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by

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1 Introduction

Experiences of Japanese economic development has been gathering more and more interests both in Japan and abroad. Some scholars and practitioners regard the Japanese economic development as an model for developing countries, and others try to derive some lessons for transforming socialist economies in Eastern Europe. Financial system in postwar period has been one of the focuses. Owing to recent researches, many aspects of the postwar Japanese financial system have been made clear. Especially researches on the main bank system have substantially progressed in these years¹. As well as the functions of the main banks itself, roles of complementary institutional arrangements were stressed². The main banks did not work by themselves but they worked with some institutional arrangements such as financial regulation by Ministry of Finance(MOF), public financial institutions such as Japan Development Bank(JDB) and industrial policies etc.. However, inter-relation or complementarity of these institutions has not been fully investigated and documented from the

from the historical standpoint. Therefore in this paper I will focus on the historical evolution and interrelating roles of those institutional arrangements including main bank system, of which the postwar Japanese financial system has consisted. Through this I intend to present a financial history of postwar Japan in contemporary perspectives.

2 Overview of Financial Structure

Sectoral saving-investment balance of postwar Japan was roughly characterized by large deficit of corporate sector, large surplus of personal sector and small surplus of the public sector(Table 1). Major role of the financial system was, as is well-known, to intermediate flow of funds from personal sector to corporate sector³.

The process of financial intermediation had also distinct characteristics. The outline of financial intermediation is summarized in the Flow of Funds Accounts by Bank of Japan. Personal sector overwhelmingly preferred cash and deposit as safe and divisible assets, and the ratio of bonds and stocks in their portfolio was very low(Table 2). This was mainly explained by the low level of households' financial assets. Because of the transaction costs and risk, the households with small financial assets did not prefer bonds and stocks. And the cause of low level of financial assets in turn was destruction of the real assets by the World War II. During the

WWII the Japanese economy lost about quarter of its national assets. That loss was imposed to the personal sector after all. Especially the rich who had preferred bonds and stocks in prewar period were imposed the major part of the loss through the postwar economic reforms and hyper-inflation⁴.

Most of the funds concentrated to the financial sector were appropriated to loans(Table 3). In other words, the ratio of bonds and stocks in the assets of the financial sector was low in postwar Japan. Financial institutions as components of the financial sector were classified into several categories. First the commercial banks occupied the largest share of funds. They gathered deposits from the corporate sector and personal sector to invested them in loans or securities. The commercial banks were classified into the city banks and regional banks. The city banks, for example, Mitsui Bank, Mitsubishi Bank, Sumitomo Bank, Fuji Bank, Daiichi (Kangyo) Bank, Sanwa Bank etc. are "banks that have their head quarters in a metropolitan area and that have nationwide networks of many banking branches," and the regional banks are "banks that have their head offices in large or medium-sized cities throughout the country and carry on most of their business in the prefecture in which the head office is located"⁵.

Second category was a long-term credit bank. There were three long-term credit banks, i.e. The Industrial Bank of Japan(reorganized in 1952), The Long-term Credit Bank of Japan(established in 1952), and The Nippon Credit Bank(established in

1957). The aim of the long-term credit banks was to supply long-term loans to the industries, which required large fixed fixed capital. For this purpose the long-term credit banks were permitted to issue bank debentures to raise long-term funds.⁵

Besides these two categories, there were trust banks, specialized foreign exchange banks, financial institutions for small firms, financial institutions for agriculture, forestry and fishery, and insurance companies. And in the public sector, some public financial institutions, i.e. Japan Development Bank and Export/Import Bank of Japan etc. engaged in policy-based finance.⁷

Looking at the corporate side, we find that most of the funds were raised from these financial institutions, especially commercial banks(Table 4). Focusing the data on the funds for equipment investment by industry, we can confirm the same characteristics(Table 5). Large role of the financial institutions was common to almost all the industries. However, in relative sense, mode of funds raising differed from industry to industry. Some industries i.e. electricity, shipping, and coal mining depended heavily on the public finance, especially from JDB. And dependence on bonds issue was relatively high in electricity, iron and steel, and transportation, etc.. Those differences reflected the historical setting of the institutional arrangement and the government policies. We will discuss these aspects in the rest of this papers.

3 City Banks, the Regulatory Framework, and the Industrial Policy

As mentioned in the introduction, number of economists have come to regard the main bank system as the most remarkable characteristics of the postwar Japanese financial system. Aoki et. al. one of the recent important literature on this topic defines the main bank system as "an informal set of practice, institutional arrangements, and behaviors that constitutes a system of corporate financing and governance"³. I would like to accept this definition in this paper. That set includes reciprocal shareholdings, dispatch of directors, loans and credits, trusteeship for bond-issue, payment settlements, and foreign exchange, etc.. These functions are thought to be based on the main bank's ability to monitor the client firms *ex ante*, *interim*, and *ex post*. And it is also stressed that each of these roles contingents upon the life cycle stage and financial state of the firm and relations between the firm and its other financiers, between the latter and main banks, and between the main bank and the regulatory authorities are also important⁴.

I am going to check these bank-firm relationships briefly in the postwar high-growth period by the historical data. For this purpose, I compiled a data set on the bank-firm relationship on Securities Report (Yukashoken Hokokusho) and some directories¹⁰. Focusing on the manufacturing industries, I picked up all the listed firms whose debts data of 1955, 1965, and 1975 were available by creditors. There are 239 firms which satisfy those conditions.

At first let's examine the debts of these firms. Most of

the literature on the main bank system make much of this aspect. As to 50-60% of the 239 firms, the city banks were the largest creditors (Table 6). In other words they were the creditors which had the largest share in the explicit and/or implicit loan consortia as to the firms. The long-term credit banks or trust banks were next to the city banks (Table). It is noteworthy that number of the firms which did not change the largest creditors were not so large as the accepted view assumes especially from 1955 to 1965¹¹. More than half of the firms changed the largest creditors in that period. The largest creditors were not so fixed. Furthermore in 1955 as to almost half of the firms the largest creditors were not the firms' top ten shareholders, and almost three quarter of the largest creditors did not dispatch directors to the firms. These are supposed to be the conditions by which the main banks monitor the client firms and harmonize their interests with those of the clients¹². High changeability of the largest creditors and low ratio of shareholding and interlocking seems to suggest that the main bank system did not be so solid or pervasive in the latter half of 1950's and in the first half of 1960's. However, these facts were, to substantial extent, resulted from division of work between short-term and long-term financial institutions.

To examine this point, we compiled another data set. From the above 239 firms, we picked up 89 firms whose short-term and long term debt data were both available. Table and Table show bank-firm relationship observed from short-term and long-term credit

respectively. Even in the period from 1955 to 1965, 52 firms of the 89 (58%) did not change the largest short-term creditors (Table 7). On the other hand, as to long-term creditors, this ratio was only 34% (Table 8). It is also remarkable that composition of the financial institutions was substantially different between short-term and long-term loans. Most of the largest short-term creditors were the city banks, while most of the largest long-term creditors were the long-term credit banks and the trust banks. This means that large changeability of the long-term creditors itself and the fluctuation of the ratio of long-term loans to short-term loans were the important reason for the large changeability in Table 6.

Furthermore the short-term creditors became large shareholders of the client firms and dispatched directors, by far more frequently than the long-term creditors. Therefore we can say that not the largest creditor but the largest short-term creditor was closer to the ideal type of the main bank which many theoretical literature have assumed. And this implies that the role of main banks which were in many cases city banks as commercial financial institutions were complemented by the long-term financial institutions. This point we will discuss in the next section. It is noteworthy that even as to the short-term creditors, the ratio of the firms whose top ten shareholders included the largest creditors was 56%, and that of the firms which had a director dispatched from the largest creditors was only 29% (Table 7). This suggests that shareholding and interlocking were useful for the function of the main

bank, but they, especially the latter were not always indispensable.

The roles of the main bank imposed heavy burdens on the city banks. Although diversifying loans thorough organizing loan consortia and the cooperation with the long-term financial institutions relieved the situation, it was not sufficient. Difficulties with which the city banks were confronted, can be indicated in the aggregated balance sheet of city banks(Table 9). The composition of both assets and liabilities changed drastically from prewar period to postwar period. On assets side, the ratio of securities especially government bonds decreased, and on the other hand the ratio of credits increased. This means the liquidity of the city banks' assets substantially declined. For the matter of fact, the head of the credit analysis section of Daiichi Bank(one of the top six city banks) wrote in his article of 1956 that "the present bank assets differs largely from those in prewar period" and that "decline of the ratio of the government bonds, the best assets, above all indicates the decline of the bank assets quality"¹³.

Worse still, on the liabilities side, ratio of capital fell substantially from prewar to postwar period, and this was also worried at in the above article¹⁴. After all, liquidity of city banks' assets declined, while the city banks' capability of risk bearing decreased. This situation would have caused instability of bank management and and financial system, and consequently contraction of funds supply to the industries. Therefore since early 1950's, "over loan problem," which meaned excessive bank loans depending on

loans from BOJ, was widely discussed in the financial circle, the government, and the journalism.

Several measures were taken to solve this problem, and consequently institutional arrangements complementary to main bank system evolved. The long-term credit banks, JDB, and regulation of bonds issue discussed in the next section were the components of those institutions. In this section I am going to explain the regulation of city banks by MOF and the industrial policy on the allocation of bank loans by MOF and MITI. These two issues correspond to MOF's basic policies until the first half of 1960's, that is stabilizing bank management (kenzenka) and qualitative credit adjustment (shitsuteki shin'yo chosei)¹⁵.

The measures for stabilizing bank management by MOF were regulations on interest rates, new entry to the banking industry opening branches and, and performance indexes. Through these measures MOF pursued a policy that a bank should not be bankrupted(convoy policy, Goso Sendan Gyosei). The interest rates regulation was started in 1947 by Temporary Interest Rates Adjustment Law (Rinji Shikin Chosei Ho). The interest rates of the deposits and the maximum of those of loans were announced by MOF in accordance with the decision of BOJ's Policy Board¹⁵. The regulated interest rates gave large profit margin to the banks. As shown in Figure 1, profit margin in postwar period was 3-5 times larger than that in prewar period.

Besides the control of price competition by means of the interest rates regulation, non-price competition was also controlled

thorough regulations on opening branches and new entry to the banking industry. New entry to the banking industry was regulated by MOF in accordance with Banking Law(Ginko Ho), and MOF maintained a policy not to approve of new entry in principle. In fact, the number of banks was maintained at almost the same level since 1952¹⁷. Furthermore MOF took a policy to restrain number of branches¹⁸. These measures were complementary with the interest rates regulation, for large profit margin secured by the interest rates regulation caused severe competition aiming at quantitative extension among the banks.

These measures gave more or less rents to the banking sector. MOF intended to make use of these rents for stabilization of bank management and consequently stabilization of financial system and welfare of depositors¹⁹. For this purpose MOF regulated the bank management referring to the performance indices. First, MOF set a guideline of ratio of ordinary expense to ordinary income since 1949. The aim of this guideline was to prevent the rents from being dissipated to the bank employees. A letter of a chief of MOF's banking section (August 1953) instructed clearly that the surplus of the bank management should be used for reservation, reduction of loans interest rates, or raise of deposits interest rates²⁰. Dissipation to the banks' shareholders was also restricted by the regulation on dividends rates.

The other aspect of the financial regulation was regulation on funds allocation from the standpoint of the industrial policy. MOF and BOJ had regulated directly funds allocation of the

private banks since WWII by Temporary Law on Funds Allocation Control(Rinji Shikin Chosei Ho, 1937) and Rules on Funds Allocation by Financial Institutions(Kin'yu Kikan Shikin Yuzu Junsoku, 1947)²¹. Until around 1950 these direct control had been abolished, but MOF continued to indirectly regulate allocation of the bank loans through administrative guidance and the banks' voluntary self-regulation.

In 1951 the government announced a series of policies which consisted of preventing inflation, supplying funds to the strategic industries, and restrain loans to unnecessary industries, and MOF issued a notice to the banks instructing restraint of unnecessary loans. Corresponding to this notice, National Federation of Banking Association (NFBA, Zenkoku Ginko Kyokai Rengokai) set up the Committee for Self-Regulation of Loans (Yushi Jishukisei Iinkai). The role of the committee was "examining loans to be restrained, announcing criteria, and providing with reference materials for the voluntary loan discretion of each bank"²². At first, the committee selected the funds for building, real estate, and amusement etc. as those to be restrained in July 1951. Furthermore in 1953 it decided to restrain rigidly the loans for speculation and excessive and/or duplicate investment²³.

Since 1955 the institutions of indirect regulation for funds allocation were substantially extended. The background of this movement was tightening of macro economic policy in 1954 and 1957 because of the international imbalance. In 1954 MOF issued a notice to the banks instructing not only restraint of unnecessary loans but

also positive direction of loans. In that notice MOF indicated that the banks should give priority to the loans for promoting the basis of the economy and improving international balance of payments referring to the policy of public funds allocation to investment, and that for this purpose self-regulation by the banks was desirable²⁴. In other words, MOF intended to concentrate bank loans to the strategic industries, i.e. coal, iron and steel, electricity, and shipping thorough the banks' self-regulation.

On the other hand, the ruling parties, i.e. Democratic Party and Liberal Party aimed at making use of banks' funds in place of public funds, which were in short in those days. For this purpose they planned to regulate the allocation of banks' funds directly by a law and drew up a draft of Funds Committee Law(Shikin Iinkai Ho) in 1955. Because the financial circle and the business circle strongly opposed to this law and MOF did not support it, it was not enacted after all. As a substitute for it, the Council on the Funds of Financial Institutions (Kin'yu Kikan Shikin Shingikai) was established in 1956 to discuss and coordinate the funds allocation of the private financial institutions. This council was composed of representatives of the financial circle, the business circle, scholars, and bureaucrats²⁵.

Meanwhile, NFBA extended its self-regulation organization to stand against the Funds Committee Law. In 1955 it set up the Committee for Investment and Loans (Toyushi Iinkai)²⁶. The purpose of the committee was cooperating with the government policy to supply

funds to the strategic industries voluntarily and positively. This committee, composed of the presidents and directors of major banks, and representatives of MOF and BOJ, discussed the loan policy for the strategic industries and it coordinated the bank loans with the public finance²⁷. MOF and NFBA implicitly agreed to induce the private funds along the long-term plan, Five Year Plan for the Independence of the Japanese Economy (Keizai Jiritsu Gokanen Keikaku), the government decided in 1955²⁸.

In 1957 under the tightening of macro economic policy, the institutions were further extended in both of the government and private sectors. In June 1957, the cabinet meeting decided the Emergency Measures against the Imbalance of Payments, including the policy to restrain the unnecessary investment. Corresponding to it, MOF issued a notice to the banks instructing that they should put priority to the loans to the strategic industries and that even as to these industries they should cut down loans to the minimum level²⁹.

In order to implement this policy, NFBA merged its Committee for Investment and Loans and Committee for Self-Regulation of Loans to establish a new committee, the Committee for Regulation of Funds Allocation (Shikin Chosei Iinkai) and under it Managerial Meeting for Regulation of Funds Allocation (Shikin Chosei Kanjikai)³⁰. Meanwhile the institutional arrangements to secure cooperation of the industries were prepared. In 1957, a working committee composed of financial circle, business circle, and bureaucrats was set up in the Council on the Funds of Financial Institutions. From the business

circle, representatives of Tokyo Chamber of Commerce, Federation of Business Associations, Electricity Association, Japan Iron and Steel Association, Coal Association, Chemical Industry Association. This small committee played the role of coordinate the funds allocation and the investment plans of the industries³¹.

Coordination mechanism between the financial sector and the industrial sector was highly systematized by the establishment of the Funds Branch of the Council on Industrial Rationalization (Sangyo Gorika Shingikai Sangyo Shikin Bukai) under MITI in December 1957³². The Funds Branch was composed of representatives of Federation of Business Associations, NFBA, JDB, IBJ, and several business associations, and large industrial companies, etc.. Referring to the loan policy of the Council on the Funds of Financial Institutions and the Committee for Regulation of Funds Allocation of NFBA, the Funds Branch adjusted and coordinated the investment plans of the industries. The investment plan of each industry handed to the Funds Branch was prepared by each concerning bureau of MITI (genkyoku) through the discussion with the business association of that industry. Standing on the adjustment and coordination in the Funds Branch, the discussion between genkyoku and the business association were repeated in an iterative manner, if necessary. Thorough this procedure, the banks could have the high-quality information on the direction of industrial policy of MITI and the investment projects of the industries which were "authorized" by MITI. And consequently the bank loans were coordinated with MITI's industrial policy. This system is

supposed to reduce the risk of the banks to commit heavily industrial finance. Although the Council on Industrial Rationalization was reorganized to the Council on the Industrial Structure (Sangyo Kozo Shingikai) in 1964, the Funds Branch was succeeded to the new council³³.

4 Long-term Financial Institutions and Bonds Market

Besides the above discussed regulation and industrial policy, some institutional arrangements were prepared to secure the stability of the financial system and funds supply to the strategic industries. First, Japan Development Bank (JDB) was established based on the public funds in 1950 to relieve the shortage of long-term funds of the strategic industries. In 1949, Reconstruction Finance Corporation(Fukko Kinyu Kinko, RFC), which had played quite a large role in industrial finance since 1947 stopped loaning new funds by the instruction of the American occupation authority (GHQ), whereas, USAID Counterpart Fund(Mikaeri Shikin), which was expected to be a substitute for RFC, did not sufficiently supplied to the industries³⁴.

This situation gave damage especially to the industries which had depended on RFC, coal, iron and steel, shipping, and electricity. It was serious because these industries were regarded as strategic from the stand point of the industrial policy as is shown in the fact that policy-based finance of RFC had been concentrated to them.

JDB was expected to supply funds in accordance with the government industrial policy standing on its own independent judgement. The framework of JDB loan was instructed in the Basic Policy for Loans (Un'yo Kihon Hoshin) decided by the cabinet meeting every fiscal year. The Basic Policy indicated several industries to be strategic, for example electricity, shipping, coal, iron and steel, chemical, machinery, agriculture, fishery, and synthetic fiber in 1952 f.y.³⁵. Referring the Basic Policy and above mentioned coordination in the Funds Branch of the Council on the Industrial Rationalization, JDB examined creditworthiness of each project from the standpoint of a financial institution independently. Reflecting the industrial policy, JDB gave priority to the coal, iron and steel, electricity, and shipping in 1950's and after that the weight of regional development etc. increased.

It is noteworthy that from the beginning JDB pursued cooperative loans with the private banks³⁶. JDB loans had signaling (cow bell) effects that the projects were both creditworthy and in accordance with the industrial policy and induced loans by the private financial institutions³⁷. Horiuchi and Sui tested the signaling effect of JDB loans on private financial institutions' loans and got an affirmative result³⁸.

Two years after JDB started, Long-term Credit Bank Law was established. In accordance with this law, the Industrial Bank of Japan (IBJ) was reorganized and the Long-term Credit Bank of Japan was established in 1952. These banks were expected to supply long-term

funds to the strategic industries in accordance with the industrial policy, and for this purpose bank debentures they issued enjoyed an advantage to be collateral for BOJ credit. In fact, loans by the long-term credit banks concentrated to the strategic industries.

As seen in section 2, the long-term credit banks played the complementary role with the main bank system through supplying long-term funds to the city banks' client firms. It is noteworthy that also on the side of funds raising the main bank system and the long-term credit banks were complementary each other. The large part of the bank debentures were held by the city banks, although interest rates of bank debentures were lower than those of bank loans. It is pointed out that besides an advantage as to BOJ credit mentioned above, the city banks had good reason to hold the bank debentures; they expected that the long-term credit banks loaned to their client firms in return for their holding bank debentures³⁹. LCBJ itself wrote that "We supplied long-term funds to the clients firms of the ordinary banks which were main holders of our bank debentures in order to relieve those banks burdens, and we also take care to make the funds return to those banks as deposits"⁴⁰.

The other source of the long-term funds was the corporate bonds market. The policy to promote the bonds market was started with regulation in 1949 by BOJ. BOJ took two measures for this policy. First BOJ screened and rated the bonds qualified for collateral for BOJ credit ex ante. Virtually only those qualified bonds could be issued. Second when a bank bought bonds, BOJ bought the same amount

of the government bonds from that bank ⁴¹. As the interest rate of BOJ credit was substantially lower than the market rate, both measures gave de facto subsidies to the banks⁴². Standing on these measures, BOJ regulated the interest rate and amount of each issued bond thorough the Conference on Bonds Issue (Kisai Kondankai) and the Consultation Meeting on Bonds Issue (Kisai Uchiawasekai). The former composed of MOF, BOJ, the entrusting banks, and big four securities companies, decided general matters on bonds issue. The latter, composed of BOJ, the entrusting banks, and big four securities companies decided the respective conditions⁴³. Through the bonds issue regulation, the strategic industries were given priority. Although the above mentioned ex ante screening and rating system was abolished in 1956, regulation by the Consultation Meeting on Bonds Issue continued⁴⁴.

The entrusting banks of the bonds, which were members of the Consultation Meeting on Bonds Issue, kept in touch with the Committee for Self-Regulation of Loans and the Committee for Investment and Loans of NFBA in order to check holding unnecessary industries' bonds by the banks and secure holding the strategic industries bonds⁴⁵. At this point the institutions of bonds issue related to the bank regulation system discussed in section 3. Furthermore, they also related to the main bank system. The entrusting banks of the industrial bonds not only advised the issuing firms but also monitored the firms on behalf of the bonds holders. It is natural that these role was played by the main banks of the firms.

industrial policy. The main banks coordinated explicit or implicit loan consortia to supply funds to the client firms, while this function was supported by loans of long-term financial institutions, bond market regulation by BOJ, bank regulation by MOF, and the funds allocation policy of MOF and MITI.

This means that the division of works in the postwar Japanese financial system was characteristic. Aoki stressed that financial functions i.e. monitoring the firms or the investment projects ex ante, interim, and ex post were carried by the main banks in an integrative manner in postwar Japan, and that main banks' ex ante monitoring was complemented by that of public financial institutions, long-term credit banks, and the government councils referring to the Council of Coordinating Electric Energy Source Development⁴⁶. In this paper we clarified that not only as to electricity industry, which was public utility and under rigid government regulation, but also as to all the industries, MOF, MITI, BOJ took part in coordinating and screening the investment projects of the industries through the Council on the Funds of Financial Institutions and the Funds Branch of the Council on Industrial Rationalization etc., and that they guaranteed stability of the whole system under the condition that capital ratio and capability of risk bearing of both industrial firms and banks were low.

What was the performance of this system? It is well-known that the Japanese industries grew quite rapidly depending on the funds borrowed from the financial institutions. Investigating the documents in high growth era, we can easily find that this system substantially

influenced on the recognition, expectation and behaviors of the agents consisting the Japanese economic system. The head of the credit analysis section of Daiichi Bank wrote in 1956 that "it is said that depositors' thinking has been changing since the end of the war. They may confide in the banks only because they are banks"⁴⁷. MOF's convoy policy removed risk consciousness of the depositors and they were ready to deposit their funds to the banks. In 1959 the head of MOF's banking division wrote that "it cannot be denied that the banks have to some extent lost consciousness that they are entrusted with funds by depositors partly because they are confident that a bank must not be bankrupted"⁴⁸. MOF's regulation changed the thinking of the banks too. Furthermore in 1962, the president of Fuji Iron and Steel Co. said that "I suppose that rationing system of funds itself causes large funds demand, because the industries feel that the projects to which the funds are rationed are authorized by the government"⁴⁹. This means that the government regulation and coordination stimulated the investment of industrial firms. Especially as to the industry, entry to which was regulated by the government, the effect of the government regulation to promote investment was quite large. In 1965 the president of the Petrochemical Association said that the projects planned by many firms in those days were caused by the regulation itself, because if a firm got government permission, it could expect that the government would restrain the following entry⁵⁰. These change of thinking and expectation caused the high speed investment and growth. However, it should be noted that in postwar Japan there was some historical

conditions on which this system worked well. On the one hand the basis of required institutional arrangements, for example close bank-firm relationship and close government-firm relationship etc. had been prepared since WWII. On the other hand, in high growth era the Japanese economy was in catching up process and therefore the strategic industries were more or less clear. After the catching up was completed, it was difficult to screen the strategic industries. The experiences of the Japanese economy after the end of 1980's i.e. "bubble economy" and its bursting, gave us a lesson on the problem of that system in caught up economy.

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16 ibid., pp.118-122.

17 ibid., pp.95-98.

18 ibid., p.80.

19 ibid., p.80; Ueda, op. cit., pp.9-10.

20 MOF ed., op. cit., pp.80-81.

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43 ibid., p.210.

44 Shimura op. cit., p.114.

45 ibid., p.126.

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47 Inoue, op. cit., p.8.

48 Tadao Shiotani, "Tomen no Ginko Gyosei no Mondaiten," (Issues of Present Banking Policy), Kin'yu October 1959.

49 "Zadankai: Keizai no Genjo to Keizai Unei no Hoko" (A Symposium: Present Economy and the Direction of Economic Policy', Keidanren Geppo, June 1962.

50 "Zadankai: Toshi Chosei wo Do Susumeru ka" (A Symposium: How should We Adjust Investment Plans ?), ibid., April 1965.

(% of GNP)

	Corporation	Household	Government
1955-59	-8.9	7.7	0.5
1960-64	-10.9	8.2	1.4
1965-69	-7.7	6.8	0.7
1970-74	-10.9	10.1	0.6

Source: Economic Planning Agency ed., Choki Sokyū Suikei Kokumin Keizai Keisan Hokoku
(Long-term Retrocative Estimation of National Accounts).

	1955-59	1960-64	1965-69	1970-74
Total	100.0	100.0	100.0	100.0
Currency	4.4	5.7	6.3	6.8
Deposits	61.4	53.7	59.0	65.3
Trust	4.1	5.2	6.5	6.3
Insurance	11.9	9.6	13.0	13.0
Government Bonds	0.2	-0.1	7.1	0.7
Public Corporation Bonds	0.3	1.0		1.3
Bank Debentures	2.1	2.6		3.7
Industrial Bonds	0.4	0.4		1.0
Stocks and Securities Investment Trust	9.2	11.0	2.1	1.3
Others	3.6	6.1	-0.8	1.9

Source: BOJ, Flow of Funds Accounts.

	1955-59	1960-64	1965-69	1970-74
Total	100.0	100.0	100.0	100.0
Currency and Deposits	2.0	1.7	1.2	2.4
Government Bonds	1.1	0.9	} 14.5	3.2
Public Corporation Bonds	2.0	1.7		2.2
Bank Debentures	3.8	2.9		3.1
Industrial Bonds	3.9	3.2		1.4
Stocks and Securities Investment Trust	6.4	6.8	2.5	3.8
Call Money	0.7	0.1	-0.3	0.8
Loans	77.5	77.6	79.0	78.5
	2.6	5.2	3.1	4.5

Source: BOJ, Flow of Funds Accounts.

	1955-59	1960-64	1965-69	1970-74
Total	100.0	100.0	100.0	100.0
Stock	13.5	16.2	6.2	5.8
Industrial Bonds	4.4	4.5	3.3	3.1
Loans	82.1	79.4	90.5	91.1
Private Financial Institutions	73.3	72.8	81.2	83.1
Long-term Financial Institutions	6.2	5.1	6.1	6.5
Public Financial Institutions	6.7	5.2	8.0	7.1
Others	2.1	1.4	1.3	0.9

Source: Toyo Keizai Shinposha, Showa Kokusei Soran, vol. 2, Toyo Keizai Shinposha, Tokyo, 1991.

Table 5
Source of Funds for Investment by Industry

(%)

	1955-59					1960-64				
	Total	Bonds	Stock	Loans Private	Long-term Credit Banks Public	Total	Bonds	Stock	Loans Private	Long-term Credit Banks Public
Total	100.0	3.3	14.1	62.1	18.6	100.0	5.6	16.0	64.1	15.4
Electricity	100.0	5.2	11.1	49.1	15.4	100.0	16.3	12.8	51.3	12.7
Iron and Steel	100.0	6.2	29.8	59.3	28.8	100.0	9.8	30.5	56.2	19.2
Shipping	100.0	0.1	11.4	62.9	19.4	100.0	0.0	3.8	47.8	12.9
Coal	100.0	1.1	15.9	49.0	42.1	100.0	1.8	3.2	38.2	23.3
Textile	100.0	3.6	8.6	74.2	25.0	100.0	7.4	13.1	66.4	20.6
Chemical	100.0	2.9	17.2	71.8	28.9	100.0	4.4	22.4	66.4	21.8
Ceramics	100.0	0.8	17.3	68.3	26.8	100.0	2.6	17.6	68.9	22.0
Machinery	100.0	5.3	32.3	52.2	25.0	100.0	7.2	27.6	57.0	19.0
Non-ferrous Metal	100.0	2.4	13.2	64.5	21.7	100.0	3.0	15.9	65.3	21.6
Land Transportation	100.0	7.7	14.3	62.3	18.3	100.0	8.8	12.5	60.4	13.4
Agriculture and Fishery	100.0	0.4	4.0	44.8	9.6	100.0	0.6	3.2	48.7	5.7
Others	100.0	1.8	8.5	75.2	11.2	100.0	1.3	10.3	76.7	11.5

Source: JDB.

Table 6
Bank-Firm Relationship I

	total	city bank	long-term credit bank	trust bank	insurance company	others
1955						
A	239	141	50	19	8	21
B	121	86	13	8	6	8
C	55	45	6	0	2	2
1965						
A	239	121	41	46	5	26
B	159	97	21	30	3	8
C	77	55	16	4	1	1
1975						
A	239	126	46	40	2	25
B	207	122	38	37	2	8
C	120	83	17	8	2	10
1955-65 A'	116	85	20	8	1	2
1965-75 A'	142	83	29	21	2	7

note: A=number of firms classified by the categories of financial institutions which they owed the largest debt.
 B=number of firms whose largest creditor were a top 10 shareholder(classified by the above categories).
 C=number of firms which had a director dispatched from the largest creditor(classified by the above categories).
 A'=number of firms whose largest creditor did not change from 1955 to 1965 or from 1965 to 1975.

Table 7
Bank-Firm Relationship II

	total	city bank	long-term credit bank	trust bank	insurance company	others
1955						
A	89	65	13	2	2	7
B	50	39	5	1	2	3
C	26	24	1	0	0	1
1965						
A	89	69	3	1	1	15
B	60	55	2	1	1	1
C	36	34	1	0	1	0
1975						
A	89	82	4	0	1	2
B	79	75	3	0	0	1
C	58	54	3	0	0	1
1955-65 A'	52	49	3	0	0	0
1965-75 A'	64	63	1	0	0	0

note:A=number of firms classified by the categories of financial institutions which they owed the largest short-term debt.
 B=number of firms whose largest short-term creditor were a top 10 shareholder(classified by the above categories).
 C=number of firms which had a director dispatched from the largest short-term creditor(classified by the above categories).
 A'=number of firms whose largest short-term creditor did not change from 1955 to 1965 or from 1965 to 1975.

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Bank-Firm Relationship III

	total	city bank	long-term credit bank	trust bank	insurance company	others
1955						
A	89	10	44	24	8	3
B	16	0	2	8	6	0
C	4	2	2	0	0	0
1965						
A	89	6	33	41	6	3
B	48	6	10	27	4	1
C	12	3	5	4	0	0
1975						
A	89	9	37	37	5	1
B	69	9	28	26	5	1
C	20	8	7	3	2	0
1955-65 A'	30	2	19	8	1	0
1965-75 A'	60	3	27	28	2	0

note:A=number of firms classified by the categories of financial institutions which they owed the largest long-term debt.
 B=number of firms whose largest long-term creditor were a top 10 shareholder(classified by the above categories).
 C=number of firms which had a director dispatched from the largest long-term creditor(classified by the above categories).
 A'=number of firms whose largest long-term creditor did not change from 1955 to 1965 or from 1965 to 1975.

(%)

	1935	1944	1950	1955	1960	1965	1970
Assets							
Currency and Deposits	6.9	4.7	11.6	12.3	11.2	10.3	9.0
Call Money	4.7	0.3	0.0	0.3	0.0	0.0	0.0
Securities	36.4	28.7	5.9	9.2	11.4	12.4	10.7
Government Bonds	19.5	23.9	2.3	1.3	0.4	0.1	0.9
Local Government Bonds	3.8	0.2	0.0	0.5	0.9	1.2	1.4
Industrial Bonds	10.7	3.3	3.3	6.2	8.1	9.0	5.9
Stocks	1.5	0.8	0.3	1.1	1.9	2.1	2.4
Loans and Credits	42.7	63.3	50.1	58.2	59.3	57.5	58.9
Loans	35.5	61.6	33.1	33.4	36.8	37.7	38.9
Discounted Bills	7.2	1.7	17.1	23.3	22.5	19.9	20.1
Liabilities	81.7	76.7	55.6	75.3	70.3	66.3	65.9
Demand Deposits	23.2	27.6	30.6	31.0	23.2	21.7	18.5
Time Deposits	58.0	37.7	18.7	36.8	41.5	39.8	43.6
Loans	0.0	16.1	9.2	2.6	7.2	8.3	7.3
Foreign Exchange	0.7	0.0	12.9	1.2	3.3	3.5	2.8
Call money	0.0	0.0	0.3	2.3	3.0	4.9	5.5
Capital	14.6	3.9	2.8	3.9	3.8	3.3	3.9
Others	3.0	3.3	19.3	14.7	12.4	13.7	14.6

Source: BOJ, Keizai Tokei Nenpo (Annual Report of Economic Statistics).

the Mian Bank	Firms	Bonds Issues	Cases the Main Bank Entrusted Bonds Issues
Total	54	489	431
IBJ	2	4	4
Mitusi Bank	9	102	102
Mitsubishi Bank	4	42	42
Sumitomo Bank	5	73	73
Fuji Bank	7	68	68
Sanwa Bank	4	29	29
Daiichi Bank	5	68	68
Kangyo Bank	5	28	28
Tokai Bank	1	3	3
Kyowa Bank	2	16	14
Norinchukin Bank	9	48	0
Foreign Bank	1	8	0

Source: IBJ, Shasai Ichiran (Lists of Industrial Bonds), IBJ, Tokyo, 1970.

