has reinvigorated the argument that a government-led type economy, which is supposed to have its origins in Japanese industrial policy, and a development-oriented policy are both failures. Then, is industrial policy an anachronism? During my recent stay in the United States, I noticed that industrial policies were being discussed quietly at U.S. universities as a means of understanding Japan, though their concern differed from that shown during the 1980s. I also learned that in the debate over the pros and cons of industrial policies on U.S. campuses, the concept shaped during the 1980s on the basis of 90% criticism and 10% praise remained intact, as if cased in a mold.

I feared that the economic structural policy practiced by Japan in recent years would be misunderstood as a result, and this misunderstanding would hamper correct understanding of Japan. This fear is what urged me to write this article. However, I also thought that argument over industrial policy is essential in order to come up with the correct prescription to resolve the ongoing crisis in Asia.

My conviction is this: "Industrial policy changes accordingly in different stages of the development of an economy and is not immutable. While making adjustments between industry and the various conditions surrounding it, it aims to promote, as efficiently as possible, industrial progress in the direction that will best serve the people's inter-

ests at each stage. Its eventual aim is to enable the country to join and participate in the world market and not to keep the country closed to the rest of the world." In this sense it is a policy still necessary in every country, and regardless of how it is named, it will basically continue to exist.

Typical "concept of industrial policy" in the U.S.

Japanese industrial policy as understood by many people in the U.S. can be summarized as follows:

-In Japan, the government, not the market, selects the winners or promising industries and also the losers or declining industries.

-As a means to this end, a council which serves as an advisory body for the government projects a vision of the future and the representatives of various sectors such as business, labor, the financial world, academi, and the media, who take part in the process of creating the vision, forge a consensus, and all Japanese unite to make the vision materialize. In this vision, which industries will grow and which industries will decline is forecast, so it can be said that the government chooses the winners and the losers, as stated above.

-The government "protects" the winners from foreign competition and "fosters" their growth by furnishing subsidies to help them progress. The government also "protects" the losers from imports by allowing them to form a cartel and at the same time endeavors to prolong their lives also by means of

various subsidies.

-As a result, exports increase but imports do not, and Japanese industrial policy works to make the nation's trade balance run a surplus as a whole. To the rest of the world, it appears as a 'predatory' policy.

-This policy, combined with "keiretsu," or close relations among a group of Japanese business firms, and the Japanese business climate that tends to allow "dango" (behind-the-scenes price rigging, which is a violation of the Antimonopoly Act), keeps the Japanese market closed to the rest of the world.

This unsavory image of Japanese industrial policy is based on a concept formed during the 1980s, the decade when Japan's trade surplus took root and trade friction between Japan and the U.S. became a regular event. It was also an age when the U.S., while praising Japan's technological prowess, suspected unfairness in Tokyo's industrial policy without solid grounds, because Japan was exporting automobiles to the U.S., the largest automobile producer in the world, and producing semiconductors, a product developed in the U.S., with better quality and exporting them at lower than U.S. prices. As I will describe in more detail later, my impression was that the U.S. debate over Japanese industrial policy is stereotyped and neglects its changing nature, that the U.S. image of Japanese industrial policy is based on misunderstanding of the policy's purpose and there is a gross exaggeration in rating the means to achieve the policy's objective. Both advocates and adversaries of Japanese industrial policy would be



Yawata ironworks in 1952: Government prioritized fundamental industry for recovery from World War II

Photo: Kyodo News

wrong if they entertained the above image of Japan without amendment.

Policy changes with the times

Japanese industrial policy does change with the times. Since it is a policy that responds to meet the needs of each age, so it should therefore be considered together with its particular background. In this sense, industrial policy is dynamic in nature and changeable. Here, I want to demonstrate that Japan's industrial policy has changed with the times.

Priority production system (immediately after World War II)

During the period that immediately

followed World War II, Japan's industrial production capacity was only one-tenth of its prewar level and the volume of its international trade was one-eighth. The drop had been precipitous. Inflation due to the shortages of goods, on the other hand, was running at an annual rate of about 100%.

Imports were almost paralyzed, and industrial production was virtually at a trickle. Therefore, most goods were under quantitative controls by the government. Market forces were not working, and all industries were gasping due to the low level of production.

The industrial policy adopted by the government in such a situation was called the "priority production system." To be specific, so as to ensure supplies of iron and steel, which

were necessary to revive industrial production, adequate supplies of coal were essential. What few resources and funds Japan had were directed to these two industries with top priority in order to create a beneficial circle of growth and for it to spread to other industries. This policy was a success. Mining and manufacturing production recovered considerably within a short time and in 1948 reached 70% of the prewar level.

This first postwar industrial policy served as one model for industrial policies adopted after that, not because strong control by the government formed the basis of the priority production system, but because the system succeeded in utilizing scarce resources most

effectively and bringing about speedy recovery of industrial production.

Protecting industry and fostering its growth (the 1950s)

Quite a few people think that an industrial policy means protecting domestic industry from foreign competition and fostering its growth with subsidies. The government's industrial policy during the 1950s may have been very close to this image. During the 1950s, Japan's foreign exchange reserves were constantly insufficient, and a great many foreign products were under an import quota system with high tariffs. Foreign exchange, too, was under a quota system. In this sense, it may be said that domestic industry was barely exposed to foreign competition and was being protected. To foster the growth of industry, on the other hand, the government used such tools as tax reduction, low-interest-rate loans and foreign currency allocation rather than subsidization. The tax cut accounted for about 5.7% of the government's corporate tax revenue. Low-interest-rate loans from government-affiliated financial institutions represented 28.3% of the total funds made available to business corporations during that period. This was a far cry from the condition referred to as "soaking industry in subsidies."

Trade & investment liberalization and domestic policy (the 1960s)

If you think that Japan would not have liberalized foreign trade and international investment unless it had been exposed to foreign pressure, you are seeing only one side of the reality.

As a child wants to shed outgrown clothes when it grows, a country strongly desires liberalization when its economy grows. During the 1960s, Japan's trade balance tended to be in the red, but Japan decided to go ahead with a trade liberalization policy because it believed that this would serve the national interest.

Moreover, it was strongly felt that protecting an industry forever does not lead to its healthy development. On the basis of this thinking, it was proposed for certain important industries that Japan should lift protective measures at

some point to stimulate their growth. In other words, the government began to use the liberalization of trade and capital as an important tool for the implementation of its industrial policy. As a result, the concept of a programmatic approach with limited time frame was introduced to policies.

The shortage of foreign exchange reserves was the greatest problem during the first half of the 1960s, and such systems and policies as the import quota system and the export promotion policy remained in force. During the second half, however, import liberalization for such major items as iron and steel, televisions and automobiles was completed, the liberalization rate reached 93%, and the export promotion measures were abolished. The industrial policy of that period was characterized by "liberalization and promotion." This evidently differed from the policy of the preceding period, which was based on "protecting industry and fostering its growth." Further, the tools for policy execution were shifted to "soft measures" such as low-interest rate loans from government-affiliated financial institutions, taxation measures that have the effect only of putting off the tax burden, like

special depreciation, public forums in which government and business adjust future investment so as to avoid excessive production capacity, and allowing industries to form cartels to set the standards of their products.

Policy weights shift from vertical to horizontal (the 1970s)

During the 1970s, the economic situation underwent violent changes internationally and domestically.

In 1971, the imposition of an import surcharge, called "the Nixon shock," led to the international realignment of currencies and also to a shift to a floating exchange rate system. This was a major change in the international monetary system which brought about sharp and substantial appreciation of the yen. In 1973, the incident known as the oil crisis occurred, and Japan was forced to basically reexamine not only its energy policy but its economic growth-oriented policy also. Moreover, domestic problems such as pollution and congestion began to show clearly that the age of fostering the growth of industries as the sole objective had ended. During this decade, the trend toward a surplus in Japan's balance of payments became stronger, and trade

friction between Japan and the U.S. occasionally occurred.

In the course of such developments, what happened to industrial policy? Firstly, the new thinking of "promotion and withdrawal" emerged to replace the old thinking of "promotion only" as the basis for industrial policy. The settlement of the Japan-U.S. textile dispute, which was considered to have triggered the change, resulted in a decrease in textile exports from Japan.

This outcome forced the government to adopt the policy of purchasing excess production facilities from the textile industry. Later, this kind of policy became a model called "positive adjustment industrial policy." Under this policy concept, the government should not protect industries from increased imports, but resort to the policy of hastening an industry's withdrawal by reducing its production capacity.

Secondly, industrial policies in the past were based on a "binary" way of thinking: whether to foster the growth of a given industry or force its withdrawal. But now the government faced a new problem head-on: how to adjust industrial development with problems such as "pollution," "congestion" and "problems in consumer and industrial safety." This trend marked a shift of weight in industrial policy from "vertical" (industry by industry) to "horizontal" (common issues). Similarly, the first and second oil crises, which occurred during the 1970s, forced the scrapping of the concept of oil as an "inexhaustible resource" and had a great impact on urging the reexamination of the relationship between industry and energy.

Hollowing-out of old-type policy and the target of international debate (the 1980s)

During the 1980s, the Japanese economy continued expanding to reach such a high level that Japan's GDP became the second largest in the world next to the U.S. Its GDP per capita belonged to top world level and its trade surplus exceeded \$100 billion every year. Japan became the greatest creditor country in the world. In the course of such developments, two mutually con-



Transition period from export promotion to trade liberalization: Shin Sakuramaru finished her voyage for the "Japan Industry Floating Fair" in 1980; in the same period, *Journal of Japanese Trade and Industry* started



First Oil Crisis in 1973: People flocked into supermarkets to buy everyday goods such as toilet paper

Photo: Kyodo News

Japanese government must be working as a nontariff barrier to imports."

The OECD held a debate over government roles in industrial adjustment as a project for 1979-82, and proposed the adoption of PAP (positive adjustment policy). The OECD's conclusions were that (1) PAP is a more desirable policy than the negative adjustment policy which protects declining industries by restricting imports, but

tradictory trends showed up. One was the hollowing-out of the old-type industrial policy and the other was the fact that this policy became a target of international debate.

A great many manufacturing industries in Japan had attained top international standing. Steel, chemicals, automobiles, machinery, household electrical appliances, and electronics all boasted of technologies and outputs that belonged to the highest levels in the world. In such a situation, an industrial policy aimed at protection and growth no longer met industry's needs. It is meaningless to subsidize highly prosperous industries. Low-interest loans have still less effect as an incentive. Tax privileges are unsuited by their nature as an industry-by-industry stimulus measure. In this sense, promotion-type industrial policy was used in a very limited area and had less importance than before.

In another development, Japan's industrial policy became a subject of international debate and a target of foreign criticism. This development arose probably because Japan invited various foreign suspicions, such as that "the Japanese government may be extending major financial assistance to industry," "cartels seem to be used as a tool in Japan too much and too often," or "administrative guidance by the

directly subsidize either declining industries or promising industries. (3) The OECD failed to reach a clear-cut conclusion about the advisability of furnishing subsidies for the development of new technologies.

In 1983-84, Japan and the U.S. held a conference called the "industrial policy dialogue."

At this conference, the U.S. side criticized Japan, asserting, among other things, that: (1) The targets of the Japanese government's industrial policy were specific industries and technologies, and that the amounts of monetary assistance being provided by it (subsidies for the development of technologies, low-interest loans, and tax privileges) were "not huge but not trivial;" (2) Administrative guidance in Japan was working as an import curb; and (3) Antirecession cartels were curbing imports. The Japanese side responded, saying that: (1) The U.S. government was providing considerable financial assistance to such industries as aircraft, semiconductors and machine tools under the name of national security and, as a result, the spin-offs from military technologies constituted a major form of assistance to industry, and (2) to protect declining industries, the U.S. government was directly curbing imports or forcing exporting countries to curb exports to the U.S., and that

this was a policy intended directly to protect specific industries.

Looking back on the industrial policies pursued in this decade, the motto in the beginning was "creativity in industries" but the emphasis gradually shifted to "the internationally-harmonized industrial structure." "Creativity" here refers to the necessity for Japan to develop new, original technologies across inter-industrial borders. Therefore, the development of technologies was emphasized in lieu of promotion on an industry-by-industry basis, as was the importance of basic technological development. Advocacy of the "internationally-harmonized industrial structure" meant the following two things. Firstly, excess production facilities were scrapped in some industries that were beginning to lose international competitiveness as a result of the yen's sharp appreciation and the rise in the price of oil. The specific policy measure for scrapping was to allow industries exceptionally to use cartels in a limited number of sectors. It is noteworthy that the objective of this policy was to prevent declining industries from relying on import-protection measures. Secondly, such industries as automobiles, semiconductors and machine tools were involved in bitter trade friction with the U.S. For these industries, it became a major problem not only to settle such friction in the short run, but also to change their industrial structures, from export-oriented to globally based ones in the long run. In other words, in order to ensure better international harmony, stress on the domestic market, diversification of the foreign market and more importantly, overseas investment for production, were taken into consideration as an important factor of industrial policy regarding those industries.

Moreover, as already said, industrial policy diversified in response to changing social needs, such as anti-pollution measures that industry was required to meet.

Deregulation and institutional reform (the 1990s)

Anyone who thinks that the purpose of industrial policies in general is to protect and nurture the growth of

industry does not really have an understanding of the industrial policy practiced by Japan during the 1990s. The 1990s began with a rapid shrinking of the Japanese economic bubble. The shrinkage was followed by a very long slump. Economic stagnation has given rise to many second thoughts on the advisability of the Japanese pattern of economic growth. It can be said to be the case that many factors which contributed to growth in the past are now obstacles to growth in the future.

Firstly, as slow economic growth has continued over a prolonged period, Japan's high-cost structure has become more and more conspicuous. Japanese manufacturing industries, which account for 20% of GDP, are constantly exposed to international competition, and their productivity is of top international level, whereas other industries which account for the remaining 80% are exposed to domestic competition only, and many of them are protected by domestic laws. As a result, their productivity remains low by international standards. These industries, however, pay wages of the same level as internationally competitive manufacturing industries, so their costs are naturally very high. One way to eliminate the high-cost structure would be to ease and abolish laws and regulations that protect domestic industries and stimulate competition. If the government fails to take such measures, high-productivity manufacturing industries may well depart from Japan one after another, and new industries generating high-added value will not grow.

Secondly, another cause of high costs is the heavy taxes and public dues imposed by the government on business corporations. For example, (1) corporate tax in Japan is the highest in the world (50% until recently and 46% from this year), and (2) the social insurance premiums borne by companies are high. At present, companies bear social insurance premiums of the same amount as the total amount of corporate tax, but the burden is expected to increase fivefold in the coming 25 years with the aging of the Japanese population.



UN Framework Convention on Climate Change held in Kyoto in 1997: International harmony and environmental protection are the current priorities in Japan's industrial policy making

If these matters are left unamended, the financial burdens on Japanese companies will increase, pushing up their operating costs and robbing them of their competitiveness. Moreover, the hollowing-out of industry will occur as many companies, unable to bear the high costs, will leave Japan. Therefore, the government should give serious thought to carrying out sweeping institutional reform, such as lowering corporate taxes and preventing a rise in social insurance premiums. The social welfare problem in particular is one that Japan cannot avoid, and the government must study ways to ensure coexistence between industry and welfare (such as converting a rise in social insurance premiums into an indirect tax or privatizing social welfare schemes and improving their efficiency). Otherwise, the hollowing-out of industry will surely cause the hollowing-out of the welfare system.

Thirdly, Japan lacks a system to foster the growth of high-potential ventures. There are abundant personal financial assets on one hand and superb budding technologies on the other, but there is at present no financial system which can function as a go-between for them. The U.S., on the other hand, has

a system that enables a great many pension funds to participate in such stock markets as NASDAQ, dispersing assets and skillfully hedging risk. When we realize that this system is making a major contribution to the birth of high-potential ventures in the U.S., we can only feel the need for reform of the Japanese stock market and financial system more acutely.

Fourthly, Japan has a highly developed education system, with a high percentage of students advancing to universities and colleges. It is said that this was one factor which contributed to the rapid recovery and growth of the Japanese economy since the end of World War II. Recently, however, the Japanese education system has come under harsh criticism for the closed character of universities, the tendency to despise practical values, and the uniformity which hampers the growth of the individual personalities of really able people.

Fifthly, global warming has become a subject of loud debate in recent years. An international convention to combat it has been signed, but it is feared that concern over global warming will greatly hamper the advancement of the world economy. Theoretically, the

amount of carbon dioxide discharged into the atmosphere needs to be cut to 40% of the present level or reduced to one-sixth of the estimated amount of discharge based on the current growth rate of CO₂ emissions in the next 100 years. How to attain this target is a problem of coexistence between the economy and the environment and a problem of mankind's present form of civilization.

The Japanese government's industrial policy in the 1990s covers all these problems. In many respects, the six major reforms proposed by Prime Minister Hashimoto Ryutaro (economic structure reform, welfare reform, educational reform, financial reform, fiscal reform and administrative reform) are attempts to resolve these problems which industry faces. In this sense and in the sense that the government is tackling industrial problems which have diversified in nature, the six reforms have a strong character as an industrial policy.

What is the essence of industrial policy?

Looking back on the industrial policies pursued in the past, we can detect the following megatrend which shows the essence of industrial policy.

1) There has always been a strong inclination toward market functions. Internationally, the government formulated its industrial policies in the direction of opening the Japanese market to the world. Domestically, you can say that the history of industrial policies is the history of deregulation. Around 1950, the government abolished such controls as the goods rationing system and price controls. By 1960, it abolished the foreign exchange allocation system. During the 1960s and 1970s, Japan carried out the liberalization of trade and capital transactions. The current 1990s are "the age of deregulation" for domestic industry. Concluding that such deregulation is desirable from the macroeconomic viewpoint, the government has actively promoted it.

2) Industrial policy should change so as to adapt to each stage of economic

development. The basic purpose of industrial policy during the incipient stage of economic development was to accelerate the growth of the economy through strategic distribution of limited resources. The laws of economics state that the efficiency of resource distribution is maximized if it is carried out following market rules. However, a developing country should keep in mind the following two points if it wishes to catch up with developed countries:

-Following market rules is the best policy in the long run, but may result in losses through repeated market failures.
-The histories of developed countries provide a great many examples of both success and failure, and a developing country can find short cuts to economic progress by studying such examples.

By carrying out a strategically directed allocation of resources on the basis of the lessons learned from such examples, a developing country can attain higher economic efficiency than by simply following market rules. On the other hand, this way of making policy works only in the earlier stage of development. You should not forget that policy direction must suit the stage of development at which the country finds itself. Japan drastically reexamined its industrial policy about every 10 years. The purpose of reexamination, however, changed from mere promotion of industry to the prevention of pollution, prevention of congestion, environment protection, international harmony, etc.

3) The tools used for the implementation of industrial policy also changed when deregulation was progressing and the nation was becoming more affluent. Inducement replaced regulations as the tool for resource allocation, and indirect methods based on market rules, such as the financial system and tax system, replaced direct subsidization. Increasingly soft methods, such as the presentation of a vision and the furnishing of information, began to be used.

Macroeconomic policy and industrial policy

Industrial policy is sometimes called a microeconomic policy in contrast to a macroeconomic policy. Microeconomic

policy may be a concept that overlaps to a large extent with industrial policy if one assumes that microeconomic policy includes both policies for individual corporations and industries, policies based on the concept of vertical division, and such policies as technological development policy and industrial location policy, which are based on horizontal division. However, opinion may be divided on whether microeconomic policy also covers such measures as antipollution regulations and regulations regarding industrial and consumer safety. Basically, industrial policy and macroeconomic policy have a mutually supplementary relation. Such macroeconomic policies as the Dodge Line anti-inflation policy, enforced in 1949 to bring inflation under control, and the credit crunch designed to counter the threatened shortages of foreign exchange reserves during the 1960s and 1970s may have been harmful to industry's short-term interests, but were necessary measures to ensure industry's long-term development. Japan endeavored to restructure its industry into export-promotion type during the 1960s and then into an import-promotion type during the 1980s. It may be said that in these attempts, industrial policy supplemented macroeconomic policy.

Does the U.S. have an "industrial policy"?

Some people in the U.S. assert that the U.S. does not have any kind of industrial policy. I, however, do not agree. In the U.S., too, there are industry-related policies, though they are not as systematic as the industrial policy pursued by Japan. U.S. industrial policies can be broadly classified into two types.

One is aimed at high-tech industries where the U.S. excels, and its purpose is to encourage research and development and spread the results. Tools for implementing this policy include research and development by the federal government itself, the corporate tax system, government procurement, etc. There are many examples of U.S. poli-

cy for high-tech industries which are the results of government-sponsored projects or spin-offs from defense technologies. Light-water reactors, semi-conductors, computers, NC machine tools, the Boeing 747, the Boeing 707, jet engines (the engines of the DC-8, DC-10, B707, B727, B737 and B747) are old examples. The Internet system and new telecommunications technology are the most typical ones in recent years, and the number of such specific examples has been increasing following the end of the Cold War, since President Clinton explicitly requested the U.S. defense forces to provide assistance to U.S. industry. The U.S. also makes use of various industry-related schemes that directly or indirectly contribute to U.S. companies' international competitiveness, even though they are not called "industry promotion schemes." These include research and development schemes with participation by federal government agencies such as NASA and DOD, and tax incentives such as ACRS (accelerated cost recovery system) and a tax exemption for incremental research and development costs.

Another is a policy for protecting industries that have lost international competitiveness and are in need of adjustment. By taking boarder or trade measures, such as import restrictions under the Trade Act, the U.S. protects such industries or enables them to recover international competitiveness. There are no positive industrial adjustment measures in the U.S. such as those in Japan. However, the federal government protects such domestic industries from imports by taking measures. In addition to import restrictions by the U.S., there are cases where exporting countries engaged in voluntary export restraints, which had effects similar to import restrictions.

Asia's present plight and government-led type economy

A government-led type economy is not a single concept. It varies from country to country and also changes

with times and economic situations even within the same country. You may not in fact think that Asian countries followed or copied the Japanese system. Even in Japan, the concept of "industrial policy" has changed from time to time when economic conditions changed. Generalization in this case is not appropriate. The current economic crisis in Asia, unlike the crises in South American countries in the past, did not stem from excessive spending by their governments. Some people have pointed out the absence of financial discipline in their private sectors and that their governments are incapable of preventing unreasonable increase in foreign currency inflows. Totally, in my views, these phenomena basically came from the structural problems in the financial systems—a not well-developed financial system and not well-balanced liberalization of short-term capital flows. My conclusion is that the crisis in Asia is not attributable simply to government failures and that it should not lead to total denial of their past policy. Governments will perform a greater role in the short-term process of bailing out the Asian economy from the crisis. In the long run, on the other hand, as the economy grows, the government role would decrease accordingly.

Future direction of industrial policy

Recently, the U.S. and European governments strongly advised Japanese government to pull its economy out of recession by taking not only the short-term antirecession measures but also the economic structural measures.

It is true that the main cause of the current economic stagnation in Japan is of structural nature, and that problems which industry has to resolve, such as how to ensure coexistence with welfare and the environment, concern public interest and are deep-rooted. The policy for settling these issues, regardless of whether you can call an industrial policy or not, will become more and more important. Particularly important problems which the government should

address from now on are as follows:

The current stagnation of the Japanese economy stems from the decline of vitality on the supply side. In the background, the supply side, which is the money earner for the Japanese economy, appears to have been forced to accept an excessive burden—the highest rate of corporate tax, income tax and social insurance premiums in the world. Creating an environment favorable to industrial advancement from this viewpoint is an important part of the industrial policy of the future.

Looking at Japan's industrial structure, we find a great many inefficient conventional service industries, but few new-type service industries, such as software and information. In this regard, Japan lags behind the U.S. by more than 10 years. The underlying cause of this lag is the lack of utilization and understanding of information technologies by the general public and people in the public sector, not simply people in the industrial sector. In addition, there are too many regulations which not only hobble telecommunications, the basis for information industries, but also drive up telecommunications costs.

How this industry progresses hereafter depends critically on the development of new technologies for the information industry, the prevailing utilization of information technology, the construction of infrastructure to broaden its use, and urgently and most importantly deregulation in this sector.

—It is evident that industry from now will be supported by new technologies and that a technological breakthrough is necessary to find a basic solution to such problems as global warming. Preparing systems for the development of new technologies and improving the substance of research and development endeavors are also essential. ■

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