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I

MOVEMENTS FOR THE ESTABLISHMENT OF FREE PORTS IN JAPAN

— A HISTORICAL SURVEY —

BY GINJIRO SHIBATA

I

The subjects for the need of free port in Japan with some explanations of its system had been often dealt with in abstract by a few scholars even before World War I. But, the arguments set forth in a concrete way, urging so as to designate the certain specified ports as free ports or free port districts, were presented in the first place in Formosa at the end of World War I, when the industrial prosperity was at the peak in Japan. That is, Shigesaburo Yasuda, a manager of the Branch of the Nippon Yūsen Kaisha (N. Y. K. Line), advocated through the press "the Taiwan-Nichinichi" on May 1, 1918, that free ports should be established in the ports of Keelung and Takao, or the whole Formosa island should be authorized as free trade zone, which should be controlled and administrated by a semi-governmental organization, "Port Trust", as he called the system. This argument created a sensation to some extent, and afterwards the Taiwan Nichinichi commented editorially on this subject for many times. But government authorities had yet no interest in that sort of thing and the argument tapered out during the year, without rousing even any opposite view against it.

A few months after the foregoing incident, a similar case took place at Dōkai, a bay in North Kyūshū. When a reclamation plan of the port of Wakamatsu at a great outlay of ¥120,000,000 was made public, the press "the Osaka Asahi" expressed an objection to the expansion plan as a commercial port as it was, and made a proposal of rebuilding the plan as an industrial port, and of establishing a free zone in a new area which was created by the reclamation, and of making a great industrial port at Wakamatsu.[1] This proposal, however, ended merely as an opinion.

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1) The Osaka Asahi press, July 24, 1918.

It can be said that an administrative plan for a free port was first laid out officially in the City of Shimonoseki. That is, on the occation of accomplishment of the improvement works of the port of Moji in 1918, Yamaguchi Prefecture and the City of Shimonoseki laid a plan for harbor construction at Hikojima, a small island at the Shimonoseki Channel, where free port might be established as an area for processing and manufacturing industries on a large scale and as a great port for entre-port trade for the Asiatic Trade. In spite of the investigations and the layouts were accomplished in 1919 by the prefectural and municipal governments, the plan was suspended before we were aware of the fact. The reasons for the suspension were concentrated around the fact that the time was too soon after the war and that the island may be come a strategic point for defensive plans.[2)]

Most strenuous movements for the establishment of free ports took place in 1922. At the beginning of 1922, scores of businessmen traveled around the world to observe the actual state of economic recoveries in Europe and America after World War I. On that occasion, they saw the prosperous activities of trade and shipping in the London consignment market and in the free ports of Hamburg and Copenhagen with their own eyes, and besides they learned the intensive movements in the political and business worlds for establishing the foreign trade zones in U. S. A. After their return from abroad, they took up the very free port problem in the first place as a way out of the economic depression in Japan. Besides, there was another stimulant just at that time. That is, in the Russo-Japanese Conference at Dairen in March 1922, a debate waged about the establishment of free port at the harbor of Vladivostok and the plan was deemed to be realized as a means of settling the Russo-Japanese trade problems. Although this plan was presented as a policy of the then Chita Government, it is undeniable that the plan spurred the consciousness of the Japanese ports and harbors connected directly across the Japan Sea with the northern Asia. Moreover, there was talk of establishing a free port in the harbor of Shanghai which would also excite the nerves of the Japanese businessmen.

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2) The Fukuoka-Nichinichi Press, Jan. 10 and Sept. 16, 1919.

Just on these occasions, a first stage of harbor construction works at Kobe which had been started in 1907 was finished, and new port was formally opened with great pomp in May 1922 with a good attendance of notables in and out of official life. This was a good chance to be in high spirits for the establishment of free port in Kobe harbor. The first voice on this problem was made in Tokyo by Tooru Ishii, a director of Nippon Yūsen Kaisha and an attendant in the ceremony for the completion, in May 1922; the purport of the statement was as follows:

1. The population problem in Japan must be solved by obtaining a large sum of foreign currencies, promoting foreign trade and shipping. Japanese economic circles should pay attention to the prosperous activities of London consignment market.

2. Carrying on the protective trade policy, to bring the same advantages in our foreign trades as is enjoyed by the free trade countries, such as the United Kingdom, there is no other way than the establishment of free port.

3. It is natural to establish free port in Kobe harbor, considering its geographical and economic circumstances.[3)]

At the same time, some members of the council of Kobe City, who attended the ceremony for the completion of new port, introduced a motion to the attendance for establishing a free port in Kobe harbor, and formed "the Association for the Establishment of Free Port in Kobe." The atmosphere of the first meeting was that, if the free port in Shanghai be realised, Japanese ports are sure to suffer a severe blow, and they must establish a free port in Kobe which has a closest connection with Asiatic trades. Just then, the second stage of harbor construction in Kobe was going to be planned and a free port plan was to be woven into the whole plan of the new harbor.

This free port problem naturally became the subject of conference of the Kobe Chamber of Commerce. The latter set up "the Investigation Committee for the Free Trade District in the Port of Kobe". The members of the Committee were elected from the circles of foreign trade, shipping, warehousing, banking, manufacturing industries, and the representatives of various regions.

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3) The press "Tokyo Asahi", May 5, 1922.

The Committee sent out questionnaires on the following three items to all circles of businessmen on October 25, 1922.

1. Pros and cons on the establishment of free port in the port of Kobe; and the reasons thereof.

2. Area of free port, if it is to be established in Kobe or the vicinity.

3. Points to be improved in the operation of bonded warehouses, bonded factories and other facilities in existence.

While the Committee was collating the answers of the questionnaires, Shinzō Mitsuhashi, a member of the Committee and a manager of the Kobe Branch of the Mitsubishi Warehouse Company, Ltd., made unexpectedly a bomb-like motion at the meeting on December 23, 1922. His motion was made against the establishment of free port. He stated the the reasons for objection against the establishment as follows:

1. Free port is going to be a system of the past in the foreign countries, and at present it has been replaced by the bond and drawback systems.

2. Japan is unpromisingly situated to promote the entre-port trades, considering from the geographical and economic points of view.

3. If the bond and drawback systems in existence are not satisfactory for the foreign trades, by further improvements made on the systems, bond and drawback would fulfil the same functions as a free port.

4. Processing and manufacturing industries within the free port area are not found to be possible to develop, judging from the cases of the foreign free ports.

5. The complicated formalities of the entrance and clearing of ships would be replaced easily by the amendments of the procedure regulations.

6. The establishment of free port at Shanghai would not be suspended, even if free ports be realized in Japan. When the free port of Shanghai is realized, our free ports will not be able to compete with it.

7. The port of Kobe is not qualified for establishing a free port, which is proved by the fact that the entre-port trades made there amounted only to 9–16% for the total trades handled in the port of Kobe in 1919–20.

In consequence of the motion, the Committee was thrown into confusion. And they had to start conference from the beginning over again. Shinzō

Mitsuhashi pressed further his objection and printed his contention in full whose outline was stated above, and distributed it broadcast in the country. The reasons of his objection against free port were ostensibly based upon the welfare of the national economy, but there is no doubt that he or the warehouse companies which he represented were afraid that if a free port be realized in any harbor, it should deprive the existing warehouses of their business activities.

In spite of the hesitation of the Kobe Chamber of Commerce, the arguments for the establishment of free port were gaining grounds over the whole country increasingly. This was due to the fact that the establishments or the plans of free ports in the foreign countries were reported one after another at that time. The information covered the ports: — Vladivostok free port was under consideration; Kiel (July 15, 1922) and Flensburg (September 20, 1922) established free ports; Gothenburg and Malmo free ports were planned adding to the existing free port of Stockholm; Norway was planning out the free port in Christianabergen, Christiansand and Trondjem; Portugal established it in the port of Lisbon in 1920; Switzerland was planning it in Basel; France was also planning it in the ports of Le Havre and Marseilles; and etc. The information gave positive aid to the movement for free port in Japan.

Besides Kobe, the Osaka Chamber of Commerce organized the Investigation Committee for Free Port on October 30, 1922. The Committee of Osaka reached to a decision, in result, that as a prospective site for a free port the port of Osaka should have the strongest claim since it has a large area of hinterland for processing and manufacturing. And they started to campaign for the free port establishment, and the Osaka City Planning Committee, abiding by the decision of the Chamber of Commerce, introduced a free port project within their original city planning.

At the same time, In Yokohama, the Investigation Commission for the Port of Yokohama in the Chamber of Commerce formed the sub-committee for free port problems. The chairman, late Dr. Kiichirō Sōda, a then director of the Yokohama Institute of Social Problems, studied the free port problem with the staffs of the Institute, and its result was published as a pamphlet

"the Free Port Problem considered from the Point of View of Yokohama", in December 1923. The purport of this pamphlet was: Yokohama should not establish a free port for the purpose of entre-port trades, because the entre-port trades would not be of any promise in the port of Yokohama from the geographical point of view: if they wished to establish a free port in Yokohama, it should be established as the promoting facilities of shipping. That is, Yokohama was standing on somewhat negative standpoint.

In the City of Moji, the Chamber of Commerce presented a petition asking for the establishment of free port in the port of Moji to the then Minister for Home Affairs, late Rentaro Mizuno. The business circles in Formosa emphasized again their desires for establishing free ports in Keelung and Takao, or for authorizing the whole island as free trade zone.[4] In Korea, the Fusan Chamber of Commerce sent to the Japanese Government a representation for the establishment of free ports district in the port of Fusan on December 4, 1922.

Thus, the agitations for establishing free ports spread in the country, and the four parliamentarians of the Kenseikai Party, Chūji Shimooka and others, brought forward a proposal for establishing free ports to the House of Representatives which was adopted after discussion. The essential of this proposal was as follows:

"The ways for attaining superiority over other countries in the international economic competition and for increasing the national resources must be found in the promotion of our foreign trade and of our shipping. To achieve both promotions, the best policy should be to establish free ports, taking advantage of our natural location and selecting the ports favored with right conditions, and the Government should take proper measures promptly to execute this proposal."[5]

Meanwhile, essays, articles and comments on free ports were published in large numbers by scholars, businessmen, and journalists. Especially, a pamphlet, "a Treatise on Free Port Establishment, as an Economic Policy for

4) The Taiwan Nichinichi, October 1 and 22, 1922.

5) The press, "Tokyo Asahi", December 30, 1922.

National Prosperity" by a member of Ikkyosha (38 pages, July 28, 1922) was a forerunner in the sense that the fairly detailed descriptions of foreign free ports were given. Besides, the foreign books on free ports were translated by some scholars. For an example, "The Copenhagen Free Port; the Key to the Baltic, by the Copenhagen Free Port Company" was translated and edited by the late Kenkichi Kodera, a then member of House of Representatives, in February, 1923. These publications gave more or less impetus to the positive movement for free port.

Under the circumstances mentioned above, the Kobe Chamber of Commerce could no longer leave the questions in indecision. Therefore, the Committee of the Chamber, in spite of the bitter objection of a member, S. Mitsuhashi, held several meetings to arrive at a conclusion, and a report was published on March 1, 1923. The report stated the following opinion on the premise that the Port of Kobe requires a free port zone in line with the far-sighted national policy.

1. The entre-port trade shall be greatly promoted in our country for the development of our national economy, and the Kansai (the West-Japan) region is located by now at a most important point for entre-port trade with the Asiatic Continent. Especially, the port of Kobe is located at a strategic point in the ocean and near-sea routes and its hinterland is well adapted for all sorts of manufacturing industries. Therefore, they believe that the port of Kobe must be one of the best places to be designated as a free port district.

2. In the free port district, there must be docks, factories and area for storing, sorting, repacking and other manipulations. As the area for these facilities, a new harbor district which is now under construction as the second stage of plan and another area to be extended in the future shall be appropriated for the free port.

3. Since the City of Kobe has borne a considerable expense of harbor construction and is expected to bear hereafter, the Chamber of Commerce must join hands with the municipal government to realize a free port.

Besed on the conclusions stated above, the Executive Committee for Establishing Free Port District was organized on March 16, 1923, dissoluting the former Committee which contained an objector, and as a first stage of

the movement the Committee resolved after ten days as follows:

1. In order to attain the object of establishing a free port district in Kobe, the Executive Committee should cooperate with the City Office and Municipal Council.

2. The Executive Committee shall appoint some person of authority as advisory staffs.

3. A publication explained reasons why the port of Kobe is suitable above all for establishing a free port district should be printed and distributed to all parties concerned.

The Committee acted in accordance with the above decisions and a pamphlet, "A Proposal of Establishment of Free Port District in the Harbor of Kobe" was published in May 1923. In this pamphlet, at the beginning the character of the free port district was explained and in the second place the advantages it brings on commerce, industries, transportation and finance were stated, and the importance of promoting entre-port trades was emphasized, judging from the instances of all the countries in Europe and America. Especially, the argument that the present systems of bond and drawback would serve enough in place of free port was refuted thoroughly in the pamphlet as follows:

1. In the bonded warehouses: the description of the goods stored is limited; formalities of warehousing, delivery and removal of bonded goods are much complicated; a period of time of storing is limited under two years; and any manufacturing or processing operations, needless to say, and any manipulations are not permitted in the bonded warehouse.

2. In the bonded factories of official and private establishments: the variety of the goods stored is limited; the period of time of storing is limited under six months; the formalities are extremely complicated; though manufacturing and processing are permitted, not only the description of the goods permitted to be operated is narrowly limited, no facilities for operations are equipped in official bonded factories. Especially, private bonded factories, though the equipments for operations are free, are monopolized by each private founder. The private bonded factory system, however, is not to be denounced at all, but when the free port is established, it should rather be

allowed to remain for the manufacturing of re-exportable merchandise on large scale or for performing intricated processes.

3. A warehouse certificate with which shippers are enabled to finance is not issued from the bonded warehouse or factories.

4. A drawback system is practiced merely for the limited description of goods, its formalities is complicated too, and shippers must deposit guaranty. And when one wants to benefit by the drawback, he has to re-export the goods within one year after its importation from the same port of entry.

According to the reasons stated above, the Committee concluded that the existing bond and drawback systems are not equal to take the place of the free port system.

In the next stage the pamphlet described the present state of entre-port trade in the port of Kobe and concluded that the most prosperous port in the entre-port trade in Japan is Kobe. In the last part of the pamphlet, the actual conditions of geographical circumstances, port facilities and natural advantages (the number of days that the loading could not be done under bad weather were only about ten days a year) are described, and the actual projects of the site and facilities are carefully delineated.

These written opinions of the Executive Committee of the Kobe Chamber of Commerce naturally attracted universal attention.

The above descriptions are related to only the non-governmental movements for free port problem. Besides these movements, the authorities concerned in the central and local governments also worked up the investigations or researches about free ports of other countries and their applicability to our country or to our specified ports. For instance, the Public Works Bureau in the Department of Home Affairs published the translation of several foreign publications on free ports under the title of "An inquiry on Free Port", in March, 1923. The Port and Harbor Department of the Kobe City Office published three pamphlets entitled "Outline of Free Port System", "Data for the Investigation of Free Port Problems", and "The Explanation of Free Port in Kobe".

But, before June 1950, the Port of Kobe was owned, administrated and managed by the central Government of Japan and its agencies, and the City

Government had no authority on the port, though the half of the construction and repair expenses of the port had been always imposed on the City Government. Owing to such condition, the voice of the City Office was apt to refrain from making any positive argument. And the national Government was also mostly conservative for the political issue. They made merely the investigation or research on the free port system, and did not express positively any opinion on the problems in question at first.

The arguments for establishing free port was naturally followed by a scramble for the place of the establishment among ports or cities. Then, in spite of no official opinion that the establishment of free port should be confined to one place, many disputes broke out whether any one port was suitable for the purpose or not, taking for granted that as if only one free port had to be established in the country. This was due to the fact that the advocates were for the most part those who were directly connected with one port or another. Thus the most enthusiastic advocates were the Ports of Kobe, Osaka and Moji. Yokohama, one of the most important ports, alone had a peculiar opinion as already had been stated. As the opinion of the independent party, the port of Moji stood aloof from the question, and the scramble for a free port became the question of rivalry among the three ports of Kobe, Yokohama and Osaka.

The press comments on this question in those days were the same in tenor substantially. For instance, "the Jiji-Shimpo" presented the then public opinion over six days, from October 15 to 20, 1922, in the editorial column entitled "Problem of Free Port Establishment". Its summary was as follows:

"Osaka is fairly active in foreign trade and is a centre of various industries in Japan. But the docks in the port are not adequate to the entrance of large ships. Then, Osaka should be left as a hinterland of the port of Kobe, and the question would be contracted as Kobe versus Yokohama. Kobe, having the region of Osaka as its hinterland, is most prosperous in manufacturing industries and ranks first in Japan in the foreign trade with Asia. So, when a free port would be established in the port of Kobe and Osaka would make use of it, the industries and foreign trades of our country would surely develop all the more. On the contrary, Yokohama, having no

hinterland for industries such as Osaka, but bordering the great consuming region of Tokyo, is a special port for the silk trade of Japan and the site of the port is too narrow for free port. Thus, Yokohama is considered that there is little probability for free port establishment."

Since the editorials of the local press in Kobe, Yokohama and Osaka recommended their own port as a matter of course, these should better be excluded from the present discussion. As an opinion of an influential person, Tohoru Ishii, a director of Nippon Yūsen Kaisha, argued in "the Osaka Asahi Press" of September 18, 1922, as follows:

"Judging from the statistics, the first rank among the commercial ports which handled the imports and exports of non-domestic-consumable goods is hold by the port of Kobe. Those merchandise handled in the port of Kobe accounted for more than 50% in the total for the whole country. Since the region of Osaka and Kobe is the pivot of our foreign trades at present, the network of shipping routes is concentrated at the port of Kobe. For example, a Vladivostok direct line is opened at Kobe, but not at Yokohama; a Yokohama-Shanghai liner necessarily calls at Kobe, while Kobe has her own Shanghai route. So, when a free port be established in the port of Kobe, there is no need to open new routes, or there should be no change in the system of collection and distribution of cargoes. There is the first reason that we recommend the port of Kobe. For the second reason of the recommendation, the port and harbor of Yokohama has been already allotted definitely, where the new site for free port shall be no more available; but the port of Kobe is now under construction for the expansion and one part of the site may be alloted for free port without any extra cost. On the other hand we find that some recommend the port of Osaka on such a ground as follows; notwithstanding the completion of the harbor construction with much difficulty, the harbor has been left just like a fishingpond, and utilized little as a port proper. Thus, if the harbor be used as free port, it may serve two ends concurrently. In spite of the above argument, no large vessels make a call at Osaka and it seems at present little hope for the establishment of free port. If I think about the matter calmly, a highest probable port as free port would be Kobe, secondly Osaka and Yokohama the third."

He gave another account of this subject on "the Kokumin Press" of September 16, 1922; that is, if the port of Osaka be designated as a free port, the shipping circles would make an objection to the plan (*note*: he himself was one of the most influential members in the circles), because, it would cause additional the shipping expenses, first to touch at Kobe, and then proceed toward Osaka.

The Kokumin Newspaper argued from the objective point of view in the editorial entitled "the Free Port Question taking Concrete Shape", on September 15, 1922, and insisted that it is essential to designate a port which possesses the qualifications necessary for the free port, after mature consideration without any party feeling or any other sentiment.

Several businessmen who had traveled around the world in 1922, mentioned above, formed an association named "the Nippon Keizai-Renmei (the Japan Economic League) since, and its office was opened in the building of the Kōgyō Club (the Industrial Association) in Tokyo. The members debated with one another on the free port problem at every meeting. According to the news of "the Tokyo Asahi", on September 8, 1922, entitled "a demand of the Keizai-Renmei for a free port in Kobe", the tendency of the meetings was favorable to Kobe, though a few of them were opposed to it.

Thus, as the general tendency in the country, the approval for the establishment of free port seemed to have absolute support. In the Government, the Department of Communications, which had administered the shipping affairs at that time, the Department of Agriculture and Commerce, which had administered the foreign trades affairs, and the Department of Home Affairs which then administered the ports and harbors, approved possitively the free port establishment or had at least no objection to it. The Department of Finance which governed the Customs did not expressed its opinion pro or con to the last moment.[6] In the non-official side, the leading rôle in the movement was played always by the shipping circles, especially by the Nippon Yūsen Kaisha. Among them, however, one expressed opinion which is obscure in significance. Zoku Kamiya, a managing director in the Ship-Owners'

6) The Osaka Asahi, September 18, 1922.

Association, argued that he would rather go further and prefer a free trade system to a free port system, to which, however, he had no objection at all.[7] A free trade system, that he preferred, was merely an idealist's doctrine and the dream of the foreign traders even at that time. Therefore, the traders were inclined to desire the realization of the free trade system rather than of the free port. That is, his idealistic argument was liable to put on the brake against the movement for the free port.

The industrial circles were also coming round to support the establishment of free port. Even the oil industrial circles who were at that time afflicted with the oversupply and were extremely afraid of the importation of foreign oil in lower prices, expressed the demand for free port as follows:—

"The importers of foreign oils are forced make sales of their imported oil, since they can not continue to pay the expensive storage for any length of time. It is caused by the existing regulations governing the bonded warehouses which restrict every operation in storing the goods and are not adapted to utilize the business opportunity. The free port should be established primarily with the object of making good those defects. ····· Therefore, the preparations should be made now for the construction of the oil factory in the free port and the building of the oil-tankers. When the free port be established and the customs barriers be removed, the refiners of foreign oils would be able to import the cheaper oils and to re-export them abroad after refining."[8]

On the opposite side of these impetus for the establishment of free port, there were a few arguments against it. Most of these objections were made by the warehouse men whose warehouses were already constructed at the existing ports. For instance, the opposision of Shinzo Mitsuhashi had been presented above.

The details of these views against free port, however, were like to those expressed in the United States when the same questions were much discussed

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7) The Osaka Asahi, November 10, 1922.

8) The Sekiyu-Jihō (the Monthly Journal of Oil Industry), November, 1922: Tooru Shimizu-dani, "the Problem of Free Port Establishment and Oil."

as early as in 1919.[9] It is self-evident that the both objections came from the fact that the objectors deliberated the question from the view point of the activities of their own business, that is, in Japan mainly from the view point of the warehouse business, while in the United States, of the manufacturing and agricultural industries. However, the remarkable difference of the views from each other may be pointed out as follows. While in the case of the United States the leading arguments for the objection were fundamentally based upon the protectionism; while in Japan the arguments were originally based upon the free trade principle and the fears were felt for the establishment of free port might prove rather detrimental to the realization of the free trade principle. The objection was based upon the free trade principle, though it was only a camouflage, and proved to be a tough antagonist to the free port assertions. We have learned in the practice of social or economic policies of various countries that their progress have been much hampered by such high-flown arguments. This is mostly a political trickery that through advocating an ideal of freedom it really hinders an actual step for the realization of freedom.

Setting aside such a lofty idealism, most of the arguments against the free port were such as that had already been expressed in the United States; or that the free port of Shanghai, expected to be established shortly, would not do anything harmful against the Japanese port activities; or that there is no necessity for Japan to establish a free port at such a great outlay. Thus, during 1922 and 1923 the debates on the free port problem were raging in a lively way. On September 1, 1923, however, the great earthquake took place in the central district of Japan, especially around Tokyo and Yokohama the disaster was most serious. The people were panic stricken in this and the public opinion was estranged from the free port problem. Since, the business became very prosperous and the main ports presented much activity in the importation of the materials for rehabilitation. The world-wide business

9) Ginjiro Shibata, the Foreign-Trade Zones in the United States, pp. 7–19 in "the International Economic Review, Vol. I, 1950, edited by the Research Institute for Economics and Business Administration.

prosperity followed this and the measures for the promotion of entre-port trade disappeared out of the question at last. Especially, in 1931 the Manchurian Incident took place, and since, the nation intent on the defense problem, nobody took notice of the free port which seemingly offered a leased area for the foreign ships and cargoes on our soil. Thus, World War II took place and the free port campaign ended in a fiasco.

II

After World War II, following the advice of the General Headquarters of the Allied Powers, the cities that possess the nationally important port in the locality demanded to have free portdistricts instituted in their harbors. This fact could not have been ignored by the General Bureau of Shipping of the Department of Transportation, which was then the direct governing office of the port and harbor. Thus, the Planning Division of the Bureau mapped out a scheme and showed confidentially its concrete plan in April 1948. This plan was quite progressive and it insisted that Japan should prefer a free port district to a free port and that it should be an industrial as well as commercial port where processing factories be established like the free port of Hamburg or Copenhagen, but not to be merely a commercial port beneficial only to the entre-port trade. This plan was shaped in a pretty concrete way, but it provided that the plan shall be realized on conditions, that its establishment shall be at the time when the independent sovereignty of Japan is authorized and a peace treaty concluded, the limits of reparation defined, and the affiliation with the United Nations realized.

Besides the above plan, the Economic Stabilization Board of the Cabinet had presented confidentially the different plan in a pamphlet entitled "An Opinion in regard to the Establishment of Free Trade Zones," on July 25, 1949. The latter plan seems to had followed the principles of the Celler Act of 1934, U. S. A., that is, the zone should be left out of the customs territory, the consumption of the foreign goods is prohibited within the zones, and though the storing, repacking, sorting, grading, cleaning and other manipulations are permitted in the zone, the assembling, processing and manufacturing are prohibited, except to repair of vessels. So, this plan is something like regre-

ssion as compared with those of the General Bureau of Shipping.

On the same date, another plan was presented confidentially by "the Planning Division of the the Port and Harbor Bureau in the Department of Transportation as a pamphlet entitled "a Plan for the Establishment of the Free Trade Zones." In the preface of this pamphlet the necessity of the establishment of free port was stated as follows:

"The question whether the free ports shall be established or not in our country has been hitherto discussed among the all circles concerned, but still no decision could be attained. However, G. H. Q. has given us recently an instruction to establish the free trade zones which suggested that the free port might be well even for entre-port trade only. The Departments concerned are at present investigating it from every point of view and consulting about it with each other. But since we can not decide immediately whether the free port system should follow the type of a free port city or a free port district, we have arrived at the conclusion that the free trade zone which operates only the entre-port trade should be established for the present."

And the establishing standards of a free trade zone, and the actual schemes for the scales and facilities of the zones, which would be established in the ports of Kobe, Yokohama and Saseho, on a three stages' program were concretely described in that pamphlet. This plan of the Port and Harbor Bureau is much more conservative as compared with that of the General Bureau of shipping of April 1948, and is much in line with the plan of the Economic Stabilization Board.

In the meantime, the question of port and harbor control was raised by an advice from G. H. Q. That is, the port and harbor, which were owned and controlled by the state hitherto, have been now to be placed under the control of the regional public corporations or the port authorities. The Port and Harbor Law was enacted on May 31, 1950, under which the ports and harbors in our country are now administrated. Since this reform was much drastic as compared with the establishment of free port, the national government and the regional public corporations devoted themselves to the question of the port control, and the problem of establishing free port has been shelved as it was and the arguments for its establishment have apparently disappeared either in the political circles or in the authorities concerned.

It will seem, after all, that while before World War II the question of the establishment of free ports was the matter argued and demanded by the non-official circles, the same question after the War was dealt with by the national Government as one of administrative measures.

III

On June 15, 1952, the Customs Law was amended partially. The main point of this amendment is that the new systems of "the designated bonded area" and "the privileged shed" have been adopted, abolishing the former system of "the customs yard". The customs yard provided in the Law was defined as a land area, excepting the space enclosed by public or private owned buildings, in the port controlled in its entirety by the customs authority where the merchandise may be landed or stored in bond during a certain limited time (within seven days) under the supervision of the customs authority, but any manipulations on the goods shall not be permitted. On the contrary, the designated bonded area is a land area which is instituted with the intention of simplifying the customs formalities and promoting the promptitude of the procedures within its enclosure, and (1) the examination of the contents of the merchandise, (2) the exhibition of samples or the carrying the samples out of the area, (3) repacking, sorting and any other conditionings on the goods, and (4) simple processing on the goods, these may be done by permission of the superintendent of the customs in each time and under the supervision of the customs officers, provided that the simple processing shall not involve the mixing of the materials which is considered to be manufacturing in accordance with the provision of Article 1 of the Bonded Manufacturing Factory Law. The time of storing in the designated bonded area is prescribed not to run over fifteen days. The privileged shed is a private shed in the port designated as a bonded shed by the superintendent of the customs. The operations permitted in the privileged shed shall be those of (1), (2) and (3) as stated above in regard to the designated bonded area.

The amendment of the Customs Law in 1952 is considered to be in no doubt an advance of our port and harbor policy, as it has taken a step toward the free port. But, in one view, it might be taken as an evasion from the question

of establishing free port, which has come to the fore again after World War II, according to the advice of the G. H. Q. Although some operations which had not been allowed under the former regulation has come to be permitted as a result of the amendment, the customs control and supervision over every port activity in the area are still in force. Besides, since new operations may be carried on in the area and new field of the mission has been given to the customs, the supervision of the customs officers may be exercised much more strictly. The distinction between the designated bonded area and the free port district is found in these very phases. The characteristic feature of the free port is to be an area where customs control is excluded. Therefore, customs formalities and duties are all dispensed with and freed from all restrictions. So, the former is a system adopted from the view point of Government administration, while the latter is established from the view point of national and international economy.

Consequently, although the designated bonded area has come into operation in our ports, the question of establishing free port has neither dissolved nor been ameliorated at all in our country.

JAPAN'S TRADE WITH LATIN AMERICA IN THE POST-WAR YEARS.

BY FUKUO KAWATA

(I)

The twenty Latin American republics and the British, French and Dutch colonies in Latin America represented together 1.3% of Japan's export trade and 0.6% of her import trade in 1928. This figure increased to 4–5% in export and 3–4% in import in the late 1930's owing to her strenuous efforts to expand trade with this region supported by the depreciation of yen.

Immediately after World War II, Japan's trade with the Latin American countries was negligibly small, but it has been recovering since 1950, taking up more than 10% of Japan's total trade. Latin America's shares in Japan's

Table 1. Latin America's Share in Japan's Total Trade

(in million U. S. dollars)

Exports	1928	1936	1937	1938	1950	1951	1952	1953	1954 Jan.-Oct.
Total (A)	1113.6	1005.9	1170.6	1094.3	820.1	1354.5	1272.9	1274.8	1298.7
(B)	915.2	781.0	914.8	766.5	—	—	—	—	—
To Latin America (C)	12.3	31.9	46.4	24.8	45.5	91.1	53.0	106.4	174.9
Shares $\left(\frac{C}{A}\right)$	1.1%	3.1%	4.0%	2.3%	5.5%	6.7%	4.1%	8.3%	13.4%
$\left(\frac{C}{B}\right)$	1.3%	4.1%	5.0%	3.2%	—	—	—	—	—

Imports	1928	1936	1937	1938	1950	1951	1952	1953	1954 Jan.-Oct.
Total (A)	1270.8	1040.6	1355.1	1062.4	969.9	1995.0	2028.1	2409.5	2076.5
(B)	1019.3	801.5	1089.9	759.0	—	—	—	—	—
From Latin America (C)	6.4	38.9	52.0	27.9	67.0	259.0	167.9	264.7	247.3
Shares $\left(\frac{C}{A}\right)$	0.5%	3.7%	4.8%	2.6%	6.9%	13.0%	8.2%	11.0%	11.9%
$\left(\frac{C}{B}\right)$	0.6%	4.8%	4.8%	3.7%	—	—	—	—	—

(Note) (A) Including exports to Korea & Formosa.

(B) Exports to foreign countries only.

trade in the post-war as well as the pre-war years are shown in Table 1.

Looking from the Latin American side, in 1937, Japan's share in the export trade of this region represented 1.5%, and her share in the import trade 2.5%, while in 1953, the former percentage rose to 2.8% and the latter declined to 1.9%, as is shown in Table 2. This means Japan's purchase from Latin America relatively increased, and her sale to this area relatively decreased in the post-war period as against the pre-war days.

Table 2. Japan's Share in Latin American Trade

Export of Latin America	1937	1950	1951	1952	1953
To: U. S. and Canada	46 %	63 %	57 %	62 %	62 %
U. K.	13	9	10	5	7
Continental EPU countries	26	15	20	18	17
Japan	1.5	0.5	1.1	1.5	2.8

Import of Latin America	1937	1950	1951	1952	1953
From: U. S. and Canada	44 %	61 %	61 %	61 %	60 %
U. K.	10	8	6	7	5
Continental EPU countries	29	15	19	18	18
Japan	2.5	0.6	1.4	0.8	1.9

Sources: IMF; International Financial Statistics.
United Nations, Economic Survey of Latin America, 1953.

Among the Latin American countries, Japan's principal export markets are Argentina, Brazil, Mexico, Venezuela, and Colombia, of which the former two countries are predominant. In the pre-war years, Chile was one of the largest markets in Latin America, but to-day its position has become less important.

Japan's main sources of supply in Latin America are Mexico, Brazil, Argentine, Cuba and Peru.

In the pre-war years, Japan's import from Cuba had been negligibly small, but in the post-war years a great deal of Cuban sugar has been imported, which has made Cuba one of the largest trading partners of Japan in Latin America.

Table 3 shows the distribution of Japan's trade with the Latin American countries, arranged in the order of magnitude in 1954 (January-October).

Table 3. *Distribution of Japan's Trade with Latin American Countries*

(in million U. S. dollars)

Export	1936–38 average	1950	1951	1952	1953	1954 Jan.–Oct.
Total to Latin America	34.4	45.5	92.1	53.0	106.4	174.9
of which to:						
1. Brazil	3.3	2.3	21.6	10.9	21.7	66.7
2. Argentina	8.1	20.9	47.3	9.1	15.6	40.8
3. Mexico	2.5	3.4	3.3	6.1	12.0	25.2
4. Colombia	0.08	1.1	0.6	3.3	3.8	7.7
5. Venezuela	2.1	3.4	3.8	5.9	7.4	7.0
6. Peru	1.7	0.4	1.0	2.3	2.8	3.7
7. Nicaragua	0.1	—	—	—	—	3.5
8. Cuba	0.3	3.9	2.7	1.8	1.8	2.5
9. Uruguay	2.1	0.5	2.4	0.8	0.5	2.1
10. Panama	1.5	0.5	0.7	2.3	25.4	1.1
11. Jamaica	0.4	2.8	1.1	1.4	1.3	1.1
12. Chile	2.3	0.1	0.6	1.2	3.1	1.0

Import	1936–38 average	1950	1951	1952	1953	1954 Jan.–Oct.
Total from Latin America	39.6	67.0	259.0	167.9	24.7	247.3
of which from:						
1. Mexico	3.6	16.9	99.6	71.3	4.1	70.4
2. Brazil	15.0	1.6	31.2	15.4	31.9	63.1
3. Argentina	9.2	30.7	49.4	3.6	51.4	43.3
4. Cuba	0.06	10.2	43.1	50.8	48.6	19.1
5. Peru	2.0	0.5	6.6	11.1	15.2	18.6
6. Nicaragua	0.2	0.3	2.3	1.4	3.7	7.9
7. Urguay	4.5	5.0	4.7	2.9	13.5	4.8
8. Chile	3.4	—	1.3	2.0	4.	2.1

(II)

The composition of Japan's exports to Latin America has undergone a remarkable change after the war. In the prewar days, cotton and rayon fabrics took up major parts of export, but now, instead of textiles, iron and steel have assumed the most important position among the commodities exported to Latin America. Besides iron and steel, non-ferrous metals, such as copper and alminium have largely come to be exported to this region in recent years.

Sewing machines and textile machinery have also made remarkable advance to the Latin American markets since the end of the war.

In addition, railway locomotives numbering 32 in all, 10 in 1952, 22 in 1953, were exported to Chile for the first time, and in 1953, five ships (steel) were sold to Panama.

With regard to the export of ships, it is to be remembered that although ships exported to Panama are registered in that country, they are actually owned by the United States shipping companies, established in Panama with American capital. The operation of these ships is centered mainly around New York. The reason why these ships are imported into Panama, although they are not used in Panama, is that the import duties and domestic taxes on ships are far lower in Panama than in the United States.

In line with these new-type exports, the traditional export goods, such as cotton and rayon fabrics, potteries and toys are also making a steady advance to Latin America, although their relative positions have somewhat changed in the post-war years.

Chief imports from Latin America in the pre-war years were raw cotton and raw wool, but in the post-war years, sugar has come to be imported in large quantities from Cuba. To-day, therefore, cotton, sugar and wool are the three important commodities coming from Latin America.

Besides sugar, rice has also come to be imported from Latin America in

Table 4. Composition of Japan's Trade with Latin America in 1936

(in million U. S. dollars)

Exports			Imports		
Total	31.90	100.0%	Total	38.90	100.0%
1. Cotton Fabrics	13.02	40.7	1. Raw Cotton	20.56	52.9
2. Rayon Fabrics	3.85	12.1	2. Raw Wool	4.46	11.5
3. Silk Fabrics	0.80	2.5	3. Maize	3.60	9.3
4. Potteries	0.70	2.2	4. Lead	2.43	6.2
5. Toys	0.58	1.9	5. Nitrate of Soda	1.28	3.3
6. Woolen and Worsted Yarns	0.50	1.6	6. Hides and Skins	1.25	3.2
7. Iron and Steel	0.44	1.4	7. Tanning Extracts	0.81	2.1
8. Raw Silk	0.32	1.0	8. Coffee	0.52	1.3
9. Cotton Yarns	0.19	0.6	9. Copper (matt)	0.52	1.3
10. Textile Machinery	0.12	0.4			
11. Sewing Machines	0.02	—			

(Note) Japan imported nitrate of soda and copper from Chile, and lead from Mexico.

the post-war years as a result of the loss of Korea and Formosa, which had been the main granaries of Japan.

Table 4, 5 and 6 show the composition of Japan's exports to and imports from Latin America in the post-war as well as the pre-war years.

Table 5. Composition of Japan's Exports to Latin America in the Post-War Years. (*in million* U. S. dollars)

	1950	1951	1952	1953	1954 (Jan.–Oct.)
Total	45.5	92.1	53.0	106.4	174.9
1. Iron and Steel	11.6	43.5	16.7	20.5	51.2
2. Cotton Fabrics	4.5	2.5	3.1	5.0	10.1
3. Sewing Machines	0.9	7.8	3.4	5.7	7.8
4. Copper	0.9	2.2	2.0	3.5	6.2
5. Textile Machinery	—	1.8	1.2	1.6	4.6
6. Rayon Filament Fabrics	3.8	2.7	1.7	3.3	3.6
7. Toys	0.6	0.8	1.1	3.1	3.6
8. Alminium	—	0.7	0	1.8	3.3
9. Spun Rayon Fabries	0.4	0.6	1.3	2.1	3.0
10. Potteries	1.0	1.4	1.0	1.9	2.3
11. Raw Silk	0.1	0.4	0.8	3.8	1.2
12. Ships	—	—	—	23.4	—
13. Railway Vehicles	—	—	1.1	2.5	—

(Note) Ships were exported to Panama, and railway vehicles (locomotives) to Chile. In 1954, two naval transportation ships were sold to Brazil, the value of which is as yet unknown.

Table 6. Composition of Japan's Imports from Latin America in the Post-war years. (in million U. S. dollars)

	1950	1951	1952	2953	1954 Jan.–Oct.
Total	67.0	259.0	167.9	264.7	214.3
1. Raw Cotton	15.5	144.8	82.5	108.6	116.8
2. Sugar	12.8	44.5	57.9	59.2	34.2
3. Raw Wool	4.9	18.8	2.5	38.1	25.9
4. Wheat	19.8	1.4	0	3.4	19.3
5. Rice	1.5	1.1	6.3	4.8	4.3
6. Soya Beans	—	—	0.3	2.0	1.7
7. Hides and Skins	4.1	12.7	0.7	2.4	1.1
8. Coffee	0.3	0.7	1.3	1.6	
9. Tanning Extracts	—	4.1	0.8	3.0	

(Note) Soya beans are imported frm Brazil.

(Ⅲ)

The relative importance of the Latin American markets for respective Japanese export goods is different. But, generally speaking, the shares of Latin America are larger in the case of metals and machinery, including trasportation equipments, while they are smaller in the case of consumer goods. For example, the proportions of metals and machinery exported to Latin America are, in 1954, 56% with alminium, 46% with copper, 44% with iron and steel, 33% with sewing machines, 30% with railway vehicles (in 1953), 29% with ships and 14% with textile machinery, while those for consumer goods are 14% with toys, 8% with rayon filament fabrics, 8% with potteries, 7% with spun rayon fabrics, and 5% with cotton fabrics.

It is, moreover, noteworthy that the shares of producer goods, large as they are, either fluctuate widely, for example, alminium, copper, iron and steel, or are discontinuous, for example, railway vehicles and ships ; while those of consumer goods, though they are small, remain relatively steady.

Table 7 illustrates the shares of the Latin American markets for various Japanese export goods in 1936 and in post-war years.

Table 7. Shares of Latin America in Japan's Total Export of Various Commodities

	1936	1950	1951	1952	1953	1954 Jan.–Oct.
1. Alminium	— %	— %	5.8%	— %	25.3%	55.9%
2. Copper	—	2.5	7.1	7.0	62.5	46.2
3. Iron and Steel	—	14.2	19.5	6.2	14.4	44.5
4. Sewing Machines	13	10	36.1	17.0	28.0	33.0
5. Railway Vehicles	—	—	—	17.0	30.0	...
6. Ships	—	—	—	—	29.1	...
7. Toys	5.5	5.0	6.4	7.0	13.0	13.9
8. Textile Machinery	7.8	0.5	12.1	5.8	10.0	13.7
9. Rayon Filament Fabrics	9.0	9.8	4.1	3.9	7.6	8.2
10. Potteries	5.5	5.2	4.3	3.4	6.8	8.0
11. Spun Rayon Fabrics	—	3.7	3.2	6.6	7.2	7.3
12. Cotton Fabrics	9.2	2.2	0.8	1.8	2.9	4.9

(Note) Figures in 1936 refer to the trade with foreign countries only, excluding Korea and Formosa.

Now let us examine to what country and in what quantity the Japanese goods were and are sold.

(1) **Iron and Steel**

In the pre-war days, iron and steel exported to Latin America amounted to only ten thousand metric tons, of which five thousand tons went to Argentina, and four thousand tons to Brazil.

In the post-war years, the volume of iron and steel exported to Latin America has increased significantly, coming at the top in value of those commodities exported from Japan to Latin America.

At the same time, the relative importance of the Latin American market, which had been negligible in prewar days, increased largely.

This is because of the large demand for iron and steel from Argentine and Brazil, which have been carrying on their development or industrialization progammes since the end of the Second World War. Although Japan's prices of iron and steel products are relatively higher than internationals prices, these countries are willing to purchase iron and steel from Japan in exchange for their cotton, wool, and wheat, the prices of which are also relatively higher than the world prices.

(2) **Sewing Machines**

Sewing machines are also one of the new types of exports in the post-war years. In 1953, 190 thousand and in 1954 (January-October), 324 thousand pieces of sewing machines were sold to Latin America, which take up about 30% of Japan's total export of sewing machines. The principal markets of Japanese sewing machines in Latin America, are Brazil, Mexico, Peru, Venezuela and Colombia.

(3) **Textile Machinery**

The textile machinery is one of the most competitive sorts of Japan's export machines.

To those countries where the textile industry has been developing rapidly in the post-war years, Japan's spinning and weaving machines have been sold in the face of keen competitions with those of European industrial nations. In 1953 and in 1954 (January-October), about 10% of the total export of textile machinery were sent to Latin America, while the ratio was 8% in 1936. Of

the Latin American countries, Brazil and Mexico are the largest markets.

(4) **Cotton Fabrics**

In the prewar days, cotton fabrics had been of predominant importance as the export commdity to Latin America, accounting for 40% of the total export to that area in 1936. Although cotton fabrics had been sold to almost every country in Latin America, main markets had been Argentina, Chile, Venezuela and the Dominican Republic. For example, in 1936, Argentina purchased 82 million square yards of Japanese cotton fabrics. This figure reached to just one third of Japan's export of cotton fabrics to Latin America in that year.

In the post-war days, the volume of Japan's export of cotton fabrics to Latin America fell down considerably. For instance, only 9 million square yards were sold in 1951, although in later years, the figure has kept on increasing. As above stated, the buyers of cotton fabrics are large in number, though each of them takes small portions. In this respect lies the difference of the market structure of consumer goods between that of producer goods, the markets of which are now concentrated to small numbers of Latin American countries, such as Argentine, Brazil, Mexico and Chile.

In the post-war years, the principal markets of Japanese cotton fabrics in Latin America are Venezuela, Jamaica, Nicaragua, Peru and Mexico.

Since 1952, Japan's export of cotton tissues to Latin America has been increasing. This is partly due to the barter or compensation trade, by which Japan buys cotton or other local products in exchange for cotton tissues.

The relative importance of the Latin American markets for Japanese cotton fabrics has declined since the war; for example, Latin America's shares in 1953 and in 1954 were 3% and 5% respectively as against 9% in 1936.

(5) **Rayon Filament Fabrics**

In the pre-war years, rayon filament fabrics were, next to cotton fabrics, one of the most important exports of Japan.

In 1936, about 50 million square yards of rayon filament fabrics were exported to Latin America, of which 23 million square yards were directed to Uruguay.

In the post-war period, the volume of export decreased to 8 million square

yards in 1952, but later it has been increasing. The main buyers are Venezuela, Jamaica and the Dominican Republic.

The portion of rayon filament fabrics exported to Latin America, which was 9% in 1936, declined to 4% in 1951 and 1952, but in 1953 and 1954 it recovered to about 8%, approaching to the pre-war level.

(6) **Span Rayon Fabrics**

Spun rayon fabrics are one of the new exports in the post-war years. The amount of export to Latin America has been increasing since 1950. The chief markets are Jamaica and Mexico.

The quantity of spun rayon fabrics exported to Latin America, which was only 1.6 million square yards, increased with acceleration, reaching to 17.3 million square yards in 1954. This figure is as large as that of rayon filament fabrics exported to this area in the same year.

The share of Latin America, which was about 4% in 1950, rose to 7% in 1953 and 1954.

(7) **Copper**

Copper is exported to Brazil and Argentina, but mainly to Brazil. The quantity exported to Latin America has been increasing since 1952. In 1952 1.8 thousand tons of copper were exported to Latin America, but this figure rose to 3.8 thousand tons in 1953, and 7.0 thousand tons in 1954.

The relative importance of Latin America as the outlet of Japanese copper, which was only 2.5% in 1950, increased strikingly to 62.5% in 1953 and 46.2% in 1954.

(8) **Alminium**

Alminium is exported to Brazil and Argentina.

The amount of export which was 0.9 thousand tons in 1951, registered a substantial increase to 2.9 thousand tons in 1953, and 5.7 thousand tons in 1954. The share of Latin America, which was 6% in 1951, increased remarkably to 25% in 1953, and 56% in 1954.

(9) **Potteries**

In the pre-war years, Argentina and Brazil were the chief markets of Japan's potteries in Latin America.

In the post-war days, Venezuela, Mexico, Cuba and Panama are the

largest buyers.

Potteries and toys have now, been exported through the barter or compensation trading; that is, Japan exports potteries or toys to some Latin American countries chiefly in exchange for their local products. The relative importance of Latin America for Japanese potteries, which was 5% in 1936, increased to 7% in 1953, and 8% in 1954.

(10) **Toys**

In the pre-war days, Argentina, Brazil, Peru and Mexico had deen the principal buyers in Latin America, but in the post-war years, Mexico, Venezuela, Peru and Cuba have become main markets.

The share of Latin America for the Japanese toys, which was 5.5% in 1936, made substantial growth reaching to 13.0% in 1953, and to 13.9% in 1954.

Table 8 shows the quantity of Japan's principal exports to Latin America in the pre-war and the post-war years.

Table 8. Quantity of Japan's Exports to Latin America

	Unit	1936	1950	1951	1952	1953	1954 Jan.–Oct.
Iron and Steel	thousand metric tons	10	145	234	112	136	341
Copper	//	—	1.96	2.10	1.75	3.81	7.03
Alminium	//	—	—	0.91	0.04	2.94	5.69
Cotton Fabrics	million square yards	246.0	24.8	9.4	15.1	27.7	47.4
Rayon Filament Fabrics	//	51.9	16.0	9.7	8.2	17.2	18.2
Spun Rayon Fabrics	//	—	1.58	1.65	6.15	10.62	17.26
Sewing Machines	1000 No.	—	29.92	241.96	132.72	189.96	324.08
Potteries	MT	—	—	—	—	5,131	5,541
Toys	//	—	—	—	—	2,602	3,394

(Ⅲ)

Shares of Latin American products in the Japan's total import are higher in tanning extracts, coffee, sugar, and raw wool, while they are lower in wheat and rice.

The share of hides and skins showed fairly high percentages in 1950 and 1951, but it has declined in later years. [Cf. Table 9]

Table 9. Shares of Latin American Products in Japan's Imports

	1936	1950	1951	1952	1953	1954 Jan.–Oct.
1. Tanning Extracts	57.3 %	49.6 %	83.1 %	28.0 %	50.0 %	%
2. Coffee	50.5	67.5	45.1	55.2	49.2	
3. Sugar	—	32.5	54.3	53.4	55.0	38.0
4. Raw Cotton	8.3	6.2	31.3	21.5	30.2	30.6
5. Raw Wool	6.9	9.0	12.8	2.0	22.4	23.2
6. Wheat	—	12.6	0.9	0	2.4	13.1
7. Hide and Skins, undressed	17.7	33.0	28.4	3.6	8.0	6.0
8. Rice	—	1.8	0.9	3.4	2.2	1.8

(Note) Figures of 1936 refer to trade with foreign countries only, excluding Korea and Formosa.

Now let us examine in what quantities and from what countries of Latin America these commodities are imported.

(1) **Raw Cotton**

In the pre-war years, raw cotton was imported chiefly from Brazil, Peru, Mexico and Argentina, of which Brazil was the largest supplier. The quantity of cotton imported from Latin America totalled in 1936, 164 million pounds, of which 93 million pounds came from Brazil.

In the post-war years, Mexico, in place of Brazil, has become the largest source, supplying Japan with 172 million pounds in 1953. Cotton from Latin America accounted for 7% of the total cotton import in 1936, but in 1953 the ratio rose to 30%.

(2) **Raw Wool**

Argentina and Uruguay are the principal suppliers of raw wool both in the pre-war and in the post-war years. The quantity imported from Latin America, which was 15 million pounds in 1936, increased threefold to 46 million pounds in 1953, although the quantity imported in 1952 was only 3 million pounds.

The share of Latin American wool in the total wool import of Japan, which was 7% in 1936, increased to 22% in 1953, and 23% in 1954.

(3) **Sugar**

In the pre-war years, Japan imported sugar almost exclusively from Formosa, and the volume of Latin American sugar imported in 1936 was about 12 thousand tons, as against 830 tousand tons from Formosa in the same year.

In 1953, the quantity of sugar imported from Latin America reached 656 thousand tons, taking up 60% of the Japan's total sugar import. The principal suppliers are Cuba, Peru and Brazil, of which Cuba is by far the largest.

(4) **Hides and Skins, undressed**

Hides and skins, undressed, are imported from Argentina and Urguay in the post-war as well as in the pre-war years. In 1936, import of raw hides and skins from Latin America reached 4 thousand tons, representing 18% of the total import of raw hides and skins. In post-war years, the volume of import suddely increased to 13.4 thousand tons in 1951, but the amount declined sharply to 1.3 thousand tons in 1952, recovering, however, to 5.3 thousand tons in 1952.

The shares of Latin American hides and skins accounting for about 30% in 1950 and in 1951, declined to 8% in 1953, and to 6% in 1954.

(5) **Wheat**

Wheat is imported chiefly from Argentina. The amount of import declined heavily in 1951 and 1952 owing to the bad crops caused by the successive droughts in the River Plate region. In 1950 and 1954 (Jan.-Oct.) respectively, about 200 thounsand tons of wheat were imported from Argentina, representing about 13% in 1950 and 10% in 1954 of total wheat import of Japan.

(6) **Rice**

The amount of rice imported from Latin America was 29 thousand tons in 1952 and 22 thousand tons in 1953, representing 3% in 1952 and 2% in 1953 of the total rice import of Japan.

It is a remarkable fact that countries supplying Japan with rice are not constant, but changing almost every year. For instance, rice was imported from Mexico in 1950, from Mexico and Brazil in 1951, from Mexico and Ecuador in 1952, and from Peru, Brazil, Nicaragua, Argentina and Uruguay in 1953.

(7) **Tanning Extracts (Quebracho Extracts)**

Quebracho extracts are imported chiefly from Argentina.

In 1936, the volume of quebracho extracts purchased from Argentina was about 9 thousand tons, taking up 54% of tanning extracts imported into Japan. In 1953, 11 thousand tons of quebracho extracts were imported from Argentina, representing 44% of the total import of tanning extracts.

(8) **Coffee beans unroasted**

Coffee is one of the most important export products of Latin America.

In 1936, Japan imported about 3 thousand tons of coffee from Latin America, of which 2.5 thousand tons were imported from Brazil. In 1953, about 1.2 thousand tons of coffee is imported from Latin America, of which 0.7 thousand tons were bought from Brazil, the rest being supplied by Colombia, Venezuela, Guatemala, Panama, Costa Rica and other Central American countries. This decentralization of coffee import may be due to the compensation trade policy, which Japan has recently adopted.

The share of Latin American coffee in the total coffee import of Japan, which registered 50% in 1936, showed 55% in 1952, and 49% in 1953.

Table 9 shows the quantity of Latin American products imported into Japan.

Table 10. Quantity of Latin American Products imported into Japan

	Unit	1936	1950	1951	1952	1953	1954 Jan.-Oct.
1. Rew Cotton	million pounds	146.9	35.1	223.5	203.1	308.7	311.1
2. Raw Wool	//	15.8	7.5	11.4	3.3	46.8	30.4
3. Sugar	1000 metric tons	12	103	326	451	656	377
4. Hides and Skins, undressed	//	4.5	5.3	13.4	1.3	5.3	2.2
5. Wheat	//	0.4	221.0	15.3	0	32.7	199.6
6. Rice	//	—	10.0	5.9	29.5	22.4	21.5
7. Tanning Extracts	//	8.96	3.81	19.51	3.05	11.22	
8. Coffee, beans unroasted	MT	3016	196	610	1304	1186	

(V)

We have so far examined the figure of export and import between Japan and Latin America. Now we are to study the Japanese trade policy for this

region.

Japan's trade promotion to this part of the world is mainly achieved by means of (1) bilateral trade and payments agreements and (2) compensatory trading contracts.

Japan's payment agreements with Latin American countries were signed, for the first time, in 1949. Some of these agreements expired in 1952, when Japanese Peace Treaty went into effect, while others have been extended and are still in force to-day.

These agreements may be classified into two types, that is (1) the "dollar cash" type and (2) the "open account" type.

Japanese agreements with Peru and Uruguay are of the "dollar cash" type, under which all payments and receipts are actually made in freely disposable U. S. dollars.

(Japan also had dollar cash payment agreements with Chile, Colombia, Mexico and Venezuela, all of which were concluded in 1949, and expired when Japanese Peace Treaty went into effect in 1952.)

Japan's agreements with Argentina and Brazil are of the "open account" type, under which the U. S. dollar is no more than an accounting unit and the intergovernmental credit element is implemented by swing provisions. The swing margin for Argentine open account is 20 million dollars and that for Brazilian open account is 10 million dollars. Japan also has trade agreements with Argentina, Brazil and Urguay.

Under the trade agreement with Argentina, it is planned that Japan and Argentina will exchange 90 million dollars of goods in a year beginning on May 1, 1954. Japan is to export iron, steel, machinery, non-ferrous metals, chemicals and factory equipments, and to import wheat, wool, cotton, hides, barley, quebracho, maize and rice. Under the trade agreement with Brazil, Japan intends to export iron, steel, non-ferrous metals, ships, machinery and vehicles amounting to 33.5 million dollars, and to import cotton, rice, soya beans, coffee and cacao totalling 36.5 million dollars, in a year beginning on July 1, 1954.

Under the trade agreement with Uruguay, Japan is to export silk, cotton, and rayon fabrics amounting to 5 million dollars, and to import the same

amount of wool, hides, linseed, casein and bone-powder in a year.

Japan has conducted the so-called, "compensation trade" with some Latin American countries, such as Mexico, Nicaragua, Peru, Chile, Uruguay, Paraguay and Colombia. The amount of compensation trade contracts with Latin America approved in 1953, reached to about 25 million dollars.

Although Japan's share in Latin American trade is very small, as is shown in Table 2, Latin America is a prospective market. To develop trade relations with this region, Japan despatched trade missions in 1952 and in 1953. As it has been stated above, Latin American markets are buying chiefly metals and machinery in post-war years. In these lines, Japan's competitive ability is, unfortunately, rather weak. It is, however, owing to the bilateral trade and payments agreements and other special trading arrangements that Japan's capital goods are sold to this region. But this kind of special or discriminative trade measures may not be allowed to last long, because there is a strong tendency toward the liberalization of international trade and recovery of currency convertibility. It is, therefore, necessary for Japan to strive to rationalize her export industry, so that she may be able to compete with other nations in the Latin American markets without recourse to special measures.

THE MARITIME COMPETITIONS IN THE EARLY MEIJI ERA

—— In Relation to the Development of "Common Carrier" Type ——

BY SEIJI SASAKI

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1. Preface

In 1633, the Japanese Shipping in the Tokugawa Era had been, temporarily but completely discontinued its outward-bound navigation under such an unnatural policy of seclusion and restriction, that prohibited the people from travelling abroad and building large ships. Japanese overseas expansion in South-China, Thailand and other South Sea Islands, which had formerly been much encouraged, had been stopped and the visit of the foreign vessels to Japan had been also restricted. So the former skilled level of shipbuilding and navigation in this country was not only held up in their further development, but was left behind the foreign countries in progress. All larger vessels capable of sailing over the ocean disappeared, and the surviving small sailing-ships of only several tens of tons in tonnage were narrowly permitted to maintain their existence by the practise of inter-coastal transportation.

Besides, the main type of the shipping operation in the Tokugawa Era remained in the "carrying trade" or "merchant carrier", which accomodated to the stationary developmental stage in the feudal economic system. Although a "common carrier" type was partly —— but it is of so much importance —— beginning to grow on the particular trade-route between Yedo, the seat

of the Tokugawa Shogunate Government, and Osaka, the centre of economy in this country, almost all forms of the shipping business in the Tokugawa Period were, as a rule, included in the commercial trade and were carried on as "private carrier". It was a matter of course that under the undeveloped marine transportation, in which only the smaller sailing-vessels navigable in accordance with the wind and tide were employed, the carrying trade was not yet able to establish itself as an independent shipping industry.

After the slumbering stagnation during about two centuries and a half the Japanese shipping awakened again to develop. On a July day in 1853, Commodore Matthew Calbreith Perry of the United States Navy arrived at Yedo Bey leading his squadron. The four "Black Ships" moving swiftly without sails and against the current and belching black smoke like floating volcanoes surprised the Japanese people rudely. The steam-worked vessels, however, rekindled the Japanese dream for the outward advance.

The modernization of shipping which developed rapidly since the Meiji Restoration, formed originally a link in the chain of the introduction of new capitalistic political and economic system. Without this development of capitalism, the independent shipping industry, especially that of common carrier type, might not have grown in Japan, as it was in foreign countries. While the process of shipping modernization in this country was based on such economic and technical advancement, it was also importantly affected by the political and military requirements which sometimes neglected to allow for the relation with the economic basis. In fact the Meiji Government set out promptly to import new European-type vessels, specially steam-ships, regardless of the poor development of the national economy and of the juniority of the technique. It was entirely caused by the following non-economic reasons: — the one was the purely military transportation to accomodate for the two wars in 1874 and 1877; and the other was the invasion of the foreign steamers which was increasing gradually since the opening of this country.

"Kaiso Kaisha", the first steamship-company in Japan to which the Meiji Government gave so much support and actual aid, was established in January 1870. The motives of creation, however, were national impatience and pure

accident. Although it was, as is clearly seen in the following discription, difficult to recognize this company as an independent shipping company of the common carrier type, and it ceased to exist entirely in spite of several reorganizations, it was a very important and epoch-making enterprise that it adopted for the first time the company system in the Japanese marine transportation. Other steamship companies in Japan followed after this company. The "Tsukumo Shokai", established in October of the same year, was also one of the earlist private shipping companies which were organized independent of the central government. This Tsukumo Shokai has continued to exist and develop untill to-day as a good representative steamship company in Japan, though it changed often its name, and we know it rather by the name "Mitsubishi Kaisha" or "Nippon Yusen Kaisha".

The formation of these steamship companies, either with or without the connection with the government, did not promise directly the perfect establishment of the Japanese shipping industry and did not realize readily the development of the common carrier type business enterprise. There was still a thorny path to tread to reach the Japanese independent shipping trade. Through the experiences of many severe tests and bitter struggles, the Japanese shipping has grown gradually and expanded its fields of activity and established its independence as an enterprise, that is to say, attained the development from private carrier to common carrier type in operation.

This article attempts to consider the process of the modernization of the Japanese shipping from the aspects of the maritime competitions which happened in this period.

Emphasis will be laid on how these competitions accelerated the formation-process of the Japanese independent shipping industry, and served to bring about the transition from the private carrier type to the common carrier type.

2. Competition between the "Nihon-koku Yubin Jokisen Kaisha" and the "Mitsubishi Kaisha"

The earliest steamship company in Japan was the "Kaiso Kaisha" which was originally established and supported by the hands of the Meiji Government

and which set up its business since January 1870. The Government gave to the company many steamships, that is, 5 vessels owned by the central Government and 5 vessels owned by some local governments (feudal lords); all of the steamers had been imported before the Meiji Restoration. It had also the monopoly for the transport of the tribute-rice. Such a decision of the government was derived itself from the preceding ordinance, which the government had issued in 1869 proclaiming to encourage the import of the European-type vessels and also had been the outcome of the policies in the late Tokugawa Era (ordinances 1858 and 1861), and the object had been to set up a carrying trade against the foreign steam-ships.

With the Pacific Mail Steamship Co. of U. S. A. in the lead, so many senior shipping companies in Europe, including the British, French and Dutch —— the last named alone had been allowed to come to this country even in the isolation period —— were coming to this new market one after another. Such an advance of the foreign shipping was not only reducing the activity-field of the Japanese native sailing-vessels and preventing the new development of the steamship company in this country, but gave necessarily so strong pressure on the political independence of Japan. Especially when the P. M. opened the line from Yokohama to Shanghai through Kobe and Nagasaki in early 1870, the Meiji Government had to confront the enterprise, willing or not, with a counter enterprise. A sense of crisis that the privilege of coastal navigation which was (and is) thought to belong to the native shipping was threatened by the foreign steamers, and this was the immediate motive of the establishment of the Kaiso Kaisha, together with the old still remainning fear of the "Black ships and Cannons" which awakened the Japanese people from the dream of isolation.

As Japanese economic and maritime circumstances in this period did not yet require the voluntary formation and development of the steamship enterprise and also the then fundamental operation-type was still the private carrier type with the out-of-date "Japanese-style sailingvessels", it was necessary that the government should give great encouragement and support in order to introduce the steamship and to master its operation-method. The chief lines of the business activity of the Kaiso Kaisha had already been determined by

government protections. This was a very advantageous condition for this company, but, on the other hand it was a restrictive condition, for it limited the development of this company at the beginning. Indeed the system of this company which was established in order to compete against the foreign shippings and to maintain the privilege of coastal navigation was organized "from upside", utilizing the grant of the needed vessels and promised jobs. The knowledge relating to the navigation by steamship and the method of its operation in the new company-system was not only immature and unskilled, but its operation-system itself was also bureaucratic. Then, even though it was formally announced that this company will be operated to deal with the transport of the public cargoes and passengers, its operation actually was nothing but the semi-common carrier type. It did not start as a common carrier and even its operating foundation was entirely fragile. The essential weakness of a non-common carrier type, characterized by its semi-official organization, coupled with its inefficient and bureaucratic performance, drove rather the new company itself to the fate of disorganization within one year, far from driving the foreign shippings away. These basic defects were well recognized in the "Kaiso Toriatsukaisho" which was established in January 1871, and in the "Nihon-koku Yubin Jokisen Kaisha" —— herein after abbreviated as N. Y. J. K.—— which was established in August the same year. For reasons of these defects, the semiofficial steamship company disappeared in the end, even though it struggled to continue its existence by changing the name. The N. Y. J. K. fell behind of another native steamship company, "Mitsubishi Kaisha",[1] which advanced with more speed and in more perfect form as a common carrier, though it had been established later, when the two companies confronted in competition.

It was a very interesting fact, even though ironic on the other land, that the Mitsubishi Kaisha which started as a purely private enterprise accomplished ultimately both objects of the elimination of the foreign shippings and

1) It also changed so often its name; Tsukumo Shokai in October 1870, Mitsukawa Shokai in January 1872, Mitsubishi Shokai in March 1873, and Mitsubishi Kaisha in May 1875. It will be known that the Mitsubishi Kaisha was moreover succeeded by the Nippon Yusen Kaisha in 1885.

the development from private carrier to common carrier, while the semiofficial companies failed to do so after all.

Although it had no connection and no support with the Meiji Government till the "Formosa Campaign" (1874), except the some aids from a local government, "Tosa-han", the Mitsubishi Kaisha was undoubtedly developing to considerablly clear common carrier type at least since about 1873. A lack of the monopolistic transport-privilege made this company select the way to deal with the public cargoes and the general passengers. It was more possible for this company to develop the independent shipping trade, —— that is, com mon carrier, as it originally started to earn freight only. Moreover, it was necessary for this company that it should depend upon this business for existence. Therefore it treated the customers carefully and adopted every means of merchantism in order to invite to use of its vessels. It was quite natural that the general shippers and passengers should like the courteous treatment accorded them and prefer the ships of the Mitsubishi to other arrogant ships.

Nevertheless, in view of the general economic development of the country and the volume of the traffic at that time, the Mitsubishi had no advantage over others and did not have enough share of the business. Many difficulties obstructed the way of operating the steamship company; and even the business operation of the Kaiso Kaisha, which had been generously subsidized and had been assured of mass-traffic, was not at all easy. The difficulties were much more increased in the case of the Mitsubishi, as it depended for its finance solely on the earnings from the transport of public cargoes and passengers. Its repeated changes of the trade names and reorganizations in the beginning of the history of the company may have been caused by these difficulties. In order to advance in the direction of common carrier system that aimed to earn freight and reduce the operating loss and increase the profit, the Mitsubishi found it advantageous to obtain some government protections, and especially subsidy by all means. The government, however, had already established another steamship company and had given it so exclusive support, that the Mitsubishi had to prove its ability, excellence and superiority over the semi-official company, in order to wedge in the claim for the government

protection. It was the most practical and efficient method for the Mitsubishi to overcome the rival in the competition. In effect the Mitsubishi challanged and conquered the N. Y. J. K. completely.

At this point of competition with the N. Y. J. K., the only motive power by which the Mitsubishi attempted to overwhelm the rival was the superiority of its common carrier type to the semi-common carrier type. It may be concluded, theoretically, that the Mitsubishi could have challenge and predominate gradually over the N. Y. J. K. because of its modern progress in the operation-type, although it is doubtful whether the importance of the development to common carrier type was correctly recognized by both companies, the government and the general public. As a matter of fact the Mitsubishi was considerably inferior in almost all aspects; in the tonnage, in the connections with the central government and other organizations and in the protections and aids given by them, but it was distinctly superior to the N. Y. J. K. in the point of its advance toward the common carrier type. The latter was obliged to fall behind step by step in the competitive process by reason of a limited frame-work of its semi-common carrier type, from which it could not extricate itself. Of course, the competition with the Mitsubishi and this limitation were not the only causes that the N. Y. J. K. fell into decay. It was true, however, that its declining fortune was accelerated by the bitter strife. Although it is commonly stated in the Japanese books about this period of the history of shipping that the bureaucratic and conservative business operation on the side of the N. Y. J. K. was inferior to the merchantile and progressive capabilities of the Mitsubishi, I will emphasize that the difference of character between two companies, that is, the common carrier type of the Mitsubishi and the semi-common carrier type (the remains of private carrier type) of the N. Y. J. K. must be recognized more basically and distinctly.

While the N. Y. J. K. remained to persist in the type of semi-common carrier, the Mitsubishi advanced one step further to common carrier type. It was natural that the latter which had to manage with the freight-income by transporting the public cargoes and passengers should try to collect even one more passenger or one more tonnage of cargoes. The N. Y. J. K., on the other hand, engaged itself originally in the transportation of the monopolistic

cargoes which were assured by the government, and rendered service only additionally and benevolently to the general passengers and cargoes. Thus there was an extremely important difference between both companies, when the struggle for the common cargoes and passengers later became severe. The cargoes and the passengers flowed inevitably into the Mitsubishi and the public credit for it increased gradually. The cut-down freight rate began to absorb even those cargoes which had not been handled by the steamship, and the Mitsubishi succeeded to cover the loss of rate-cutting with the increase of the total traffic volume. Compared with the Mitsubishi, the N. Y. J. K. lost gradually the public cargoes and passengers by which it gained an additional income, though they were only supplementally handled, and thus its income was limited only to the slender earning derived from the obligatory traffic.

The "Formosa Campaign" broke out in 1874, when the superiority or inferiority in this competition became quite distinct. The Mitsubishi performed indeed the most brilliant and active cooperation with the government in this war, when the Meiji Government undertook the over-sea transportation of the army for the first time. Believing that it was a golden opportunity to show its ability for the government, the Mitsubishi undertook voluntarily the greater part of this transportation. On the other hand, the N. Y. J. K. which had fallen already into the inferior position was hardly able to cooperate in this work because of the obsoleteness of its vessels and for reasons of political factions for the war. Here the government relations with both companies reversed completely and the Mitsubishi was now able to expect the further strongest protection and intimate connection with the government. While, the financial difficulty[1] of the the N. Y. J. K. which happened after this war brought about its disorganization, and the Mitsubishi even replenished its fleet by the annexaion of the company.

The fact that the common carrier type of the Mitsubishi was proved finally superior to the semi-common carrier type of the N. Y. J. K. demonstrated the

1) The "Kawase Kaisha" (Exchange Company) which had supplied the funds to the N. Y. J. K. required the repayment of its loan for reasons of the bankruptcy in a membership.

appropriateness of the inevitable development rule from private carrier to common carrier —— usually including semi-common carrier in the middle of its process ——, as well as the beginning of this progress in Japan. It might be said that here the Mitsubishi entered a new stage to gain mastery of this new common carrier type and to develop it, though it had still to overcome many difficulties and several years of struggle and experience for its completion. And it was an almost foregone conclusion that the next inevitable trial should be brought by the conflict with the foreign shipping which had already accomplished the development to common carrier and attempted to proceed outward with this operation type. After and during such experiences, the Mitsubishi Kaisha developed and completed step by step its common carrier type.

3. Competition between the "Mitsubishi Kaisha" and the "Pacific Mail Steamship Co."

The Mitsubishi desired earnestly, as it has been stated in the preceding section, to get the government subsidy to cover the shortage in its income, caused by their operation-object to transport the general passengers and goods, and also to break open the limitation of its own development. The company succeeded not only to beat the N. Y. J. K. in the process of the competition, but also to make the government recognize the ability and strength of the Mitsubishi through the Formosa Campaign which happened in 1874. The first protective shipping policy which was established in 1875 on the basis of "Okubo's proposal" warranted to the Mitsubishi company the sole monopolistic power in the further Japanese shipping circles. In September 1875 this company owned at least 34 steamers (23,385 gross tons[1]), including 12 vessels imported in Formosa Campaign and 15 vessels taken over from the N. Y. J. K. Though the Mitsubishi grew greater and stronger, the expenses

1) from "Kobe Kaiun 50 Nen Shi" p. 39.; but this figure may not be exact. According to my research, the tonnage of 12 vessels imported in Formosa Campaign was 16.021 G/T and 15 vessels which were transfered from the N. Y. J. K. to the Mitsubishi were 7.438 G/T in total. Nevertheless, those tonnages must be understood in comparision with the sum total of Japanese steamships 26.088 G/T in 1873 and 42.304 G/T in 1875.

for the maintenance of its fleet increased together with the accompanying difficulty, and the government's expection for this company also became larger. The government's hope was no other than to check the invasion of the foreign steamers and to recover and maintain intact the coastal navigation-right. The Mitsubishi has not yet proved its strength to resist against the foreign shippings, although its predominance over other internal companies had been proved and recognized in the competition above mentioned. Moreover to assure its own monopolistic dignity within this country and also to gain the further protection (subsidy) from the government, it was a necessary premise for this company that it should repel this foreign steamers by own hands, which the N. Y. J. K. failed to do. Also to further develop the common carrier type which was adopted first by the Mitsubishi and to fully utilize its increased vessels, it was necessary for this company to get the complete control of all the inter-coastal transportations.

Thus in this point, the political and military requirements of the Government; that is, the exclusion of the foreign steamers out of the coastal routes and the purely defensive and military demand, coincided with the economic necessity of the Mitsubishi. Expressed more distinctly, the Mitsubishi was the only company that could compete with the foreign shippings and be expected to do so for reasons of national defense. Then, how were the foreign vessels situated in that period?

The foreign vessels that visited Japan were increasing year after year, including the Pacific Mail Steamship Co. which came to the orient since it opened the line from San Francisco to Shanghai in 1867. The name of the P. M. and its fleet were known among the Japanese people as "the fourth building" or "the fourth ships", derived from the name of their Branch building in Yokohama which the company set up after the opening of this country to foreign commerce. Immediately after the Meiji Restoration, the company called attention of the Meiji Government to the importance of the coastal transportation and requested for its monopolistic privilege. As soon as the Japanese Government refused to grant the request and attempted to establish the "Kaiso Kaisha, the P. M. opened the new route from Yokohama to Shanghai and made clear its attitude to govern all the coastal navigations

with its own power. Thus it oppressed the activities of the Kaiso Kaisha and the Nihonkoku Yubin Jokisen Kaisha and controlled almost all of the sea-routes in Pacific side of Japan. It was naturally an important disturbance to threaten the political independence and self-defense of Japan.

Furthermore, when the Formosa Campaign occurred in 1874, the cooperation for its military transportation which the P. M. had promised to the Japanese Government did not actualize because of the neutrality of the United States Government. This was an immediate motive of the Meiji Government to believe that it should not be able to depend on any foreign shipping in case of emergency. So the Government decided after the war to adopt a most important and original policy to foster the native shipping industry even overcoming many difficulties.

In order to exclude the great power of the P. M. which gave the most direct and important threat to Japan, and which had operated already the line from Yokohama to Shanghai, an order from the government was given to the Mitsubishi Kaisha on 18 January 1875 that the company should open and operate the same route at once. With the four steamers, named the Tokyo-maru, the Nigata-maru, the Takasago-maru and the Kanakawa-maru, all of which were imported at the time of Formosa Campaign, the Mitsubishi began instantly to operate the regular line, sailing once a week. It was reasonable to expect that the line, which was opened rather from the point of political view than from the spontaneous will of the company itself, gave hardly any profit to the Mitsubishi in the beginning. In fact, there was a considerable difference in the competitive strength of the competing companies. The following table shows the tonnage comparison of the two fleets used in this line. The figures are cited from the statistics in "the 50 Years History

Comparision of the both fleet-tonnages used in this line

Mitsubishi		P. M. Co.	
the Tokyo-maru	2.217 G/T	the Costarica	1.917 G/T
the Nigata-maru	1.090	the Oregonia	1.914
the Takasago-maru	1.019	the Golden-age	1.870
the Kanakawa-maru	606	the Nevater	1.060
total 4 vessels	4.932 ton	4 vessels	6.761 ton

of Nippon Yusen Kaisha" though they may not be quite accurate.

Although there was no significant difference in the comparision of every ships' age, there is enough reason to suppose that the vessels of the P. M. were generally superior to the Mitsubishi's in the point of speed. Quite apart from those differences, the Mitsubishi was distinctly inferior to the P. M., as the latter had already accumulated so much actual results in this line and had owned considerable facilities in the various ports and had already entered into close connections with many shippers.

Nevertheless, the fact that the Mitsubishi challenged the P. M. immediately on the basis of the government direction meant, at the same time, that the company had an assurance that suitable protection and help might be further given by the government if that was necessary. This was the only source of strength for Mitsubishi and was the sole advantage that the Mitsubishi had over the P. M. in competition. The Japanese Government formally drew up the protective shipping policy in May 1875 and successively in September issued the "First Direction" to this company, which provided that it shall be given 250 thousands yen a year as the navigation-subsidy. On the other hand, the Mitsubishi had added to its fleet-tonnage after the disorganization of the N. Y. J. K., for a considerable number of vessels which the latter had owned were given to the Mitsubishi free of cost. Supported by such advantages, the Mitsubishi was now able to set on so difficult competition againt the P. M. that seemed quite impossible by its own effort. The challange started with the rate-cutting and the increase of the navigation-frequency against the competitive methods of the rival company, whose superiority was speed and it tried to disturb the vessel-operating and cargo-collecting mechanism of the Mitsubishi. The fares of the passenger service between Kobe and Yokohama, where the competition was most fierce, were cut down to: — the "Upper Class" from normal 25 yen to 10 yen and the less, the "Lower Class" from normal 10 yen to $3\frac{1}{2}$ yen, and at the climax of competition they were reduced to 5 and 3 yen respectively. Although such rate-war resulted in the accumulative loss to both campanies, the Mitsubishi Kaisha was able to cover the loss with the aforesaid subsidy, if necessary may expect even to be given with more aids.

On the other hand, there were perhaps nothing to cover such loss on the

side of the P. M. The navigation-subsidy 500 thousand dollars a year which the P. M. had been given by the U. S. Federal Government for its line between San Francisco and Shanghai, would hardly have any effect on this branch-line from Yokohama to Shanghai. Furthermore, the outbreak of a bribery-case involved with this subsidy and the approaching expiration of the term made the position of the P. M. quite difficult. It was, therefore, quite wise for the P. M. to decide to withdraw itself from this route, when it considered the facts that the Japanese inter-coastal transportation, which the company had advised to cultivate, was beginning to develop in the direction of protecting the native shippings from the point of self-defence and that it might be given with immeasurable government supports for them. It was not, nevertheless, to be thought that the P. M. withdrew itself from this line as a result of defeat, like some of the conventional Japanese books on its shipping-history are inclined to state. It was quite certain that the P. M. had still strength enough to compete with the younger Mitsubishi Kaisha, even though the later was given with much aid from the Japanese Government. Indeed, the P. M. preferred to close the competition within the advantageous period for itself and to reduce its possible loss in the future, and gained perhaps as much compensation as possible to repare its damages hitherto.

Paradoxically, the following facts may be quoted:—the Mitsubishi attempted to close the competition by purchasing 4 vessels and the overall facilities in Kobe, Nagasaki and Shanghai, including lands, houses, warehouses, piers and other land equipments owned by the P. M., on 16th October 1875, about only one month after the day, 15th September, on which it was promised the grant of subsidy by the "First Direction" for the Mitsubishi Kaisha. That is, immediately after the grant of an advantageous competitive consideration —— the grant of subsidy, possibly a most important and immediate competition power ——, the Mitsubishi desired rather to come to an agreement. It seems to mean clearly that the strong hope to end the competition had existed in the Mitsubishi management. The money paid to the P. M. in compensation for its withdrawal was never small sum. To be specific, the payment for 4 vessel amounted to 680 thousand dollars within the total compensation of 810 thousand dollars —— it was paid from the considerablly

difficult national treasury —— and the sum for every vessel was also larger in comparison with the sum paid for each vessel at the time of the "Formosa Campaign" or "Seinan Campaign" (1877) which was unavoidably much higher, as they were bought under emergency conditions.

4. Conclusion

The modernization of the Japanese maritime transportation —— especially the mastery of the new operation-method concerning steamship company —— in the early Meiji peiod was started on its own process since the foundation of the Mitsubishi Kaisha. It was an inevitable development of shipping that the N. Y. J. K., which persisted to retain the stage of a semi-common carrier for the various reasons, was replaced by the Mitsubishi, which launched daringly into the common carrier type. The development of common carrier type in the Mitsubishi was, of course, recognized so far as the restrictive coastal routes are concerned and its strength could not be compared with that of the foreign shipping industries. The Mitsubishi had yet no power to advance outward in the world as a common carrier. Still at that time the type of a private carrier using infantile Japanese-type vessels or somewhat more progressed European-type sailing-vessels was predominant in this country. The navigation of the steamer was just carried on only in such main routs as the line between Tokyo and Osaka, which had been prosperous in the Tokugawa Era and importance has been attached because the railroad had not yet been opened.

Therefore, the start of Yokohama/Shanghai line which the Mitsubishi Kaisha undertook in accordance with Government-order and attempted to grow as the first international route between Japan and China, was not based upon the economic or commercial demand. The same route was only selected as a method to exclude the Yokohama/Shanghai Line of the P. M. Co., for the latter, which included the haul from Yokohama to Kobe, gave a severe threat to "the right of inter-coastal navigation" as well as to "national defense-right". This is easily confirmed, when we consider that this competition, which was extended formally on the route between Yokohama and Shanghai, was actually restricted almost upon the passenger trafic from Kobe

to Yokohama.

The Mitsubishi Kaisha was able to compete with the P. M. and to succeed in the purchase of the inter-coastal navigation right with the aid of the government subsidy, which was given essentially from the point of view to prepare the shipping of the country for national defence. It could not, however, prevent all the foreign vessels and their further menace on the right of intercoastal navigation. In February 1876, four months after close of the competition with the P. M. the "Peninsular and Oriental Steam Navigation Co.", an English Shipping Company, invaded into the same coastal route and gave a more important menace to the Mitsubishi and the Japanese Government. The Mitsubishi resisted again and at long last drove back this new invader, but the explanation about the competition between the Mitsubishi and the P. O. is beyond the scope of this article, and will be studied in another opportunity.

It is by no means intimated that the Mitsubishi Kaisha excelled the foreign steamship companies in the type of common carrier. The latter surpassed very much in their process. The background by which the Mitsubishi succeeded to repulse the foreign steamers must be sought in the facts that the modernization of shipping in the early Meiji period was promoted from the view of the defensive and militaristic emergency and that it had been given with an unbounded government protection for that reason. Through its contact with the advanced foreign shippings, the common carrier type of the Mitsubishi learned so much more and went further forward step by step on the road of progress. In conclusion it may be said that the development of the Japanese shipping to the common carrier type, which the Mitsubishi Kaisha represented, had originally been encouraged by the defensive subsidy policy.

TWO DEFLATIONS IN THE SHOWA ERA

BY MASAHIRO FUJITA

I

The actual situation of the present Japanese Economy seems to be well expressed by saying that it is now going through a severe deflation. It is not however that our people have not suffered from such vicious deflation in the past. On the contrary, they have suffered several deflations interspersed with alternative inflations since the Meiji Revolution (1868) —— that is, we may count seven deflations as follows:——

1. The so-called Matukata deflation — Meiji 14~16 (1881-1886)
2. Post Japan-China War (Nisshin War) deflation — Meiji 29 (1896)
3. Post Japan-Russia War (Nichiro War) deflation (by Katsura Ministry) — Meiji 41-42 (1908-1909)
4. The early Taisho deflation — by the panic in Taisho 3 (1914)
5. The Inoue deflation — Showa 4~5 (1929-1930)
6. The Dodge deflation — Showa 24 (1948)
7. The present deflation since last year (Showa 28) — 1953

The Matsukata deflation was brought about as an attempt to retrench the prodigeous issue of paper currency to meet the expense of the Seionan conflict (Meiji 10; 1877). This is one of the only two successful cases which our financial authority effected to contract currency and ceased inflation by self-reliant policy and voluntary effort. We have only two such cases since the beginning of Japan Capitalism in the Meiji era. Another case is the socalled Inoue deflation of which we will speak later. The Seinan conflict resulted in an inflation; price index (wholesale price) changed as in the following table.

Table 1. Changes in the price index since 1877 (standard year=1873=100)

1873	100 (Meiji 6)
1874	108
1875	113

1876	108					
1877	111	(Meiji 10) Seinan Conflict Out-break				
1878	117		1904	209	1930	349
1879	128		1905	224	1931	295
1880	146		1906	231	1932	327
1881	162		1907	249	1933	375
1882	156		1908	240	1934	382
1883	126		1909	229	1935	392
1884	110		1910	232	1936	408
1885	112		1911	240	1937	496
1886	104		1912	255 (Taisho 1)	1938	522
1887	108		1913	253	1939	578
1888	113		1914	243	1940	647
1889	118		1915	246	1941	693
1890	124		1916	298	1942	753
1891	115		1917	375	1943	806
1892	112		1918	491	1944	914
1893	126		1919	601	1945	1380
1894	133		1920	661	1946	6411
1895	143		1921	511	1947	18972
1896	153		1922	499	1948	50403
1897	170		1923	508	1949	82253
1898	180		1924	526	1950	134957
1899	181		1925	514	1951	137650
1900	194		1926	456 (Showa 1)	1952	13965
1901	185		1927	433	1953	14326
1902	187		1928	436	1954	14336
1903	199		1929	424	1955Jan.	13475

In the Seinan conflict inflation, wholesale price index showed 62% rise in comparison with that of Meiji 6 (1873)~Meiji 14 (1881); and the average quotation of inconvertible paper-notes for 1 silver coin (money) yen showed ¥1.03 in Meiji 10 (1877), and in Meiji 14 (1881) became ¥1.69; and the rice quotation of one *koku* was ¥5.55 in Meiji 10 (1877), but in Meiji 14 (1881) the quotation rose to ¥11.20. On account of this inflation, the price level rose about 50% in four years, we find, another influence that affected the price level was attributted to the flowing out of gold due to unfavourable position of our trade. The Amount of government specie hoarding was decreasing and uneasiness atmosphere began to spread. It, above all, resulted in

an excess of import since Meiji 10~14. In those days, the amount of the specie lost rose to ¥38 million. The stages of transition are as folloues:—

Meiji 9 (1876) (a) circulated inconvertible paper-notes ¥107 million
(b) government holding amounts of the specie 15 million
(c) rate of its reserve 14%

Meiji 13 (a) circulated inconvertible paper-notes ¥159 million
(b) government holding amounts of the specie ¥7 million
(c) rate of its reserve 4%

As regards the government counter-measures adopted to stop these inflation influences, there were two chief opinions, the one of which was that of Finance Minister Ōkuma's advocacy the other was that assumed by Matsukata Ōkuma's successor. Let us examine these two policies, though we shall not be able to go into the details.

1. Ōkuma policy:—

The cause of this inflation was not the increased issue of inconvertible paper-notes, but was due to the flowing out of the specie on account of unfavourable trade. And then the unfavourable trade was due to dullness of production and inept retrenchment of the convertible paper-notes which must cause currency deficit. From these points of view, his poliy was directed necessarily to adopt liberalization of selling ***Mexican Dollar or Trade Dollar*** (yōgin) an don the other hand, to promote the industry production, which, however, needed enormons funds. The Ōkuma policy resulted finally in a miserable failure.

2. Matsukata policy

As above-mentioned, Ōkuma was forced to relegate the work of amending the defects of his policy to his successor in position and authority. The New Finance Minister promoted the new policy, which he planned and executed in Meiji 14. The Contents were as follows:—

(a) To effect surplus and sound government fiscal balance by increasing the annual revenue by the increase of taxation and economizing annual expenditure.

(b) Burning away of existing inconvertible paper-notes collected through (a).

(c) Accumulation of the specie (gold) by promoting exports. In consequence, he showed the standard fiscal government budget and selected Meiji 14 as a model year.

Therefore, the expenditure of each government office after Meiji 15 was left unincreased for three years through various newly kinds of taxes and increased taxes and realized the surplus on government financial budget balance of ¥40.1 million during Meiji 14~18.

The inconvertible paper-notes that were directly burned away in five years (Meiji 14~18) amounted to ¥3.65 million, and the transferred amount to special government reserve fund was ¥26.46 million, and the total amounted to ¥40.1 million. The reserved inconvertible paper-note issue system has been retained by Finance Ministry in order to make good a temporary shortage of fiscal balance, which was a very unsound system. Therefore, in Jan. Meiji 15, this was reformed together with the procedure and order of dealing with receipts and disbursement of the national treasury fund. It is to be noted that, in spite of this temporary measure that attempted to decrease an temporary shortage of the fund, the deficit could not be solved by such a make-shift measure. At the time of his taking office as Finance Minister, Oct. Meiji 14, the uncollected amount of public loan bond had showed ¥14.5 million, but most of it had been redeemed by Jan. Meiji 16. Besides, by issuing unregistered public loan bonds (it was exchanged for gold note or Dajō-kan note) in Meiji 16, attempts were made to retrench the vicious inflation. By Meiji 19, the inconvertible paper-notes were collected to the amount of ¥7.92 million. Especially, Matsukata's powerful policy was the retrenchment of paper-notes and the proportion of export. The latter included the following measures new establishment of a central bank (Bank of Japan established Meiji 15), encouragement of export was concentrated in the export of rice, silk, green tea; and consular service was established at all important places over the world, and promoting the issue of documentary bill system in export, furnished the foregn exchange fund to the Yokohama Specie Bank etc. As Matsukata reformed the reserve fund system, he directed the converting to specie (instead of buying public loan bond and carrying on advance and loan fund), and the rate of the specie and total reserve fund showed ¥8.6 million

and ¥5.5 million in Meiji 14, but ¥42 million and ¥48 million in Meiji 8.

Thus, Matsukata deflation policy actualized his public promise, and the vicious inflation in those days was cured in five years. The Matsukata policy was most pure and diligent practice of the orthodox and classical monetary Theroy, and in a sense it might be said the Meiji edition of "Dodge line". With the development of Japan Capitalism, national funds grewto enormous amounts day by day and the scale of our economy extended and its national expression was the formation of the Japan Imperialism.

Japan-China and Japan-Russia and Japan-Germany War (World War I) were the process of development of Japan Imperialism. Inflation has a prosperous character, on the contrary, deflation has panic character. And, both inflation and deflation are apt to appear alternately which brings effects as we mentioned before. Inflation is caused issentially by war, deflation in its train. Though we picked up the seven deflation or deflation policies since the Meiji Revolution, these do not cover all instances that happened in Japan. To take some up, the panic in Meiji 23 (1890) and the financial panic closing banks all over the Kyushu district in Meiji 33~34 (1900-1901), another in the early period of Showa (Showa 2: 1927), a great panic deflation or panic in Taisho 12 (1923) at the time of the Kanto district great earthquake disaster. Now turning to the Katsura deflation policy, it was adopted after the panic following the Japan-Russia War. It included measures as follows:—

(i) Retrenchment of the expansive government budget.

(ii) Adoptation of drastically contracted government budget and monetary policy after Meiji 42 fiscal year.

(iii) To cut the national expenditures and put off the expenditures on public business entity to the utmost.

(iv) To forbid new issu of public loan bond.

(v) The redeeming program of public loan bond more than ¥50 million per year.

The effect of these policies brought about the depreciation of prices as shown in table 1 and the trade balance from an excess of import in Meiji 41 changed to exess of export.

In point of rate of interest, the official rate of the Bank of Japan declined

successively since May Meiji 42, and the discount rate of commercial bill was fixed at 1.3 sen, and private or city rate of interest similarly fell: Tokyo discount rate declined from 1.8 sen in Meiji 41 to 0.95 sen in Meiji 42. Subsequently, our history was involved in World War I and then followed the abandonment of the gold standaed and return to the gold standard and lifting of the gold embargo, so on.

Lately we have experienced the so-called Dodge stabilization policy. It was a typical deflation policy, which is characterized as follows:—

(1) The Dodge policy was not simple alternate depression and prosperity, but cyclical deflation.

(2) This deflation rose from a powerful stabilization policy in order to stop quickly the inflation produced by the war and during the war.

(3) This deflation has been caused by the devaluation of pound sterling in Sept. 1949 and by the recession of American Economy.

(4) This deflation was the expression of continuing depression, and was due to the structural change of economic life. In fact his deflation policy adopted in 1948-49 was a complex policy that combined the cyclical and stabilizational, mechanical and structural characters.

II

There are various definitions of "deflation": (1) it is simple reverse concept to inflation or anti-inflation (2) Stock finance or stock circulation (3) the process of re-estimation of goods and labour. (4) changing of price of gold —— price standard bring about the fall of nominal prices. (5) Deflation is economic situation under the policy which intends to draw up the rate of foreign exchange and to draw down the price level. The pulling down of actual value of gold is attempted by connecting the difference of values between gold and paper-money. It's remarkable point is that deflation is the circumstances that deflation policy can be actually carried on. Again, deflation is one economic phenomenon through which currency and credit are contracted and price level lowered in which too excessive contracting of currency does not provide enough social demand quantity of currency. Then, deflation policy contains adoptation of drawing up the rate of interest, ***open market operation*** (selling

operation), and an exessive withdrawal of financial fund by the increase of taxation. Simply speaking, deflation policy is a control of currency quantity. Furthermore, deflation is price-lowering under the expensive reproduction. Here the various types of deflation must be made clear, several theories are as follows:—

(1) Cyclical deflation; this direction to depression is one step of business cycle which is realized automatically.

(2) Continuous deflation; with the development of capitalism, deflation becomes its structural contradiction.

(3) Restorative deflation; the includes deflation policy and stabilization policy. The former is contraction policy which intends that the domestic prices fall down to old level and the rate of foreign exchange goes up to old level, the latter is devaluation policy. The lifting of embergo on gold (1930) is one of restorative deflation policy.

(4) Mechanical deflation; the world gold standard caused international deflation, this belongs to mechanical deflation.

(5) Structural deflation; owing to the change in the structure of economic life, its automatic adjustmental operation is lost, and under the "laissez-faire" operation results in essential continuous depression.

III

As we have studied various characters and counter-parts of deflation, we intend now to analize the two deflations in the Showa Era. The two deflations include the Inoue deflation or the First World War deflation and the deflation since 1953 or the Second World War deflation.

First of all, let us examine the former deflation. In the fall Autumn of 1929, the stock exchange market of New York registered a severe fall that marked the moment of world deflation. Since then, the phenomenon continued to develop up to 1932 and 1933, until it led up to Great Depression. The World deflation influence was expressed generally on the price level. This price-change was remarkable in export country of agricultual products i. e. the U. S. A., Canada, New-Zealand, Argentia, etc. The decrease of production in all the world showed 60% and capital goods production was larger

than that of consumer goods. So unemployment increased and the wages of factory workers was forced down. In 1932, unemployment all over the world was 25 million ~ 30 million.

Table 2. Wholesale price (1929=100) Leage of Nations

	1930	1931	1932	1933	1934	1935
U. S. A.	90.7	76.6	68.0	69.3	78.7	83.5
Canada	90.6	75.4	69.8	70.2	74.9	75.4
United Kingdom	84.0	70.2	67.7	68.2	71.0	74.1
Germany	90.8	80.8	70.3	68.0	71.7	74.2
Anstria	90.0	83.9	86.2	83.1	84.6	84.4
France	88.4	80.0	68.2	63.3	60.6	54.0
Italy	89.3	78.1	73.0	66.5	65.0	71.5
Japan	**82.4**	**69.6**	**73.3**	**81.6**	**80.8**	**84.4**

The income or earning of capitalist (class) extremely decreased. In 1932, no profits were made in average, and they suffered great deal of loss; in 1933 the income was 1/6 to 1929, in 1934 was 1/4.

In other words, the rate of profit declined.

Table 3. The world production (1929=100)

	1932	1933	1934
all over the world (except U. S. S. R.)	63	71	77
all over the Europe (except U. S. S. R.)	70	76	84
North America	54	64	67

Source: League of Nations

Table 4. Production of Invested good and consumer goods (1925—29=100)

		1930 IIII	1929 IIII	1931 IIII	1932 I
U. S. A.	I	94	64	41	35
	C	99	87	86	83
U. K.	I	107	85	77	78
	C	101	89	95	93
Germany	I	109	78	56	46
	C	106	91	92	86
Sweden	I	118	99	94	87
	C	103	102	105	110

Source: League of Nations

Increase of unemployment during world depression.

Table 5. Employment Index in the World (1929=100)

	1932	1933	1934
all over the World (except U. S. S. R.)	70	73	81
all over the Europe (〃)	79	80	85
N. America	62	66	65

As a whole, 1929-32 employment reduced about 30%, but N. America employment reduced 38%. Total unemployment collected by League of Nations in 1932, 20 million ~ 25 million, at the end of 1932, 25 million ~ 30 million.

Table 6. The number of unemployment (unit: 1000)

	1929	1932	1933	1934
U. S. A.	8%	23%	26%	21%
Canada	12	77	80	89
U. K.	1004	3233	2310	1908
Germany	2484	6034	5599	2779
France	9	347	357	839
Italy	293	1053	1082	1057
Japan	**369**	**474**	**424**	**381**

only U. S. A. picked up percentage for total employment. Next, nominal or real wage changed viciously.

Table 7. Nominal Wage (1929=100)

	1932	1933	1934
U. S. A.	84	83	99
Canada	94	90	89
U. K.	96	95	96
Germany	82	79	79
France	104	104	104
Italy	86	84	82
Japan	**85**	**86**	**88**

In real wage, general speaking shown propensity to increase.

Table 8. Real Wage (1929=100)

	1932	1933	1934
U. S. A.	108	111	124
Canada	115	115	112
U. K.	110	112	111

Germany	104	104	101
France	110	111	112
Italy	104	106	109
Japan	**112**	**107**	**107**

On the contrary, the loss of the profit of capitalist is high degree, and then diminishing rate of profit is clear.

In the case of the U. S. A.

1929	1930	1931	1932	1933	1934
100.0	59.3	25.0	net-loss	15.9	26.1

In the case of U. K.

1929	1930	1931	1932	1933	1934
100	99	77	63	63	74

According to great deflation, the quantity of the world Trade situation quitely reduced and the world trade structure changed.

Table 9. The changes of the world Trade (1929=100)

	1932	1933	1934
the dollar value	39.1	35.2	33.9
the gold value	52.5	46.5	43.0
the quantity	74.5	75.5	78.5

Dollar value counted trade amount that it was converted by America Dollar

Thus vicious deflations are caused from the following factor.

a. The changes in the industrial structure

Development of rising capitalism countries i. e.

South and North America, Australia, New Zealand and South and Southeast Asia, Far East Asia countries

b. The accumulation of contradiction

(i) Agriculture revolution since 1910

(ii) Excess or over production in industry

Table 10. The World Stock Index (1925-29=100)

	1925	1929	1930
Agriculture stock	89.7	120.9	139.0
Raw material stock	90.9	118.0	128.7
Total stock	90.2	119.6	134.6

c. International capital movements

Table 11. Changes of the gold reserve in each country

(unit: million dollar)

	1925	1927	1928	1929	1930	1931 (June)	1931 (Dec.)	1932	1933
U. S. A. (A)	3985	3977	3746	3900	4225	4593	4051	4182	4189
U. K. (B)	704	742	746	711	722	800	590	587	933
France (C)	800	799	1247	1631	2099	2211	2683	3257	3015
Germany	303	460	666	560	544	354	251	209	109
Canada	226	229	191	151	194	157	144	137	127
Japan	**579**	**542**	**541**	**542**	**412**	**424**	**234**	**212**	**212**
Total (D) (all over the world)	9054	9384	9919	10249	10800	11128	11061	11637	11615
A/D %	54.2	42.4	37.5	38.0	41.0	41.4	36.8	36.1	36.1
B/D %	9.6	7.9	7.5	6.9	6.7	7.2	5.4	5.1	8.0
C/D %	10.9	8.4	12.5	15.9	19.4	20.0	24.4	28.1	26.0

During 1929-1930, the deflation was a link of a chain of world panic. The diagnosis of Finance Minister Junnosuke Inoue of the economic conditions at that time was as follows:—

(1) In those days Japanese economy was under the gold embergo.

(2) So, no autonomous adjustment operation of her economy occured.

(3) Though there were continuous of imports on account of undue consumption prosperity, domestic deflation could not be produced by the flowing out of gold. Therefore, the people were enjoying life more than they really deserved. But they became regard that kind of life as just and ordinary, and the national economy faced serious crisis.

(4) It was due to the accumulation of the foreign currency in the World War days that despite flowing out of gold, our people were able to keep up excess import.

As far as the flowing out of gold was not restricted and our people did not stop wasting this valuable foreign currency for luxury, our hoarding of foreign currency was clear to be exhausted. An excess-disbursement in the balance of international payments is sure to bring about the fall of yen in foreign exchange. From this analysis he established the new policy, which may be summarised:—

(1) To encourage the cutting down of consumption of the people.

(2) To propose the contraction policy in Finance.

(3) Lifting of gold embergo.

(4) To reduce prices, and increase the export, to recover the international value of yen. All these measures were accomplised at the same time.

IV

However, the Inoue policy could not perfectly attain its aim because of the world depression. Owing to the decrease of the annual government revenue, government could not balance its over-disbursement in 1930. In our trade condition, there was no element of changing into excess export and it was still excess import. After all, in Sept. 1931, as soon as Great Britain placed embergo on gold, the difficulties to maintain the gold standard of Japan were aggravated more and more, and eventually in Dec. 1931 Japan was obliged to place embergo on gold standard again. The characteristic features of Inoue deflation or World War I deflation are as follows:—

(1) Over-production in agriculture and industry.

(2) Contradictions due to the great change in the world market composition.

(3) Extremely lessened holding of the gold.

In contrast, the 2nd World War deflation has the following features.

(1) The structural change in the world economy

(i) The formation (institution) of Soviet Sphere,

(ii) The emphasis of American control power,

(2) The Marshall plan,

(i) The rapid recovery in 1947,

(ii) The diminishing in coal products of Great Britain and West-Germany (under expectation),

(iii) Terrible poor harvest in 1947,

(iv) Owing to the intensifying tension between the East (Europe) and the West Europe, it arose difficulties in regard to (concerning) the exchange of various goods.

(v) West-Germany's productivity was still low and showed that the industrial production level corresponded only to that of 40–45% 1937–38.

(vi) The change of the U. K. position in the world economy,

(vii) The absolute superiority of the U. S. A.,

(viii) World-wide dollar shortage; etc.

Let us now observe the recent deflation aspects in banking business. Present deflation stands upon two factors; firstly, it is the contraction of government finance; secondly, the restriction of money circulation. The former measure is to curtail the public financial investment and loan by ¥58000 million. But in local finance it is far from being curtailed, but increasing. The influence of the present inflation is not general but limitted to those that rely on other people's capital, especially the enterprises that rely highly upon borrowing funds from banks,— i. e. the wholesale dealers, trading companies, small and medium enterprises. In the Inoue deflation, because of keen depression the demand of industrial fund was small, except in the remarkable dollar buying period in the later half of 1931 and generally the money circulation was moderate. As aforementioned, the Inoue policy placed weight on the following points:—

(1) Curtailing of the expenditure of the public finance.

(2) Not to issue new public loan bonds.

(3) The adjustment of the outstanding public loan bonds,

(4) Reduction of worker's wages in private enterprises,

Owing to the strict Inoue policy and the world-wide over-production of agriculture and Great Depression, deflation sufferings permeated among all classes of people. The Inoue deflation faced both agriculture depression and financial depression or panic. Because of the latter, the consolidation of banks has been much pushed forward.

Table 12. The change in the number of banks.

	Special bank	ordinary bank	Savings bank	Total
1913	52	1457	648	2157
1914	52	1445	658	2155
1915	52	1442	657	2151
1916	52	1427	664	2143
1917	52	1398	664	2114
1918	52	1378	661	2091
1919	52	1344	657	2053

1920	52	1326	661	2039
1921	48	1331	636	2015
1922	35	1799	146	1980
1923	33	1701	139	1873
1924	33	1629	136	1798
1925	33	1537	133	1703
1926	33	1420	124	1577
1927	31	1283	113	1427
1928	31	1031	100	1162
1929	30	881	95	1006
1930	25	782	90	897
1931	25	683	88	796
1932	25	538	87	650
1933	23	516	85	624
1934	21	484	79	584
1935	21	466	79	566
1936	20	424	74	518
1937	10	377	72	459
1938	9	346	71	426
1939	9	316	71	398
1940	9	286	71	366
1941	9	186	69	264
1942	9	148	69	226
1943	9	101	40	150
1944	4	85	24	113

The Inoue deflation affected bank management and its influence on local banks was grave, but on big city banks its influence weak. But in the present deflation, its influence is ultimately reverse.

Table 13. The ratio of the borrowing fund to the deposit

(unit=million)

	Big five banks			Local bank		
	deposit (A)	borrowing(B)	$\frac{B}{A}$%	deposit (A′)	borrowing(B′)	$\frac{B'}{A'}$%
Dec. 1930	3178	21	0.66	5550	704	12.68
Dec. 1931	3169	—	—	5099	740	14.51

	Big 11 banks			Local banks		
	(A)	(B)	$\frac{B}{A}$	(A′)	(B′)	$\frac{B'}{A'}$
Sept. 1943	1412604	268496	19.01	813554	29116	3.59

Dec. 1943	1521861	261653	17.19	893763	14095	1.58
Mar. 1944	1530821	329859	21.55	881385	26011	2.95
June 1944	1496018	808654	20.63	890241	19007	2.14
July 1944	1497131	303195	20.25	891552	20621	2.31

Table 14. Big 5

	Mitsui		Mitsubishi		Sumitomo		Daiichi		Yasuda		Total	
	Deposit	Loan	D	L	D	L	D	L	D	L	D	L
Dec. 1929	576.0	638.0	582.6	284.6	501.7	378.2	453.6	334.8	374.4	364.7	2490.0	1990.3
Jan. 1930	594.0	413.8	590.3	290.9	498.9	360.0	450.9	337.2	358.3	372.0	2492.0	1773.9
Feb. //	579.5	414.6	583.8	288.7	502.1	351.8	444.8	326.7	346.6	370.3	2456.8	1752.1
Mar. //	569.8	419.8	581.6	281.4	495.4	355.5	443.2	329.3	343.7	370.0	2432.7	1756.0
Apr. //	562.1	415.8	576.3	286.6	498.6	365.4	442.8	338.7	343.4	375.4	2423.2	1781.9

Table 15. Increase of deposit Big 5

	all ordinary bank	Big 5	percentage of Big 5 to all
1926	9031	2232	24.7
1927	8906	2817	31.6
1928	9215	3219	34.0
1929	9213	3209	34·7

Table 16. Net profit

	Big 5	ordinary banks
1926	—	392
1927 I	24.5	230
1928 II	22.2	305
1929 I	21.3	330

Table 17. The ratio of profit in banks and enterprises

	all industrial enterprises (companies)	all banks
1919	—%	25.0
1920	20.9	24.4
1921	15.7	21.8
1922	18.6	20.5
1923	19.0	20.1
1924	17.0	19.8
1925	15.2	17.8
1926	12.1	19.7
1927	12.2	11.8
1926	12.5	16.7

Table 18. The concentration of the funds in large banks

	all ordinary banks		big five		neo-big Seven		Total		other ordinary banks	
	Deposit (amout) (A)	total	Deposit	ratio to (A)	D	ratio to (A)	D	ratio to (A)	D	ratio to (A)
	¥ million	%	¥ million	%	¥ million	%	¥ million	%	¥ Million	%
1926	9174	100	2178	23.7	1424	15.6	3602	39.3	5771	60.7
1927	9025	100	2780	30.8	1435	15.9	4216	46.7	4809	53.3
1928	9310	100	3066	32.9	1637	17.6	4704	50.5	4605	49.5
1929	9292	100	3150	33.9	1703	18.3	4853	52.2	4438	47.8
1930	8658	100	3187	36.9	1640	18.9	4828	45.8	3829	44.2
1931	8269	100	3169	38.3	1564	18.9	4733	57.2	3535	42.8
1932	8319	100	3368	40.4	1467	17.6	4831	58.0	4488	42.0
	all ordinary banks		Big 6		other ordinary banks					
1933	8729	100	4728	54.2	3999	45.8				
1934	9353	100	5080	54.3	4273	45.7				

cf. Big 5: Mitsui, Mitsubishi, Daiichi, Yasuda, Sumitomo.
neo-Big 7: Kawasaki, Dai-Hyaku, Yamaguchi, 34, Kōnōike, Aichi, Nagoya, Meiji.
Big 6: Mitsui, Mitsubishi, Daiichi, Yasuda, Sumitomo, Sanwa.

As for deposit, deflationary influence made decrease and draw down business-deposit, saving deposit increased.

Table 19. The process of bank deposit in all over the conntry

(*=decrease)

	Juridical person				individual				blank time deposit	
	long term deposit		short term deposit		short term dleposit		long term deposit		money ammo unt	Ratio to former term
	money amount	ratio to former term	m. a.	r. f.	m. a.	r. f.	m. a.	r. f.		
Mar. 1952	719443	133220	249650	44943	340063	31818	305913	41504	60788	—
Sept. //	864145	144702	311575	61925	371560	31497	283249	* 22664	177904	117116
Mar. 1953	998810	134665	371737	60162	416017	44457	325500	42251	221261	43357
Sept. 1953	1013571	14761	419610	47873	452414	36397	380722	55222	245942	24681
Mar. 1954	1060993	47422	474u33	54523	472335	19921	480841	100119	226809	* 19133

For banks, saving-deposit is the most important earning resource on account of dissolving of over-loan.

Table 20. (A) **Deposit banks** (unit=ten thousand yen)

	branch per one bank	Totel capital (fund) per one bank	Deposit amount per bank	advance per one bank
1893	0.3	6.4	7.0	—
1901	0.9	19.4	24.1	—
1909	1.0	27.0	65.2	—
1914	1.3	36.1	95.4	—
1919	1.9	78.1	428.6	—
1927	4.0	180	700.0	640
1932	18.0	350	1500	1170
1937	9.6	430	3300	2060
1940	12.8	520	8520	4980
1944	—	—	76980	44530

(B) **various financial institution deposit**

	ordinary bank deposit	special bank D	saving bank D	industrial guild D	postal savings	money trust co., D
1916	2256	888	687	43	298	—
1921	6444	2024	1945	285	906	—
1926	9178	1550	1067	781	1156	423
1930	8658	835	1540	1102	2347	1178
1935	9873	992	2044	1377	3107	1729
1940	24389	2347	4452	2208	7387	2603
1945	102349	10047	7432	25787	39932	5298

(C) **Over-loan** (unit=one hundred million)

	self-capital and deposit bond (A)	advance and loan advance for foreign exchange (B)	B/A
Mar. 1950	780	748	96
June //	817	795	97
Sept. //	882	883	100
Dec. //	1003	1023	102
Mar. 1951	1107	1192	108
June //	1200	1363	113
Sept. //	1329	1492	112
Dec. //	1490	1615	108
Mar. 1952	1616	1699	105
June //	1766	1817	103
Sept. //	1892	1994	103
Dec. //	2151	2205	103
Mar. 1953	2258	2356	104

In the Inoue deflation days, the modern industrial equipment that was installed during World War I was kept fully new in style compared with

European countries that suffered from severe disaster. On account of the post-war depression that disturbed the productive equipment, then using of it was efficient enough to meet the overseas and domestic demand that had decreased anyway. Consequently, the demand for industrial fund was at a low level, as people owned the capital their own.

On the other hand, after World War II we were at a loss with severe inflation and most part of our capital accumulation for long years was lost away at a stroke. In the reconstruction of our post-war economy, our industry had been forced to rely for its recovering fund on commercial bank advance (borrowing), because our source of long term fund or credit had been dried up on account of the innovation of the financial system, by the occupation allied powers. On account of the outburst of inflation business-deposit increased, but the demand for industrial fund was as much immense and high, so the demand and supply was unbalanced and was not smooth. Still, the low rate of interest policy allowed many enterprises to overborrow, for the advance from banks was more favourable to the enterprise than to increase the capital or issue debentures. As a result, the financial capitalists i. e. big banks emphasized their controling over the industrial capitalists. Thus in Japan, powerful banks had come to grasp even the personal administration of the industry.

Table 21. Propensity to advance to excess all over the country

(unit=one million)

	advance+loan+discount bill +import bill loan (A)	securities (B)	B/A (%)
1929 (Dec.)	11999	4901	40.85
1930 (Dec.)	11654	4798	41.17
1931 (Dec.)	11591	4694	40.50
1952 (Dec.)	2128 022	236 054	11.09
1953 Mar.	2261 377	255 404	11.29
June	2370 260	278 267	11.74
Sept.	2518 518	299 193	11.88
Dec.	2671 286	328 284	12.29
1954 Mar.	2696 026	350 927	13.02
June	2710 976	373 377	13.77

In the exercise of the deflation policy, the selection of enterprises which

Table 23 Actual condition of ordinary banks (unit=one million)

Year	business office		capital (fund)		reserves	deposit	borrowing	loan and advance			securities	cash	net profit	net loss	dividend
	head office	branch and agency	official	paid up				advance	discount bill	call-loan					
1893	545	165	34	30	2	33	—	49	—	—	—	—	2	—	1
1897	1223	651	224	147	13	207	64	241	—	—	—	—	22	—	11
1901	1890	1457	367	251	38	450	67	356	278	—	108	77	38	3	18
1906	1670	1476	359	256	68	1033	72	443	668	—	175	76	55	5	19
1911	1615	1784	457	327	111	1256	77	598	794	—	270	166	70	3	24
1916	1427	2163	525	374	134	2256	173	1711	520	—	421	296	44	—	26
1917	1398	2221	659	436	142	3233	209	2216	762	—	561	492	61	1	32
1918	1378	2374	778	513	161	4639	287	2944	1202	—	835	672	76	—	38
1919	1344	2563	1076	717	173	5744	519	3949	1717	—	847	773	127	—	60
1920	1326	2796	1603	963	267	5826	589	4558	1344	—	1085	754	203	—	82
1921	1331	3159	1703	1044	339	6444	640	4871	1370	—	1499	784	169	1	92
1922	1799	5162	2366	1450	493	7801	809	6323	1524	—	1746	968	214	22	127
1923	1701	5275	2444	1491	543	7805	937	6509	1549	—	1706	967	195	10	134
1924	1629	5324	2437	1507	585	8093	976	6651	1638	—	1880	986	192	14	132
1925	1537	5357	2046	1500	627	8726	1042	7269	1572	—	2051	989	187	—	127
1926	1420	5333	2380	1496	663	9178	1102	7075	1558	585	2158	1009	189	13	128
1927	1283	5254	2522	2364	1481	629	9027	946	6797	1176	206	2591	1068	167	94	105
1928	1031	5074	2267	2181	1379	592	9330	1037	6564	981	164	3283	1190	67	—	97
1929	881	4956	2063	2170	1381	603	9292	885	6420	825	165	3323	1164	133	11	95
1930	782	4802	1953	2033	1296	589	8738	820	6189	628	203	3127	982	147	15	83
1931	683	4582	1811	1951	1249	535	8269	817	6030	563	154	2928	829	73	21	71
1932	538	4311	1522	1910	1217	530	8319	712	5618	663	319	2941	884	102	18	67
1933	516	4021	1436	1855	1186	515	8815	665	5360	725	420	3325	977	105	14	63
1934	484	3893	1253	1814	1162	540	9438	576	5159	775	369	3895	1104	114	9	63
1935	466	3708	1218	1765	1134	586	9950	555	5312	850	389	4243	1010	108	7	62
1936	424	3654	1205	1703	1099	597	11007	549	5688	1077	341	4814	1022	108	6	61
1937	377	3621	1171	1627	1047	628	12434	389	6533	1260	489	4655	1230	102	3	60
1938	346	3600	1151	1587	1018	664	15191	342	7484	1363	442	6147	1477	111	—	61
1939	318	3600	1130	1552	1000	701	19966	438	9530	1819	526	7811	2182	122	—	63
1940	286	3658	1097	1513	979	—	24671	232	12284	1553	710	9644	2390	139	17	64
1941	186	—	—	—	—	—	29401	—	13539	1603	526	12786	2975	—	—	—
1942	148	—	—	—	—	—	35737	—	16430	1226	399	16978	3175	—	—	—
1943	101	—	—	—	—	—	43131	—	21502	964	295	21489	2847	—	—	—
1944	85	—	—	—	—	—	60962	—	33802	994	368	29899	2786	—	—	—

are worthy to receive advances does not follow any definite line of system on the part of the banks, but as a general rule, the export industry that is useful to improve the balance of international payments and the important fundamental industry enjoy priority in the selection. Under the deflation since 1953, the bank business administration has to emphasize the following aspects:—

(i) To maintain the liquidity of bank funds resources.

(ii) Liquidation of over-loan or over-borrowing.

(iii) To economise general expenditures.

(iv) Rationalization of banking business or official work (adoptation of excellent working machine i. e., accounting machine, etc.)

(v) To cut down the cost of fund.

Table 22. (A) deposit cost in ordinary banks (%)

	the average sate of deposit	rate of exdenditure		sum	total
		general expenditue	tax		
1930	3,920	1,220	0.173	1,393	5,313
1931	3,725	1,227	0.162	1,389	5,114
1952	3,188	3,516	0.372	3,888	7,076
1953	3,303	3,436	9.381	3,817	7,120

(B) propensity to return before the World War in time-deposit (all bank)

	deposit (A)	time-deposit (B)	B/A (%)
Dec. 1929	1,444	6,398	55.91
〃 1930	11,035	6,217	56.34
〃 1931	10,595	6,037	56.98
〃 1952	2223,820	855,012	38.45
Mar. 1953	2333,328	918,499	39.36
June 〃	2296,536	974,717	42.44
Sept. 〃	2512,260	1046,274	41.65
Dec. 〃	2707,612	1181,718	41.69
Mar. 1954	2715,112	1181,783	43.53
June. 〃	2682,898	1237,865	46.14

To sum up our analysis of the two deflations in the Showa era, we would say that the deflation policy is perfect not only in its financial and monetary constraction policies, but also essential to points as the general economic policy.

Recent deflation was considered unfavourable to the balance of international payments (the amount is 3 hundred million dollar), and the reduction of "special demands" caused by the Korean hostilities, have dissolved as a result of cease of fire, the annual income of which was 5–10 hundred million dollars. And an excess-retrenchment (with drawal) in government public finance brought about the decrease of export amount and diminished the general purchasing power. In contrast, the former deflation (1930) is characterized as one link of the world panic, but the recent deflation is due to the recession in the capitalistic sphere (world). We shall, however, find anew the difficulties accuring to deflation yet.

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1867, Oct. 14 (Keio 3)	(Meiji) **Resotration.**
1869, May 24 (Meiji 2)	**Tokyo Exchange Company** (*Kawase Gumi*) founded.
1871, May 10	**New Money Regulation** (*Shinkajōrei*) proclaimed an adoption of gold standard.
1872, Aug. 15	Both *Mitsui-gumi* (Mitsui & Co.) and *Ono-gumi* application of establishment of new bank granted.
1872, Nov. 15	National Bank Act and **National Bank Regulations** proclaimed.
1873, July 20	The first (Daiichi) National Bank started business.
1875, May 2	**Postal savings** started business.
1877, Feb. 15	**Seinan Conflict** out-broken.
1878, May 27	An proclamation that make **Trade dollar or Mexican dollar** (*Bōeki-gin*) the general currency declared.
1878, June 1	**Tokyo Securities Exchange** started business.
1879, Dec 1	**Osaka Clearing House** started business.
1880, Feb. 28	**Yokohama Specie Bank** started business.
1880, Nov.	Finance Minister Masayoshi Matsukata began to adjust the issued recklessly paper-notes (money). (**adjustment policy**)

1882, Oct. 10	**Bank of Japan** started business.
1890, Aug. 25	**Bank Act** and **Saving Bank Act** momulgated.
1890,	Beginning of **Parliamentarism.**
1894–1895 (Aug. 1)	Sino-Japanese War.
1897, Oct. 1	An adoption of gold standard by performance of **money act**
1904–1904 (Feb. 10)	Russo-Japanese War
1914, Apr. (Taisho 3)	The **Kitahama Bank incidents** (owing to Financial crisis brought about bank run and bank failure.)
1917, July 28	**World War I** out-broken.
1917, Sept. 12	The **Embargo on gold ordinance** declared.
1917, Oct. 30	An urgency Imperial ordinance of issuing of small bank-note proclaimed.
1920, Mar.–Apr.	Foreign exchange rate towards U. S. A. fell suddenly \$ $47\frac{3}{4}$
1921, Apr. 14	**Saving Bank Act** proclaimed.
1923, Sept. 1	**Kanto Great Earthquake** occurred.
1923, Sept. 7	**Moratorium** declared.
1924	Foreign exchange rate towards U. S. A. fell suddenly \$ **42** level.
1926, Feb. 18 (Showa 1)	Finance ministry announced the **stoppage of remitting the specie** (owing to anxiety in the financial and business circles by obstruction of export and suddenly rise in foreign exchange by remitting the specie).
1927, Mar. 15	The **Watanabe Bank** suspended business. So, the financial circles quaked, banks in many distrcts suspended business one after and another as follows:— six saxingbanks stopped business. Imabari Commercial Bank, Chōei Bank, Tokushima Bank, Akaji Bank, Nakano Bank, Murai Bank, Sōda Bank, Nakazawa Bank, 84th Bank, Hisayoshi Bank (Saitama Prefecture), The 15th (Daijūgo) Bank, Ōmi Bank, the 65th (Dairokujūgo) Bank, Bank run occurred one after and another in Shikoku district. Still, Bank of Taiwan (Formosa) faced severe crisis by Suzuki Co., (Shōten) incident.
1927, Mar. 30	**Bank Act** (ordinary bank) proclaimed.
1927, Apr. 17	The Privy Council general assembly rejected the urgency Imperial ordinance (bill or draft) of relief Bank of Taiwan (Wakatsuki Cabinet resigned in a body).

1927, Apr. 22	The Imperial ordinance of putting off the financial liabilities on private law and putting off the period of right preservation deed of bill etc., in other words, **Moratorium, proclaimed.**
1929, May 12	**Moratorium matured.**
May	All closing banks **re-opened** business. The Promotion of Bank anity and combination
1930, Jan. 11	The **repeal of goldembergo.** Since Feb. 1930 banks in each districts re-suspended business.
1931, Sept. 18	**Manchurian conflict** out-broken.
1931, Dec. 13	The Finance Ministry Ordinance of *the gold re-embergo* declared.
1932, Feb. 28	The Foreign Exchange Rate towards U. S. A. showed **$ 38 3/8**
1932, June 9	〃 〃 〃 **$ 31**
1932, July 1	**Prevent of Capital Flight Act** proclaimed.
1932, Aug. 19	The Foreign Evchange Rate towards U. S. A. showed **$ 22**
1933, Mar. 29	**Foreign Exchange Control Act** issued.
1932, Nov. 27	Bank of Japan began the *open market operation.*
1937, July 7	**Sino-Japanese hostilities** out-broken.
1937, Aug. 23	**Private banks,** Foreign Exchange Agreement towards U. K. (England) among concluded. (it aims to maintain 1 shilling 2 pense level)
1937, Sept. 9	**Emergency Fund Adjustment Act** issued.
1941, Dec. 8	**Pacific Ocean War** out-broken.
1942, Feb. 24	**Bank of Japan Act** proclaimed (issuing system of bank note adopted the lmitted measures of maximum issuing amount). Thereafter (after 1942), the principle of one bank in one prefecture was adopted as a promotive measure of unity and combination of banks.
1945, Aug. 15	World War II ended.
1945, Sept. 20	G. H. Q. ordered **the dissolution of financial control organization.**
1945, Sept. 24	An Imperial ordinance to make military note legal tender proclaimed.
1945, Dec. 31	An issuing amount of bank-note (Bank of Japan) showed ¥ 55, 400 million.
1946, Jan. 1	Tokyo Bank Association began Cleaning House function (From wartime till Dec. 31, 1945, Bank of Japan persued).
1946, Jan. 20	Government buying price changed; gold (1g)≒¥17, silver (1kg)=¥310.—

1946, Feb. 16 **The Emergency Financial Measures Ordinance** and **the Bank of Japan's note Deposit Ordinance** proclaimed.

1946, Feb. 17 **The Emergency Property Investigation Ordinance** proclaimed. (as the base of Tax for assets)

1946, Aug. 12 **Economic Stabilization Board** founded. (at the same time Price Board started business too)

Dec. 16 **Tokyo Bank** (*former* Yokohama Specie Bank) started business.

Dec. 31 An issuing amount of Bank of Japan's note showed ¥93,300 million.

1947, Jan. 7 (**money groups or plutocracy** *zaibatsu*, **dissolution ordinance** proclaimed.

Jan. 25 The **Reconstruction Finance Bank** started business.

Mar. 12 The military exchange rate (converting rate) of **1** dollar to **50** Japan yen, announced.

Apr. 4 **Anti-Trust Act** proclaimed.

July 17 Government buying price changed:—
gold (1g)=¥75, silver (1kg)=¥1300.

Aug. 14 The **Export and Import Revoling Fund** established.

Sept. 25 Government buying price changed:—
gold (1g)=¥ 150, silver (1kg)=¥2700

Dec. 31 An issuing amount of Bank of Japan's note showed ¥219,100 million.

1948, May 13 The adjustment of small Bank-note Act proclaimed.

1948, June 8 The *60 million dollar* **Cotton Credit** concluded.

June 30 **America's Revolving Fund** towards Japan (150 million dollar) concluded.

July 6 **Military exchange rate** of **1** dollar to **¥270—**, announced.

Aug. 13 Government buying price changed.
gold (1g)=¥326, silver (1kg)=¥6325.—

Dec. 18 The **9 Economic stabilization principle** announced.

Dec. 31 An issuing amount of Bank of Japan's note showed ¥355,300 million.

1949, Mar. 16 **F. E. C. B.** started business.

Apr. 1 The **"Dodge Line"** carried (into effect)

Apr. 23 **G. H. Q. established the foreign exchange rate of 1 dollar. to 360 yen** announced.

Apr. 30 The **Relief Counter part Fund Accounting Act towards**

Japan proclaimed.

July 22 Government buying price changed :—
gold (1g) = ¥385, silver (1kg) = ¥7,288.—

Sept. 15 The **'Shoup" Mission Recommendation** announced.

1949, Dec. 1 **Foreign Exchange Control** Act proclaimed.

1950, Jan. 7 One thousand yen bank note issued.

Mar. 1 Government buying price changed
gold (1g) = ¥401.—, silver (1kg) = ¥9,700.—

Dec. 15 Japan Export Bank Act proclaimed.

Dec. 31 An issuing amount of Japan's note showed ¥422,000 million.

1951, Dec. 31 An issuing amount of Bank of Japan's note showed ¥506,400 million.

1952, Jan. 16 The Reconstruction Finance Bank dissolved.

Dec. 1 **Japan long-term Credit Bank** started business.

Dec. 31 An issuing amount of Bank of Japan's note showed ¥576,400 million.

1953, May 11 **I. M. F.** granted Japan's new gold parity (¥1=2.46853 gold mg) at the same, Japan joined I. M. F.

Sept. 5 The High rate (official rate) application system in Bank of Japan emphasized→monetary contraction policy as deflation policy.

1954, Mar. 22 The exchange rate towards U. K. (Great Britain) showed.
1 pound= ¥1013

1954, Aug. 1 Tokyo Bank started as the Special foreign exchange bank.

Sept. 24 The Reparation Agreement towards Burma concluded
amount of Reparation $ 200 million
amount of Economic co-operation $ 50 million.

Aug. Government buying price changed.
gold (1g) = ¥ , silver (1kg) = ¥

ESTIMATION OF THE EFFECTIVENESS OF DEVALUATION ON BALANCE OF PAYMENT DEFICIT IN JAPAN

BY HIKOJI KATANO

I. Introduction.
II. Model-setting.
III. Estimation.
IV. Remaining problems.
Statistical appendix.

I.

Theoretical study on the effectiveness of devaluation on the economy of a country has been pursued for a long time. Some empilical investigation carried out from the point of view of an actual effectiveness, was one of the objects of the studies undertaken by IMF in recent years. IMF can not overlook the experience of severe dollar shortage on the world wide scale after World War II, and the devaluation by European countries in September of 1949.

But does the problem only pertain to the past? No, not! The present situation in our country has a possibility to repeat a similar experience, perhaps a more severe one than that the European countries had experienced. This is the conclusion we are bound to come if we survey the field to which Japan is related directly or indirectly. Apart from the question when that will occur, we are duty bound to be concerned with the study of this problem. For this reason, we in the first place attempt to examine the effectiveness of devaluation on the balance of payment deficit with an actual example.

II.

The question in this section is to study:——

Suppose one country in the world, devaluates her exchange rate by

a certain percentage, and then how much effectiveness will that country enjoy from the devaluation under the conditions in which the country and the rest of the world are?

In such a case, the focus of this question is concentrated upon the relation between the country and the rest of the world. And, moreover, this question has a character of comparative static theory in the sense that it is concerned with some simultaneous effects at certain time point. Therefore, we may be allowed, in forming this theory, to disregard the labour and capital relations and the inter-industrial relations, and the assumption may be permitted as an first approximation to the theory. At any rate, this assumption shall be indispensable in the later stage because of some limitations of statistical data that will have to be used later.

To begin with, we construct a fundamental relations as follows:

(1)	$Y=C+I-D$	(Definition of national income)
(2)	$D=M-E$	(Definition of balance of payment deficit)
(3)	$C=\theta Y$	(Consumption function)
(4)	$Y=yp$	(Definition)
(5)	$I=ip$	(Definition)
(6)	$M=mp^m$	(Definition)
(7)	$E=ep^e$	(Definition)
(8)	$m=\mu y$	(Import function)
(9)	$e=e$	(given)
(10)	$p=a_0+a_1y+a_2p^m+a_3A$	(Home supply function)
(11)	$p^e=b_0+b_1y+b_2p^m+b_3B$	(Export supply function)
(12)	$p^m=rp^{m*}$	(Definition),

where the notations are

Y: Current value of national income,

C: Current value of consumption,

I: Current value of investment,

D: Current value of balance of payment deficit,

M: Current value of import,

E: Current value of export,

y: Real value of national income,

i: Real value of investment,

m: Real value of import,

e: Real value of export,

p: Index of composite prices at home,

p^m: Index of import prices at home,

p^e: Index of export prices at home,

r: Index of parity,

θ: Average propensity to consume,

μ: Average propensity to import,

p^{m*}: Autonomous part of p^m from devaluation,

A: Group composed of data determining p except y and p^m,

B: Group compdsed of data determining p^e except y and p^m,

a_0: Autonomous part of p,

b_0: Autonomous part of p^e,

a_1, a_2 and a_3
b_1, b_2 and b_3 } Constants.

In this model, if i, e, p^m, A, B, a_0 and b_0 are given, the system (1)-(11) excluding (9) is complete for ten variables Y, C, I, D, M, E, y, m, p and p^e. (12) shows a sub-relation of datum p^m.

In (1)-(12), we assume certain time point. We suppose it a basic time point (or initial time point). Then we attempt to reconstruct the above-mentioned system at the basic time point. In the course of this reconstruction, we introduce some changes in the comparative statics, show the initial values of variables and data with bar, neglect the higher-order items of the operator of increment or decrement. And, at the same time, all indices are reconstructed at the basic time point as the base, which might be all free from the base in the above case. Then,

(13) $\Delta Y=\Delta C+\Delta I-\Delta D$

(14) $\Delta D=\Delta M-\Delta E$

(15) $\Delta C=\theta\Delta Y$

(16) $\Delta Y=\Delta y+\bar{y}\Delta p$

(17) $\Delta I=\Delta i+\bar{i}\Delta p$

(18) $\Delta M=\Delta m+\bar{m}\Delta p^m$

(19) $\Delta E=\Delta e+\bar{e}\Delta p^e$

(20) $\Delta m=\mu\Delta y-\bar{m}\varepsilon_h\Delta p^m+\bar{m}\varepsilon_f\Delta p_f{}^e$

(21) $\Delta e=\Delta e^*+\bar{e}\eta_h\Delta p^e-\bar{e}\eta_f\Delta p_f{}^m$

(22) $\Delta p=a_1\Delta y+a_2\Delta p^m+a_3\Delta A$

(23) $\Delta p^e=b_1\Delta y+b_2\Delta p^m+b_3\Delta B$

(24) $\Delta p^m=\Delta r+\Delta p^{m*}$

(25) $\Delta p_f{}^e=\Delta p^m$

(26) $\Delta p_f{}^m=\Delta p^e$

are derived from (1)-(12), where the additional notations are

ε_h: Price elastisity of demand for import at home,

ε_f: Price elastisity of supply of import of the world,

η_f: Price elastisity of demand for export of the world,

η_h: Price elastisity of supply of export at home,

$p_f{}^m$: Import price index of the world,

$p_f{}^e$: Export price index of the world.

Thus, in the system (13)-(26) excluding (24), if Δi. Δp^m, ΔA and ΔB are given, the above system is complete for thirteen variables ΔY, ΔC, ΔI, ΔD, ΔM, ΔE, Δy, Δm, Δe, Δp, Δp^e, $\Delta p_f{}^e$ and $\Delta p_f{}^m$. We use this system as a basic model for the analysis below.

In this basic model, we see a complete equation system composed of a number of variables. However, this model is hard to deal with. Then, in order to ease the treatment and, what is more important, to rise the core of our question to the surface, let us construct a reduced form from the above basic model.

The focus of our question is on the effect of a devaluation upon the balance of payment deficit. Therefore, in the first place, the basic model is converged on a variable ΔD which stands for the balance of payment deficit. However, we have to notice that a balance of payment equilibrium may be achived corresponding to any national income levels. So that, we must consider the balance of payment problem with a particular level of national income; if not so, problem is indeterminate. Thus, we have two variables ΔD (balance of payment deficit) and Δy (national income) as central variables.

And the basic model is induced to a reduced form regarding with ΔD and Δy.

$$(27)\quad -\{\mu-b_1\bar{e}(1+\eta_h-\eta_f)\}\Delta y+\Delta D = \{\bar{m}(1-\varepsilon_h+\varepsilon_f)-b_2\bar{e}(1+\eta_h-\eta_f)\}\Delta r+\Delta B^*,$$

where

$$\Delta B^* = -\Delta e^*+\{\bar{m}(1-\varepsilon_h+\varepsilon_f)-b_2\bar{e}(1+\eta_h-\eta_f)\}\Delta p^{m*} -b_3\bar{e}(1+\eta_h-\eta_f)\Delta B,$$

and

$$(28)\quad \{(1-\theta)-a_1(\bar{i}-(1-\theta)\bar{y})\}\Delta y+\Delta D=a_2(\bar{i}-(1-\theta)\bar{y})\Delta r+\Delta A^*,$$

where

$$\Delta A^* = \Delta i+(\bar{i}-(1-\theta)\bar{y})(a_3\Delta p^{m*}+a_3\Delta A).$$

(27) may be considered as an explanatory equation for the balance of payment deficit D, which is reduced from equation (14), by the intermediary of (18)-(26) excluding (22), and may be easily expressed as a function of y and r: real national income level and exchange rate. (28) is generated from (13), by the intermediary of (15)-(17), (22) and (24), and represents a "multiplier equation".

(27) and (28) are cooperated into a reduced form of the basic model. Then we, in the last stage, investigate the effect of devaluation on the balance of payment deficit. In order to find the effect, we solve the simultaneous equation (27) and (28) with regard to ΔD. Namely, in

$$-\{\mu-b_1\bar{e}(1+\eta_h-\eta_f)\}\Delta y+\Delta D=\{\bar{m}(1-\varepsilon_h+\varepsilon_f)-b_2\bar{e}(1+\eta_h-\eta_f)\}\Delta r+\Delta B^*,$$
$$\{(1-\theta)-a_1(\bar{i}-(1-\theta)\bar{y})\}\Delta y+\Delta D=a_2(\bar{i}-(1-\theta)\bar{y})\Delta r+\Delta A^*,$$
$$\begin{vmatrix} -\{\mu-b_1\bar{e}(1+\eta_h-\eta_f)\} & 1 \\ \{(1-\theta)-a_1(\bar{i}-(1-\theta)\bar{y})\} & 1 \end{vmatrix} \neq 0$$

therefore this simultaneous equation is soluble. Thus we have

$$(29)\quad \Delta D=\frac{\left(\begin{array}{l}[\{\mu-b_1\bar{e}(1+\eta_h-\eta_f)\}\{a_2(\bar{i}-(1-\theta)\bar{y})\}+\{(1-\theta)\\ -a_1(\bar{i}-(1-\theta)\bar{y})\}\{\bar{m}(1-\varepsilon_h+\varepsilon_f)-b_2\bar{e}(1+\eta_h-\eta_f)\}]\Delta r\\ +[\{\mu-b_1\bar{e}(1+\eta_h-\eta_f)\}\Delta A^*+\{(1-\theta)-a_1(\bar{i}-(1-\theta)\bar{y})\}\Delta B^*]\end{array}\right)}{\{\mu-b_1\bar{e}(1+\eta_h-\eta_f)\}+\{(1-\theta)-a_1(\bar{i}-(1-\theta)\bar{y})\}}$$

Moreover, we suppose that there are no changes in the data A^* and B^* after basic time point. And we have, instead of (29),

$$(30)\quad \Delta D=\frac{\left(\begin{array}{l}\{\mu-b_1\bar{e}(1+\eta_h-\eta_f)\}\{a_2(\bar{i}-(1-\theta)\bar{y})\}\\ +\{(1-\theta)-a_1(\bar{i}-(1-\theta)\bar{y})\}\{\bar{m}(1-\varepsilon_h+\varepsilon_f)-b_2\bar{e}(1+\eta_h-\eta_f)\}\end{array}\right)}{\{\mu-b_1\bar{e}(1+\eta_h-\eta_f)\}+\{(1-\theta)-a_1(\bar{i}-(1-\theta)\bar{y})\}}\cdot\Delta r$$

(30) shows a compound multiplier through which the balance of payment deficit is changed by any change of parity (or exchange rate). This multiplier is a function of elasticities, propencities and the other structural parameters, and each initial value of import, export, saving and investment. To read this multiplier, it is difficult due to some complexities of the structure. However, we can understand that the balance of payment deficit is changed by the change of parity (exchange rate) through the composite operator which is a weighted average of an excess-investment and an excess-import by some suitable coefficients.

III.

In section III, we will estimate the effectiveness of devaluation on the balance of payment deficit within a period of actual case in Japan.

An actual example taken up is Japanese situation of 1953 (the calendar year). We estimate how much effectiveness should reseive the Japanese economy, under the conditions in which Japanese economy had been placed at the time, when Japan carried out to devaluate her exchange rate, within the limited statistical data.

Of the data, we used the statistics of the Economic Council Board of Japanese Government, a part of which we modified. Moreover, of the National Income Statistics which are of central importance, we have only four terms per year. Therefore, we cannot analyze the time series sufficiently, and are obliged to have a specialized model (as stated in section II) due to the limited econometric treatment. For example, of the consumption function and the import function, we are quite unable to estimate these functions from some time series, or from some cross section data. Therefore these functions are treated as some proportional relations (for example, between consumption and national income). Similarly, all initial values in the above-mentioned model are all average values for 1953. Thus the effect estimated is the one of a devaluation on the balance of payment deficit under the average condition of 1953.

To begin with, we calculate each percentages of all variables for the initial value of national income, (Table 1).

Table 1

	(bil. ¥)	(%)	
National income	6,142.3	100.0	Y, y
Consumption	4,460.1	72.6	C,
Saving	1,682.2	27.4	S,
Investment	1,755.4	28.6	I, $\bar{i}$
Import	844.5	13.8	M, $\bar{m}$
Export	771.3	12.6	E, $\bar{e}$
Balance of Payment deficit	73.2	1.2	D,

Percentages shown in Table 1 are used to make easy some calculation. The other structural parameters are estimated as follows;——

Table 2

$\theta=0.726$	$\mu=0.138$
$\varepsilon_h=2.500$	$\eta_h=0.000$
$a_1=0.062$	$a_2=-0.250$
$b_1=1.846$	$b_2=0.000$

Two price elastisities of demand for export and supply of import of the world are impossible to be estimated in fact, so that we suppose

(31) $\varepsilon_f=\eta_h$

(32) $\eta_f=\varepsilon_h$

Using the above-mentioned figures and assumption, (30) is shown as follows,

(33) $\Delta D=-0.076\Delta r$.

This means that a relative decrement 0.076 of the balance of payment deficit is caused by a unit devaluation: for example, US dollar value's increase represented by yen. To explain with numerical example, this means that:—— Suppose a official rate of yen for US dollar ¥360.00=US $1.00. Then we suppose that the Japanese Government devaluates the yen value to make a parity index up to 2 from 1 at initial time point. And, due to the devaluation, the balance of payment deficit is reduced by 7.6% for the initial value of national income. Well, the Japanese economy had the balance of payment deficit 1.2% for the national income of 1953. Then, if the Japanese Government make her mind to devaluate her exchange rate in order to varnish the balance of payment deficit, she has to devaluate it by 0.158 $\left(=\frac{1.2}{7.6}\right)$ nnits; namely US $1.00=¥416.88 for US $1.00=¥360.00.

IV.

Present investigation is based mainly on Tinbergen-Stuvel's econometric model.* This attaches more importance to a measurement than to a theoretical conciseness: this is not as well concise as Robinson-Metzler's theories** are, but this has a measurability which is not in the Robinson-Metzler's theories. Moreover, our model is not a ratio-analysis, but an analysis in activity levels is not an explanator of a true mechanism of economy in a sense that for a number of ecomic activity levels there may be the same ratio as one of them has.

* J. Tinbergen, On the theory of economic policy, 1953.
G. Stuvel, The exchange stability problem, 1951.

** J. Robinson, The foreign exchange, "Essays in the theory of employment", Part III, 1947.
L. A. Metzler, The theory of inteenational trade, "A survey of contemporary economics", (ed. by H. S. Ellis), 1948.

However, our model has two knotty points as below. The first is:——The above-mentioned effectiveness of devaluation on the balance of payment deficit is merely the immediate one, and does not show the process to make the effect to saturate into the mechanism of economy in the propagation process after the impulse. Even if the economy wants to devaluate her exchange rate for vanishing the balance of payment deficit, it is not wise policy to carry out the devaluation until the whole effect including the propagation effects is plain for an authority of the economy. Otherwise, the country may be weakened in her international economic power. Then we have to construct the model which can measure the whole effect: this model is in preparation in our Research Institute, and will be published before long.

The second is:—— In our present model, the foreign conditions are all considered the same as the home conditions. But an actual situation is not the case. Then we have to investigate the foreign conditions. And in this investigation, the relations and its convertability problems between the dollar and the sterling are also considered. Our model in preparation will take them as complete as possible.

STATISTICAL APPENDIX

(A) Figures used in Table I are taken from the following four balances of the national accounts, which is constructed regarding to four activities of the economy.

Operating Account (bil. ¥)

National income	Y	6,142.3	Consumption	C	4,460.1
Imports	M	844.5	Investment	I	1,755,4
			Exports	E	771.3
		6,986.8			6,986.8

Appropriation Account (bil. ¥)

Consumption	C	4,460.1	National income	Y	6,142.3
Saving	S	1,682.2			
		6,142.3			6,142.3

Resting Account (bil. ¥)

Investment	I	1,755.4	Saving	S	1,682.2
			Balance of payment deficit	D	73.2
		1,755.4			1,755.4

External Account (bil. ¥)

Exports	E	771.3	Imports	M	844.5
Balance of payment deficit	D	73.2			
		844.5			844.5

These balances are composed of the statistics of the Economic Council Board of Japanese Government, where

$Y=C+I-D$

$C=$(Personal consumption expenditures)
+(Government purchases goods and services)

$S=Y-C$

$I=$(Government invetment)
+(Gross private domestic investment)

$M=$(Merchandise imports)+(Invisible imports)

$E=$(Merchandise exports)+(Invisible exports)

$D=M-E$

(Personal consumption expenditure)
=(Labourer income)
−((Income tax liability)+(Social insurance; private charges))
(Labourer income)
=((Wages and salary receipts)×0.7)*
+(Income of agriculture, forestry and fisheries in income of unincorporated enterprises)
+((Income of unincorporated enterprises; excluding income of agriculture, forestry and fisheries and income by side-works)×0.5)**
+(Income by side-works)

* Of all wages and salary receipts, 0.7 is the relative share for labour between capital and balour, which is estimated from the statistics of the Ministry of Finance and the CPS (Consumer's Price Survey).
Cf. S. Tsuru and I. Nonomura: National Income in the Post-war Era. (in "Lectures on Japanese Capitalism", VIII, 1954).

** Of income of unincorporated enterprises, a half of which is estimated to belong to the labour.
Cf. S. Tsuru and I. Nonomura, ditto.

(B) Structural parameters shown in Table 2 are estimated as follows.

a) θ and μ.

θ is a ratio of consumption to national income;

$$\theta=\frac{C}{Y}=0.726.$$

And μ is a ratio of imports to national income;

$$\mu=\frac{M}{Y}=0.138.$$

b) ε_h and η_f.

The elastisity coefficients are estimated respectively as follows. Of imports, ε_h is taken as the coefficient of the second term of the right side of the equation

$$\log m=\varepsilon_0-\varepsilon_1 \log p^m+\varepsilon_2 \log g,$$

where

g: Issued value of export letter of credit.

ε_0, ε_1, and ε_2: Constants.

This regression equation is estimated for Japanese data of 1953 as follows,

$$\log m=-0.008-2.500 \log p^m+0.150 \log g,$$

where 2.5 is taken as ε_h.

Similarly, of exports, η_h is taken as the coefficient of the second term of the right side of the equation

$$\log e = \eta_0 + \eta_1 \log p^e + \eta_2 \log q,$$

where

q: Index of production.

η_0, η_1 and η_2: Constants.

And the regression equation is

$$\log e = -0.011 + 0.000 \log p^e + 2.400 \log q,$$

where 0.000 is taken as η_h.

c) a_1 and a_2.

a_1 and a_2 are coefficients of the equation

$$p = a_0 + a_1 y + a_2 p^m + a_3 t + a_4 u,$$

where

t: Index of quantity of money,

u: Index of producer's inventory.

However, national income statistics is published only four times a year, so that y has not sufficient time series. For this reason, we will use the approximation

$$a_1 y \fallingdotseq a_1 q,$$

where we suppose that national income level moves parallel with production. This approximation is admitted if and only if y is taken as the base of our calculation (see section III) and q is the index of production based on the average production of the same year. Thus the above equation is transformed approximately into

$$p = a_0 + a_1 q + a_2 p^m + a_3 t + a_4 u.$$

However, composite price can not be estimated directly. Then we estimate consumer's price, p^C, and investment goods price, p^I, separately, and calculate the weighted average of p^C and p^I:

$$p = 0.75 p^C + 0.25 p^I$$
$$= 0.029 + 0.062 q - 0.250 p^m + 1.014 t - 0.093 u$$

where

$$p^C = -0.298 + 0.046 q + 0.000 p^m + 1.333 t - 0.097 u$$

$$p^I = 1.011 + 0.108q - 1.000p^m + 0.056t - 0.080,$$

and 0.75 and 0.25 are weights by which p^C and p^I are averaged into p. And in equation of p we have

$$a_1 = 0.062,$$

and $$a_2 = -0.250.$$

d) b_1 and b_2.

b_1 and b_2 are coefficients of the equation

$$p^e = b_0 + b_1 y + b_2 p^m + b_3 t + b_4 u.$$

In this case, we take an approximation

$$b_1 y \fallingdotseq b_2 q.$$

Thus we have the estimation of p^e as follows;

$$p^e = 2.995 + 1.846q + 0.000p^m - 3.778t - 0.283u,$$

where we have

$$b_1 = 1846,$$

and $$b_2 = 0.000.$$

THE RECOVERY METHOD OF THE JAPANESE SHIPPING INDUSTRY IN POST-WAR PERIOD

BY HIROMASA YAMAMOTO

I. Destruction of the Japanese Shipping Industry

Capitalistic development of Japan had been promoted by the government since the beginning of the Meiji era (1868) and its development had been inspired with militalistic aim. The Japanese shipping industry was such an important industry for militalistic potential power and for the improvement of the long continuing unfavorable balance of trade that the government fostered this industry with subsidies for special trade routes and shipbuilding. The shipbuilding policies included shipbuilding finance and the cost lowerment of the steel for vessels, which contributed much for completing the superiority of the Japanese merchant fleet in quantity and in quality. In addition, prewar accumulation of capital in the Japanese shipping industry was huge and 80 per cent. of the money needed for shipbuilding was self-provided. Thus at the beginning of World War II Japan had great merchant fleet totalling 6,094,271 gross tons which ranked third in the world with the 8.2 per cent. of the world bottoms.

Following Japan's entry into the war, for the purpose of making the seaborne transportation subservient for the war fulfilling program the controlling authority of the ship operation was organized which was named the Ship Operating Authority. This organization had the power to charter all merchant vessels, but the charter money provided shipping circles with profit on one hand, and the loss of the vessels by war was covered with wartime special indemnity on the other hand.

To meet the increased demand for vessels Industrial Equipment Corporation, one of the wartime controlling organization, gave orders for ship construction, and the domestic shipyards built many wartime standard type vessels of lower quality which were good enough mass production. Though these shipbuilding was obstructed by the priority granted to naval vessel

construction, many merchant vessels were constructed and the peak of production was reached in 1943.

But in the course of the war the losses of merchant vessels were over the amount of shipbuilding, so the vessels left at the end of the war were only 1,494,000 gross tons, 557,000 gross tons of which were movable.[1] Moreover, almost all of the vessels that survived were either wartime standard-type or 'superannuated vessels, while we could hardly find any ocean-going vessels. World War II destroyed Japanese merchant fleet entirely. The Japanese shipping industry lost her merchant fleet by war, and the occupation forces' initial policy which aimed at demilitarization and democratization of Japan gave the second blow to the Japanese shipping industry. Controlling Japanese merchant marine directly, the occupation forces prohibited the prewar shipping and shipbuilding policies and limited the navigable area of Japanese vessels to Japanese waters. Wartime special indemnity of lost vessels was given up, property taxes were imposed upon the shipping companies, and the important shipping companies were designated as special account companies.

Thus the destruction of the Japanese shipping industry was decisive because of the fact that the shipping industry lost the accumulated capital which might be used to obtain new ships.

A series of these measures had the intention to destroy the Japanese industry which had served Japan to make militaristic invasion, and to limit the scale of her merchant fleet to the amount that would be needed only for the continuance of peacetime economy. The reparation program by Mr. Pauley, American ambassador,[2] had such an intention that the scale of the merchant fleet shall be limited to under 1.5 million gross tons of steel vessels, and each vessel had to be under 5,000 gross tons and under 15 knots at the highest speed. It further proposed that surplus 869,000 gross tons of the above mentioned shall be expropriated as reparation, and that navigable area shall be limited to domestic routes and the far eastern waters, and that as

1) cf. J. B. Cohen; Japan's Economy in War and Reconstruction, ch. 4. Arms industries

2) Statement by ambassador Edwin W. Pauley on Japanese Interim Reparation Program, Dec. 7. 1945

regards the shipbuilding equipments all equipments and accessories of the 20 shipyards in Japan shall be expropriated, leaving only ship repairing equipments necessary for the occupation forces in Japan.

Meanwhile the occupation forces made the Ship Operating Authority operate the coastwise transportation, and ordered the domestic shipyards to repair vessels and to maintain the construction of vessels laid down in wartime with twenty-four hours' work, for the fear that the people might suffer from the shortage of vessels. Because in the period right after the war the economy of Japan was in disorder and the function of transportation had been destroyed. The emphasis of the instructions was, however, placed on the ship repair, so that they may not be used for the recovery of the Japanese merchant fleet.

2. Shipbuilding Programs

(a) From the First to the Fourth Shipbuilding Programs

In 1947, for the purpose of ecocomic recovery of Japan the so-called priority policy of important products was carried out so as to supply funds and raw materials preferentially to important fundamental industries such as coal, steel, shipping, etc. Then with the investment of the government, aggregating to 300 million yen, the Ship Corporation was founded which was in charge of building, repairing, and taking in custody of the vessels, according to the recovery program of the Economic Stability Board under the cabinet, and the fund for the project was furnished from the Economic Recovery Fund established to supply funds to the important industries.

The reason why this organization was established can be found in the following circumstances :-In the postwar period, shipping companies were forced to rely upon this fiscal investment for the construction of the ships needed for domestic transportation, because they received from the Ship Corporation bare-boat charter money which was not enough to build the boat, and could not carry on their own operation, because the prewar shipbuilding policies had already been abolished.

It was provided in the Ship Corporation Act that the Corporation should invest 70 per cent. of the shipbuilding cost and the rest should be provided by the private shipowners, and the ships concerned shall be co-owned by the

owners and the Corporation. The establishment of the Corporation did not aim to make the shipping industry the national enterprise but only to assist this industry to build up new merchant fleet as the transition means until it gains self-supporting strength. Accordingly, it was provided that the Corporation shall sell its shares of vessels when a private shipowner wants to buy the vessels co-owned.

The shipbuilding by the Ship Corporation had been carried out as from the first to the fourth shipbuilding projects from 1947 to 1948, and built 93 cargo boats totalling 188,374 gross tons, each of the boats being under 5,000 gross tons used for coastwise and adjacent sea trade. In consequence of the fact that the size and speed of the vessels were limited and these vessels included no foreign-class boat except a few, the projects did not furnish Japan with enough vessels to re-enter the world market. However, these vessels were enough to transport domestic cargoes. Here we can say that the shipbuilding programs were the first step of recovery of the Japanese merchant fleet, and that in the course of the projects the Ship Corporation took the large part of the responsibility of the recovery when we consider that the fiscal investment reached to about 58 per cent. of all shipbuilding costs.[1)]

Among the applicants of the private shipowners who would take part in the programed shipbuilding those were picked up preferentially who would bear over 30 per cent. of the construction cost, the ordinary shipowners' share of the cost of the vessels. The partakers of shipbuilding programs were scattered broadly in the shipping circles, and almost all of them were small companies.

In relation to the method of ship operation from September 1948, the Ship Operating Authority changed the ship operating system from bareboat charter to time charter, and we may say that the controlled system of shipping industry began to take a new turn to liberal conditions.

(b) From the Fifth to the Tenth Shipbuilding Programs

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1) Shipbuilding Survey. edited by the Ship Department of the Ministry of Transportation, 1953. p. 92.

In 1949 when new China was born, the United States occupation policy against Japan changed clearly from the initial policy which had intended to demilitarize and democratize Japan, into a policy which intended to make Japan a member of the free world and make her the bulwark against the communism in the Far East. This change, however, did not take place suddenly, but this tendency appeared gradually since February 2, 1947 when the occupation forces prohibited a general strike in Japan and oppressed communism. We can see the change of the United States's attitude with regard to reparation as one of the concrete expressions of this change. The Strike Report section B dated February 1948[2] advised that the scale of Japanese merchant fleet shall be 4 million gross tons at minimum, that merchant fleet of that day shall be excluded as objects of reparations, and that the shipbuilding equipments which had the capacity of building vessels totalling 400,000 gross tons a year shall be retained.[3] This advice had much generous contents than Mr. Pauley's program, and more-over the Johnston Report[4] in 1948 stood on the principle that the productive equipments shall be retained as are necessary for the Japanese people to enjoy adequate standard of living, and also it advised to retain 569,000 gross tons of shipbuilding capacity in Japan. It seems clear that the reparation policy changed into the one which aimed at the self-support of the Japanese economy.

In the heating of the cold war the thing which the United States necessitated, in making Japan a member of the free world, was not the absolute demilitarization of Japan but to let Japan have a considerable economic power under the leadership of the United States. For this purpose the occupation forces ordered the Japanese government to adopt the stability and the self-supporting policy of the Japanese economy which included to stop

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2) Report on Industrial Reparations Survey of Japan to the U. S. A. by Overseas Consultant, Inc. New York.

3) This report estimated shipbuilding capacity of domestic shipyards a year at 0.8 million gross tons.

4) Report on the Economic Position and Prospect of Japan and Korea. Measures required to improve them April 26. 1948; P. H. Johnston, Secretary of the Army's Committee to inquire into economic problems of Japan and Korea.

inflation and to enlarge the amount of foreign trade.

The change of the policies above mentioned greatly affected the method of merchant fleet recovery up to that time. The occupation forces demanded the balanced budget of the government to stop inflation, and the Economic Recovery Fund stopped to function and the Ship Corporation was prohibited the construction of the vessels and limited its function only to repairs and safe-keeping of vessels. (The Ship Corporation was dissolved in March 1950.) In short, shipbuilding programs supported by the fiscal investment were destined to be given up.

On the other hand occupation forces' insistence for a fair balance of payment for Japan required the Japanese merchant marine to operate vessels in international sea-borne traffic and to contribute to the invisible income because the post-war trade of Japan had been unfavorable in balance. In such a plight the occupation forces began to allow the ocean-going of Japanese ships, and in March 1950 abandoned the control of the shipping industry. Nevertheless, the Japanese shipping industry had no ocean-going vessels, and it was necessary and desirable to build ocean-going vessels.

The report of the Economic Five Years' Plan[5], which was drawn up by the government along the occupation policy, stated the intention and the target of reconstruction of the shipping industry as follows:

"The first aim is to recover the normal situation as a nation of mercantile marine, and for this purpose we project that the coastwise transportation be carried on all by Japanese flag ships and that as for foreign trade routes one half of the cargoes be carried by the Japanese flag ships in the last year of program. For this purpose, we improve and enlarge our small ocean-going boats of the present day, and as for new shipbuilding we must lay stress on building of larger vessels of superior grade, 3,000 gross tons or over."

"The five year new shipbuilding program aims to build 1.3 million gross tons …… and then we prospect our mercantile marine to earn 100 million dollars by the international sea-borne traffic." In this program they projected

5) The Report of the Committee of Economic Recovery Program, May 30. 1949 Part II. pp. 161–175. Though the program itself was abandoned by Korean war, unexpected plight, it may be thought that the fundermental aims were not changed.

to make good the deficit of 70 million dollars, the estimated amount of unfavorable trade balance, with the invisible income from the mercantile marine.

Further, with regard to shipbuilding fund it was stated: "However, this enlargement of the merchant fleet requires a huge amount of long term funds, and there are neither accumulated funds in the shipping circles, nor people can depend for all the necessary funds upon private investments and private financing. In the last program year they can provide themselves with shipbuilding funds by freight earning, but in the initial period they have to depend upon the assistance of the government or the direct government investment or the United States Aid Counterpart Fund." The occupation forces gave allowance to use the U. S. Aid Counterpart Fund as the shipbuilding fund. In its employment in Japan stress was laid on the redemption of national debt and on the investment to public utilities; but among the investment to private industries the shipping industry together with the electric power industry took greater advantage than others. Here again, however, we can realize how great was the need of the shipping industry for the occupation forces.

Thus the fifth and the subsequent shipbuilding programs which have had quite different characteristics from the first-fourth shipbuilding programs had to be carried out. The objects of the fifth and the following programs were to have ocean-going large vessels necessary for Japan in coming back to the international shipping market, and the neucleus of the funds was the Aid Fund which had to gain the permission of the United States at the time of its use. However, since October 1952 the direct investment of the Aid Fund was abolished and its investment was carried out through the Japan Development Bank. After the nineth project this investment took the shape of the Development Bank loan.

In October 1954 the tenth shipbuilding program was decided on and they began to construct projected vessels. Now, we want to know whether these projects (5th-10th) had really promoted the recovery of the merchant fleet, or not. While shipbuilding programs (from fifth to nineth) had completed 202 vessels totalling in 1,547,000 gross tons which included 173 cargo boats

totalling 1,175,000 gross tons and 39 tankers totalling 372,000 gross tons until the end of 1953, independent shipbuilding free from the programs completed 46 vessels totalling 48,000 gross tons composed of 21 cargo boats totalling

Shipbuilding Programs (5th–10th) (1,000 G. T.)

		Cargo Boat		Tanker	
		No.	G. T.	No.	G. T.
1949	5th	36	203	6	72
1950	6th	26	171		
	6th added	4	26	2	25
1951	6th added	3	22		
	7th former	26	179	2	24
	7th later	13	100	1	18
	7th later added	4	28	2	24
1952	8th former	29	199	3	43
	8th later			4	51
	by foreign investment			4	51
1953	9th former	12	91		
	9th later*	20	157	5	64
1954	10th	19	154		
Total		192	1,329	29	372

* included a emigrant vessel in cargo boats. (Source) ; Economic Counsel Board

Japanese Merchant Fleet—Steel vessels, 100 gross tons and over

(1,000 G. T·)

	Total		Passenger vessels		Tankers		Cargo vessels		ocean-going vessels*	
	No.	G. T.	No.	G. T.	No.	G. T.	No.	G. T.	No.	G. T.
1935	1,355	3,890	392	1,018	39	155	924	2,716		
1941	1,962	6,094	433	1,269	94	401	1,435	4,424		
1945	796	1,344	185	189	83	168	528	987		
1949	994	1,684	192	209	105	247	697	1,227	23	129
1950	944	1,711	178	190	116	281	650	1,240	125	745
1951	1,017	2,283	160	168	133	372	724	1,743	291	1,739
1952	1,065	2,735	144	144	148	448	773	2,144	332	2,048
1953	1,067	3,046	153	164	174	596	740	2,286	376	2,434
1954 May	1,066	3,090	155	164	185	598	726	2,328	387	2,511

(Source) Quarterly Bulletin of Transport Statistics by Ministry of Transportation

* Ship Year Book in 1955 edited by Ship Department of Ministry of Transportation.

40,000 gross tons and 25 tankers totalling 8,000 gross tons. Moreover, the average size of the vessels was only about 1,000 gross tons. Accordingly we can realize that the postwar recovery of ocean-going vessels was carried out only by the shipbuilding projects.

In postwar period the Japanese merchant fleet increased steadily, therefore in May 1954 we could number 387 ocean-going vessels aggregating 2,511,000 gross tons and over one half of them were new ships constructed with the projects. Seeing such a fact, we may admit the successful recovery of merchant fleet in the Japanese shipping industry, which had an ill-luck of losing all its accumulated capitals. Of course the scale of the merchant fleet in May 1954 was 3090,000 gross tons or 50.7 per cent. of the scale in 1941, but the recovery was quite speedy.

Nevertheless, the quantative recovery of the merchant fleet did not always mean the recovery of the Japanese mercantile marine to prewar situation of superiority. It becomes clear when we see the role of the shipping industry among the invisible trade. Before entering into the discussion we will consider the shipbuilding finance.

From the beginning of the fifth shipbuilding program to October 1952 when the Japanese Peace treaty with the free world nations took legal effect, the neucleus of the shipbuilding fund was the U. S. Aid Counterpart Fund. This Aid Fund was the skilful investment of the United States, because the United States' assistance for Japan was conducted in the form of supplying of surplus commodity in that country, and the payments for the commodity were employed as investments in Japan. Consequently, the employment of the Aid Fund required the permission of the United States. Taking into consideration these plights, we shall think that the recovery of the Japanese merchant fleet proceeded within the allowance limit of the United States or in harmony with the interests of that country. Since October 1952 direct investments of the Aid Fund were abandoned, and it has been replaced with the loans from the Japan Development Bank, funds for loans of which are derived from the Aid Fund and the governmental fund.

The financing of the Aid Fund or the Development Bank was not enough to furnish all the costs of shipbuilding, and at such times the firms must have

loans from private institutions. The firms which could build vessels under the projects (after 5th) were required to go through following procedures. The Ministry of Transportation first estimated the necessary amount of vessels to be constructed, and secondly adjusted this amount with the consideration of the scheduled amount of loans from the Aid Fund decided by the occupation forces. The Ministry of Transportation made public this decided amount of shipbuilding to make shipowners apply for the project. Among the applicants firms qualified for borrowing the Aid loans or government loans were lastly selected. But the criteria to select the firms for various projects were different, hence we cannot find any consistent measures in them, except the liner priority policy and the policy to select shipping companies preferentially to industrial carriers.

And then, because loans of the Aid Fund or the Development Bank only covered about fifty per cent. of the total shipbuilding costs, especially less than 30 per cent. in 1951 and early period of 1952 when the shipping circles boomed, the shipping circles had to raise the rest of the necessary funds.

According to the five year program in 1949 it was projected that the shipping companies would raise funds for shipbuilding by the earning of the ship operation in the later period of the program. But this prospect of the Japanese shipping industry has not been successful to earn the amount of shipbuilding costs in reality, because of the depression of the world shipping, and with regard to necessary funds they had to depend either on the increase of the capital or loans from financial institutions. But they were unable to raise money by the former because of their bad management, so they had to depend on the latter, that is, on the loans, and being possible to borrow shipbuilding funds surely from private banks became the required condition for the participation in the shipbuilding projects. Selection method of proper firms in the sixth project made this condition clear, that the terms to apply for the project were to produce the written contract with the financial institutions to borrow long term funds.

For the reasons it was natural for private banks to lend money to such larger enterprises having comparatively good assets and credit, (that is, the same prospects for loans of the Development Bank) as could redeem surely and

could hardly become the prospects of ordinary private banks. And after the fifth shipbuilding program the volume of the vessels constructed through the projects by the larger shipping companies increased distinctly,[6] and specific connection series of large bank —— large shipping company —— large shipyard were created, especially among the Zaibatsu enterprises. We can discern the criteria of firms selection after the seventh project which included the terms "those who have good assets and credit" as the condition which spurred this tendency. We must say that the system of programmed shipbuilding was useful for the recovery of prewar monopolistic enterprises.

The interest rate of the shipping equipment funds lent by the Aid Fund and the Development Bank was 7.5 per cent. a year, and the interest rate of the fund by private banks were 11 per cent. or over a year. The shipping industry could not pay not only the loans but the high interest, and also the high interest rate was the cause of weak competitive power of the Japanese shipping industry. The "act regarding the supply of interests and the compensation of losses for the loans lent for the ocean-going vessel construction", which we shall study later, has the intention to lower the interest rate of the fund and to strengthen the competitive power of the Japanese shipping industry on one hand, and to relieve the losses of financial institutions which lent funds to the shipping industry on the other.

The quantative enlargement and the beginning of the ocean-going of the Japanese mercantile marine proceeded on with good conditions accidental to the Korean war, but this boom did not last long. The index number of the Japanese tramp freight[7] which showed 213 in May 1951 fell to 100 in October 1952. Every nation increased the rearmaments and enlarged the volume of trade by the Korean war. However, the coming of peace brought about the great contradictions——largest increase of vessels after World War II and the curtailment of the world market caused by the division of the world into two factions, which produced the curtailment of the trade volume in the

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6) Ten important shipping companies built 101 vessels of the total 221 vessels built through the 5th–10th projects.

7) constructed by the Ministry of Transportation, April 1950～March 1951=100

capitalistic nations. In consequence, the Japanese shipping industry had to face a deep depression. Moreover, when the ocean-going of the Japanese mercantile marine began in 1950, the market where she had enjoyed the advantage before the war had been invaded by foreign ships, and the decision of the United States that prohibited Japan to trade with China made Japan lose the far eastern shipping market where she had kept superior position in prewar period. Almost all of the Japanese vessels built by the fifth and the following projects were liners, and they operated on 40 voyages, averaging all routes a month with 308 vessels at the end of 1953. And when the Japanese mercantile marine reopened in this year, nearly all international trade routes where she had placed vessels before the war, were run by 880 foreign vessels which kept 108.5 voyages a month.[8] Therefore a hard competition was inevitable. The hard competition resulted in lowering freight. However, the Japanese shipping industry was forced to make profits charging high freight rates because it operated vessels built with loans bearing higher interest and this condition gave her weak competitive strength.

(Remark) "With regard to shipping and shipbuilding problems in recent years" published by the Ministry of Transportation showed the weak competitive power of Japanese shipping industry as follows:

Freight cost of new built vessels of Japan in comparison with those of the United Kingdom (grain laden in bulk from North America Pacific Coast to Japan) one voyage cost per long ton

Unit: dollars

	Voyage Costs	Direct Ship Costs		Indirect Ship Costs				Total
		repair necessaries of vessels	wages of sailors	Office expenses, charges of insurance	ship tax	redemption	interest of loans	
Japan	3.73	0.74	0.61	1.75	0.28	1.98	3.38	12.40
United Kingdom	3.73	0.68	0.99	1.40	0	1.55	1.21	9.56

Shipbuilding cost per g. t. was estimated 146,000 yen in Japan and 125,000 yen in United Kingdom. Both countries borrowed all shipbuilding

8) World Shipping, No. 31 p. 20 edited by the Research Department of N. Y. K.

funds and their interest rates were respectively 7.5% in Japan and 3.5% in United Kingdom.

The conditions mentioned above resulted in the worse plight of the shipping management and the failure of contributing toward balanceing of payment. The rate of profits against total capital of twelve important shipping companies were always lower than that of important enterprises of all industries in Japan, and after the beginning of ocean-going in 1950 they registered the losses in the first half period of 1950 and in the second half period of 1952. We should keep in mind that the organization of income and

Goods carried by Japanese Vessels in International Sea-borne Traffic

monthly averages or calendar months (1,000 metric tons)

	Total	Export		Import		Inter-foreign countries
		Tons	cargo * loading rate	Tons	cargo * loading rate	
1936	2,311	732	67.0	1,579	57.0	
1939	2,846	1,041	70.0	1,804	63.0	
1949	188	64	31.7	121	12.7	4
1950	311	46	15.3	243	25.1	22
1951	709	82	27.2	576	32.7	52
1952	1,163	133	32.1	902	45.5	130
1953	1,488	156	37.8	1,122	43.0	210
1954 April	1,813	198	38.4	1,366	41.0	249

* Percentage of tonnage carried by Japanese vessels against the total exports (or imports) tonnage

(Source) Ministry of Transportation

Balance of Payments in Japan

(million dollars)

	Balance of Trade			Balance of Invisible Trade			of which maritime Transportation		
	Export	Import	Net Credit	Credit	Debit	Net Credit	Credit	Debit	Net Credit
1936	1,035	1,049	−14						+68
1950	829	835	−6	883	358	+525	9	97	−88
1951	* 1,582	1,647	−65	1,014	619	+395	41	256	−215
1952	1,289	1,694	−405	1,136	557	+569	71	231	−160

(Source) Ministry of Finance

* included Procurement payments

expenditure of the shipping companies in the second half period of 1952 showed interests paid at 10.3 per cent. of all expenditures.[9] The Shipbuilding programs as a means of recovering measures of the Japanese mercantile marine did not succeed to bestow the competitive power to the shipping industry.

On the other hand, whereas the purpose to countervail the ill balance of trade with the shipping earning, the balance of the invisible trade of shipping showed unfavorable balance and it was impossible to attain the aim. The cargo loading rate of the Japanese vessels in both export and import was increasing gradually, but Japanese vessels could not have carried one half of cargoes waiting to be carried in May 1954. Small cargo loading rate is due not necessarily to the insufficiency of vessels but to weak competitive power. We should refer to the ill balance of the shipping account to the fact that Japanese vessels chiefly carried cheap bulky cargoes, while foreign vessels carried cargoes of high freight rates, together with the small cargo loading rate.

3. Enactment of the "Act regarding the supply of interests and the compensation of losses for the loans lent for the ocean-going vessel construction"

In summary, the programmed shipbuilding system made possible the recovery of the Japanese merchant fleet, but this system also made apparent the weak competitive power of the shipping industry and the ill balance of the shipping account because of the higher rate of interest. The Shipping industry requested to lower the rate of interest of shipbuilding funds so as to get rid of its weakness. Besides the banks and shipyards also demanded some shipping and shipbuilding policy to help them. In January 1953 "Act regarding the supply of interests for the loans lent for the ocean-going vessel construction" was enacted, and again in August of the same year the "Act regarding the supply of interests and the compensation of losses for the loans lent for the ocean-going vessel construction", which had enlarged and revised the former contents in the form to be helpful to all three. This was enacted and put to effect on and from the day the bill passed. (Hereafter we call this act the Fund Act.)

9) The research is of the Japan Industrial Bank

The reason why shipbuilding and financial circles required the Fund Act can be found in the following circumstances.

Shipbuilding Circles: Domestic shipbuilding equipments including naval shipyards were cancelled as the objects of reparations by the change of the United States occupation policy against Japan. Before the war, private shipyards kept up their works busy with the considerable volume of naval vessel construction. After the war the prohibition of naval shipbuilding and the dullness of ship export made inevitable the excess of equipments. Volume of launching during 1949–53 in Japan was 2,267,569 gross tons, and 1,525,029 gross tons with 67 per cent. of the total were built under the projects, and 555,124 gross tons, a quarter of the total were export vessels.[1] Annual volume of average launching (about 450,000 gross tons) could employ only one half of all the shipbuilding equipments, and this volume were maintained chiefly with the projects. Accordingly, the shipbuilding industry required the enlargement of shipbuilding volume by the projects and supported indirectly by lowering the interest rate to make the shipbuilding projects proceed smoothly.

Financial Circles: Financial institutions accomodated to the shipping companies long term funds for vessel construction and as working capital, and the ratio of loans to the shipping industry reached to 21.1 per cent. of

Statement of Borrowing and Repaying of Shipbuilding Funds After 1949 (at the end of March 1953)

(million yen)

	Fiscal Funds			Private Fund			Total		
	Loans	Repayment	Outstanding	Loans	Repayment	Outstanding	Loans	Repayment	Outstanding
1949	15,911	207	15,704	13,401	9,901	3,500	29,396	10,191	19,205
50	13,619	563	13,056	9,222	4,204	5,018	24,807	6,733	18,074
51	24,155	50	24,105	33,638	7,346	26,292	59,310	8,913	50,397
52	10,270	0	10,270	25,121	291	24,829	36,348	1,250	35,099
53	2,697	0	2,697	515	0	515	3,212	0	3,212
Total	66,653	820	65,833	81,896	21,742	60,154	153,073	27,086	125,987

(Source) The Japan Development Bank, Economic Counsel Board, and the Ministry of Transportation

1) The data is of the Ship Department of the Ministry of Transportation

the outstanding loans of all banks at the end of 1952, and 25.8 per cent. at the end of 1953, which were at the top of all industries. Hence, the condition of redemption by the shipping industry had considerable effects upon the banking accounts, but the depression of the shipping industry made it difficult to repay. Accordingly, to continue the lending to the shipping industry, especially to shipbuilding finance, will lead banks to worse business conditions. Moreover, so far as banks had loaned much funds already to the shipping and the shipbuilding industry, the suspension of loans for these industries could not be practiced, because that would produce worse business conditions of the two, and that would also make it impossible for the banks to collect the credits. Thus the situation of the banks came to need the government assistance for the shipbuilding —— which would be useful not necessarily for the relief of the shipping industry but also for the improvement of the banks' own business condition.

The outline of the Fund Act is as follows:

(a) Aim: This act intends to promote the construction of ocean-going vessels[2] and to promote healthy development of our merchant marine by providing with interest and compensating for the losses for the loans which are necessary for the construction of ocean-going vessels.

(b) Supply of interests: By the contract with financial institutions the government provides them with the difference of interest rates between 5 per cent. and ordinary rate (11 per cent.) in the case they loan funds for shipbuilding, and they are required to lower the interest rate 5 per cent. so as to lessen the burden of paying interest for those who want to build vessels.

Supply of interest is also applied to the Development Bank,and in this case it is provided that the government allows the Development Bank with the difference between 3.5 per cent. and ordinary interest rate (7.5 per cent.). Therefore, with the application of this act, shipping companies can borrow shipbuilding funds at 5 per cent. interest rate of private fund, and 3.5 per cent. interest rate of the Development Bank fund.

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2) The act prescribes an ocean-going vessel is the vessel which is 4,500 g. t. and over and 12 knots speed and over.

However, the total sum of interest supplied by the government is determined in the fiscal budget, and the period of supply is limited within eight years from the fiscal year in which the contract is concluded. And also the shipping company which realized the revenue over the amount prescribed in this act can not enjoy the benefit of this lower rate of interests. In addition, the builder of the ocean-going vessels is confined to Japanese individuals and judicial persons, and this is of no other intention but that the act's aim is to maintain domestic shipyards. The point of which we ought to take notice with regard to the supply of interest is that these provisions are applied for the construction of the vessels undertaken after December 1st, 1950, as to cargo boats, and for the vessels undertaken after December 1st, 1951, as to tankers.

(c) Compensation of losses: By the contract with the financial institutions the government compensates the losses for them, which they suffered from the loans for shipbuilding funds, within the amount corresponding to 30 per cent. of the loans.

The Japanese merchant marine which had tried to enlarge its fleet by means of the shipbuilding projects found out its weak competitive power resulting from the exorbitant high interest rate, and for the purpose of its relief the Fund Act was enacted. So far, the shipbuilding projects resulted in producing the tendency to create larger shipping companies more powerful because of the connection with the large banks and large shipyards. Farther this act tends to make the gap between larger enterprises and weaker small enterprises still more wide. This act seems to bestow the competitive power to the shipping industry, at any rate through the effect of lowering the rate of interest. But the world-wide tendency of the surplus vessels in the future has the possibility of lowering the freight and cut-throat competition may result. In such a case, it is doubtful if this act shall still be able to give the competitive power to the Japanese merchant marine. There is a great possibility that the weak point in the merchant marine to become apparent, and the loss of the accumulated capital may require another shipping policy once more.

In concluding this article, the writer has a question with regard to the recovery method of the Japanese merhant marine which was determined by

the change of the United States occupation policy against Japan. For the purpose of making the Japanese merchant marine powerful, the national enterprise system, or another method which facilitated the accumulation of the capital should have been adopted; and the writer thinks that, there is room to consider more fundamental means to balance the balance of payment by fostering the shipping industry. However it may be, the Japanese merchant marine of the present day comprise glaring contradictions of Japan itself which became a member of the free world only at the end of World War II.

II

BUSINESS ACCOUNTING AND TAX ACCOUNTING

BY SUSUMU WATANABE

BUSINESS ACCOUNTING AND TAX ACCOUNTING

Here we define tax accounting as an accounting which has for its object the measuring of periodic income in accordance with tax law. This may be distinguished from business accounting based on business accounting principles. By the term 'business accounting principles' we mean "those standards which form a system of customary rules generally accepted as just and proper chosen from among business accounting practices of spontaneous growth, and which are binding on all enterprises in their accounting if not necessarily by the operation of law."[1] Hence it follows that business accounting principles should be considered as those standards which derive from what are generally recognized as 'the best accounting practices' regularly employed for a number of years by a majority of the enterprises involved. The question of the differences between tax accounting and business accounting and their adjustments is now taken up by many writers. It is this question that is before us to be solved.

There are in fact several differences between these two types of accounting. One of the most important factors in causing such differences is the fact that tax accounting aims at the measurement of taxable income and stands under the strong influence of the tax policy of the government. Another factor is expediency in tax administration which is taken into consideration in tax accounting. There is a third factor which is operative even if we leave out of consideration tax policy and expediency in tax administration. Tax law necessarily lags behind business accounting in following the development of the latter,—— a circumstance which gives rise to differences between the two types of accounting in the process of tax law absorbing newly developed

1) The Business Accounting Council of the Treasury Department 'Business Accounting Principles' (an interim report)

accounting practices. Business accounting keeps modifying accounting practices according to changes of economic conditions in order to meet its own need of properly reflecting periodic profit. Some newly adopted accounting practices stand the test of time by growing into established standards and force themselves upon tax law for approval. An apt illustration is afforded by the statutory recognition of the Lifo method in the United States. Lifo started in some enterprises (as a result of the income concept being re-examined in such industries) and developed until it was incorporated into the Internal Revenue Code of the United States.

Tax accounting and business accounting as they actually stand are thus destined to have some differences. Moreover, certain differences are inevitable when we consider the need of national industrial policy. A complete agreement between the two is never to be expected. The question then lies not so much in whether there are differences between them as in whether provisions of tax law affect business accounting to such an extent that they stand in the way of its development.

Indeed it goes without saying that tax law should provide regulations pertaining to the measurement of periodic business income, but it would be a serious question if it should interfere with the measurement of periodic business profit. The influence of tax law in Japan is so powerful that it looks as if tax accounting were the only accounting practice in business circles, leaving no room for business accounting proper. The result is that all there is accounting restrained and distorted by tax law, and that there is no hope for the development of proper business accounting. The proper function of tax accounting is to measure and determine taxable income, and not to interfere with a sound development of business accounting.

INTERFERENCE BY TAX LAW WITH BUSINESS ACCOUNTING

The interference of tax law with business accounting may be divided into two categories, direct and indirect. Direct interference arises from the requirement that enterprises should follow a specified book-keeping method in order to enjoy certain benefits offered by tax law. Indirect interference arises from the provision that a corporation should file its return 'on the basis of its

confirmed settlement of accounts'. As a typical example of direct interference by tax law, we may cite a special treatment of corporate income in cases where a corporation is granted national subsidies, prefectural subsidies or municipal subsidies (hereinafter called governmental subsidies) and spend the same in acquiring such assets as fit their purposes. We may put the special treatment as follows: Where a corporation enters the assets in the 'Inventur' at the book value of the cost of acquisition less the amount of the governmental subsidies expended for such acquisition, the difference between the cost of acquisition and the amount on the face of the Inventur is computed as a dedution in calculating corporate income (Corporation Tax Law Enforcement Regulations, §11 (1)). Here entry in the Inventur means entry on the balance sheet, and the amounts on the balance sheet in their turn derive from the accounting records. It follows then that the corporation can take advantage of the statutory benefit only when it adopts the book-keeping method conforming to the statutory requirement. This may be explained below by a hypothetical example:

A corporation spends a governmental subsidy of 5,000,000 yen and an amount of 8,000,000 yen out of its funds (totaling 13,000,000 yen) on the construction of a warehouse. This transaction will be journalized as below if the corporation wants to take advantage of the above cited provision in the Corporation Tax Law Enforcement Regulations:

(1) When the governmental subsidy is received:

Dr. Cash ¥5,000,000 Cr. Subsidies ¥5,000,000

(2) When the warehouse is built:

Dr. Warehouse ¥13,000,000 Cr. Cash ¥13,000,000

(3) To enjoy the statutory benefit mentioned above:

Dr. Subsidies ¥5,000,000 Cr. Warehouse ¥5,000,000

Through this procedure the book value of the warehouse is placed at 8,000,000 yen. This method is oridinarily known as 'reduced entry' because it places the warehouse acquired for 13,000,000 yen at the book value of 8,000,000 yen. Although tax law treats a subsidy as taxable income as a principle, the journalizing (3) shown above gives the subsidy of 5,000,000 yen the appearance of being exempted from taxation. But the subsidy is not in fact so treated.

The reason is that, since the book value of the warehouse is 8,000,000 yen, this figure forms the basis of depreciation allowed, with the result that 5,000,000 yen equivalent to the amount of the subsidy is excluded from depreciation when the actual cost of acquisition is 13,000,000 yen. This method results in annual underdepreciation (in other words, profit shown in excess of what it really is), through which the equivalent of the subsidy is gradually represented as income to be practically taxed in instalments. Thus the benefit offered by tax law through the reduced entry lies in a mere deferment of taxation because the subsidy is not treated as the taxable income of the year of grant but is substantially made subject to taxation spread over a number of years through annual underdepreciation.

Here it may be questioned whether a subsidy is of the nature of income. Tax law holds that a subsidy should not properly be treated as an tax-exempt item on the ground that it forms an ultimate gain of the stockholders. The business accounting principles in Japan, on the other hand, consider a subsidy as having, in accounting theory, the nature of capital surplus, not of operating profit. This is the position taken in the 'Proposals for Adjusting Tax Law and Business Accounting Principles' (hereinafter called Proposals). The Proposals look on a subsidy as a contribution to the capital of the enterprise not by its stockholders but by the Government to serve purposes of national economy. The Proposals conclude in these words: "From the point of view of accounting principles, the reduced entry is an undesirable accounting procedure contrary to the principle of fair presentation because it does not show assets at their actual cost of acquisition and prevent governmental subsidies granted from appearing in the financial statements. The compulsory adoption of such a procedure amounts to the control of tax law over the accounting method of an enterprise. It is desirable, therefore, that the tax law requirement of reduced entry in the financial statements should be repealed."

It is the opinion of the writer that it depends on varying business income concepts whether a subsidy should be considered as business income or capital surplus. Tax law takes the position that an enterprise is a body of stockholders and that a subsidy is an ultimate gain of the stockholders. Even if we admit that the enterprise is owned by the stockholders and that the subsidy ultimately

becomes their gain, it is evident that a going concern should not regard the subsidy as operating income. So far as the business entity is concerned, the subsidy may by considered as a capital contribution by the Government. It is improper to levy a tax on it as business income before it actually realizes as a gain to the stockholders, even if it ultimately so realizes.

The concept of business income must be defined before it can be determined whether a subsidy is business income or not. At the present moment tax law holds one way, and the accounting principles another. There is no immediate likelihood of overcoming this split of opinion. Even if we admit the standpoint of tax law which includes a subsidy in business income and subjects it to taxation, the requirement for reduced entry, as the Proposals point out, produces results contrary to the principle of fair presentation.

The need of making reduced entry for taxpayers to enjoy a statutory benefit (deferment of taxation) arises in cases of contribution to the cost of contruction and insurance excess. Here a contribution to the cost of construction means the contribution by the user or beneficiary of all or part of the cost incurred when a corporation engaged in electricity or gas supply or local railroad transporation constructs facilities necessary for its operation; an insurance excess means the excess of the amount of money received from the insurer over the book value of fixed assets owned by a corporation immediately before their destruction or damage.

INDIRECT INTERFERENCE BY TAX LAW WITH BUSINESS ACCOUNTING

Indirect interference by tax law with business accounting may be illustrated by the price fluctuation reserve. It is provided in § 5-(10) of the Special Taxation Measures Law that, where a corporation being permitted to file its return on the blue form sets up a price fluctuation reserve not in excess of a certain amount (the maximum amount to be credited) to cover possible losses consequent on a decline in the prices of assets to be inventoried[2]

2) The assets to be inventoried enumerated in § 9-(7) of the Corporation Tax Law are merchandise, raw materials, finished goods, partly finished goods, goods in process and others. We omit to discuss in this article the price fluctuation reserve recognized with regard to securities.

enumerated in § 9-(7) of the Corporation Tax Law, the amount so credited shall be treated as a deduction in computing the income of the accounting period in which it is credited.

The maximum amount to be credited varies according as (1) the inventories are valued by the Lifo method or (2) by a method other than Lifo. That is to say:

(a) In the former case, the maximum amount to be credited is the excess, if any, of the total amount of the book value of the inventories at the closing date of the accounting period over 90 per cent. of the total amount of the market value of the same inventories at the same date.

(b) In the latter case, the maximum amount to be credited is the excess, if any, of the total amount of the book value of the inventories at the closing date of the accounting period over 90 per cent. of whichever is the smaller, the said total amount or the total amount of the market value of the same inventories at the same date.

In the latter case, therefore, the amount of inventories valued (the book value of inventories less the price fluctuation reserve), substantially speaking, is the amount reached by the 'cost or market, whichever is lower' method less 10 per cent. of such amount. Whereas it is not allowed in the former case to set up a price fluctuation reserve unless the book value is over 90 per cent. of the market value, it is allowable in the latter case to set up a reserve equivalent to 10 per cent. of the amount reached by the 'cost or market, whichever is lower' method. In this connection there is an objection raised to the different treatment of the price fluctuation reserve according to the valuation method adopted, Lifo or otherwise. This different treatment is presumably based on the assumption that the amount of inventories valued by the Lifo method is ordinarily already lower than that reached by any other method. Opposition to this, however, is expressed, for instance, in the 'Opinions on the Price Fluctuation Reserve System' (dated November 1, 1954) of the Kansai Economic Federation: "As things actually stand in Japan, the Lifo method has not been given free scope because of the narrowness of valuation units of inventories in Japanese tax law, difficulties in obtaining raw materials at the right time, difficulties in maintaining stock in trade due to unforeseen

accidents, etc. It is unreasonable to deny a corporation electing the Lifo method the setting up of such price fluctuation reserve as allows a certain latitude to the book value at the end of each period, on the assumption that the Lifo method has had a full scope. It is proper, therefore, not to discriminate between corporations electing the Lifo method and those electing any other method."[3] Here we will not go into the propriety of this opinion for the double reason that it demands pages of discussion and that it is not the main subject of this article.[4]

The said price fluctuation reserve perhaps comes under what the American Institute of Accountants calls "reserves designed to set aside a part of current profits to absorb losses feared or anticipated in respect of inventories on hand"[5] and charges or credits relating to such reserves should not enter into the determination of net income in accounting theory.

It is necessary, however, in the present-day Japan with violent price fluctuations and with enterprises of little flexibility to allow the setting up of a price fluctuation reserve by a charge to income. It is, in view of this necessity, to be considered as a grace which tax law bestows from the point of view of industrial policy.

The above referred-to Proposals for Adjusting Tax Law and Business Accounting Principles assert that the price fluctuation reserve evidently has the accounting nature of earned surplus, instead of a valuation account such as bad debts reserve, and go on to say, "Even if treated as a deduction at the time of its setting up, the amount so debited should not appear in the income statement, but to be charged to earned surplus as its accounting nature requires." The majority opinion agrees with this position in holding the price fluctuation reserve as an appropriation of earned surplus.[6] Tax law is so interpreted, however, that a price fluctuation reserve set up as an appropria-

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3) The dollar-value Lifo remains yet to be recognized in Japanese tax law.

4) There has been a series of cases where corporations that had elected the Lifo method gave it up to avoid disadvantage in taxation in connection with their price fluctuation reserve.

5) A I A, Accounting Research Bulletin, No. 31, Oct. 1, 1947.

6) The writer is of the opinion that it is necessary to recognize a price fluctuation reserve

tion of earned surplus is not recognized as a deduction.[7] Here again we find a difference between business accounting and accounting based on tax law.

RETURNS BASED ON THE CONFIRMED SETTLEMENT OF ACCOUNTS

The differences between business accounting and tax accounting are found in many cases other than that of the price fluctuation reserve. The original source of such indirect interference is in fact the statutory requirement that returns shall be filed on the basis of the confirmed settlement of accounts (Corporation Tax Law, § 18 & § 21). By a return based on the confirmed settlement of accounts is meant a return based on the financial statements approved at the general meeting of stockholders. This requirement has given rise to the following rules: a) The amount of valuation profit or loss on assets or of depreciation shall not be increased or decreased in the return, because such amount must not, as a rule, be other than the same amount that has been approved at the general meeting of stockholders or by the whole body of partners. b) What are allowed to be treated in tax calculation as deferred assets shall not be deducted from the amount of income in the return in cases where such items are already listed as deferred assets in the financial statements approved at the general meeting of stockholders or by the whole body of partners (Basic Notification 315). The provisions in this notification, being of an illustrative nature, are interpreted as applying to other profits or losses of a similar character.

The taxing authorities explain that internal transactions such as depreciation, valuation profits or losses, setting up of reserves or allowances should not properly be recognized in tax law unless they are listed in the financial statements approved at the general meeting of stockholders, because decisions

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set up by a charge to income besides or before a price fluctuation reserve as an appropriation of earned surplus. But this view is grounded on anincome concept different from the prevalent one. The majority opinion considers the present price fluctuation reserve as an appropriation of earned surplus.

7) The amount of income of a domestic corporation for each accounting period shall be the total amount of its incomes less the total amount of its business expenses for each accounting period (Corporation Tax Law, § 9).

on such internal transactions are finally and most authoritatively made at the general meeting of stockholders.[8)]

This explanation appears plausible. The apparent justification of this interpretation consists in the very fact that the so-called confirmed settlement of accounts is prepared with due regard to the statutory requirement. This same fact, therefore, does not justify us in denying that business accounting as it should be is distorted by the requirement of returns based on the confirmed settlement of accounts.

For instance, even enterprises which believe that the present price fluctuation reserve is an appropriation of earned surplus cannot treat it as such if they want to enjoy the benefit offered by tax law. The consequence is that a fair presentation of periodic profit or loss is prevented.

The very presence of the requirement of 'returns based on the confirmed settlement of accounts' demands of necessity regard to be given to the requirement in the settlement of accounts so as to avoid disadvantage in taxation.

This is way tax law affects business accounting to such an extent that it restrains accounting procedure. This may be called indirect interference by tax law with business accounting.

For a sound development of business accounting, it is imperative that tax law should emancipate business accounting from all interference, direct or indirect. Tax law should be primarily concerned with the measurement of taxable income, and the difference between business accounting and tax accounting should be allowed to be adjusted in the return filed. This would by no means mark a step backward for tax law, but a return to what it should properly be. The duty of criticizing the propriety of business accounting practices does not devolve on tax law, but on some other competent organ.

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8) There are cases where adjustments in returns —— modifications of the confirmed settlement of accounts at the time of filing returns —— are recongnized. Such adjustments are considered as allowable in the following cases:

a) where the accounting is contrary to the facts.

b) where the accounting is contrary to the tax law provisions.

SPATIAL CHARACTERISTICS OF INDUSTRIES RELATIVE TO THEIR BUSINESS FEATURES

—— Comparative Study between Japanese and British, American Industries

BY MINORU BEIKA

(1)

For business enterprises, the plant location is an important problem, but it is only one of many factors correlated to one another. These enterprises, therefore, are more concerned with the relative adaptability than the highest suitability of their locations. In other words, the interrelation between the business features which many factors of the enterprises produce, and their location problems, shall constitute the central point of their spatiality.

As an attempt to pursue these studies, this article is first to grasp the spatial characteristics of our important industries relative to their business features, and then to compare them to the British and American industries for clarifying those characteristics. There seem to be many ways for grasping the specialities of our industries. Now, for finding out the mutual relation of the spatiality amony our important industries, a good furtherance may be given for our research from the calculation of the coefficient of localization for each type of industries, and to combine it with their business features. Fortunately these coefficients for the British and American industries have been given by Prof. P. S. Florence in his "The Logic of British and American Industries" (1953), and the writer of this article will try to collate our materials and related data.

The coefficient of localization can be measured by the deviation of the regional (by prefectures in our case) distribution of the workers in each industry, from the distribution of the total workers in the whole industries over the whole country. First, the percentage of the workers in a certain industry is obtained for each region, and compared to percentage of the total workers in

our whole industries for each region. Next, the extent of localization (coefficient) of certain industry can be measured by the sum of plus, or of minus deviations for all regions of the former (for each industry), from the latter (for the whole industries). Accordingly, the totals of plus and of minus deviations are to be the same, and the type of distribution of a certain industry is more appoximate to the distribution of the whole industries, the coefficient is nearer to zero, and when the distribution of a certain industry has higher deviation from the whole, the coefficient is nearer to 100.

But as these coefficients indicate only the mutual relation of localization among each industry and not the actual extent of regional concentration, the actual percentages of most important regions (three chief prefectures in our case) for each industry are also to be useful as checks against misunderstandings.

Still more, the industrial localizations above stated, have a close correlation with their business features. The business features are to be characteristically found out by the size of their plants, that is, by number of workers. This measure shows not only the size, but also their industrial characteristics; small industries, localized industries, modern large-scale industries, or associated or assembly industries. For this reason, the size of the plants in each industry is used here with the coefficient of localization.

(2)

The details that are tabulated following the above statement, are shown below :—

(1) Localization and Size of Plant in Japanese Industries

Group of Industry	Coefficient of Localization	3 Leading Prefectures		Percentage of Workers by Size of Plant (no. of workers)				
				—49	50—99	100—499	500—999	1,000—
			%					
1 Pottery	68	Aichi, Gifu, Mie	74	57.4	9.7	20.2	4.1	8.5
2 Lacqner	60	Ishikawa, Fukushima, Wakayama	44	96.8	3.1	—	—	—
3 Electrical measuring apperatus	59	Tokyo, Shizuoka, Nagano	64	26.7	4.5	18.9	13.6	35.8
4 Electric lump	53	Tokyo, Kanagawa, Osaka	74	30.8	7.7	27.6	8.7	24.9

5	Communication equipment	51	Tokyo, Kanagawa, Hyogo	81	25.0	9.9	19.9	9.2	35.7
6	Iron and steel	49	Fukuoka, Hyogo, Kanagawa	55	3.0	2.8	11.6	7.7	74.0
7	Shipbuilding	48	Hyogo, Kanagawa, Nagasaki	46	16.7	4.7	11.1	3.3	64.0
8	Precise Machinery	47	Tokyo, Aichi, Osaka	67	45.9	12.2	25.3	6.7	9.7
9	Mortor vehicles	47	Tokyo, Kanagawa, Aichi	71	24.4	8.5	14.8	12.4	39.5
10	Bicycles	45	Osaka, Tokyo, Aichi	70	47.9	16.0	29.6	6.2	—
11	Two and three wheel motor cycle	45	Osaka, Okayama, Tokyo	55	24 4	6.6	17.9	15.4	35.5
12	Sugar	43	Hokkaido, Tokyo, Fukuoka	49	21.8	14.1	64.1	—	—
13	Textile industries machinery	42	Aichi Osaka, Hyogo	57	40.6	11.1	23.9	8.9	15.2
14	Industrial inorganic chemicals	41	Yamaguchi, Fukuoka, Niigata	28	16.9	4.4	18.3	9.8	50.3
15	Nonferrous metal smelting	39	Shizuoka, Ehime, Osaka	32	5.1	2.7	12.4	21.4	58.2
16	Railroad equipment	39	Aichi, Osaka, Hyogo	47	12.5	4.1	13.8	17.2	52.1
17	Broad fabrics	39	Aichi, Osaka, Fukui	35	53.3	11.6	18.2	5.6	11.0
18	Glass products	39	Osaka, Tokyo, Fukuoka	61	36.4	18.2	20.9	8.3	16.0
19	Dyeing and finishing	39	Kyoto, Osaka, Aichi	50	50.1	10.1	27.9	4.1	7.5
20	Drugs	37	Tokyo Osaka, Toyama	53	34.0	14.6	36.5	6.1	0.8
21	Electrical generating, transmission apparatus	37	Tokyo, Ibaraki, Osaka	46	24.9	7.9	16.4	9.2	41.3
22	Rubber products	36	Hyogo, Tokyo, Fukuoka	50	20.5	1.0	41.2	10.9	16.4
23	Metal working machinery	35	Tokyo, Osaka, Toyama	52	44.4	10.6	18.4	11.8	14.6
24	Agricultural machinery	35	Niigata, Hokkaido, Osaka	23	51.9	15.7	29.2	3.0	—
25	Spinning yarn	34	Aichi, Osaka, Mie	32	17.9	3.9	11.0	9.1	57.8
26	Soap	33	Tokyo, Osaka, Hyogo	51	46.2	12.0	24.4	11.2	—
27	Lumber and wood products	32	Hokkaido, Shiga, Aichi	18	86.5	8.4	5.0	—	—
28	Hosiery	31	Tokyo, Osaka, Aichi	43	66.1	12.6	18.3	1.0	1.8
29	Toys	31	Tokyo, Aichi, Osaka	53	84.6	7.2	8.1	—	—
30	Industrial organic chemicals	31	Fukuoka, Tokyo, Osaka	44	20.2	7.0	31.0	12.3	29.3
31	Canned and bottled foods	30	Tokyo, Hokkaido, Aichi	22	73.8	11.3	14.9	—	—
32	Iron and steel casting	30	Osaka, Saitama, Aichi	48	56.6	15.0	20.1	8.1	—
33	Apparel	29	Osaka, Tokyo, Saitama	43	72.2	14.2	11.3	0.3	1.8
34	Paper products	29	Shizuoka, Tokyo, Osaka	36	45.0	10.2	20.8	9.5	14.3
35	Metal products	28	Tokyo, Osaka, Hyogo	56	69.3	11.1	15.4	3.3	0.7

36 Printing, Publishing	28	Tokyo, Osaka, Aichi	53	59.3	11.1	16.0	3.5	9.8
37 Grains, flour	26	Hokkaido, Aichi, kanagawa	19	82.7	7.8	9.5	—	—
38 Engines	24	Tokyo, Osaka, Hyogo	34	32.8	8.8	25.4	17.7	15.2
39 Vegitable and animal oil and fats	24	Tokyo, Hyogo, Hokkaido	27	63.8	6.8	25.8	3.4	—
40 Furniture	16	Tokyo, Osaka, Aichi	29	88.0	6.9	5.0	—	—
41 Bread and cake	13	Tokyo, Aichi Osaka	30	82.7	6.0	6.9	3.6	0.6

The writer calculated by the data of "Census of Manufactures, 1952" and "Establishment Census of 1951"

Our industries, largely depending for raw materials from abroad and on foreign markets for the sales of products, naturally tend to concentrate in a few central districts including trade ports, where, so to speak, there are raw materials and consuming centers; that is, Kei-Hin (Tokyo and Kanagawa Prefecture), Han-Shin (Osaka and Hyogo Prefecture) and Nagoya (Aichi Prefecture) districts. As a matter of fact, even the several industries with lower coefficient of localization have considerably concentrated in these central districts, for such coefficients indicate only the mutual relation of localization among the industries.

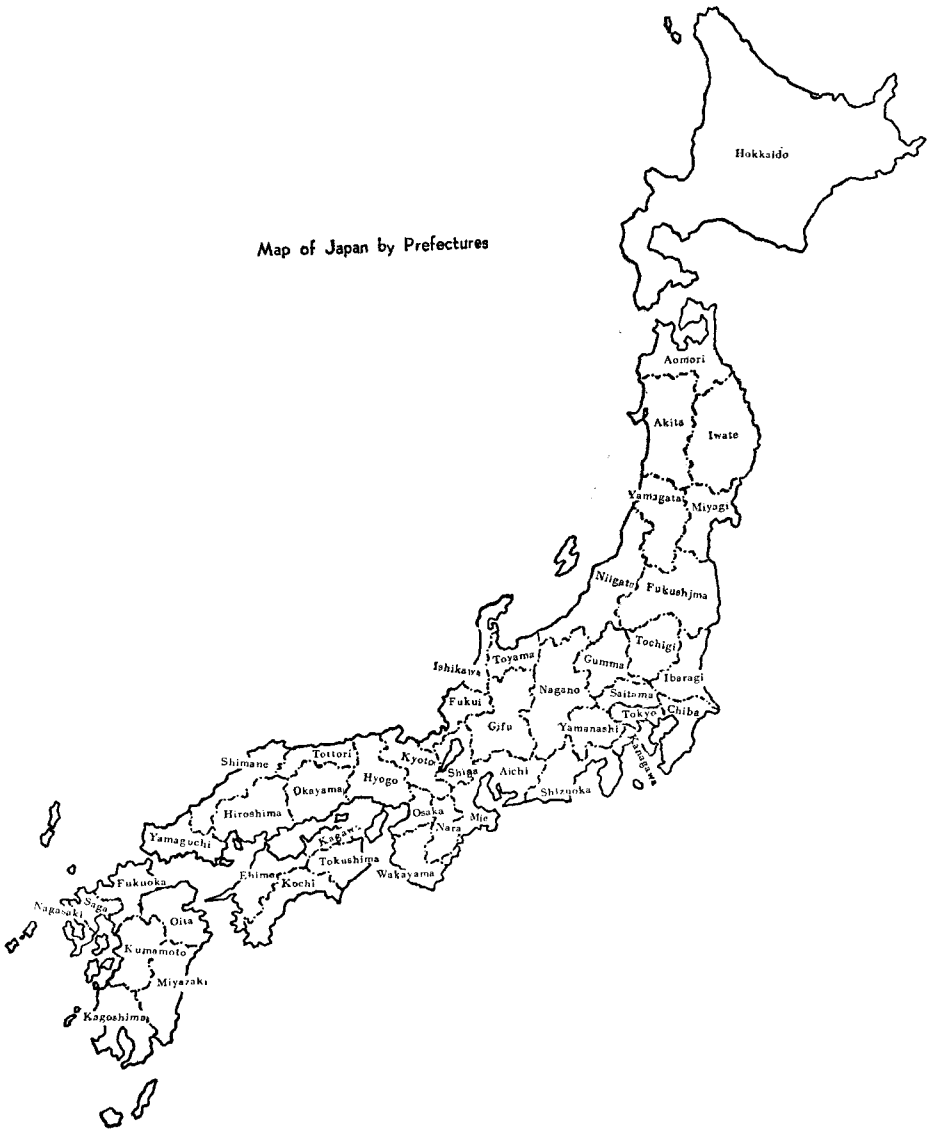
The 1st Table sets forth several groups which have certain types of localization and business features, as follows;—

(1) Several types of industries which have highest, or relatively higher coefficient of localization, and which are concentrated chiefly in a few central industrial districts, including large, medium and small factories in the localities.

Electrical measuring apparatus (3), Electric lump (4), Communication equipment (5), Precise machinery (8), Motor vehicles (9), Bicycles (10), Two- and three-wheels motor cycles (11), Textile industries machinery (13), Electricgenerating, transmission apparatus (21), Metal working machinery (23). —— all of which belong to higher-processed engineering industries.

Most of these industries in the 3 leading prefectures, have severally 50% or over of all workers in each industry. And these leading prefectures are mainly in a few central districts above stated.

These industries which have high coefficients, concentrated in certain


Map of Japan by Prefectures
Hokkaido
Aomori
Akita
Iwate
Yamagata
Miyagi
Niigata
Fukushima
Tochigi
Gumma
Ibaragi
Toyama
Ishikawa
Nagano
Saitama
Fukui
Tokyo
Chiba
Gifu
Yamanashi
Kanagawa
Shimane
Tottori
Kyoto
Shiga
Aichi
Shizuoka
Okayama
Hyogo
Hiroshima
Osaka
Mie
Nara
Yamaguchi
Kagawa
Tokushima
Wakayama
Ehime
Kochi
Fukuoka
Saga
Nagasaki
Oita
Kumamoto
Miyazaki
Kagoshima

districts, and yet consist of each type of factory-size, could be said to belong to the kind of the mutual associated industries for which it will be very difficult to maintain respective isolation.

Needless to say, there are a few exceptions that several factories in those types of industries, have been in different districts outside of our central industrial districts. But in these cases, those factories have special conditions of their own. According to the writer's research, these conditions have been chiefly as follows;

(A) These factories have been constructed in adjoining districts as a result of industrial development around the old, central districts. The leading prefectures outside the central districts above stated, in these types of industries, are, for example, Saitama, Gumma, Ibaraki, Chiba, Shizuoka, which are all adjoining prefectures of Tokyo and Kanagawa prefectures.

(B) Most of these factories have belonged to some of the largest multi-plant enterprises in our country. One factory of electric generating machinery in Mie Prefecture is one of the 15 factories of Tokyo Shibaura Electric Industrial Company, another factory in Ibaraki Prefecture and another of electric lump in Chiba Prefecture belong to the 16 factories of Hitachi Manufacturing Company, and one factory of electric machinery in Hiroshima Prefecture is one of the 12 factories owned by Mitsubishi Electric Machine Company; and so on.

(2) Several types of industries which have relatively higher coefficients, and are concentrated not only in a few central districts, but are also distributed, more or less, in several country districts, and which include chiefly large factories are;—

Iron and steel, (6) Nonferrous metal smelting (15),
—— primary-processed industries

Shipbuilding (7), Railroad equipment (16)
—— finished, assembling industries

Industrial inorganic chemicals (14), Spinning (25)

Although these types of industries have higher coefficient in the same degree of the 1st types of industries, they have not over 50% of the workers severally in three leading prefectures, but have a fair weight in some country

districts. And yet, most of them are not mutually associated industries, but are chiefly consisted of large factories with over 1,000 workers. In the primary -processed industries and industrial inorganic chemicals, these characteristics have been produced, on the one hand, by the existence of raw material resources in the locality, however small that quantity may be, and, on the other hand, the shortage made good by the importation of raw materials from abroad. Shipbuilding industries and railroad equipment industries are both assembly or associated industries, but have severally special location factors which must depend on good ports, wider space and market orientation. They have been able to control many connected firms or factories, however isolated they may be, because of the large scale of the enterprise.

Exception is found in the case of the spinning industry which, though it depends mainly on foreign raw materials and is low-processed manufacturing industry, the factories have not been concentrated in the central districts by reason of relatively higher transportability of raw materials and products.

In short, these types of industries have been located in central and rural districts by their own location factors respectively. Therefore, such locational characteristics are fouud clearer in the factories in the country districts. In the factories in the country distrit prefectures outside of our central industrial districts, the characteristics are found as follows.

The country district prefectures, which have these types of industries, are found here and there, not so connected with one another as with the 1st types of industries.

Eor example, Fukuoka, Hokkaido and Iwate in iron and steel; Shizuoka and Ehime in nonferrous metal smelting; Nagasaki and Hiroshima in ship-building, Hiroshima and Yamaguchi in railroad equipment; Yamaguchi and Fukuoka in industrial inorganic chemicals; Mie and Gifu in Spinning and so on.

These locational phenomena indicate that these types of industries have been located in the country districts, because of their respective location factors, which are coal or mineral resources, electric power by water, conveniences of transportation, etc.

(3) Several types of market-oriented industries, which have medium

coefficient, consisting of medium-sized factories.

Sugar (12), Glass products (18), Drugs (20), Rubber products (22), Industrial organic chemicals (30),

These are chiefly apparatus industries, and have been concentrated so much in central districts by market orientation as medium coefficient. Especially these industries have been located severally in three or four of the five areas in our country (Hokkaido, Kanto, Chubu, Kansai and Kyushu). This locational pattern indicates that these industries are market-oriented.

(4) Several types of localized industries, which are concentrated in several districts, here and there, and consist of a number of small-sized factories. These industries have medium or higher coefficient.

Pottery (1), Lacquer (2), Broad fabrics (17), Parts of rubber products (22),

These industries which constitute parts of our important industries, are in existence on "external economies" by high localization in certain districts. The origins of the localization of these industries are to be pursued historically for the most part, in our country.

(5) Several types of market oriented industries which consist of small-sized industries, having medium or lower coefficient.

Dyeing and finishing (19), Agricultural machinery (24), Soap (26), Hosiery (28), Toys (29), Iron and steel casting (32), Apparel (33), Metal products (35), Printing publishing (36), Engines (38), Vegetable and animal oil and fats (39), Furniture (40), Bread and cake (41),

The markets of these industries are not only in the central districts, but are also all over the country; cities, suburbs, towns and rural districts. Therefore, these industries are not so much concentrated as with the other industries above stated. Some of these types have the characteristics of the localized industry (the fourth types) with their own specialities. For examples, parts of dyeing and finishing industries, hosiery industries and apparel industries, etc.

(6) Several types of material-oriented industries which consist of small-sized factories, having low coefficient.

Lumber and wood products (27), Canned and bottled foods (31), Parts of paper industries (34), Grain and flour industries (37),

The industries are dispersed fairly widely on the country. But some of

the factories in the paper industry, which include large factories, belong to the 2nd type, and some of the factories in the grain and flour industry, which consist of medium-sized factories and depend on foreign raw materials, belong to the 3rd type.

On account of the spatial characteristics of the industries relative to their business features, our industries have to be classified to the six groups above stated.

Furthermore, there seem to be two characteristic features in our industries through these typical researches.

First, the industries which have medium or higher coefficient of localization, are chiefly classified to the producers' goods, and one which have medium or lower coefficient, chiefly to the consumers' goods. Secondly, the industries which are located in the other districts than the few central industrial districts in our country, are the ones which have the following characteristics:—

(1) Large-sized factories which are located by raw-materials in the localities; these belong to the 2nd type of the industries above stated. (2) Large-sized factories which have been controlled by big multi-plant enterprises, and located in the out-side districts by the extensive development of the central districts; these belong to the 1st type industries.

(3)

The next problem is to compare the results of our research on our industries as above stated with the characteristics found in the British and American industris.

Prof. P. S. Florence set forth the coefficients of localization and leading size of the factories of the British and American industries in p. 24–25 and p. 84 of his "Logic of British and American Industry" (1953). These data may be well compared with our researches, for the writer of this article has adopted generally the same research method for coefficient of localization as Prof. Florence. The coefficient of localization and size of plant in the leading industries and higer-coefficient industries in both countries, are given below:--

(2) Localization and Size of Plant in British and American Industries

(A) Leading Industries

Britain (1935)			U. S. A. (1939)		
Group of Industry	Coefficient of Localization	Leading Size of Plant	Group of Industry	Coefficient of Localization	Leading Size of Plant
1. Cotton weaving	72	Medium	1. Cotton yarn	73	Medium
2. China and earthern ware	70	Medium	2. Cotton broadwoven goods	70	Largish
3. Cotton spinning	69	Medium	3. Saw mill and veneer mills	65	No type
4. Woolen and worsted	66	Medium	4. Motor vehicles	62	Large
5. Boot and shoe	58	No type	5. Rayon	59	Largish
6. Hosiery	48	No type	6. Petrol refining	55	Largish
7. Motor and cycle	45	Large	7. Woolen and worsted	54	No type
8. Shipbuilding	45	Largish	8. Hosiery	52	No type
9. Iron and steel	42	Large	9. Steel works, rolling mills	51	Large
10. Silk and art silk	41	Largish	10. Meat packing	45	Largish
11. Electric machine	32	Large	11. Foot wear	44	Medium
12. Wholesale tailoring	30	No type	12. Paper and paper board mills	40	Medium
13. Newspaper	30	Largish	13. Men's and boy's suits, coats	37	No type
14. Brick and fireclay	28	Smallish	14. Furniture	34	Medium
15. Printing and bookbinding	25	No type	15. Commercial printing	27	Small
16. Iron and steel foundry	25	No type	16. Newspaper	20	No type
17. Funiture	25	No type	17. Bread and other baking products	14	Small
18. Saw mill	25	Small			
19. Paper	25	Medium			
20. Cocoa and sugar confectionery	23	Small			
21. Bread and cake	22	Small			

(B) Industries of Higher Coefficient of Localization

Britain (1930)			U. S. A. (1929)		
Group of Industry	Coefficient of Localization	Leading Size of Plant	Group of Industry	Coefficient of Localization	Leading Size of Plant
1. Jute	91	Medium	1. Turpentine	86	Small
2. Tinplate	86	Largish	2. Oil cake, Cotton seed	74	Small
3. Lace	81	Smallish	3. Cotton small ware	71	Medium
4. Linen	74	Largish	4. Cotton goods	71	Largish
5. Cotton weaving	72	Medium	5. Clocks	71	Large
6. China	70	Medium	6. Worsted goods	70	Largish
7. Cotton spinning	68	Medium	7. Canning fish	70	Small
8. Fur	68	Small	8. Textile machinery	68	Largish
9. Wireless apparatus	66	Large	9. Cast pipe	66	Medium
10. Fish curing	66	Small	10. Rubber tyre	65	Large
11. Wool and worsted	66	Medium	11. Jewellery	64	Smallish
12. Electric valves	66	Largish	12. Corsets	61	Smallish
13. Tools	65	Medium	13. M/C tool access	61	Smallish
14. Plate, Jewellery	62	Smallish	14. Motor vehicles	60	Large
15. Textile packing	58	Small	15. Fur goods	60	Small
16. Gloves	58	Smallish	16. Woolen goods	59	Medium
17. Dyes	57	Largish	17. Wire	59	Largish
18. Saddlery	56	Smallish	18. Agric. Implem.	59	Large
19. Corset	56	Medium	19. Motor bodies	59	Large
20. Linoleum	56	Large	20. (4. industries)	58	

By P. S. Florence "The Logic of British and American Industry" 1953 p. 24–25 and p. 84.
Size of plant are classified by the workers of plant; Small—under 50, Large—over 1,000, No type—mix of several types.

In these tables, we can see the general spatial characteristics of British and American industries, and so the writer will compare these with those of

our industries in tables (1) and (2).

(1) In Great Britain and the United States of America, the leading industries which have high coefficient of localization, are the cotton spinning and weaving, and woolen and worsted industries, and the ones which have relatively higher or medium coefficient after the above industries, are the iron and steel, shipbuilding, engineering and motor vehicle industries.

In contrast, in our industries, the higher-processed engineering industries, that is the 1st types of industries in I table, have rather higher coefficient then the textile industries.

(2) In the size of plant also, while our textile industries have chiefly large factories in the spinning section, and small in the weaving section, the typical size of plant in the British and the American textile industries (spinning and weaving) are both medium (100 to 500 workers per plant). Moreover, our engineering industries are consisted of more mixed sizes of large, medium and small plants than in the other countries.

(3) But it is common between the Japanese industries and the British and American industries, that the types of industries which have lower coefficient, are chiefly the kinds of consumer goods industries like bread and cake, paper, printing and furniture industries. Yet while our industries of these types are consisted of almost small sized factories, the British and American industries comprise not a few medium or largish factories.

What are the causes of these differences? It is difficult to answer satisfactorily because they caused by many mixed conditions in and out. But the writer of this article will try to approach to this problem, as far as they relate to the locational problems.

〔1〕 Industrial Structure.

The coefficient of localization is to indicate relative spatial characteristics among the industries. Therefore, the differences may be caused by the specialities of industrial structure in the several countries. The 3rd table shows the industrial structure in each of the three countries by the number of the workers.

(3) Industrial Structure by No. of Workers in the Three Countries

Group of Industry	U. S. A. (1947)		Britain (1951)		Japan (1952)	
	No. of Workers		No. of Workers		No. of Workers	
Metallurgical and Engineering	5,888,944	41.2%	4,125,000	46.8%	1,424,563	32.9%
Textile and clothing	2,315,275	16.2	1,816,000	20.6	1,024,841	23.7
Food and Drink	1,441,847	10.0	841,000	9.5	419,586	9.7
Chemicals	632,319	4.4	485,000	5.3	329,341	7 6
Wooden products and Furnitune	958,092	6.7	311,000	3.5	375,671	8.7
Others	3,057,827	21.5	1,223,000	14.3	745,080	17.4
Total	14,294,304	100.0	8,801,000	100.0	4,319,082	100.0

U. S. A.—— Statistical Abstract of the United States, 1951
Britain —— Annual Abstract of Statistics, 1952
Japan —— Census of Manufactures, 1952

As is shown in this table, striking differences among the three countries are only noticeable in the metallurgical and Engineering industries, in which Japanese industries have relatively less weight than the others, so this table may be not sufficient to solve our specialities of coefficient and business features. The qualitative differences relating to these industries will be examined later.

〔2〕 Types of enterprises.

Types of enterprises, especially number of factories controlled by one enterprise, is to be closely related with the spatial characteristics of the industries to which the enterprises belong. In the Japanese industries, the number of multi-plant enterprises which are capitalised at over 100,000,000 yen, are classified by the numbr of the controlled factories as follows:

(4) No. of Single and Multi-plant Enterprises by No. of Controlled Factories (Manufacturing Industries) —1954—

	No. of factories / No. of enterprises	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Iron and steel	42	15	7	7	3	3	2	2	1	1	1					
Nonmetal	4	1	1	2												
Engineering	57	16	22	9	8	2										

Electric machinery	34	7	12	5	2	3	1					1	1		1	(16) 1	
Measuring and optical Machinery	8	3	2	1	1	1											
Transportation equipment	38	12	11	6	4	2		2	1								
Shipbuilding	13	2	5	3	1	1	1										
Chemicals	58	19	9	12	7	4	2	2		1		1	1				
Oil and colours	15	2	5	5	1	1				1							
Drugs	11	2	1	4	2		2										
Foods	40	8	8	9	2	4	2				2	1		1	1	(19) 1	(26) 1
Ceramics	21	3	5	4	1	4	2		1	1							
Rubber and leather	12	5		4	1	1			1								
Textile	39	5	2	1	3	5	3	3	4		5		2	1		(22) 1 (38) 1	(27) 1 (45) 1 (28) 1
Pulp and paper	26	6	8	3	4	1		3	1								
Fabrics	22	6	4	3	4	1	2	1	1								

Collated by the writer from "The Corporation Year Book 1954" of "The Nippon Keizai Shimbun".

In our country, the leading industries which are consisted of relatively larger multi-plant enterprises, are the textile industries, and in our metallurgical and engineering industries, only a few exceptional large enterprises have many factories. On the contrary, there are different features in American industries as follows. As it is diffiicult for the writer to obtain such detailed research materials in the United States of America as in our industries, only several leading enterprises in chief industries could be shown here. But even with that limitation it will be useful for comparison in outline.

(5) No. of the Factories of the Leading Enterprises in the United States of America (Engineering and Textile Industries)

Group of Industry	Enterprises	No. of factories
Engineering		
(Motor vehicle)	General Motors Cor.	35
	Ford Motors Co.	28
	Chrysler Cor.	24
	Nash-Kelvinator Cor.	8
	Studebaker Cor.	4
(Electric machinery)	General Electric Co.	122

	Westinghouse Electric Cor.	33
	Radio Cor. of America	14
	Singer Manufacturing Co.	9
(Railroad equipment)	American Lomotive Co.	7
	Baldwin-Lima-Hamilton Cor.	10
(Office machinery)	International Business Machine Cor.	7
	Remington Rand Inc.	18
	National Cash Register Co.	4
	Burrough Adding Machine Co.	7
(Agricultural machinery)	International Harvester Co.	19
(Aircraft)	Douglas Aircraft Co.	4
	Boeing Airplane Co.	3
	Curtis-Wright Cor.	6
	Consolidated Vultee Aircraft Cor.	4
Textile inderstries		
	Berkshire Fine Spinning Association, Inc.	8
	Burlington Mills Cor.	75
	Cone Mills Cor.	20
	Cannon Mills Cor.	10
	Pacific Mills	8
	Bibb Manufacturing Co.	11
	Pepperell Manufacturing Co.	4
	American Woolen Co.	26

from "Moody's Industrials" 1952

While eight leading enterprises in American textile industries have so many factories as our representative ones, the several chief engineering enterprises in U. S. A. have far more facteries than ours. In U. S. A., the engineering industries are more representative, and have more distinguished characteristics of the multi-plant enterprise, than the textile industries. These characteristics could have dispersed many American factories in these industries to the South and the other parts, especially more remarkably since the 2nd World War. Abovre all, these movement have been found in the famous national and international enterprises.

On the other land, 70% of the American textile industries are concertrated in the South, and the rest are located in New England and other districts. And yet these industries have relatively competitive conditions, while most of metallurgical and engineering industries have been controlled by a few large

enterprises. The type of the enterprises is to be one of the causes of the differences about spatial characteristics.

In the British industries, the writer has only a few research data, but he has only to say that it is remarkable that the North of England and Scotland which are called "Depressed Areas", have induced several large engineering factories recently; for example, several factories of large multi-plant American enterprises of office machinery.

〔3〕 Structural characteristics of the consisting factories.

As is shown in the 1st table, our spinning industry is consisted chiefly of large factories over 1,000 workers, and our weaving industry, of chiefly small-sized factories under 100 workers. On the contrary, as is shown in the 2nd table, the British and American spinning and weaving industries are consisted chiefly of medium-sized factories from 100 to 500 workers. Thus, the Spinning industry is the representative one in our country, while in British and American, it does not.

But our metallurgical and engineesing industries, on the one hand, have included large, medium and small-sized factories, depending on one another mutually, and, on the other, the British and American industries are consisted chiefly of largish or rather large sized factories. The latter can be dispersed in certain districts severally independently, but for the former the dispersion may be very difficult unless they have some special contitions. Though the same descriptive of "large factories" in classification is used, the "large" in British and American industries are far more large-sized than in the Japanese, —— in organization, and machinization, and so the former have also made out far more added value than the latter. In this sense, there are rather more differences qualitatively between both countries than quantitatively, in the industrial structure.

〔4〕 Geographic differences.

Geographic differences are also one of the causes, but as this phase of the problem had already been set forth by the same witer in the "Kobe Economic and Business Review" 1, (1953) it shall be treated here only briefly.

First, the British and American industries, especialy in the latter, have far more raw materials as coal and minerals in the countries, than the

Japanese, and although the obstacles through raw materials have been gradually diminished by the development of industrial technology and transportation, it is beyond dispute that the concentration of our higher-processed engineering industries, induding several sizes of plant, in a few industrial districts around principal trade ports, have been at least partially caused by this speciality.

Secondly, while the American industries have depended chiefly on her large-scale national market, our industries must depend largely on the foreign markets. This has also caused our special locational features.

Thirdly, the difference of the land area covered in each of three countries must not be overlooked. Although it might be said that the cotton industries have been concentrated in both countries, in Britain and U. S. A., the actual space of the area where the American cotton industry is concertrated, is 10 times of the whole of Britain, where the same industry is concentrated in only Lancashire, a part of her country. The same thing could be said about the Japanese industries.

〔5〕 Historical background.

In certain cases, the historical background about the development of each industry in the several countries constitutes the most important cause of the building up of the present locational features. But a satisfactory study of these problems must be relegated to next opportunity, for it needs much more space.

(4)

As a result of our above researches, a few points about location problems will become clear, and they may be summerized as follows: ——

(1) The spatial characteristics of each kind of industries are to correlate closely with its business features, and may be grasped by several types.

(2) These several types very closely resemble with one another among the three countries, at least in form. Namely, the kinds of industries which consist chiefly of large factories, have relatively higher or medium coefficient of localization, and so are concentrated not only in a few central districts, but are also dispersed, more or less, in several country districts, depending on their own location factors. The kinds of industries which include large, medium and small factories, have highest or relatively high coefficient of

localization, and concentrate in a few industrial districts, depending on the mutual correlation to the localities. The kinds of industries which consist chiefly of small-sized factories, have highest, medium or low coefficient of localization, and some kinds are concentrated highly in certain districts, depending on "the external economies", and the other kinds are dispersed over the country districts.

(3) But, the kinds of industries which belong to each type, are actually different among three countries in some cases. Namely, these phenomena could be found especially in metallurgical and engineering industries, and textile industries. However, the industries whose raw materials are agricultural or marine products, have the relatively resembling features among three countries. Therefore, those differences seem to be found remarkably in relatively higher-processed industries.

To add a few-words in conclusion, the industrialization of several country districts outside the central industrial districts, has to be completed for developing the intensive industry which increases the value of manufactured products, as the writer had stated in the "Problem of Regional Industrialization in Japan" (The Kobe Economic and Business Review 1, 1953). Our higher-processed engineering industries are to belong to such types of industries. Yet as a matter of fact these industries have not dispersed to the country districts, but are highly concentrated in Kei-Hin districts.

What is the cause of this? It must be due to the speciality of the business feature of our higher-processed engineering industries. The general principle for the regional industrialization as above stated, will be a success in these cases in our country, only under the condition of modification of their business features. Thus the writer enphasises that it is very important to study the spatial characteristics of the industries relative to their business features.

STAGES IN FACTORY ORGANIZATION

BY TADAKATSU INOUE

In this article we shall attempt to divide the historical development of factory organization into two stages, that is, the subcontracting system and the system of centralized control.

1

The first stage of factory organization we may call the subcontracting system.[1] The chief feature of this method of factory organization was the existence of an intermediate class of men between the employer and the workers who may be called the subcontractors. They had much the same general function to perform, though the details of their duty varied according to the industry in which they worked. This was to contract with the factory owner to furnish him with a certain number of products at a specified price, and then to employ such workers as they needed to fulfill their individual contracts, paying the workers whatever wages they considered suitable, or allowing the wages to be paid by the factory owner and deducted from their contract account. These subcontractors and their underhands worked in the factory and were furnished by the factory owner with the tools and materials neccessary for carrying on their work. However in some cases the subcontractors provided their men not only with tools but also with certain raw materials. When the work contracted for had been completed to the satisfaction of the factory owner, the contractors recieved payment in accordance with the contracts, though in practice they did not wait for their payment until the completion of the work. Thus the contractors, if they had obtained their labours cheaply, or if they had been good supervisors, might make large profits

1) The term, subcontracting system, was used for the first time in Professor G. C. Allen's *The Industrial Development of Birmingham and the Black Country 1860–1927*, 1929. In this book the author called the attentions of historians to the significance of this method of industrial organization.

for themselves.

From the manufacturer's standpoint, the chief advantage of this system was its easiness in managing the factory. After the factory owner had made agreements with the subcontractors, he had no need to concern himself about the supervision of his labours and about wages. The multiplicity of operations was left to the factory's subcontractors who bore the full effect of all fluctuations in labour costs, sometimes even in other manufacturing costs, whether favourable or unfavourable. Under this method of organization which relieved the manufacturer of much responsibility attending to the actual productive process, the position of the factory owner did not greatly differ from that of the factor in old domestic production. Indeed the subcontracting system was a handy and simple management technique of the factory. And this merit was to be especially welcomed by the early factory owner who had as yet worked out no managerial system by which control could be centralized. This was just the reason why the subcontracting system prevailed in the early days of factory production and occupied the first stage in the development of factory organization.

The illustrations of the subcontracting system were afforded by the practices in the trades of many industrial areas. In Birmingham and the Black Country in 1860, this system had long existed in the majority of industries in which the factory production prevailed, from the coal and iron trades to the manufactures of brass goods, chains, edge-tools, gun-locks, buttons, machine-made nails and washers, bedsteads, saddlery and harnesses, hollow-wares, and tinplate wares.[2] For instance, in the ironworks the ironmaster commonly contracted with the "bridge-stocker" and the "stock-taker." The "bridge-stocker" was the subcontractor in charge of the upper part of the blast-furnace. He kept horses, employed a gang of men, women and boys, and supplied the furnace with the necessary materials. He was paid so much a ton on the produce of the furnace, and he made his own arrangements with his underhands. The "stock-taker" was the subcontractor in charge of the lower part of the furnace, and his men prepared the sand and looked

2) G. C. Allen, *ibid.*, pp. 144, 146, 148, 159–165.

after the casting and the weighing of the pigs.

The similar situation existed in the texile machinery industry of New England in the middle nineteenth century.[3] Especially, the practices in some companies such as the Proprietors of the Locks and Canals on the Merrimack River, Lowell, Mass., the Lowell Machine Shop, Lowell, Mass., the Saco Water Power Company, Biddeford, Main, the Pettee Machine Works, Newton, Mass., and the Whitin Machine Works, Whitinsville, Mass. presented the substantial forms of the subcontracting system. For instance, in the Saco Water Power Company in 1850, there were sixteen subcontractors who employed one hundred and thirty men and boys. They contracted with the company's superintendent for the different kind of work in the machine shop. In the Whitin Machine Works, the department supervisors worked for the company on contract basis and held positions of considerable authority and prestige. They hired their own men, trained them, determined their rate of pay, set their jobs, and had the power to fire them or transfer them to another department. The number of men who worked on a contract basis showed fifty-six in 1864, fourty-nine in 1870, and twenty five in 1886.[4]

2

The next stage in the development of factory organization may be characterized by the centralization of control. Under the older method of factory organization, the manufacture delegated much of his authority to the subcontractors, and avoided the trouble of supervising the process of production. Actual control over operations were assumed by each subcontractor who enjoyed considerable freedom in the performance of his contract. The subcontracting system, thus, was favourable to the manufacturer who had not yet been accustomed to managing the factory under his direction. However,

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3) G. S. Gibb, *The Saco-Lowell Shops: Textile Machinery Building in New England*, 1950, pp. 89, 145–147, 217, 359. T. R. Navin, *The Whitin Machine Works since 1831: A Textile Machinery Company in an Industrial Village*, 1950, pp. 139–149.

4) For the other illustrations of this system, see G. S. Gibb, *The Whitesmiths of Taunton: A History of Reed & Barton 1824–1943*, 1943, pp. 70–71; S. J. Chapman, *The Lancashire Cotton Industry*, 1904, p. 62; H. R. Fox Bourne, *English Merchants*, 1886, pp. 402–403.

from the standpoint of business efficiency, there was a serions disadvantage attending this system. Since real authority in the factory rested in the hands of each subcontractor who ran his department with almost independent autonomy, it was not easy to keep the process of factory production in harmony. To make the system work, each subcontractor had to have a knack of fitting his department's work into the flow of factory production. His rôle in the organization required him to be farsighted and cooperative. But in actual practice his position of authority, more often than not, encouraged him to be arrogant and autocratic. He acted with independent disregard of the welfare of the whole, and brooked no interference in the conduct of his department's affairs. Thus the subcontracting system tended to cause irregularity in the flow of production.

In the early days of factory production, however, the above mentioned fault of the subcontracting system was not a serious matter. Firstly, the establishment of those days required no expensive plant and the loss occassioned by irregular work was small. Moreover, in those days, when the competition was not keen, there was less need of careful attention to costs of production.

Now, however, the character of industrial operations changed. The size of the establishment was enlarged and the burden of overhead charge was raised. The loss from irregular work was very great. At the same time there was the increasing pressure of severe competition. The manufacture, therefore, was forced to make an attempt to secure a regular flow of work through his factory in order to minimize the effects of overhead costs. The long-established system of subcontractors had to be abolished and the new method of factory management had to be devised. Thus the manufacture began to deprive the subcontractors of their erstwhile prerogative and to transfer many of their former responsibilities to the newly enlarged office staff. The subcontractors were gradually superseded by the modern foremen who merely directed their department under the direction of the office. The results were the shifting of managerial function from the departmental level to the office staff and the increasing centralization of factory control.

The period of the transition from the subcontracting system to the system of centralized control may be illustrated by the industries we have already

mentioned. In Birmingham and the Black Country it was during the quarter of a century preceding the First World War,[5] and in the textile machinery industry of New England it was during the last quarter of the nineteenth century.[6] In both of them the replacement of the subcontracting system by the new method of factory organization occurred during the period characterized by the severe competition in the markets and by the greater use of machinery and the growth in the size of the producing units which raised the burden of overhead charges.

* * *

The system of centralized control which superseded the subcontracting system towards the end of the nineteenth century has become the typical form of the factory organization of to-day. However, we must not suppose that this system must occupy the last stage in the development of factory organization. If it is necessary to make a few observations concerning the probable future development of factory organization, we must rather take up the recent movement towards the decentralization of control.[7] This opposite movement against the centralization of control is, in a sense, that of revival of the subcontracting system in the early days of the factory. However the forces underlying the recent tendency are not the same factors which introduced the subcontracting system into the factory of the early days. The forces at work now are intimately associated with the increasing labour unrest in recent years and with the lack of moral in the operating classes

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5) G. C. Allen, *ibid.*, pp. 337–339,

6) For instance, in the Lowell Machine Shop, Lowell, Mass., "by 1890, at the very latest, the long-established system of job-takers or contractors in the plant had been abolished. Their power of hiring, firing, and rate setting had been turned over to the various foremen." (G. S. Gibb, *The Saco-Lowell Shops*, p. 296). In the Pettee Machine Works, "by 1887 the traditional system of job contracting had been abolished in the plant." (G. S. Gibb, *ibid.*, p. 359). In the Witin Machine Works, "by 1895 job work as a system was a dead letter, ..." (T. R. Navin, *ibid.*, p. 148).

7) See E. Schmalenbach, *Pretiale Wirtschaftslenkung*, 2. Band, *Pretiale Lenkung des Betriebs*, 1948; K. Bender, *Pretiale Betriebslenkung, Grundsätze der Betriebsabrechnung und Betriebsorganisation bei dezentraler Lenkung*, 1951; H. Felmann, *Selbstverwaltung in der Unternehmung*, 1950; K. W. Henning, *Thomas Bat'a, eine betriebswirtschaftliche Untersuchung*, 1949.

which was the result of the highly centralized control. In other words, it may be said that the recent movement towards the decentralization of control aims, on the one hand, to give the supervising class more incentive to work, and, on the other hand, to set up a buffer between the employer and the labours. The movement in this direction, thus, cannot be passed over in considering the development of factory organization in the near future.

ACCOUNTING FOR FIXED ASSETS REVALUATION; RECENT VIEWS IN JAPAN

BY MUNEHIRO MASUZAKI

It is a recent trend in various countries that change of prices is producing an alarm to the theoretical structure of business accounting which had stood on the convention of the so-called stability of monetary value; and the business income concept which is the central theme of the business accounting is becoming to be newly discussed. Japan is by no means exceptional in going through this phenomenon. Shown in Table I, in Japan, where after World War II, an exessive inflation has affected its economy as can not be compared with other countries in the world, this theme is under heated discussion as one of special subjects. Among these discussions, bringing those cancerning fixed assets revaluation and those depreciation to the focus, the writer wishes to study these discussions in relation to the economic background on which they are staged. In this case, the writer's interests are directed chiefly to the understanding of the present meaning of the said problems. For, the problem of fixed assets revaluation is originally the accounting steps for adjusting the value to the exessive inflation which attacked post-war Japan. However, the present Japanese economy, as will be stated later, is suffering from deflation rather than inflation, and the primary function held by fixed assets revaluation is considered, at first sight, to have been accomplished, but in fact it is by no means so, because the problem is yet fresh, and has close connection with capital accumulation in the field of the future Japanese national economy.

Table I Wholesale Price Index in various Countries (1937=100)

	1945	1946	1947	1948	1949	1950	1951	1952	1953
Japan	278	1, 290	3, 837	10, 190	16, 580	19, 667	27, 309	27, 819	28, 226
U. S. A.	123	140	176	191	180	189	210	204	201
Britain	155	161	175	202	212	242	295	301	303
France	422	728	1, 112	1, 924	2, 147	2, 328	2, 982	3, 136	2, 982
Italy	2, 587	3. 084	5, 518	5, 821	5, 528	5, 239	5, 996	5, 646	5, 588

Note: These figures are computed by the writer from the price index tables obtained from

Statical Yearbook 1953, United Nation.

In this treatise, the writer first classifying in categories the present various discussions surrounding the problem of fixed assets revaluation, and then, studying critically the typical views, wants to clarify the writer's own view on this problem.

Faced with the post-war inflation, long time has elapsed in Japan since the necessity of fixed assets revaluation had been discussed. That is to say, since the occurrence of the problem initiated by the Japan Spinning Association in the latter half of 1947, when the rise in prices became increasingly apparent. Since the 1st assets revaluation was made in 1949, we have had assets revaluation instituted 3 times, and at present, the 3rd assets revaluation is now under way. As for the circumstances during the progress, see the "Review" No. 1, by Prof. Susumu Watanabe who has given us all the details about the progress.

I

In Japan, it is usual to explain the narrowest bottle-neck for economic independence to lie in the defficiency of capital stock. The problem of capital stock which will add to national economy cannot be discussed one-sidely, and the measures to be taken for them are divided divergently. Moreover, these measures should be considered on the relative balance of actual phenomena. Even when the problem of capital stock is limited to the phase of fixed assets revaluation, against the view that to strengthen the actual condition of the enterprise is the prerequisite to enhance national economic foundation, there are already arguments for and against, and those who are against, strongly advocate *no use of revaluation*, and even among those who advocate that only the fullness of own-capital in an enterprice is the prerequisite to enlarge national economic foundation. These two schools advocate from their different understandings of economic environment in which present Japanese enterprise is placed, either to coerce the realization of the prerequisite or to leave the revaluation to the discretion of each enterprise. The discussions on revaluation at the present stage in Japan, therefore, can be classfied as follows:

1) *No use of revaluation*

2) *Compulsory carrying out of revaluation*

3) *Voluntary carrying out of reualuation*

The representative advocate of the *No use of revaluation* school is Prof. W. Kimura.[1] The chief points of his argument are as follows:

1. Under the present inflation in Japan, in which increase in labor wages is restrained, and the rise in the income of those who earn fixed income is restricted, it is quite partial to enterprises to allow to maintain real capital, acknowledging revaluation of the plants and equipment, and this will enlarge the gap between prices and wages, and restrict, all the more, our notion's purchasing power.

2. Inflation itself strengthens the conspiracy between few large enterprises and national capitals, and though the maintaining of the capital may not be complete from accounting standpoint, substantially the enterprise recovers and accumulates real substances of the enterprise. That is to say, through relying on financial operation of national capital, such as debts or subsidy from government funds, etc., the enterprise can complete its real substances, and does not necessitate to depend on accounting management, such as fixed assets revaluation. Loans of the national fund from the Reconstruction Financial Bank is a good example of this case.[2]

3. The real effects of assets revaluation have already been realized by receiving in of new capital stock accounts through capital increase which was extensively practiced in Japan since 1948, and the fruit has actually been achieved, though mere measures on accounting book such as fixed assets revaluation had not yet been accomplished.

The above arguments are the chief points of insistence of the *No use of revaluation* shchool, specially that of Prof. W. Kimura. Now, the writer wants to pass comment, in brief, on these arguments, which will contribute to the development of his own view.

1st Comment (on the 1st point of view): Indeed, an enterprise revalues fixed assets and the law permits to determine the income subtracting depreciation expense based on the said revalued amount and this may be considered to allow the enterprise stand on partial advantageous ground in comparison

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1) Dr. Wasaburo Kimura, The Conscience of Assets Revaluation, *Kigyo-Kaikei* (Accounting), Aug., 1953. And his other treatises concerning this problem since 1948.

2) The Reconstruction Financial Bank had accomodated 304 billion yen to private enterprises since 1946 to 1951. This accomodation fund has reached 1,459 billion yen, converted by general wholesale price level at the end of 1951. Compared with 725 billion yen, maximum limit of revaluation minus revalued amount enforced in following Table II, it is clear that the enormous fund has contributed to rebuild the plants and equipment in a few large corporation.

with general laborers and fixed income earners in determining taxble income.[3] However, this understanding arises from the lack of knowledge of the essential diffence between enterprise income and fixed-earning-income in the present system of economic society.[4] According to my view, it is not proper to argue to suppress fixed assets revaluation, only in consideration of the unequality in determing the taxable income.[3]

2nd Comment (on the 2nd point of view): Actually a few large enterprises may have maintained its real substance relying on the support of financial operation of the national capital. However, there is no reason to think that this will continue in the future. Such a financial operation of national capital fund and the origin of such operation, e. g., issuing of the Reconstruction Finance Bond, was the principal cause which drove the post-war Japanese inflation to a drastic one. Therefore, though a few large enterprises succeeded well to maintain their substance through the support of the national capital fund, this, after all, will make the progress of inflation worse, and will oblige reproduction scale of the said enterprise reduced until it destroys the enterprise. Therefore, the 2nd point of argument above-mentioned must be criticised as "defeatism"

3rd Comment (on the 3rd point of view): Surely, it may be said that in an enterprise whrer loan policy or capital increase policy could be made, appraisal market price of the fixed assets had enough security power to make these policies possible. As far as this point is concerned, these enterprises might be said to have achieved results on substancial revaluation through loan and capital increase, without resorting to accounting steps of assets revaluation. However, there is no logical connection between having achieved results of assets revaluation and having made success in the loan policy or in capital increase policy. In other words, these two are problems belonging to

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3) In post-war Japan, wages of laborers increased to some extent in compliance with the rise in price-level; which was forced by the strength of laborer classes. On the other hand, fixed assets revaluation was made, originally, for the purpose to maintain the real substances of enterprise, at least, to the same extent as maintenance of labor wages to slide with the rise in price levels.

4) Leo T. Little, Historical Cost or Present Value, The Economic Journal, Dec., 1952.

seperate categories, and further more, if success or failure of loan policy or capital increase policy be chiefly determined not by assets real substance but by earning power, then the foundation of the 3rd view of the *No use of revaluation* school will entirely completely collapse.

According to the comments mentioned hitherto, the writer considers that the foundation of the view, ***no use of revaluation***, is untenable. However, there is one thing to be pointed out which cannot be ignored. That is, in the progress of the long and serious inflation in post-war Japan, the trend of the survival of the fittest among competing enterprises were made more obvious than in ordinary days, by the proficiency of self-defenre steps to meet the stress of inflation adopted by each enterprise, especially whether or not it shared the benefit of the financial operation of the national capital fund. That is to say, the larger the enterprise, the more it could evade the loss from inflation. This, in case of considering the problem of inflation accounting in the post-war Japan, that is, in considering the problem of fixed assets revaluation, we are forced to notice as an accounting problem, though it happened from the change of ex-economical condition following the progress of inflation, which affected the enterprise in addition to the simple phenomenon of the decline of the value of monetary unit. It is really so. Moreover, the change of ex-economical condition is not caused only from the abovementioned financial operation of national capital. Post-war Japanese enterprise is being affected from day to day, by the change of the world-wide economic structure, by the change of domestic demand and the advancement of productive technique, and there is no similarity between enterprise before the inflation and that of after the inflation. This must be kept in mind when we study assets revaluat ion theory. This, we will study below.

II

In any case, in Japan, fixed assets revaluation has been instituted and it became effective for the purpose of tax law, in 1949 when the rising tendency of prices began to abate.

The national economic object of fixed assets revaluation was, needleess to say, to adjust the depreciation expenses as product cost which was becoming

too small on account of the depreciation reserve caused by the inflation, and to properly reflect in the costs of products the limit of the maintainance of the independence of capital of an enterprise. It is clear that the "Shoup Recommendation" which was the incubator of the Assets Revaluation Law, and advocated to adopt general wholesale price index as the revaluation standard, was distinctly based on this idea. We find the following:—

> ".....even were there no practical difficulties in using specific indexes and even though such indexes were not affected by temporary disturbances, it would still be preferable on theoretical ground to use a general index. For we are not trying to exempt from tax all gains, but only that gains that do not represent a real increase in purchasing power."[5]

This means that the Shoup Recommendation proclaims, from national economic aspect, that the defects in depreciation accounting in post-war Japan must be replenished by means of the so-called stabilized accounting. By this, it is understood that the fixed assets revaluation in Japan was, originally, what it should have been.

If so, it means, naturally, that all the Japanese enterprises should revalue their fixed assets uniformly and compulsorily, having written up their book value multipled by general price index. However, the main purpose of the Shoup Recommendation does not accord with the clamour for voluntary revaluation in the business circle, and the Revaluation Law which was actually enacted resulted in permitting voluntary revaluation. That is to say, enterprises can either be revalued or be not revalued, and even in case of revaluation, provided the revalued amount remains within the maximum limit of revaluation prescribed by the Law, each enterprise was permitted to voluntarily to revalue its own fixed assets. This complicated the discussion on the recent assets revaluation.

The following table (next page) shows how the 1st and 2nd fixed assets revaluations mentioned hitherto are being carried out.

When each enterprise determined revalued amount at its favorable point, what conditions have really been considered in determining that favorable

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5) Report on Japanese Taxation by the Shoup Mission, p. c-14

Table II Facts about the 1st and 2nd Revaluations by Industrial Groups.

(unit=a milion yen)

	Number of Company of		Maximum Limit of Revaluation (A)	Revalued Amounts enforced (B)	B/A
	Revaluation Returned	1st & 2nd Revaluation enforced			
Wholesale store	15,983	2,220	22,841	14,708	64
Retail store	26,817	3,623	23,488	13,336	56
Manufacture:					
Food	12,977	3,539	42,854	28,590	66
Fextile	7,601	1,912	100,694	87,317	86
Clothes	2,378	719	4,101	2,071	50
Lumber	15,027	2,939	18,847	9,455	50
Paper	2,107	510	19,751	16,101	81
Chemicals	5,429	1,431	97,069	68,411	70
Petroleum	356	136	8,007	5,922	73
Rubber	1,013	300	11,907	7,263	60
Leather	548	148	3,172	1,509	47
Glass	2,694	800	14,377	9,650	67
Steel & Iron	1,262	448	61,953	50,474	81
Metal	6,492	1,831	44,685	24,502	54
Machinery	11,227	3,296	93,997	52,485	55
Miscellaneous	15,656	3,020	57,480	44,948	77
Mining	1,009	349	104,351	82,706	79
Constructing	7,813	1,076	15,359	8,914	58
Transporting	4,110	1,363	106,268	76,837	72
Service	5,445	1,526	23,006	15,770	68
Electricity	9	9	351,121	299,260	83
Miscellaneous	20,182	3,641	117,731	60,502	45
TOTAL	166,122	34,637	1,343,039	973,533	72

Note; Investigation by National Tax Bureau. The *Nippon Keizai Shinbun* (Japanese Economist's Paper) Jan. 7th., 1954

point?

The "Report of Investigation on Fixed Assets Revaluation" carried out by the Research Institute for Economic and Business Administration of the Kobe University concerning the 1st fixed assets revaluation, leads us to pass almost a definite judgement on this point. When the questionaire was given out to the companies which made assets revaluation within the statutory maximum limit, asking why the company did not carry it up to the limit, out of 247 companies which answered the questionaire, a majority of 147

answered that they were forced to do so on account of their companies' "earning capacity".

In this case, the "earning capacity" means:

1. Future annual revenues are not stabilized, and it is difficult for the management to make forecast.
2. When revaluation carried up to the maximum limit, from the viewpoint of future earning prospect, depreciation expense computed thereon cannot be charged.
3. Though the said depreciation may well be charged, dividend on the present capital stock may become difficult.
4. Though the said depreciation and dividend can be charged, dividend on the capital stock after transfer of revaluation surplus into it will become tight.

Therefore, the above-mentioned facts show that the prospective future earning power in each enterprise, fixed assets revaluation in post-war Japan through backward reckoning. This peculiarity of the present revaluation remained unchanged from the 1st fixed assets revaluation to the prevailing 3rd revaluation. Nay, it can be asserted that this tendency is becoming more and more conspicuous, because Japanese economy, excepting the temporary boom at the time of Korean Invasion, is following the trend to depression, and Japanese enterprises' earning capacity is also on the wane.

Thus, the recommendation given by the Shoup Mission to carry out uniform and compulsory fixed assets revaluation have already made a 180° turning.

Ⅲ

As mentioned above, fixed assets revaluation carried out hitherto in Japan was voluntary revaluation by each enterprise. Regarding this point, there is an advocate who insists upon the compulsion of the 3rd assets revaluation now under progress and also the transfer of revaluation surplus to capital stock.[6] The objects of this insistence are, generally speaking, to readjust fixed assets book-value and the composition of gross capital in each enterprise, to rebuild the enterprise in its proper status and through adquate depreciation, to stop

6) Kaichiro Nishino, The significance of "New Kapital Determining Law" advocated by the *Keizai-Doyukai*, *Sangyo-Keiri* (Industrial Accounting), Feb., 1954. The *Keizai-Doyukai* is the moderate business managers' association in Japan.

encroachment on capital, and to reduce nominal standard of dividend rate. Thus giving impetus to accumulating capital to obtain the stability of financial foundation of the enterprise and to strengthen the foundation of national economy. This is the opinion proposed by those who advocate ***compulsory carrying out of revaluation*** mentioned in the beginning of this article.

The outline of their insistence of those advocates is as follows:

1. As the results of compulsory revaluation, depreciation expenses charged to the same manufactured products become almost equal among various enterprises, and therefore, superiority or inferiority of these enterprise become apparent.
2. Consquently, competition among those enterprises become intense, and inferior enterprises will be adjusted and amalgamated, and reorganization of industrial groups will be expedited.
3. Even when rationalization of plants and equipment is attempted, if there had not been adquate revaluation of the old fixed assets amounts, the depreciation expenses to be charged on them will be comparatively small, and the proprietors are apt to hesitate to renew the plant and equipment from the view point of whether it is paying or not.
4. As a result of compelled revaluation, the present status of capital composition to rely on loan will be corrected, and high rate dividend on nominal capital stock will be reduced, and by and by, the manager will come to realize that for collecting capital, an increase of capital is more profitable than to loan money.
5. As a result of compulsory revaluation, appropriate depreciation charge on revenue will become possible, and reported income thereon, namely, taxable income will be reduced as much, and this amount of tax reduction will make internal reserve to be increased to that extent, which will enable real capital accumulating.

These in outline represent the views insisted by those who advocate compulsory revaluation. According to my opinion, these views have one grave fault at the foundation, and in pointing out this fault, the writer found the first step which directed the writer to formulate his opinion. However, reserving this for later discussion, the writer here wants only to comment on above-mentioned discussion.

1st Comment (on the 1st and 3rd points of view): As mentioned above, fixed assets revaluation in Japan is practiced on the standard of the rise in general price index, and the maximum limit of revaluation is computed by multiplying the original aquisition costs of assets (minus the depreciation reserve already charged) concerned, by the coefficient index expressing the relation between the year of acquisition and the useful life of the assets. Therefore, this limited amount is only the one computed in pure mathematical method,

depending upon the acquisition cost and its life of the said assets, and by no means, it can be said that the limited amount is the market price of the said assets. Therefore, since the market price cannot be determined by the prevailing assets revaluation, the views presented by those who advocate *compulsory carrying out of revaluation* cannot be asserted as appropriate.

Supposing the said assets become obsolete by the development of technique and become inadequate by change of economical structure and also supposing that the earning capacity becomes generally deteriorated by the decline of profit-making power in the enterprise, in this case, market price (transfer price) of the said assets will generally become less than revalued maximum limit. Thus, that there are many cases that will not carry out the fixed assets revaluation to the maximum limit may have chance to give plausibility to the 1st view expressed by those who advocate *compulsory carrying out of revaluation.*

The same comment may be made on the 3rd viw. Because the comparison of efficiency value between new and old assets should not be made by the maximum limited amounts of revaluation but by the market prices of said assets.[7)]

2nd Comment (on the 2nd point of view); Generally speaking, there is no direct relation between the compulsory carrying out of fixed assets revaluation and the survival of the fittest enterprise, cosequently the promotion of industrial reorganization is not accelerated. Probably, though an enterprise which cannot make revaluation to the maximum limit because of its lack of earning capacity could force up revaluation to that limit, but that will not enable the firm to win in the competition among various enterprises. Of course, there can be reverse cases. In brief, the fault of the 2nd view made by those who advocate *compulsory carrying out of revaluation* is that they considered as if economic substance might be changed by manipulation on the book, fixed assets revaluation.

Concerning this point, I notice one noteworthy trend as follows:

Aside from the enforcement or not of fixed assets revaluation, an enter-

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7) G. Terborgh, Dynamic Equipment Policy, 1949, pp. 117~119, 125, 126

prise which can charge depreciation expense only less than the one on market price of the said productive equipment is not, after all, fit for long existence. In this case, it goes without saying that the calculating basis value of proper depreciation charge is not the prevailing revalution maximum limited amount, but it is the market price of the said equipment.

3rd Comment (on the 4th and 5th points of view): Arguments in the 4th and 5th discussion insisted by those who advocate ***compulsory carrying out of revaluation*** are time-worn ones talked about ever since fixed assets revaluation opinion came to the front and are matters of common sense. However, these opinions can easily be critisized by reconsidering the meaning of general proposition that "Fixed assets revaluation contributes to accumulating enterprises' capital". That is to say, that fixed assets revaluation prevents capital of enterprise from being sponged and contributes to accumulating enterprises' capital, which means revaluation is the condition on which proper depreciation expense can be computed, and also it is a premise that the said enterprise has earning capacity enough to charge such depreciation expense on the revenue. Supposing there is no earning capacity enough to charge proper depreciation expense, compulsory carrying out of revaluation is not only effective, but may render the enterprise to lost credit and hasten its collapse. Thus, it is easily understood that not only the 4th point but the 5th point of view also presented by those who advocate ***compulsory carrying out revaluation*** are utterly untenable.

Table III Depreciation Accounting Practice, unit=a million yen
(For Half-Year ended March 31th, 1953 since Oct. 1st, 1952)

	Number of Companies	Original Cost	Current Depreciation	Depreciation Reserve	Over or less Amount
Just Depreciation on legal limit	124	236,773	10,282	43,200	0
Over Depreciation than legal limit	138	212,822	10,614	42,516	4,243
Less Depreciation than legal limit	273	889,979	22,335	83,123	39,419
Total	535	1,339,574	43,232	174,938	

Source……Investigation by the Edditorial Department of *Sangyo-Keiri-Kyokai* (Financial and Cost Accounting Association)

Note "Legal limit" of depreciation charge was determined by Corporation Tax Law, its Enforcement Detail Regulation, in Japan.

Now, let us understand by the above table, the outline of depreciation accounting practice actually carried out by the first class Japanese corporations (535 companies) and the earning capacity of those corporations when the revaluation is carried out compulsorily. These tables will prove that the writer's above mentioned comment is not too pessimistic.

Table IV Estimated Earning Capacity after Compulsory Revaluation

Industrial Group	Number of Companies	Present Earning Capacity(%)	Earning Capacity after Compulsory Revaluation (%)	Decrease of Earning Capacity (%)
Transporting	9	31.4	5.6	25.8
Gas & Electricity	8	34.3	16.6	17.7
Mining	23	63.5	40.1	23.4
Machinery	51	96.5	77.6	18.9
Iron, Steel & Metal	25	43.2	21.5	21.7
Spinning	34	133.1	123.6	9.5
Food	22	105.5	100.8	4.7
Fishery	1	35.8	31.4	4.4
Chemical	35	71.4	50.4	21.0
Other Manufactured	28	145.2	134.3	8.2
Commerce	25	73.2	60.5	12.7
Total	269			

Source……*Nippon Keizai Shinbun* (Japaness Economist's Paper), Jan. 7th, 1954, by the investigation of *Nikko* Security Corp.

The writer has already pointed out that one grave fault had been made in the opinion held by those who advocate compulsory revaluation. Now, the writer reached the stage where he should clarify the fault and express his own views.

Ⅲ

Needless to say, the reason why fixed assets have value for the enterprise is that they have utility value and can bring profits to the said enterprise. Supposing no kind of this earning power is in the fixed assets, the historical background at the time of acquisition of the said assets bears no meaning to the enterprise. As mentioned above, the fact of change in demands between pre-war and post-war days, progress in productive techniques, appearance of new products, etc. have entirely changed the earning capacity of enterprise in present Japan as compared with that of pre-war days. Under the drastic

change in economic background, post-war earning capacity status classified by industry and by enterprise has changed its condition compared with that of pre-war days. Being entangled with rapid change in economic circumstances, and having suffered from exessive inflation, inflation accounting in post-war Japan has its characteristics and pecuriarity of fixed assets revaluation problem.

First, let us consider an enterprise which could increase earning power more than the rise in general price level under post-war Japanese inflation. Of course, increase in earning power is not dependent only upon the productive operation of fixed assets, however, in this case, there may be increase in earning capacity of enterprise which leave something even after charging and absorption of proper depreciation expenses, which had been computed on fixed assets value revalued in compliance with the rise in general price level. Therefore, in this case, good effects to accumulate enterprises' capital in the sense held in the Assets Revaluation Law may fairly be realized. In facts, such enterprise must have already realized fixed assets revaluation to its maximum limit.

Therefore, the object of the insistence of those who advocate ***compulsory carrying out of reveluation*** must be understood to be directed toward the enterprises which can not increase the earning capacity more than the rise in general price level, and urge them to practice fixed assets revaluation in concert with higher profitable enterprises. However, even if such fixed asssets revaluation should compulsorily out in lower profitable enterprises, it does not mean to bring good results so as to accumulate its own capital. This has already been mentioned. Really as for the significance of fixed assets revaluation to be accumulating enterprises' capital, there is a basic difference between the higher profitable enterprises and the lower ones. The writer considers that the fundamental mistake made by those who insist upon the compulsory revaluation is, disregarding this fact, and they only want to enforce even the lower profitable enterprises to carry out the compulsory revaluation which is only appropriate to the higher profitable enterprises.

This shows that the problem of fixed assets revaluation in post-war Japan is not so simple as a problem as to be regarded as mere adjustment of histo-

rical cost. That is to say, fixed assets revaluation in post-war Japan is not mathematical manipulation of book value on fixed assets, but it is a step to determine the size of enterprises' capital suitable to maintain the enterprise. In other words, the fixed assets revaluation should be considered as a revaluation made up to adjust capital amount computed by suitable determination of enterprises' capital. The basic proposition of those who advocate ***voluntary carrying out of revaluation***, who argue simply to consider 'there is value, because there is an asset; and the historical cost of an asset, can be properly valued computing from the decline of value in monetary unit, has only primary-school-pupil's mathematics in its foundation, as far as it concerns the revaluation problem in Japan.[8] It cannot be denied that revaluing fixed assets by reckoning backwards from future estimated earning capacity, as is mentioned by those who advocated ***voluntary carrying out of revaluation*** has, if considered practically, many difficult points. However, considering from revaluation conditions based on earning power in post-war Japanese enterprises, and which have remained lower-toned, the writer, theorectically, stands on this 3rd view. Therefore, the writer's view on fixed assets revaluation in post war Japan may be stated briefly as follows:

The fixed assets revaluation which has hitherto remained low-toned, is the one made after shifting up of the negative goodwill which had occured over all the enterprises by the decline of the earning capacity throughout Japanese inflation in pre- and post-war days. In short, it confirmed the facts of decrease of enterprises' capital by the process of fixed assets revaluation, which had been substantially made real in those days.

In conclusion, what mentioned above, can be summarized as follows:

1. Accummulation of enterprise's capital is necessary to strengthen the foundation of Japanese national economy.

2. The possibility of contribution of fixed assets revalution through book manipulation to capital accumulation for each enterprise depends on its earning capacity, and if fixed assets revaluation is compulsorily carried

8) Dr. Katsuzi Yamashita, The Theory of Assets Revaluation, *Sangyo-Keiri* (Industorial Accounting), May, 1954.

out in lower profitable enterprises, no effect of strengthening the capital can be expected.

3. It is only a few high profitable enterprises which can produce good effects on capital formation through revaluing fixed assets mechanically in compliance with the rise of general wholesale price, and other enterprises should consider fixed assets revaluation as a step for determining the proper capital size which could be found in the earning capacity of each enterprise itself.

According to the writer's view, the inflationary process itself, or each stage of the process, is accompanied by change of the economic relation among all enterprises more directly than in stabilized price days. Whether this phenomenon can be disregarded or not, the process of rapid and excessive inflation after World War II in Japan suggests, by the problems of fixed assets revaluation, that how meaningless it is to discuss the accounting problem in the course of inflationary stages merely as the phenomenal problem derived from the decline of value of monetary unit.

ON THE STRUCTURE OF THE NATIONAL INCOME DISTRIBUTION IN JAPAN

BY NOBUKO NOSÉ

1. *Introduction.*

The conventional national income research presents only the superficial investigations, the interests being made subject to actual behavior and phenomena. On the contrary, our ambitious investigations of National Income in this paper are concerned with two subjects:

First, to extract the original dividing structure of Japanese National Income from actual data, which is represented in the present statistical works. That is given by deducing the adjustment of Public Finance and unproductive sectors (wholesale trade and services, etc.) from the actual data.

Second, to point out the clear pictures of structure of National Income in Japan.

The most correct index of National Dividend is the surplus-value rate. So, it will be useful to choose the surplus-value rate as the index to measure the re-distribution effects and adjustments by Public Finance on original distribution.

The procedures of our analysis are as follows:

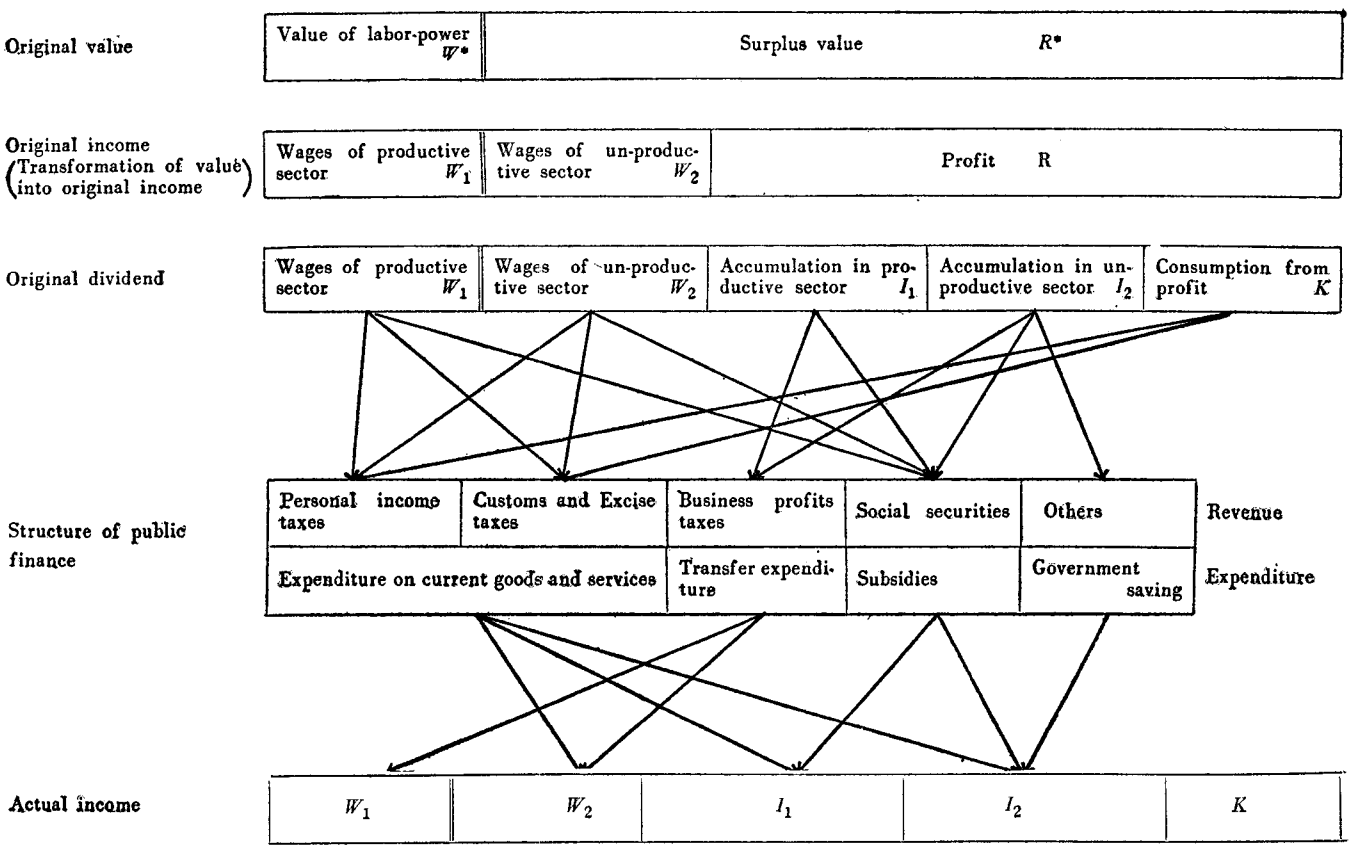
(1) Theoretical Model of National Income from the view point of Marxian Economics.

(2) The memorandum about some procedures in application of the Model.

(3) Data.

(4) Conclusion.

Schema of National Income Flow



2. *The theoretical Model of National Income from the view point of Marxian Economics.*

The original national income is the total sum of the value created by productive labour.

The value created by labourers in productive sectors is divided into value of labour-power and surplus value.

Thus, the dividing structure of original income Y^* is composed of wage of productive labourers in productive sectors[(1)] —— W^* (substantially corresponds to value of labour-power)——, and capitalists' profit —— R^* (substantially corresponds to surplus value),

1.1 $$W^*+R^*=Y^*$$

and surplus value rate is expressed by $\frac{R^*}{W^*}$.

Such an original structure of Income distribution is subjected to some transformating effects.

In the first place, the transformation by unproductive sectors is brought about.

〔a〕 The aggregate profit can be re-distributed by the introduction of unproductive commercial sectors[(3)]; i. e. the wage of commercial labourers W_2 and the profit of commercial capitalists R_2 come in for a share of the profit of productive sector R^*, taking the service for circulating process of wares into consideration.

1.2 $$W_1+W_2+R_1+R_2=Y_1$$

So the surplus-value rate in terms of money can be transformed into $\frac{W_2+\sum_i R_i}{W_1}$. $(i=1, 2)$

The surplus-value rate in productive sector, therefore, are varied to $\frac{W_1+R_1}{W_1}$, being lessend by $\frac{W_2+R_2}{W_1}$ compared with original rate.

〔b〕 And if the unproductive consumption-cost sectors are introduced, the income of unproductive sectors Y_2 (W_2+R_2) would be expanded. This sector is so called services sector, being purchased by aggregate income $W+R$.

1.3 $$W_1+\sum_j W_{2j}+R_1+\sum_j R_{2j}=Y. \quad (j=1, 2, \cdots\cdots, n.)$$

In the second place, we have the division of aggregate profit, which is

divided into Entreprenures' Profit (sum of the Corporation's Income r_1 and the Directrate's Salaries r_2), Interest for loan capital r_3 and Rent r_4.

Thus, some expansion being added in appearances, the original National Income Y^* are divided into sections.

1.4 $\sum_i R_i = \sum_{i,m} r_{i,m} \quad \begin{pmatrix} i=1,2 \\ m=1,\ 2,\ 3,\ 4 \end{pmatrix}$

1.5 $Y = \sum_{i,j} W_{i,j} + \sum_{i,j,m} r_{i,j,m}$

In turn, from the point of view of the structure of National gross Expenditure E, the National Expenditure is composed of aggregate consumption C (sum of consumption fund of labourers' C_w and capitalists' K) and the Investment by capitalists I (sum of investment in productive sector I_1 and unproductive sector I_2).

2.1 $E = C + I$

We suppose that the aggregate wage covers consumption of labourers' household, i. e. their propensity to consume is unity as a whole.

2.2 $C_W = W_1 + W_2$

The capitalists' consumption fund is the value of aggregate consumption minus labourers' consumption.

2.3 $K = C - C_W$

Deducing the consumption of capitalists' K from aggregate profit, we have the investment by capitalists. Thus, the Profit are expended on capitalists' Consumption and capitalists' Investment (Accumulation).

2.4 $R_1 + R_2 = I_1 + I_2 + K$

Next, it is the Public Finance that has no less special significance about the matter under discussion. The Public Finance (both Public Revenue and Expenditure side including local government's Finance) influences the income distribution, and so is the second changing factor on National Income structure.

The Public Revenue F_R collects the value F_{RW_1}, F_{RW_2}, F_{RI_1}, F_{RI_2}, and F_{RK} from W_1, W_2, I_1, I_2, and K respectively.

The contents of F_R are Direct Tax —— sum of $t(\sum_i W_i + \sum_i I_i + K)$ ——, Indirect Tax —— sum of $\tau\ (\sum_i W_i + K)$ ——, Social Insurance funds —— sum of $T\ (\sum_i W_i + \sum_i I_i)$ ——, and Surplus Public Enterprisesector X_4.

3.1 $F_R=(t+\tau)\sum_i W_i+t(\sum_i I_i+K)+\tau K+T\sum_i W_i+T\sum_i I_i+X_4.$

3.2 $F_R=F_{RW_1}+F_{RW_2}+F_{RI_1}+F_{RI_2}+F_{RK}$

On the other side, Public Expenditure F_E gives the allowance F_{EW_1}, F_{EW_2}, F_{EI_1} and F_{EI_2} to W_1, W_2, R_1 and R_2 respectively.

The contents of F_E are Subsidies —— to capitalists ——, the expenditure of Social Insurance Fund —— to labourers ——, and employment of government' employees —— to labourers of unproductive sector ——,etc.

3.3 $F_E=F_{EW_1}+F_{EW_2}+F_{EI_1}+F_{EI_2}$

The value of effective financial adjustment, that is estimated by deduction of the payment to government (Public R) from the receipt from government (Public E), calculated on each income classes, can be called "net effect of Public Finance".

By this effect, the surplus-value rate of economy as a whole varied to $\dfrac{(W_2+F_{W_2})+\sum_i I_i+\sum_i F_i)+(K+F_K)}{W_1+F_{W_1}}$,

and that of productive sector varied to $\dfrac{(W_{21}+F_{W_{21}})+(I_1+F_{I_1})+(K_1+F_{K_1})}{W_1+F_{W_1}}$.

(If we denote, (a) F_{W_1}, F_{W_2},…… = net effect of Public Finance on W_1, W_2, ……
(b) $W_{21}=W_2$ in Productive sector.)

Undoubtedly, the actual value represents the final one, which is adjusted by the above mentioned factors. Therefore, we can represent the actual value as the actual measure in the following form, $\dfrac{W_2'+\Sigma I'+K'}{W_1'}$, $\dfrac{W_{21}'+I_1'+K_1'}{W_1'}$.

(by denoting for example as $X+F_X=X'$)

Note. This Model is founded on Marxian Economics.

Cf. Karl Marx, 'Capital', Vol. 1 and 3.

(1) The whole sectors concerning to production of material resource. In this section the surplus-value is produced. Speaking concretely, collecting industries, agriculture, manufacturing industries, a part of transportation and communication industries belong to this section.

(2) The whole sectors not concerning to production of material resource. Concretely speaking, circulation sector, i. e. wholesale and retail trade, and consumption-cost sectors, i. e. service sectors belong to this.

(3) Cf. Marx, 'Capital', Vol. 3, Ch., 17.
Strictly speaking, division of R_1 by introduction of commercial sector, composed W_2 and R_2 and value of depreciation of fixed asset in commercial sector. This last part

is circulation-cost minus wage of commercial lobourers W_2.

Also, the wage of Financial labourers are a part of circulation cost as a whole economy.

3. *The memorandum about some procedures in application of the Model.*

In order to reach the original flow of National Income, supported by the above theory, we must advance along the adverse path against the process of the Model; i. e. by deducing each transformation effects from actual measures in turn, we have to reach the original figures finally.

Then, the defects of the present use of National Income Statistics and Theory being undeneiable from in the view point of the Marxian Theory, some careful procedures are necessary when we construct the data in correspondence to the above Model; these would be as follows:

1. We must divide the National Income into two categories, i. e. Wage and Profit. For example, the Earning Income includes the directorates' salaries or annual allowance, etc. except pure Wage. So, it must be adjusted strictly. Specially, the proprietors' income, occupying a considerable percentage in National Income in Japan, need to be divided into proprietors' wage and proprietors' profit.

2. We must divide aggregate expenditure E into labourers' consumption fund, capitalists' consumption fund and capitalists' accumulation (investment) fund.

In this case, we must regard the fact of self-consumption fund in Agriculture, Forestry and Fisheries sectors excluded from the calculation of E, and have to be excluded this value from the labourers' consumption fund.

3. The Wage and Profit which are estimated by the adjustment 1, and the consumption fund of labourers and of capitalists which are estimated by the adjustment 2, must be divided into productive sector and unproductive sector. In this case, we must remark the fact that some unproductive labourers, i. e. stuffs are employed even in the productive sector.

So we need to separate the number of these labourers in productive sector from the number of labourers in productive sector.

4. The changing effects by Public Finance have to be investigated and measured from each side of the Revenue and Expenditure, and must be deducted.

Applying above procedures, we can reach and deduct the structure of original distribution of National Income in Japan.

Note. In spite of the fact that a part of the Transportation and the Communication belong to unproductive service sector, we cannot separate them. So, we are obliged to treat them wholly as belonging to productive sector.

§ 4. *Data*

1951 **1. Actual distribution of National Income** million yen

		W_1	W_2	I_1	I_2	K	totals
productive sector	Agriculture, Forestry & Fisheries	905,353	78,726	78,799	0	31,838	1,094,716
	Mining	76,109	10,378	41,295	0	16,368	144,150
	Construction	80,515	20,129	35,759	0	15,004	151,407
	Manufacturing Industries	603,473	25,997	366,660	0	146,017	1,142,147
	Transportation, Communication & public utilities	212,675	63,526	23,303	0	9,616	309,120
	subtotals	1,878,125	198,756	545,816	0	218,843	2,841,540
	%	66.1	6.9	19.2	0	7.8	100.0
unproductive sector	Wholesale & Retail Trade	0	435,436	0	215,465	86,366	737,267
	Finance & Real Estate	0	75,483	0	56,339	22,323	154,145
	Services	0	320,326	0	91,247	36,230	447,803
	Public Services	0	166,428	0	5,618	2,196	174,242
	subtotals	0	997,673	0	368,669	147,115	1,513,457
	%	0	65.9	0	24.4	9.7	100.0
totals		1,878,125	1,196,429	545,816	368,669	365,958	4,354,997
%		43.1	27.5	12.5	8.5	8.4	100.0
totals		1,878,125	2,476,872				4,354,997
%		43.1	56.9				100.0

Cf. Eq. (1. 2), (1. 5), (2. 2), (2. 3) & (2. 4).

As for the method of estimation in details, see Appendix.

Source: 'The Japanese Economy & National Income (Nippon-Keizai to Kokumin-shotoku)', published by Economic Counsel Board, Japan.

1952 **2.** million yen

		W_1	W_2	I_1	I_2	K	totals
productive sector	Agriculture, Forestry & Fisheries	1,004,689	130,738	84,441	0	33,395	1,253,263
	Mining	115,347	15,729	48,661	0	19,028	198,765
	Construction	100,365	25,091	55,346	0	21,746	202,548
	Manufacturing Industries	615,459	135,101	291,895	0	115,719	1,158,174
	Transportation Communicaion & Publie Utilities	276,104	82,472	28,671	0	10,474	397,721
	subtatols	2,111,964	389,131	509,014	0	200,362	3,210,471
	%	65.7	12.2	15.9	0	6.2	100.0
unproductive sector	Wholesale & Retail Trade	0	520,599	0	257,276	101,351	879,226
	Finance & Real Estate	0	88,664	0	84,729	33,395	207,288
	Services	0	401,168	0	127,419	50,103	578,690
	Public Services	0	214,084	0	6,550	3,107	223,741
	subtotals	0	1,224,515	0	476,474	187,956	1,888,945
	%	0	64,8	0	25.3	9.9	100.0
totals		2,111,964	1,613,646	509,014	476,474	388,318	5,099,416
%		41.4	31.6	10.0	9.4	7.6	100.0
totals		2,111,964	2,987,452				5,099,416
%		41.4	58.6				100.0

Source: ibid.

1951 **3. Public Revenue** million yen

	W_1	W_2	K	I_1	I_2	totals	%
Personal Income Taxes	158,803	127,238	39,375	0	0	325,416	28.2
Customs & Excise Taxes	243,156	194,824	60,291	0	0	498,271	43.6
Business Profit Taxes	0	0	0	116,319	78,520	194,839	17.0
Surplus earned by Public Enterprises	0	0	0	41,430	0	41,430	3.6
Social Insurance Funds contributed by Employees	20,095	14,671	0	0	0	34,766	3.0
Social Insurance Funds contributed by Employers	0	0	0	28,856	19,479	48,335	4.6
totals	422,054	336,733	99,666	186,605	97,999	1,143,057	
%	36.9	29.4	8.7	16.3	8.3		100.0

1952 million yen

	W_1	W_2	K	I_1	I_2	totals	%
Personal Income Taxes	155,774	147,276	37,074	0	0	340,124	25.8
Customs & Excise Taxes	277,207	262,075	65,972	0	0	605,254	45.7
Business Profit Taxes	0	0	0	127,118	119,234	246,352	18.7
Surplus earned by Public Enterprises	0	0	0	26,524	0	26,524	2.0
Social Insurance Funds contributed by Employees	22,360	21,057	0	0	0	43,417	3.3
Social Insurance Funds contributed by Employers	0	0	0	31,018	29,094	60,112	4.5
totals	455,341	430,408	103,046	184,660	148,328	1,321,783	
%	34.5	32.6	7.8	13.9	11.2		100.0

Cf. Eq. (3. 1) & (3. 2)

Note. Personal Tax and Corporation Tax include miscellaneous taxes burden., see Appendix.

Source: ibid.

4. Public Expenditure

1951 million yen

	W_1	W_2	K	I_1	I_2	totals	%
Current goods & services	0	166,428	0	236,152	159,413	561,993	49.2
Transfer Expenditure	58.093	37,929	0	0	0	96,022	8.4
Subsidies	0	0	0	25,287	17,069	42,356	3.7
Government Saving	0	0	0	0	442,686	442,686	38.7
totals	58,093	204,357	0	261,439	619,168	1,143,057	
%	5.8	17.8	0	22.9	53.5		100.0

1952 million yen

	W_1	W_2	K	I_1	I_2	totals	%
Current goods & services	0	214,084	0	302,836	177,856	694,776	52.5
Transfer Expenditure	85,079	55,084	0	0	0	140,163	10.6
Subsidies	0	0	0	24,516	14,399	38,915	2.9
Government Saving	0	0	0	0	447,929	447,929	34.0
totals	85,079	269,168	0	327,352	640,184	1,321,783	
%	6.4	20.3	0	24.8	48.5		100.0

Cf. Eq. (3. 3)

Source: ibid.

As for the method of calculation, see. Appendix (4).

5. Redistribution by Public Finance (Expenditure minus Revenue)

million yen

	W_1	W_2	I_1	I_2	K
1951	△363, 961	△132, 376	74, 834	521, 169	△ 99, 666
1952	△370, 262	△161, 240	142, 692	491, 856	△ 103, 046
1951, totals	△363, 961	363, 961			
1952, totals	△370, 262	370, 262			

This is derived from table 3 and table 4.

6. The Changing Process of National Income Distribution

1951 (CONCLUSION I)

	W_1	W_2	I_1	I_2	K	totals
Actual data	1, 878, 125	1, 196, 429	545, 816	368, 669	365, 958	4, 354, 997
Redistribution by Public Finance	△363, 961	△132, 376	74, 834	521, 169	△ 99, 666	0
Original data	2, 242, 086	1, 328, 805	470, 982	△152, 500	465, 624	4, 354, 997

1952

	W_1	W_2	I_1	I_2	K	totals
Actual data	2, 111, 964	1, 613, 646	509, 014	476, 474	388, 318	5, 099, 416
Redistribution by Public Finance	△370, 262	△161, 240	142, 692	491, 856	△103, 046	0
Original data	2, 482, 226	1, 774, 886	366, 322	△ 15, 382	491, 364	5, 099, 416

7. The Change of Surplus Value Rate (CONCLUSION II)

Year	Original Surplus Value Rate $\left(\frac{W_2+\Sigma I+\Sigma K}{W_1}\right)$	Its Increase by Public Finance $\left(\frac{W_2'+\Sigma I'+K'}{W_1'}\right)$	Decrease of surplus Value Rate of the productive Sector by the unproductive Sector $\left(\frac{I_1+R_1}{W_1}\right)$	Its Increase by Public Finance $\left(\frac{I_1'+K_1'}{W_1'}\right)$
1951	94. 2%	132%	32. 8%	40. 7%
1952	105. 0%	142%	24. 9%	33. 6%

Year	$\frac{W_2'+\Sigma I'+\Sigma K'}{W_1'}$ excluding A. F. F. Industries
1951	235%
1952	247%

For Reference: Surplus Value Rate excluding Agriculture, Forestry & Fisheries (Supplementary Conclusion).

Supplementary Data

1951 **(1) Structure of Wage Income**

	Aggregate Wage Income	No. of laborers / No. of workers	No. of stuffs / No. of workers	W_1	W_2
Agriculture, Forestry & Fisheries	111, 802	92%	8%	102, 858	8, 944
Mining	85, 032	88 〃	12 〃	74, 828	10, 204
Construction	72, 713	80 〃	20 〃	58, 170	14, 543
Manufacturing Industries	538, 937	82 〃	18 〃	529, 236	9, 701
Transportation & other productive sectors	265, 343	77 〃	23 〃	204, 314	61, 029
totals	1, 073, 827			969, 406	104, 421

1952

	Aggregate Wage Income	No. of laborers / No. of workers	No. of stuffs / No. of workers	W_1	W_2
Agriculture, Forestry & Fisheries	138, 313	90%	10%	124, 472	13, 831
Mining	129, 451	88 〃	12 〃	113, 917	15, 534
Construction	91, 627	80 〃	20 〃	73, 302	18, 325
Manufacturing Industries	643, 273	82 〃	18 〃	527, 484	115, 789
Transportation & other productive sectors	344, 458	77 〃	23 〃	265, 233	79, 235
totals	1, 347, 122			1, 104, 408	242, 714

$\frac{\text{No. of labourers}}{\text{No. of workers}}$ & $\frac{\text{No. of Stuffs}}{\text{No. of workers}}$ in Agriculture, Forestry & Fisheries derived from S. Uesugi & others' 'National Income statistics in postwar Japan', series of Nippon-Sihonsyugi Koza, Vol. IX, Appendix, p. 500. Other rates derived from "Establishment Census of 1951" published by the Bureau of Statistics Office of the Prime Minister, Japan. This Census for 1952, yet unpublished. So, 1952's rates in Construction, Manufacturing Industries etc. are obliged to use 1951's rates.

Source: ibid.

(2.1) Rate of Division of Proprietors Income

	1951		1952	
	$\frac{\text{av. wage}}{\text{av. proprietors' income}}$	$1-\frac{\text{av. wage}}{\text{av. proprietors' income}}$	$\frac{\text{av. wage}}{\text{av. proprietors' income}}$	$1-\frac{\text{av. wage}}{\text{av. proprietors' income}}$
Agriculture, Forestry & Fishering	89.9%	10.1%	89.7%	10.3%
Mining	6.4 〃	93.6 〃	5.5 〃	94.5 〃
Construction	43.6 〃	56.4 〃	37 〃	63 〃
Manufacturing Industries	56.8 〃	43.2 〃	56.5 〃	43.5 〃
Transportation & other Productive sectors	83.6%	16.4%	82.7%	17.3%
Wholesale & Retail Trade	60.2 〃	39.8 〃	58.6 〃	41.4 〃
Finance & Real Estate	83.6 〃	16.4 〃	76.7 〃	23.3 〃
Services	51.8 〃	48.2 〃	46.7 〃	53.3 〃
Others	60.3 〃	39.7 〃	66.3 〃	33.7 〃

The rates in other sectors
derived from 'The Japanese Economy & Income', ibid.
Source: ibid.

(2.2) Income of proprietors in uncorporated establishments

1951

	Income	Profit	Wage	W_1	W_2
Agriculture, Forestry & Fisheries	970,386	98,109	872,277	802,495	69,782
Mining	22,741	21,286	1,455	1,281	174
Construction	64,062	36,131	27,931	22,345	5,586
Manufacturing Industries	159,389	68,856	90,533	74,237	16,296
Transportation & other productive sectors	12,988	2,130	10,858	8,361	2,497
Wholesale & Retail Trade	408,022	162,393	245,629	—	245,629
Finance & Real Estate	4,791	785	4,006	—	4,006
Services	205,028	98,824	106,204	—	106,204
Others	1,655	657	998	—	998
totals	1,849,062	489,171	1,359,891	908,719	451,172

1951

(3) Composition of Aggregate Profit

	Aggregate Profit	Proprietors' Profits	Corporations' Income	Directorates' Salaries	Social Insurance by Employers'	Rent	Interest for Persons	Surpluses in Public Enterp.	Tips	Annual Allowances	Sub-total Profit	Adjustment
Agriculture, Forestry & Fisheries	110,637	98,109	2,092	265.7	193.3	2,005		10,829			113,494	△ 2,857
Mining	57,663	21,286	31,379	3,985.9	2,900.1						59,551	△ 1,888
Construction	50,763	36,131	5,230	664	483.4						42,508.7	8,254
Manufacturing Industries	512,677	68,856	347,780	44,176.6	32,142.8			12,640			505,595.4	7,082
Transportation and other productive sectors	32,919	2,130	15,689	1,992	1,450.1			128			21,390	11,529
Wholesale & Retail Trade	301,831	162,393	74,786	9,499	6,911.9						253,590.5	48,240
Finance & Real Estate	78,662	786	32,948	4,185	3,045.1	35,726		1,101			77,791.1	863
Services	127,477	99,481	13,074	1,660.8	1,208.4				18,537		133,961.2	6,484
Public Services	7,814									2,549	2,549	5,265
Interest received by Non-Business Section (Sum of Person' & Government')							25,049	18,933			43,982	△43,982
totals	1,280,443	489,172	522,978	66,429	48,335.1	37,731	25,049	41,430	18,537	2,529	1,254,412.9	38,990

1952

	Aggregate Profit	Proprietors' Profit	Corporations' Income	Directorates' Salaries	Social Insurance by Employers	Rent	Interest for Persons	Sorpluses in Public Enterp.	Tips	Annual Allowances	Sub-total Profit	Adjustment
Agriculture, Forestry & Fishering	117,836	112,122	5,278	1,485.3	781.5	2,945		105			122,717	△ 4,881
Mining	67,689	27,925	32,076	9,014.1	4,748.8						60,001	7,688
Construction	77,092	57,600	6,903	1,939.8	1,021.9						67,464.7	9,627
Manufacturing Industries	407,614	82,602	205,451	57,736.1	30,416.7			13,068			389,273.8	18,340
Transportation and other productive sectors	39,145	2,954	12,993	3,651.2	1,923.6			2,577			24,098.8	15,046
Wholesale & Retail Trade	358,627	202,133	68,619	19,283.4	10,158.9						300,194.3	58,433
Finance & Real Estate	118,624	1,371	60,091	16,887.2	8,896.6	43,652		△ 1,360			130,761.8	△12,138
Services	177,522	140,672	14,617	4,109.7	2,164.1				22,896		184,458.8	△ 6,937
Public Services	9,657									3,245	3,245	6,412
Interest received by Non-Business Section (Sum of Person' & Government')							46,851	12,134			58,985	△58,985
totals	1,373,806	627,379	406,028	1,141,068	6,012.1	6,597	46,851	26,524	22,896	3,245	1,351,200.2	32,605

Cf. Eq. (1.4)

Estimated from 'Japanese Economy and National Income', ibid.

1952

	Income	Profit	Wage	W_1	W_2
Agriculture, Forestry & Fisheries	1,099,236	112,122	987,114	888,403	98,711
Mining	29,550	27,925	1,625	1,430	195
Construction	91,428	57,600	33,828	27,063	6,765
Manufacturing Industries	189,889	82,602	107,287	87,975	19,312
Transportation & other productive sectors	17,072	2,954	14,118	10,871	3,247
Wholesale & Retail Trade	488,245	202,133	286,112	—	286,112
Finance & Real Estate	5,883	1,371	4,512	—	4,512
Services	263,585	140,491	123,094	—	123,094
Others	540	181	359	—	359
totals	2,185,428	627,379	1,558,049	1,015,742	542,307

These tables are derived by the following procedures.

1. Income from side work is allotted into each industry and added to proprietors' income in each industry.
2. Proprietors' wage derived from proprietors' income $\times \dfrac{\text{average wage}}{\text{average proprietors' income}}$
3. Proprietors' profit derived from proprietors' income $\times \left(1 - \dfrac{\text{average wage}}{\text{average proprietors' income}}\right)$
4. As for division of Wages into W_1 & W_2, dividing rates for wage income (see Table 1.1) are applied.

(4)

Revenue Structure of Public Finance Revneue

X_i	From	W_1	W_2	K	R_1	R_2
Personal Taxes X_1		$\dfrac{W_1}{\Sigma W+K}X_1$	$\dfrac{W_2}{\Sigma W+K}X_1$	$\dfrac{K_2}{\Sigma W+K}X_1$	0	0
Customs & Excise Taxes X_2		$\dfrac{W_1}{\Sigma W+K}X_2$	$\dfrac{W_2}{\Sigma W+K}X_2$	$\dfrac{K}{\Sigma W+K}X_2$	0	0
Business Taxes X_3		0	0	0	$\dfrac{R_1}{\Sigma R}X_3$	$\dfrac{R_2}{\Sigma R}X_3$
Surplus earned by public enterprises X_4		0	0	0	X_4	0
Social Insurance Funds contributed by Employees X_5		$\dfrac{W_1}{\Sigma W}X_5$	$\dfrac{W_2}{\Sigma W}X_5$	0	0	0
Social Insurance Funds contributed by Employers X_6		0	0	0	$\dfrac{R_1}{\Sigma R}X_6$	$\dfrac{R_2}{\Sigma R}X_6$

Expenditure

Z_i	To	W_1	W_2	K	R_1	R_2
Current goods & Services Z_1		0	Z'_1*	0	$(Z_1-Z'_1)\frac{E_1}{\Sigma E}$	$(Z_1-Z_1')\frac{E_2}{\Sigma E}$
Transfer Expenditure Z_2		$\frac{N_1}{\Sigma N}Z_2$	$\frac{N_2}{\Sigma N}Z_2$	0	0	0
Subsidies Z_3		0	0	0	$\frac{E_1}{\Sigma E}Z_3$	$\frac{E_2}{\Sigma E}Z_3$
Govt. Saving Z_4		0	0	0	0	Z_4

	1951	1952
$\frac{W_1}{\Sigma W+K}$	48.8	45.8
$\frac{W_2}{\Sigma W+K}$	39.1	43.3
$\frac{K}{\Sigma W+K}$	12.1	10.9

	1951	1952
$\frac{R_1}{\Sigma R}$	59.7	51.6
$\frac{R_2}{\Sigma R}$	40.3	48.4

	1951	1952
$\frac{W_1}{\Sigma W}$	57.8	51.5
$\frac{W_2}{\Sigma W}$	42.2	48.5

Z'_1*=(Numbers of Government Employee)×(average wage), ΣE=Total fiscal expenditure (including local one), E_1=productive fiscal expenditure, E_2=unproductive fiscal expenditure, ΣN=No. of workers, N_1, N_2=No. of productive, unproductive workers respectively.

(5) Self Consumption in Agriculture, Forestry & Fisheries

	Engel Coefficient	$C'w_1$	$C'w_2$
1951	53.2	426,927	35,728
1952	51.2	454,862	50,540

Note. Self consumption $C'w$ must be deducted from all labourers' consumption fund Cw, in order to attain K from aggregate Expenditure E.

$C=(\Sigma w_i-C'w)+K$ cf. **3**,

estimating $C'w$ as proprietors' income in Agriculture, etc.,

sectors X Engel coefficient in them, $C'w$ can be calculated.

Source: White Paper for 1952, Japan, Table (2).

(6) Division of Employment

ten thousand persons

	N_1	N_2	$\Sigma_i Ni$	l_1	l_2
1951	836	545	1,381	60.5	39.5
1952	877	568	1,445	60.7	39.3

N_1=No. of productive labourers
N_2=No. of unproductive labourers
$\sum_i Ni$=Sum of N_1 and N_2
$l_1=\frac{N_1}{\sum N}$
$l_2=1-l_1$
Source: White Paper, ibid.

5 *Conclusions.*

Deriving from above theoretical model and data, our conclusions are as follows:

1. (Cf. Table 6)

Deducting the adjustment effect from each actual measure of National Income W_1, W_2, I_1, I_2 and K, the whole aspect of the original National Income in Japan is made clear.

2. (Cf. Table 7)

Referencing to the movement of the surplus-value rate, we can understand the changing process of original structure of Income distribution.

3. (Cf. Supplementary table of Table 7)

The surplus-value rates in all Japanese industries except Agriculture, Forestry and Fisheries are the most correct rates of exploitation in such of the industries. They are high rates, as Table clearly shows. The rates are distinguished from the surplus-value rate in Japanese manufacturing industry which have been investigated heretofore.

Main points are as follows:

〔a〕 Our research is deduced from Japanese National Income statistics.

〔b〕 Our research regards the re-distributing effect by public Finance, and efforts to measure it.

〔c〕 As compared with the method used before research, i. e. the investigation limited to over 30 men establishment in the manufacturing industry, our research endeavours to cover a wider scope.

Note. 1. As for the computation of surplus-value rate in the Japanese industry, see. S. Uesugi & othres, 'The estimation of surplus-value rate in Japanese Industry', reprinted in the series of 'Nippon-Shihonsyugi Koza', Vol. VIII and IX.

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THE RESEARCH INSTITUTE FOR ECONOMICS AND BUSINESS ADMINISTRATION, KOBE UNIVERSITY.

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