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"Mainbank" and its Functions

Firms and Industrial Organization in Japan (5)

by

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"Mainbank" and its Functions

Firms and Industrial Organization in Japan --(5)

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of the book forthcoming in 1995

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Chapter 6. "Mainbank" and its Functions¹

6-1. Introduction

So many of the premises of the study and controversy over the economic system in postwar Japan have never passed the process of clarifying the exact meaning and testing empirically the validity, and are adopted as the appropriate common ground. They are thought to be so obvious that few notice the need for the process and some even forget the adoption itself. How the funds flow within an economy decisively influences the function and the performance of the economic system is an example.² Both of the two views reflect it: (1) the government can control nicely the economy and improve the performance by intervention in the funds flow; (2) to have a big stable pipe for finance decisively influences the performance and growth of a firm.

The second view is reflected in the literature where corporate groups, Kin'yu Keiretsu, Loan Keiretsu, Keiretsu Loans, and the Loan-Concentration Mechanism are the keywords.³ The premise is indispensable to understand the disappointing content of prior studies and futile history of related controversies: the study and controversy over the "adhesion relationship" examined in the previous chapter is an example; the "One-Set-

¹ This chapter is a revised version of chapter 6 of Miwa[1990], whose original was published in 1985.

² Another example is an assertion or a belief that the government has the capability and the power to realize the objective on each industry and even on individual firms. The view that "Industrial Policy" was the main engine for the Japanese rapid economic growth reflects it. As shown in Part III, this view is far from obvious.

³ Political movement in 1950s reflects the first view: the Bill for Funds Committee in 1955 which passed the House of Representatives but shelved in the House of Councilors; Japan Socialist Party's Bill for the Amendment of Bank Law; Financial Institution Council established in Ministry of Finance by the Cabinet Decision in 1956; Funds Coordination Committee organized in Federation of Bankers Association of Japan in 1957. For the movement, see Miwa[1993, pp.228-30].

Ism" proposed in 1960s as a behavioristic feature of corporate groups⁴ is another,⁵ which despite of lots of criticism acquired and has maintained strong support in and out of the academic circle, and has been an big issue to continually produce "provocative new results."⁶ Also it seems to be the basis for a recent fashionable view: financial factors and characteristics have contributed much to the industrial success of Japan.⁷ With this view, research, especially theoretical one, on the formation process and its function was activated, at the core of which is the research on "Mainbank."

Thus, most people has regarded the importance of the financial factors and characteristics as obvious, and so many has recently recognized again its importance for economic growth and theoretical research has been activated. However, few have ever tried to clarify the argument, to show the concrete contents, and to test empirically whether what is alleged has actually occurred.⁸ Without investigation on whether what is alleged has actually occurred, and, if yes, what then has made it possible, we can neither make sure the appropriateness of the model choice, therefore, conclusions of the analysis, nor clearly define the issues for which models are constructed. Also, without investigation on whether the characteristics still exist, if not, when disappeared, we cannot draw useful lessons for planning strategies in developing countries.

⁴ As Goto[1975, p.235] describes, "In the conventional view the characteristics of Japanese financial system and zaibatsu in the prewar period explain the formation of corporate groups."

⁵ The representative literature is Miyazaki[1962, 1976]. See the next chapter.

⁶ For reviews, see Shinohara[1976], Kobayashi[1980], and Goto[1983].

⁷ For instance, Suzuki[1983, p.190] argues: "The basic discipline of financial institutions under the predominance of indirect finance is, being based on 'long term customer relationship,' to support actively SMEs with big growth potential. Therefore, protection of private financial institutions from competition by interest rate regulation has promoted the rapid economic growth." However, I do not agree with this view. Simply, everybody, from competing financial institutions, investors, and business firms to entrepreneurs and even employees, always wants to find such SMEs. Why has it been possible only for financial institutions?

⁸ As a natural consequence, few have ever tried to propose concrete issues, or even to review prior studies for this purpose. Kosai et al.[1980, p.165] is an exception.

As phenomena studied and discussed with "Mainbank" and related phrases⁹ have been at the core of these financial factors, their importance has been regarded to be obvious, and few have examined the basis of argument in detail. As a consequence, there is neither clear definition of keywords nor a common understanding of the argument even among supporters. In what follows, I pick up three types of stage where "Mainbank" is thought to play the role and reveal it most clearly, and examine how frequently we can observe alleged behavior. From the first half of 1970s to the first half of 1980s is the period for study.¹⁰ In what follows I use both "Mainbank" and "core bank" to avoid confusion. The former is for so-called "Mainbank," the latter is for a bank which has the biggest share of loans to a borrower, and usually a "Mainbank" is a core bank.

As mentioned in Introduction to Part II and the previous chapter, "Mainbank" is used for a large bank's relationship with a group of large firms, often called "adhesion relationship." As thus it is used for the other side of the victims of "burden-shifting" under the "loan-concentration" mechanism, our previous conclusion casts strong doubt on its validity. Also note that, even when "Mainbank" argument is valid, it applies to only a small portion of Japanese economy as it is dominated by SMEs.

In Section 6-2, I study the stability of relationship between a bank and a large firm, and show that the relationship is not so stable as expected. 6-3 is a review of how the term "Mainbank" has been used and what are thought to be the representative function of "Mainbank," and I draw two types of function in an emergency. 6-4 and 6-5 are for the examination of

⁹ Though "Mainbank" became popular among academics only in 1980s, it was a slangy word used by economic journalism in 1970s. However, more popular words for the same phenomena were keiretsu loans, keiretsu relationship, and "adhesion relationship," and "Mainbank relationship" is the direct descendent.

¹⁰ People tend to talk about "Mainbank" and related topics in depression. The period around 1965 and that around 1975 are the representatives, of which I choose the latter.

each of the two. 6-4 is for the empirical study of "big pipe" function in an emergency, and 6-5 is for "lender of the last resort" function. I draw a negative conclusion in both sections. 6-6 is for concluding remarks. At the end of the chapter, for readers' convenience I add a short appendix for comments on recent studies.

My conclusion is in the negative in each stage and in total, and therefore is opposite to the conventional view. It implies there exist no such phenomena called "Mainbank relationship" or "Mainbank behavior" on which a big wave of theoretical interests has recently concentrated. Note, however, that I do not intend to insist there are no kind of such relationships, since there is neither clear definition nor a common understanding of the "Mainbank" argument. Also note that there is no such contract called "Mainbank contract," and that nobody can directly test whether an "implicit contract" actually is effective.

6-2. The Stability of Relationship between Core Bank and Large Firm

The Stability of Relationship between Core bank and Large Firm

Among firm-bank¹¹ relationships in Japan, stable long-term one between a large firm and a large bank is regarded as the most basic.¹² The first test for "Mainbank" argument is its stability. I focus on the ratio of cases where the core bank, a bank which has the biggest share of loans to a borrower, of a large firm did not change between two points of time.

Table 6-1 shows the stability between March 1973 and March 1983 of the core bank for all 819 firms, except banks, security firms, and insurance companies, listed on First Section of Tokyo Stock Exchange (hereafter, TSE) in July 1983. The group of firms with stable core bank (S) is classified into six groups, from S(1) to S(6), by the type of core bank.

¹¹ In what follows, "bank" stands for all financial institutions.

¹² Recall such popular phrases as keiretsu loans, loan keiretsu, adhesion relationship, core bank, and Mainbank.

Firms which changed the core bank (US) is classified into nine groups, from US(1) to US(9), by the type of change, for example, US(6) for change between city banks. Each group is further classified into six classes, from G(1) to G(6), by the average growth rate of sales, which is to examine whether the stability depends on the growth rate of a borrower. Japan Development Bank and Export-Import Bank of Japan are not counted even when either is the biggest lender.¹³ Growth rate data are from Daiwa Securities Research Institute, 1983 Analysts' Guide and data for financing are from Toyo Keizai Shinpo-sha, Kigyo Keiretsu Sohran (Conspectus of Corporate Keiretsu), editions for 1973 and 1984.¹⁴ Therefore, "financing" here includes both long- and short-term borrowings and excludes bills discounted.

---- Table 6-1 ----

I choose as indices for the "stability" of core bank relationship two ratios, NS/NT, NS(1)/NT, which are shown in Table 6-2. S is the group with stable core bank, S(1) with city bank as stable core bank, and T the total set for classification. NS, NS(1), and NT are the numbers of firm in each set. Leaving G(1) and G(6) out of consideration because of the small population, this table shows that the stability of core bank relationship does not depend on the borrower's growth rate.¹⁵

----- Table 6-2 ---

¹³ Therefore, though Nippon Yusen, for example, borrows ¥136.8 billion of the total ¥221.1 billion at the end of March 1973, its core bank here is Mitsubishi Bank from which it borrows ¥16 billion.

¹⁴ The English version of this Conspectus is now available from Dodwell Marketing Consultants, Tokyo, with a title "Industrial Groupings in Japan."

¹⁵ Readers interested in this result should refer Kosai et als.[1964, especially Table 5], though not directly comparable.

Figures for the total (T) are 66.8 percent for NS/NT and 41.2 percent for NS(1)/NT, whose evaluation differs among readers. However, most supporters of and those who are deeply interested in the conventional view with keiretsu, adhesion relationship, corporate groups, and Mainbank, has special attention to city banks, therefore, NS(1)/NT, and must be surprised at such low level of 41.2 percent. Further, some are interested in the behavior of 6 or 7 city banks,¹⁶ and for them the critical figure must be around 30 percent. Note that S also includes such financial institutions as Trust Banks, Long Term Credit Banks, Central Cooperative Bank of Agriculture & Forestry, Local Banks, Life Insurance Companies, and etc.

Let me leave with readers the evaluation of these figures, 66.8 percent and 41.2 percent.¹⁷ However, they obviously cast doubt on the plausibility of the dominant view of Japanese economy: "Close relationship with a large bank, especially a city bank, is indispensable for a large Japanese firm to survive and flourish. Therefore, no borrower voluntarily end the relationship, and it is prohibitively difficult to replace it with that one with another bank."¹⁸ Note that these figures include a firm which unchanged the core bank even though it could do, and that the fact many firms actually changed it suggests the number of such firms large.

Corporate Groups and the Stability of Core Bank

¹⁶ Recall that six is the crucial number associated with corporate group argument. Statement of Mr. Kazuaki Kajiwara, an economic journalist, is a model: "The number of banks which have capacity to be a 'Mainbank' in the Japanese way is at most six or seven" (p.75, 24 March 1984 issue of Shukan Diamond).

¹⁷ Some may say that such relationship suggested by these figures is similar to their relationship with barber's and dentist's. Most of the first reaction of Japanese academics interested in these phenomena were, "So low. It is surprising."

¹⁸ In this view, a firm is like a fish in a pond controlled by a bank, and going out of the pond or moving to another will risk the life. Note that, in the dual-structure-view, such firms are envied by the majority of firms in enjoying the privilege of being in ponds, since they are rejected.

The above argument immediately awakens two types of criticism among supporters of the corporate-group-view, that is, among those who insist that firms in a "corporate group" behaves as if they form an entity and such corporate groups dominate Japanese economy. The first type focuses on the extent of "large firm." They assert that all firms listed on First Section of TSE is too expansive and most of important firms with large size, long history, and high social status belong to corporate groups, and that among such important firms the ratio must be much higher. The second type concerns cooperative behavior among banks (that is, financial institutions, here). They assert that banks in a corporate group (a city bank and a trust bank in the same group, for instance) closely cooperate, and the above argument neglects it, and that the result will change greatly when we delete such cases from US as "change" between banks in the same group. However, as shown below, we need not modify the above conclusion.

(1) The Extent of "Large Firm"

The essence of the first type of criticism is that the argument for a stable relationship between a large firm and a large bank applies only to a more limited group of firms, typically to firms in corporate groups. Comparing with the above argument, it asserts an existence of a nucleus where the stability prevails, which implies to assert that out of the nucleus stable relationship is rarer than the average. Thus, this criticism does not challenge our conclusion that on average among large firms listed on First Section of TSE the core bank relationship is not so stable as commonly believed, therefore, it does not dominate even in large firm sector. As we are interested in its importance to the whole economy, rather than in the existence of "adhesion relationship" for individual firms, we need not modify the conclusion even when we find a nucleus. However, we do not.

Table 6-3 corresponds to Table 6-2 and shows indices for the stability of core bank relationship within corporate groups. Following the custom, I use "Six Major Corporate Groups," that is, Mitsui, Mitsubishi,

Sumitomo, Fuyo (or Fuji), Sanwa, and Daiichi Kangyo Bank (hereafter, DKB), and as the extent of a group I adopt Shacho-kai (Presidents' meeting, or Presidential Council. For the details, see the next chapter) membership in March 1983. Also following the custom, I divide six groups into two subgroups, the first one is called "ex-zaibatsu-type" where are the first three and the second one "bank-type" where are the remaining three. H(1) to H(6) correspond to each group, H(A) and H(B) to the total of ex-zaibatsu-type groups and that of bank-type groups, and H(T) to the total of all groups. On the right side I adopt the figures for the total from Table 6-2.

----- Table 6-3 ----

Though there is a slight difference among corporate groups,¹⁹ NS/NT for H(T), 70.1 percent, is almost the same as that for T, 66.8 percent, and NS(1)/NT for H(T), 55.5 percent, is remarkably higher than that for T, 41.2 percent. Thus, when we do not limit the extent of "banks," there is no such nucleus as asserted, and when limited to city banks there is a nucleus. However, 55.5 percent means that yet only more than the half of large firms in corporate groups have stable core bank relationship with city banks, which is far from such conventional view as in Kure and Shima[1984, p.27]: "A city bank at the core of a corporate group is the 'Mainbank' of member firms." As mentioned above, we need not modify our previous conclusion even when 55.5 percent is much higher than 41.2 percent.^{20,21}

¹⁹ It is interesting and ironical to find the figures for Sumitomo Group are the lowest, since it is noted for its cohesiveness and internal strength.

²⁰ In Fiscal Year 1989, excluding banks and insurance companies, there are in Japan approximately 2 million firms (Hojin Kigyo Tokei Nenpo, Ministry of Finance). Of these, 164 belong to one of six groups. They account for 4.2 percent of the total employees in 2 million firms, 13.5 percent of the total assets, and 14.9 percent of the total sales in 1985-89. Toyo Keizai Shinpo-sha, 1989 Kigyo Keiretsu Sohan, p.29. The corresponding figures are 153, 5.9, 17.5, and 15.0 in FY 1970, 154, 5.1, 15.8, and 14.9 in FY 1975, and 185, 4.9, 15.3, and 16.1 in FY 1983 (1985 edition). Also, see Table 7-2 below.

(2) The Cooperative Relationship among Banks within a Corporate Group

The essence of the second type of criticism is that a change of core bank position between banks, especially between a city bank and a trust bank, in a group should not be counted as a case of "unstable (US)" relationship because of close cooperation among them. It explains that such change occurs as a result of shift of borrower's demand between long- and short-term debt, and asserts that the share of US cases will decrease drastically both in the whole of large firms and in member firms of Six Major Corporate Groups when those cases are removed from US to S. I examine first how the assertion applies to the whole, second to member firms, and to examine the validity of the cooperative assumption of the argument. Here again we need not modify the above conclusion.

Table 6-4 shows $(NUS(1) + NS)/NT$ instead of NS/NT , $(NUS(1) + NS(1) + NS(2))/NT$ instead of $NS(1)/NT$.²² The figures for the whole are in the 1st column, and those for corporate group members in the 2nd, 3rd, and 4th column. The 1st column shows that the share of firms with stable core bank relationship in T increases by 5.6 percent, from 66.8 percent to 72.4 percent. Here again let me leave with readers the evaluation of 5.6 percent increase and the share of 72.4 percent. My view is that 5.6 percent is not drastic.²³

-----Table 6-4 -----

²¹ S includes such an exceptional case as Tobu Railway which is a member of Fuyo Group's Shacho-kai and has a stable core bank relationship with Mitsui Trust Bank.

²² I examine only the cooperative behavior between a city bank and a trust bank, since an insurance company seldom takes a core bank position.

²³ The figure for $(NUS(1) + NS(1) + NS(2))/NT$, 54.1 percent, is 12.9 percent higher than that for $NS(1)/NT$, however, it is by adding $NS(2)/NT$, 8.3 percent, rather than by $NUS(1)/NT$, 4.6 percent.

The figures for corporate group members worth more attention, since cooperation among banks in a group is mainly for members. $NUS(1)/NT$ for $H(T)$, 8.0 percent, is larger than that for T , and $(NUS(1) + NS)/NT$ for $H(T)$ is higher than that for T by 5.7 percent. However, as a comparison with Table 6-3 shows, $NUS(1)/NT$ is 18.9 percent for $H(A)$ and 1.2 percent for $H(B)$, thus most of 8.0 percent comes from $H(A)$, ex-zaibatsu-type groups.²⁴ Also $NS(2)/NT$ is small for $H(B)$, and figures in Table 6-4 for $H(B)$ are almost the same with those for T . Therefore, even when the assertion on the cooperative behavior is true and there exists a nucleus called corporate groups, it applies only to the ex-zaibatsu-type. The relative size of such "nucleus" and the importance of the difference in indices from those for T suggest no need for modification of the above conclusion.

Moreover, the validity of the assumption is unpersuasive with three points: (1) As shown in Table 6-1, $NUS(2)$, 20, is almost the half of $NUS(1)$, 42. Thus, an exchange of core bank position between city bank and trust bank in different groups occurs half as frequently as that within a group; (2) $NUS(4)$, 49, is larger than $NUS(1)$, 42. An exchange between city bank and Long Term Credit Bank occurs more often than that between city bank and trust bank within a group. This is inconsistent with the assertion that the latter occurs as a result of borrower's demand shift between long- and short-term debt, since LTCBs are specialized in long-term loans and belong to no group²⁵; (3) In only 15 of 54 firms in $S(2)$ city bank of the same group as the core bank (trust bank) takes the second largest share. Only in 9 of remaining 39 cases city bank of the same group takes the

²⁴ In $H(3)$, Sumitomo Group, $NUS(1)$ is 6 and $NS(2)$ is 1, whose sum is equal to $NS(1)$.

²⁵ Almost the same is true for member firms of Six Major Corporate Groups, since $NUS(1) = 11$, $NUS(2) = 2$, and $NUS(4) = 16$. The picture changes when divided into $H(A)$ and $H(B)$. The corresponding figures for $H(A)$ are 10, 0, and 3, and for $H(B)$ are 1, 2, and 13, and thus the assumption appears to be valid for ex-zaibatsu-type groups. However, note that, as mentioned in the previous note, $NUS(1)$ for Sumitomo is 6, which dominates the picture.

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largest share among city banks, whose sum amounts only to 24, 44.4 percent of 54 cases.

6-3. "Mainbank" and Core Bank

I examine the other side of "Mainbank" argument, functions and their importance to the Japanese economy, in the following two sections, for which in this section as preparation I have to go into the details of the conventional view.

"Mainbank" is typically used like "a tragedy not having a Mainbank" and "a tragedy of a firm in too close (or adhesive) relationship with Mainbank."²⁶ The definition in the former use is by definition different from core bank.

Like keiretsu, "Mainbank" is a slangy word used by economic journalism. It has been used so frequently, but few care what it actually means. A wide variety exists for the "definition." Kure and Shima[1984, pp.26-27] is a representative example: "It depends on an agreement between a bank and a firm. A firm borrows from and deposits to the Mainbank the larger amount than other banks. In return, the Mainbank makes the maximum possible support to the firm in terms of loans and etc. when it faces difficulty in funds raising and falls into distress. ... Keiretsu loan, which is closer than Mainbank relationship, is a loan to a firm which a bank has stocks of and send directors to. Mainbank sometimes changes, but in Keiretsu loan relationship partners seldom change." However, in Kojin case expressed as "a tragedy of not having a Mainbank," DKB which has the largest share of loans among banks holds 3.44 percent of stocks (the fourth largest share next to three life insurance companies) and sends two directors in Oct. 1974, just before it bankrupts. Daiichi Life Insurance

²⁶ The former is used for Kojin (p.28 of Toyo Keizai, 6 Sept. 1975) and the latter for Eidai Industries (p.19 of Ekonomisuto, 4 April 1978). The former is used also for Ohsawa Shokai (p.72 of Nikkei Business, 16 April 1984).

holds the largest share of stocks, 8.38 percent, sends the president,²⁷ and has almost the same amount of loans. The popular expression of that time suggests neither of them or none of the four is the Mainbank, but Kure and Shima's definition suggests either (or both) is the Mainbank and keiretsu loan relationship which seldom changes the partners exists.

Note that "it depends on an agreement between a bank and a firm" is emphasized, in addition to such observable features as share and rank in loans and stockholdings among lenders and the number of dispatched executives. However, this "agreement" is implicit and so vague, as there is no such contract called "Mainbank contract," and neither side has means to make sure the existence. The attached importance may differ between a lender and a borrower, and the closeness of the relationship may differ between cases and greatly change over time.²⁸

Thus, there is neither clear definition of "Mainbank" nor a common understanding of the "Mainbank-view." I pick up two types of Mainbank function, and examine how frequently the alleged behaviors are observed. Two types of function are both to be observed in an emergency. The first is "big pipe" function, which must be most clearly observed in tight-money period and when a borrower needs a large quantity of funds raising. The second is "lender of the last resort" function, which appears when "a firm falls into distress" (or it becomes a "risky borrower"), or when such rumors begin to spread in the market.

My conclusion is in the negative for both, therefore, opposite to the conventional view. Recall again that I am talking about relationship between a large firm and a large bank which in total occupies only a small portion of the Japanese economy.

²⁷ Yuichi Nishiyama, the president, was sent for reconstruction by Daiichi Life Insurance, where he was an executive managing director. He has been the president since 1961 (p.27, Toyo Keizai, 6 Sept. 1975).

²⁸ Many also support a view said to be a statement of a famous manager who made great success in reconstructing firms in bankruptcy: "Mainbank is a financial institution which holds an umbrella over a firm on sunny days but closes it when it rains."

6-4. Function of Mainbank: (1) "Big Pipe" Function

The big pipe function is to be divided into two subtypes. The first one functions to secure necessary funds in a tight-money period,²⁹ which suggests that the Mainbank's loan share increases in such periods. This subfunction leads to a view that a large firm in a Mainbank relationship enjoys an advantage of using a stable big pipe for funds raising and can commit equipment and R&D investments for long-run growth. The second functions when a firm needs a large quantity of additional funds raising. Typically asserted that the Mainbank first makes a loan for a large share of the additional funds raising and induces the others to follow,³⁰ therefore it suggests that the Mainbank's loan share increases when the amount of borrowings increases drastically. This subfunction leads to a view that such a large firm can enjoy a wider choice set of alternatives in a rapidly changing environment.

Taking three points into consideration, I choose three industries, electric power companies, general trading companies, and real estate companies, and examine the "big pipe" function for large firms in each industry: (1) where a large firm is the representative large borrower; (2) where a large firm has a Mainbank; (3) where few think of the possibility of bankruptcy of a large firm. (1) is because we are talking about a large quantity of funds raising and its importance for the Japanese economy. (2)

²⁹ The most popular phrases which this function reminds us of is "cutting mutually loans to other banks' Mainbank-borrowers." In a tight-money period, Mainbank is alleged to decrease or reject demands for loans of such a firm as is in Mainbank relationship with other banks, since it has a big pipe for recovery. Whether it is true is an empirical question. Kure and Shima[1984, p.69] asserts that in tight-money period banks tend to put higher priority to loans for firms with close relationship, however, Mr. Kajiwara expresses an opposite view: "Under such tight-money situation a bank can find a chance to begin trade with new customers. It therefore decreases loans to firms with the closest relationship, and attacks new customers" (p.72 of Shukan Diamond, 24 March 1984).

³⁰ Representative cases for the view are the role of Daiichi Bank for Kawasaki Steel in the construction of new steel mill in Chiba and Mitsui Bank for Toray in the introduction of Nylon technology. What we are interested in is the frequency of such events.

is to see clearly the big pipe function. (3) is because the examination of the function for "risky borrowers" is the subject of the next section.

Observation does not support the big pipe function view in all three sectors.

Electric Power Companies

I choose electric power companies for (1) and (3), not for (2). In Japan there are nine, each of which is a local monopoly. They are all large borrowers,³¹ and have expanded rapidly total borrowings. Observation does not support the big-pipe-function-view in this sector.

The relationships between each firm and banks have three features worth attention: (1) Industrial Bank of Japan (hereafter, IBJ) takes the core bank position in all cases³²; (2) each firm diversifies the source of funds tremendously, however, the share and rank of each lender has been quite stable; (3) several banks make loans of the same amount. Thus, the relationships are stable and each firm can raise a large quantity of funds though it has no Mainbank relationship.

In the case of Tokyo Electric Power, for example, IBJ(9.6)³³ takes the core bank position, next to Japan Development Bank(18.2). Long Term Credit Bank of Japan takes the third share, and five trust banks (hereafter, TB) take the next positions in the order of Mitsui, Mitsubishi, Yasuda, Sumitomo, and Toyo. However, two life insurance companies, Daiichi(3.2) and Nihon, and one city bank, Mitsui(2.5), have larger share than Toyo Trust Bank. City banks except for Tokyo form five groups, in the stable order of loan shares, (Mitsui) - (Mitsubishi, Fuji, DKB) - (Daiwa) -

³¹ Even the smallest, Hokuriku Electric Power, borrows ¥249 billion in March 1983, and the largest, Tokyo Electric Power, ¥3,644 billion. The corresponding figure is ¥294 billion for Nissan (0 for Toyota), ¥273 billion for Hitachi, and ¥1,015 billion for Mitsubishi Heavy Industries.

³² Here again I do not count Japan Development Bank as a core bank.

³³ The figure in parentheses is the average of loan share in percent in 1973 and that in 1983.

(Sumitomo, Sanwa, Kyowa) - (Tokai, Saitama, Takugin, Taiyo, Kobe). Each bank in a group has the same share.³⁴

Thus, no bank appears to have functioned as a big pipe for each electric power company. The above features are to be explained with either of the views: (1) a result of a borrower's choice from a wide feasible set of alternatives³⁵; (2) a result of cooperative behavior (possibly led by a specific bank) of banks in allocating the shares. As often suggested, so many lenders are competing fiercely for larger share, and the possibility of (2) is small. Therefore, each firm has an opportunity to borrow from a wide variety of lenders, that is, to use an open market, and need not a big pipe relationship with a specific bank.

General Trading Companies (Sogo Shosha)

General trading companies are a group of large borrowers, comparable with electric power companies,³⁶ and are different from the latter in that each of them is a core member of major corporate groups. Observation does not support the big-pipe-function-view in this sector, either. Here I select one from each Six Major Corporate Groups, Mitsui & Co., Mitsubishi Corporation, Sumitomo Corporation, Marubeni Corporation, Nissho Iwai Corporation, and C. Itoh & Co. (hereafter, Bussan, Shoji, Sumisho, Marubeni, Nissho, C. Itoh).³⁷

A drastic decline of Mainbank's loan share during the period for study is a remarkable common feature, which is a result of the introduction

³⁴ In the case of Chugoku Electric Power, nine city banks have almost the same share.

³⁵ It takes various factors into consideration. To make use of a large local bank in the operating area is an example, such as Chugoku Electric Power and Hiroshima Bank, Shikoku Electric Power and Hyakujushi Bank.

³⁶ Even the smallest, Sumitomo, borrows ¥709 billion in March 1983, and the largest, Bussan, ¥1,868 billion.

³⁷ Judging from Shacho-kai membership, Nissho belongs to two groups, and DKB group includes two in the list. Also note that loans to C. Itoh from DKB is larger than that from Sumitomo Bank only since March 1978.

of a restriction by the government on big loans to one borrower. It was first introduced as an "administrative guidance" and adopted as the article 13 of Banking Law,³⁸ therefore, the decline was especially drastic in a year prior to the time of the enforcement in March 1980.³⁹

Two periods are worth attention: [period I] from April 1979 to March 1980, a year prior to the enforcement of the above restriction on big loans; [period II] the period till March 1974 and the following period till March 1976. In [period I] loans to general trading company not only from Mainbank but also from other banks decrease drastically. Investigation of the adjustment process to a change in the environment provides information on the working mechanism of the system and the behavioristic feature of participants, especially that of Mainbank and a borrower. [Period II] is divided into two. The two years till March 1974 are the last phase of the High-Growth era in Japan. Japanese economy is in big boom, and general trading companies gather public's attention because of their active investments in land, stocks, and natural resources. It suffers from severe depression in the next two years caused by the first Oil Crisis and tight-money policy against the inflation.

For [period I], excluding Sumisho, I focus on five companies. The size is relatively small and the restriction is not effective for Sumisho. Five common features are worth attention, which suggests the same working mechanism as in the case for electric power companies: (1) Loans from Mainbank decrease dramatically. The maximum decrease is 56 (145 - 89, in ¥ billion), that from Mitsui Bank to Bussan, the minimum 17 (89 - 72), from Sanwa Bank to Nissho, and the average 33; (2) Loans from the second largest lender (Bank of Tokyo in 3 cases) also decrease drastically. The maximum decrease is 25 (124 - 99), from Bank of Tokyo to Bussan, the minimum 4 (66 - 62), from DKB to Nissho, and the average 17; (3) Most of loans from

³⁸ Article 13, "credit facilities granted to one person," prohibits loans to one person in excess of 20 percent of the sum total of the bank's capital and reserves.

³⁹ At the time of enforcement, in only one case, from Mitsui Bank to Bussan, the restriction was not cleared.

IBJ, long Term Credit Bank of Japan, and city banks other than the largest 2 increase⁴⁰; (4) Almost the same applies to trust banks (TBs). Loans from the largest lender among TBs decrease (except that from Toyo TB to Nissho). The maximum decrease is 15 (81 - 66), that from Mitsubishi TB to Shoji, the minimum 3 (55 - 52), from Yasuda TB to Marubeni, and the average of four is 8.⁴¹ All loans from other TBs increase; (5) Among city banks except for Bank of Tokyo there are almost no change of ranking orders as lenders. The same is true for TBs.

These features are to be explained with either of the two views mentioned above for the case of electric power companies. So many lenders are competing fiercely for larger share also in this sector, and the possibility of (2) is small. Accordingly, though each general trading company has a Mainbank, it has an opportunity to borrow from a wide variety of lenders, that is, to use an open market. Therefore, we should not attach too much importance to a relationship with a Mainbank (or banks in a group).⁴²

Total amount of six general trading companies' borrowings in 1972 (at the end of March; hereafter, the same) is ¥2,795 billion, ¥4,354 billion in 1974, 1.56 times as large as that in 1972,⁴³ and ¥5,644 billion in 1976, 1.30 times as large as in 1974. Table 6-5 shows loan share of Mainbank, shown in parentheses. Comparison of figures for 1974 with those for 1972 reveals how a Mainbank relationship functions when a borrower needs a large quantity of additional funds raising, which thus enables to test the validity of the second subtype of big pipe function. The share rises in

⁴⁰ However, the largest lenders in three cases are exceptions: Fuji Bank to Bussan; DKB to Shoji; Bank of Tokyo to C. Itoh. In the first case, from 126 to 90.

⁴¹ However, the largest lender among TBs to C. Itoh is Sumitomo TB.

⁴² Note that TB in a group does not behave as suggested in 6-2. TB also decreased the loans instead of compensating the decrease of Mainbank loans. Note also that several largest lenders do not behave as a group. The decrease of loans from largest lenders was compensated by banks in lower ranks.

⁴³ The corresponding figure for 1970-72 is 1.69, therefore, the period 1972-74 is not an exception.

three cases, but declines in three cases. Thus, the observation does not support the conventional view. Two points also support the conclusion: (1) the average magnifying power of share rising cases, 1.55, is smaller than that of share declining group, 1.63; (2) in 1970-72 when the total borrowing increases even faster, Mainbank's share declines unanimously.⁴⁴ Comparison of figures for 1976 with those for 1974 enables to test the validity of the big pipe function in a tight-money period, the first subtype. The share of Mainbank declines in all cases, which implies that it is invalid.

----- Table 6-5 -----

Real Estate Companies

The third group is real estate companies, whose reason for choice is the same as general trading companies. Observation does not support the-big-pipe-function-view also in this sector. I choose four Shacho-kai members, Mitsui Real Estate, Mitsubishi Estate, Sumitomo Realty & Development, Tokyo Tatemono, and one large non-member firm, Tokyu Land.⁴⁵ Table 6-6 shows the loan share of a Mainbank (here, core bank, shown in parentheses) at seven points of time.

Total borrowing of 5 firms in 1974 is 1.47 times as large as that in 1972, and in only one case (Mitsubishi Estate) the share of Mainbank rises. Thus, as for general trading companies, the second subtype of big-pipe-function-view is not valid for real estate companies. Also in 1970-72 when total borrowing increases even faster (magnifying power is 1.83), Mainbank's share rises only in two cases. In the next two years under

⁴⁴ As mentioned above, loans to C. Itoh from DKB is smaller than that from Sumitomo Bank till March 1977. The share of the latter is 14.0 percent in 1970, 15.0 in 72, and 13.2 in 74.

⁴⁵ Compared with others, Tokyo Tatemono is relatively small in size. The largest, Mitsui Real Estate borrows ¥389 billion in March 1983, the fourth largest, Sumitomo Realty & Dev. ¥218 billion, but Tokyo Tatemono ¥45 billion.

tight-money policy, total borrowing increases by 1.30 times, however, only in one case (Sumitomo Realty and Dev.) Mainbank's share rises.⁴⁶ Also in 1980-82 when firms other than Mitsubishi Estate increase borrowings (four firm average magnifying power is 1.28) after an interval of stable borrowing growth,⁴⁷ in no firm except Mitsubishi Estate rises Mainbank's share. Thus, the first subtype of big-pipe-function-view is not valid for real estate companies.

----- Table 6-6 -----

6-5. Function of Mainbank: (2) "Lender of the Last Resort" Function

An Illustration: The Case of Eidai

I take the case of Eidai Industries to illustrate roughly the "lender of the last resort" function (hereafter, last-resort-function) in the conventional Mainbank-view. Eidai was a manufacturer of prefabricated houses listed on First Section of Tokyo Stock Exchange, and petitioned the application of the Company Resuscitation Law and went bankrupt on 20 February 1978. It is known to suffer from business depression since the end of 1974, and since the settling term ending in December 1975 it reports a large deficit and stockholders' dividend is zero. In the autumn of 1975 five banks agree to make cooperative loans for reconstruction under the leadership of the "Mainbank," Daiwa Bank.⁴⁸ They agree to make additional loans and exempt it from interest payment by ¥2 billion every half year.

⁴⁶ The magnifying power of Mitsubishi Estate's borrowing in 1974 to that in 1972 is 1.20, and 1976 to 1974 is 1.42. The corresponding figures for Sumitomo Realty & Dev. are 2.11 and 1.27. Note that, in both cases which show behavior exceptionally favorable for the conventional view, the Mainbank's share declines in the period of relatively faster borrowing increase, in 1974-76 for Mitsubishi and 1972-74 for Sumitomo.

⁴⁷ Total borrowing in 1980 is 1.01 times as large as that in 1976.

⁴⁸ "Though Bank of Tokyo and DKB were Mainbanks, Daiwa Bank attacks the position in 1960s by increasing stockholdings and loans and acquired it in the second half of 1960s" (Suzuki[1978, p.14]).

Thus, an economic journalism comments the case as "the collapse of a 'Myth' that there is no bankruptcy among bank-managed-firms."⁴⁹ Table 6-7 shows the total loans to Eidai, loan shares of five banks, and the total of five bank's shares. By December 1974 when the worsening of the business became widely known, the total loans had increased dramatically, forming a clear contrast with the next stable growth.

----- Table 6-7 -----

Table 6-7, coupled with other figures behind, illustrates typically the last-resort-function of "Mainbank" with four points: (1) Reflecting the agreement on cooperative loans for reconstruction, the total of five bank's shares increases drastically, especially after 1975. Loans from banks other than the five decrease unanimously in 1974-76; (2) Among the five, the role of two city banks, B(1) and B(2) (especially that of B(1)), becomes dominant, which forms a clear contrast with other three banks with almost constant loan shares; (3) The process observed as (1) and (2) begins one or two years before 1975. It is after this process that major lenders ask the borrower to propose a plan for reconstruction, and negotiate for cooperative loans⁵⁰; (4) Not only the "Mainbank" but also four other banks (at least B(2)) function as the last resort. Members decided or forced to join the agreement are the major lenders at the beginning of the process mentioned in (3).⁵¹ The other factors such as the length and size of past transaction seems to be indecisive.⁵²

⁴⁹ Ekonomisuto, 4 April 1978, p.16.

⁵⁰ Daiwa Bank sent in March 1976 Mr. Kiuchi, then the president of Eguchi Investment Trust Management Company, to Eidai as the president, and in February 1977 sent again as the president Mr. Kawakami, then a executive managing director of Daiwa Bank and famous as competent. See Ekonomisuto, 4 April 1978, p.18.

⁵¹ Note that the best choice for each lender at this moment is to recover loans and escape from here, if possible.

⁵² For instance, loan from B(3), Fuji Bank, was 0 in 1969, only ¥0.15 billion and ranked as the 16th largest in 1971.

Neither we need to know nor this is the place to discuss the details of such issues as, "why Eidai went bankrupt at this moment?" "who decided it?" "why Mainbank or a group of banks had maintained their cooperative commitment?" and "what made such cooperative behaviors possible?" The essential question for us here is how prevalent are and how frequently we observe in Japan such phenomena as we see among Eidai, Daiwa Bank and other four banks. My conclusion is that it is rather rare.⁵³

Borrower "In an Emergency" and "Risky Borrower"

The problem of critical importance here is how to specify borrowers "in an emergency," that is, "risky borrowers."⁵⁴ I adopt a typical image of a firm of which a bank needs the greatest care: the beginning of red accounts is the first warning signal; the second signal lights when red accounts continue three years, as it is thought to be "structural" rather than "temporary"; the third and last signal lights when a borrower asks lenders to exempt from interest payment. at this stage, the total liabilities exceed the total assets in most cases, and the borrower is in the state of "bank-managed-firm."⁵⁵

Monitoring carefully the borrower, each bank tries hard to recover as much loans as possible before the third signal lights. If, as often argued, a Mainbank has the most advantageous access to critical information on the

⁵³ The case of Kojin was treated differently by journalism, but to understand the difference from what appears is not easy. Kojin began to suffer from business depression at almost the same time as Eidai, and went bankrupt by applying the Company Resuscitation Law on 28 August 1975. Also listed on First Section of Tokyo Stock Exchange, it was the "biggest bankruptcy since the War" and expressed as "a tragedy of not having a Mainbank." It for the first reports a deficit in April 1975 at the end of the settling term, and both recurring profit and net income are in the black in the previous term ending October 1974. Since the spring, DKB, Mitsubishi Trust Bank, and Mitsui Trust Bank sent personnel and it was a "bank-managed-firm." See Toyo Keizai, 6 Sept. 1975, p.26 and after.

⁵⁴ I do not use collected cases of failing firm as the object set for study. Hardly it can be an unbiased sample set, since some of them are merged before bankruptcy (Ataka Sangyo is the most prominent example) and others succeed in reconstruction.

⁵⁵ See Toyo Keizai, 11 March 1978, p.32 and after.

borrower, it can use it for own profit, of which other banks are well aware. They, while on the one hand guard against loan decrease of Mainbank, on the other hand accept it as a new business chance. Success of Mainbank's recovery totally depends on reaction of other lenders and the borrower, therefore, the drama appears complicated. Thus, the process on which information on the last-resort-function is to be observed ends before the third signal lights. We have to select firms with the second signal and examine Mainbank's behavior before and after the lighting. I adopt a list of "risky borrowers" from 11 August 1984 issue of Toyo Keizai. It collects all firms, listed on all Stock Exchanges, which have continually reported red in income before interest payment⁵⁶ at least three years till March 1984 inclusive, that is, firms with the second signal. Excluding banks and insurance companies, 134 of 1,646 firms are on the list.⁵⁷ I classify them into three groups: G(A), firms in red accounts for three years; G(B), firms in red accounts for four years; G(C), firms in red accounts for more than five years. The number of firms in G(A), NG(A), is 70, NG(B) is 27, and NG(C) is 37.⁵⁸

Stability of Relationship between Core bank and Risky Borrower

Table 6-8 corresponds to Table 6-2 and Table 6-4. Any clear difference in indices for the stability of relationship appears neither when I divide the group into firms listed on First Section of Tokyo Stock Exchange (column 1;

⁵⁶ The list uses it instead of recurring profit in order to exclude a noise of income from selling stocks and real estates.

⁵⁷ As no information on whether interest payment is exempted is available, the list includes firms with the third signal. Moreover, in some cases, above mentioned case of Kojin is an example, the third signal lights before the second.

⁵⁸ Riccar and Aiden which go bankrupt by the end of 1984 belong to G(A). Each of two firms deleted from the Stock Exchange List, Yutani Heavy Industries and Nittoh Metal, belongs to G(B) and G(C). This list does not cover all risky borrowers. For instance, Tokyo Ryowa Automobile goes bankrupt, which is not on the list.

relatively large firms) and the others (column 2), nor among G(A), G(B), and G(C) (column 3 - 5). Therefore, the indices for the whole group, G(T), in column 6 represent any of each subgroup.

----- Table 6-8 -----

Comparison of each index in column 6 with corresponding one for all firms listed on First Section of TSE, adopted in column 7 from Tables 6-2 and 6-4, unanimously shows that the former is lower than the latter, indicating that Mainbank relationship is more unstable for risky borrowers. Note that the difference of index is the largest in NS(1)/NT, that is, the difference is the clearest for relationship between a city bank and a risky borrower. In only 25 percent of cases, the same city bank takes the core bank position on two points of time.⁵⁹ The picture suggested by Table 6-8 is greatly different from the conventional Mainbank-view (recall, for example, Kure and Shima[1984]'s explanation mentioned in 6-3). A bank which makes the largest loan, the core bank, appears not to support the borrower so strongly as other banks but to draw back from the business with it when it falls into distress. It is especially remarkable among city banks.⁶⁰

Loan Share of Mainbank: Risky Borrowers(1)

The next question is whether Mainbank's share rises toward March 1984, that is, whether Mainbank functions as the lender of last resort. I compare core bank's share in 1973 with that in 1984. (As shown in Table 6-8, in more

⁵⁹ I examine here the stability in 11 years of interval, instead of 10 years for the preceding tables, as the list is based on figures for March 1984. Figures for 10 years till March 1983 do not affect the conclusion. Figures for 10 years corresponding to column 1 and G(T) are (56.9, 22.8, 67.5, 44.7) and (55.9, 23.7, 69.5, 49.2).

⁶⁰ Note, however, that the denominator is not the number of borrowers whose core bank in 1973 is a city bank. When, for instance, a city bank has special capability to avoid being a core bank of firms which are to become risky ten years later, my statement in the text is an overstatement.

than 40 percent of cases, the shares of different banks are compared.⁶¹⁾ Of 134 firms, comparison is possible in 123.⁶² Table 6-9 shows the direction of change in core bank's share. No observation for the last-resort-function is in the table, that is, neither in G(T) nor in any of G(A), G(B), and G(C).

----- Table 6-9 -----

The same is true for much shorter period. Table 6-10 shows the corresponding figures for 1983-84, and we need not change the conclusion. The number of cases where core bank's share declines is larger than that of the opposite.

----- Table 6-10 -----

Thus, a borrower "in an emergency" is not only unable to maintain stable relationship with Mainbank but also unable to expect it the last-resort-function.⁶³

Loan Share of Mainbank: Risky Borrowers (2)

⁶¹ Note that the following conclusion overstates the core bank's share than when we compare the share of core bank in 1973 with that of the same bank in 1984.

⁶² Figures are unavailable for 8 cases in 1973 and for 3 cases in 1984.

⁶³ For instance, in the case of Eidai, the loan share of Daiwa Bank in 1977 is higher than both of those in 1971 and 1976. However, that in 1974, just after it is known to suffer from business depression, is higher than both of those in 1972 and 1973, but lower than that in 1969. In the case of Kojin, the share of the core bank (Mitsubishi Trust Bank) in Oct. 1974 is higher than those (Mitsui Trust Bank) in April 1970 and April 1973, but lower than that (Mitsui Trust Bank) in April 1974. In the case of Riccar which is said to have no Mainbank, Mitsui Bank takes the core bank position in 1973, 1983, and 1984, and its loan share rises both in 1973-84 (9.8 percent to 12.4 percent) and in 1983-84 (10.7 percent to 12.4 percent). (However, the share in 1984 is lower than that in 1981 (12.7 percent) and in 1982 (14.0 percent).)

rising case is larger than the opposite. This tendency is much clearer, the longer the time for a firm "in an emergency."⁶⁷

The first column of Table 6-11 shows that in G(A), firms in red accounts for three years, the number of Mainbank's share rising case for 1973-84 is larger than the opposite. However, the corresponding figures for 1983-84 are 7 (up) and 13 (down), therefore, the opposite direction.⁶⁸

Summary of 6-5: Last-Resort-Function

A borrower "in an emergency" is not only unable to maintain stable relationship with Mainbank but also unable to expect it the last-resort-function. This conclusion applies more clearly to a borrower whose Mainbank is a city bank. Moreover, Mainbank's loan share toward firms "in an emergency" tends to decline in a large borrower case and rise in a small borrower's. This tendency begins to appear before the "warning signal" lights and becomes clearer during the warning signal period. This conclusion implies that Mainbank's function which the Mainbank-view suggests "in an emergency," the last-resort-function, can be observed only in a small borrower case, and that in a large borrower's which the Mainbank-view usually argues to function the opposite tendency is observed. Therefore, observation does not support the last-resort-function view.

6-6. Concluding Remarks

The main conclusion of this chapter is simply that the Mainbank-view is totally wrong. Such phenomena studied and discussed with Mainbank and related phrases, which are argued to be at the core of financial factors

⁶⁷ Kojin and Riccar belong to G(B, L) just before the bankruptcy. Eidai belongs to G(B, L) in 1974, and G(B, H) afterward.

⁶⁸ The change in total borrowing in 1983-84 shows that lenders as a whole are not drawing back from the business with them. No difference among G(A), G(B), and G(C), and total borrowing increases in 75 cases, decreases in 48, and no change in 8.

contributed much to the industrial success of Japan, do not exist. As there is neither clear definition of keywords nor a common understanding of the argument, an examination of the Mainbank-view is like that of the UFO-existence-view. Neither such stable Mainbank relationship between a large firm and a large bank, especially a city bank, nor such special Mainbank functions called "big-pipe" function and the "last resort" function do not exist.

The conclusion needs five comments. (1) The Mainbank-view appeared, was asserted, and was accepted as a component of the dual-structure-view. It is at least originally the same one as argued with such phrases as keiretsu loans, adhesion relationship, and the loan-concentration. Even today so many believe in the dual-structure-view and regard the Mainbank-view as identical with keiretsu-loan-view that few have ever tried to clarify the Mainbank argument, to show the concrete content, and to test empirically whether what is alleged has actually occurred. The conclusion of this chapter is consistent with those of the preceding chapters, especially that of chapter 5. It is a natural consequence of them, too.⁶⁹⁷⁰ (2) A borrower in Japan has an opportunity to borrow from a wider variety of lenders than presumed by the Mainbank-view, and is able to use an open financial market. The Mainbank-view, like keiretsu-loan-view and the loan-concentration-view, implicitly assumes its leader position in loan transaction, however, a borrower with such an opportunity need not accept the follower position. Therefore, the number of lenders are so large

⁶⁹ In the second last paragraph of 5-4, I write, "burden-shifting will not appear, will not continue, and will not be presumed to exist even on the supposition that each city bank has an 'adhesion relationship' with a group of large firms." My conclusion implies that this supposition is invalid. Thus, it reinforces that of chapter 5.

⁷⁰ Readers may comment again, "But where there's smoke, there's fire. Moreover, every borrower and lender emphasizes the importance of Mainbank relationship in Japan." Recall my rejoinder in Introduction for Part II. Every buyer and seller emphasizes the importance of mutual "trust" of some kind everywhere. Every wife and husband emphasizes the importance of love, and answers, "Yes, I love my partner," whenever asked and so long as she wants to maintain the status quo. Note that answering this way is so cheap and at least non-damaging.

and the core bank's share is so low.⁷¹ (3) Though theoretical research on the formation process and the function of "Mainbank" has been activated on the assumption that financial factors and characteristics have been so important for the industrial success of Japan, phenomena to be explained has never existed and the assumption is invalid. Thus, they are like attacks with high-tech weapons on a sand castle or a mirage.⁷² (4) Though there is no common understanding of the argument, the Mainbank-view assumes that it lowers loan rate and even exempt from paying it when a borrower falls into distress. While the problem of definition remains, as shown in the text, it occurs rarely, that is, only when the third warning signal lights and banks decide to let the borrower survive as a "bank-managed-firm."⁷³ (5) The Mainbank-view emphasizes the importance of its "monitoring" function, which assumes its magnificent capability. Coupled with the scale economy of monitoring function, one or a few banks monitor a borrower on behalf of other lenders, is a story. This view is often called a "signalling effect" view or a "cowbell effect" view. If it is true, however, how should we explain tremendous amount of bad loans Japanese banks, therefore, Japanese economy as a whole, suffer from in 1990s?⁷⁴

⁷¹ Thus, it is not like a fish in a pond controlled by a bank, and going out of the pond or moving to another will not risk the life. See fn. 18 above. Because of competition among banks, asking too much information has a borrower decide to change a lender. See, for instance, Ekonomisuto, 4 April 1978, p.18.

⁷² See Ramseyer[1993, pp.2011-13].

⁷³ Readers have to search for evidence for such reduction and exemption of interest payments in the Mainbank literature.

⁷⁴ Recall the argument of Suzuki[1983] mentioned in note 7 above. In Japan, and among Japanologists, such type of argument is quite popular. Another example concerns with industrial policy, which argues that the government selects a promising industry and functions as a cowbell (see Part III of this volume). The other one in policies for small business, which argues that government-affiliated financial institutions select promising SMEs and it has an effect of attracting private bank loans to them (see Miwa[1994, fn.37]). For the recent phenomena, see Miwa[1993, p.188]. Note that underlying these views in common is an assumption or belief that in Japan, government always has an ability to beat the market. It is almost equivalent to the view that the centralization of the economy works well and improves efficiency, and is close to the "Japan Inc. view," which is, at least, still open to careful investigation.

Appendix to Chapter 6: Brief Comments on Recent Mainbank Literature

Apart from the traditional type of literature on keiretsu loans and loan-concentration mechanism, a big wave of theoretical interests has concentrated on the formation process and function of "Mainbank" since 1980s, which accompanies empirical studies. Neither it is the place for a review nor I intend to do it. I stated my standpoint as the third comment in 6-6. I present seven comments on the literature for a reader who is going to study them.⁷⁵

(1) Note that every organization and every organizational transaction such as long-term relationship other than a pure type of market or "spot" transaction has "risk-sharing" character. Therefore, whenever asked why, instead of market transaction, such form of transaction is adopted, "risk-sharing" can be a right answer in that it is not wrong. (2) When she studies a literature based on "risk-sharing" explanation, ask how they actually share the risk. Recall the fourth comment in 6-6. Also note that other lenders will free ride if a Mainbank lowers interest payment when a borrower falls into distress. When a Mainbank asks a premium for "risk-sharing," a borrower in prosperity will refuse it. It is not sure about the Mainbank's behavior when it is in distress because of free riding behavior of other banks. If a borrower took it seriously, it would raise Mainbank's loan share and reduce the number of lenders.

(3) When she studies a literature based on "monitoring" explanation, ask who cares to monitor it and at what cost. Quite often a monitoring model is applied to such representative Japanese firms as Toyota, Hitachi, SONY, Mitsubishi Heavy Industries, Mitsubishi Corporation, and firms studied in 6-4. Who cares to monitor such firms? Who shares Mainbank's monitoring costs? Making loans to such firms is a safe business, and market mechanism must prevail here. Therefore, banks compete for larger share, but

⁷⁵ See, for example, Horiuchi[1989], Sheard[1989], Hoshi, Kasya, and Scharfstein[1990], and Aoki[1990]. For rather skeptical views, see Miwa[1991] and Ramseyer[1991, 1993].

their shares are rather stable like such homogeneous product industries as sugar, cement, and steel. If this comment is effective, a monitoring model cannot be effective at the core portion of the Japanese economy. (4) When she studies a literature applying a monitoring model to a firm "in an emergency," ask why other banks trust the Mainbank that it will behave as their representative and reveal timely accurate information on the borrower. As shown in the text, in many cases Mainbank relationship is unstable and the "last resort" function does not exist. (5) When she studies a literature on "monitoring" function, recall the fifth comment in 6-6. As clearly revealed in the tremendous amount of bad loans in 1990s', an underlying assumption of Mainbank's magnificent capability for monitoring is now dubious, which each bank has known well. Why do other banks trust in Mainbank's capability?

(6) Ask whether she is not preoccupied with a view that Japan is and must be peculiar and different from other economies. (7) Note that, as is usual the case, the authors of the Mainbank literature are only those who are interested in them. Once lost an interest on it, she will never be an author.⁷⁶

⁷⁶ Readers may comment, "why so many new literature on Mainbank?" Strong demand for the literature backed up by the dual-structure-view continually creates the supply, and now there exists a "Mainbank literature" industry, is my answer.

Table 6-1 Sales Growth Rate and Core Bank Stability (1973-83) (number of firms)

	Groups in Sales Growth Rate (ten year average; in percent)						Total (T)
	G(1) (--0.01)	G(2) (0-	G(3) (5.00-	G(4) (10.00-	G(5) (15.00-	G(6) (20.00-)	
A Total	4	65	306	331	90	23	819
B Unclassifiable (*)	1	5	15	38	14	3	76
C=A-B Classifiable	3	60	291	293	76	20	743
US Case Where Core Bank Changes	1	22	88	99	25	12	247
US (1) Change between City Bank and Trust Bank in the Same Group (**)	0	4	19	14	4	1	42
US (2) Change between City Bank and Trust Bank in Different Groups	1	3	4	9	2	1	20
US (3) Change between Trust Bank and LTCB (***)	0	0	3	7	1	1	12
US (4) Change between City Bank and LTCB	0	2	18	19	5	5	49
US (5) Change between LTCBs	0	1	1	2	0	1	5
US (6) Change between City Banks	0	3	3	8	3	0	17
US (7) Change between CCBAF (***) and the Other Bank	0	2	15	12	1	1	31
US (8) Change of the Number of Core Banks (****)	0	1	4	11	5	1	22
US (9) Others	0	6	21	17	4	1	49
S Case Where Core Bank Does not Change	2	38	203	194	51	8	496
S (1) City Bank is the Core Bank	0	22	118	134	25	7	306
S (2) Trust Bank is the Core Bank	1	6	28	16	3	0	54
S (3) LTCB is the Core Bank	0	8	39	26	18	1	92
S (4) CCBAF is the Core Bank	0	1	6	4	1	0	12
S (5) Multiple Core Banks (****)	0	0	5	5	2	0	12
S (6) Others	1	1	7	9	2	0	20

Notes: (*) Cases where outstanding borrowing at either point of time is zero, and cases unlisted in 1973 and data unavailable.

(**) Following Toyo Keizai Shinpo-sha, Kigyō Keiretsu Soran, (Mitsui Bank, Mitsui Trust Bank), (Mitsubishi Bank, Mitsubishi Trust Bank, Nippon Trust Bank), (Sumitomo Bank, Sumitomo Trust Bank), (Fuji Bank, Yasuda Trust Bank), (Sanwa Bank, Toyo Trust Bank) are in the same group.

(***) Long Term Credit Bank and Central Cooperative Bank of Agriculture and Forestry.

(****) Cases where multiple banks share the core bank position are classified to S(5) where no change in the number and the composition and to US(8) the remainings.

Source: Adopted from Miwa [1990, P. 145], Table 6-1.

Table 6-2 Indices of Core Bank Stability (1973-83) (in percent)

	G (1)	G (2)	G (3)	G (4)	G (5)	G (6)	Total (T)
NS/NT	66.7	63.3	69.8	66.2	67.1	40.0	66.8
NS (1) / NT	0	36.7	40.5	45.7	32.9	35.0	41.2

Note: See the notes for Table 6-1.

Source: Adopted from Miwa [1990, p. 145], Table 6-2.

Table 6-3 Six Major Corporate Groups and Indices of Core Bank Stability (1)
(1973-83) (in percent)

	Mitsui H(1)	Mitsubishi H(2)	Sumitomo H(3)	Fuyo H(4)	Sanwa H(5)	DKB H(6)	ex-zaibatsu type H(A)	bank type H(B)	all groups H(T)	Total T
A Total	24	28	21	29	42	45	73	111 (*)	184	819
C Classifiable	18	20	15	24	33	32	53	84 (**)	137	743
NS/NT	72.2	75.0	53.3	75.0	75.7	62.5	67.9	71.4	70.1	66.8
NS(1)/NT	55.0	65.0	46.6	50.0	57.6	50.0	56.6	54.8	55.5	41.2

Notes: See the notes for Table 6-1.

(*) Four firms belong both to H(5) and H(6), one of which belongs also to H(4).

(**) Among 47 case (=184-137), 38 are financial institutions and unlisted firms, and 9 are zero borrowings.

Source: Adopted from Miwa [1990, p.148], Table 6-3.

Table 6-4 Six Major Corporate Groups and Indices of Core Bank Stability (2)
(1973-83) (in percent)

	T	H(A)	H(B)	H(T)
(NIUS (1) +NS) /NT	72.4	86.8	72.6	78.1
(NIUS (1) +NS (1) +NS (2)) /NT	54.1	83.0	57.1	66.4

Note: See the notes for Table 6-3.

Source: adopted from Miwa [1990, p. 149], Table 6-4.

Table 6-5 Loan Share of Mainbank (in percent) (*): General Trading Companies

	Year	1970	1972	1974	1976
General Trading Company (Mainbank)		15.5	13.9	14.8	12.5
Mitsui & Co. (Mitsui Bank)		21.5	19.6	17.9	15.7
Mitsubishi Corporation (Mitsubishi Bank)		20.2	17.5	17.9	17.1
Sumitomo Corporation (Sumitomo Bank)		20.6	19.9	15.0	12.9
Marubeni Corporation (Fuji Bank)		21.7	19.1	21.3	19.7
Nissho Iwai Corporation (Sanwa Bank)		13.1	12.4	10.6	9.7
C. Itoh & Co. (DKB)					

Notes: (*) Borrowing from Export-Import Bank of Japan is subtracted from the denominator.

Source: Adopted from Miwa [1990, p. 158], Table 6-5.

Table 6-6 Loan Share of Mainbank (*) (in percent) : Real Estate Companies

	Year	1970	1972	1974	1976	1978	1980	1982(**)
Real Estate Company (Main bank)								
Mitsui Real Estate (Mitsui Trust Bank)		19.0	16.3	13.9	12.4	13.1	11.7	10.2
Mitsubishi Estate (Mitsubishi Bank)		10.0	14.8	20.5	17.4	17.3	17.0	17.9
Sumitomo Realty and Dev. (Sumitomo Bank)		18.1	22.2	17.9	19.0	16.6	17.9	14.8
Tokyo Tatemono (Fuji Bank)		52.2	44.7	32.3	28.5	25.2	21.6	16.9
Tokyo Land (Mitsui Trust Bank)		27.9	23.3	20.2	18.6	18.9	18.8	17.2

Note: (*) A core bank is treated as a Main bank.

(**) All figures are at the end of March each year except Tokyo Tatemono for which that at the end of December of the previous year is used.

Source: Adopted from Miwa [1990, p. 159], Table 6-6.

Table 6-7 Total Loans and Loan Share: The Case of Eidai

	Year		1969	1971	1972	1973	1974	1975	1976	1977(*)
Total Loans (in billion yen)			3.8	19.4	39.5	57.2	70.4	73.1	81.3	90.0
Loan Share (in percent)										
B (1) Daiwa Bank			28.1	18.0	10.6	12.4	18.0	21.9	27.8	33.8
B (2) Bank of Tokyo			2.6	2.6	7.3	8.6	11.1	11.8	16.5	21.4
B (3) Fuji Bank			-	1.0	5.6	8.0	7.7	7.7	7.6	8.7
B (4) DKB			18.4	6.7	6.6	5.9	6.4	6.8	7.3	7.9
B (5) Mitsubishi Trust Bank			21.1	10.3	10.4	10.1	12.6	12.0	12.2	11.9
B (T) The Total of Five Bank's Shares			65.8	38.7	40.5	45.1	55.8	60.2	71.3	83.7

Note: (*) Figures are at the end of December, each year.

Source: Adopted from Miwa [1990, p. 162], Table 6-7.

Total 6-8 Stability of Relationship between Core Bank and Risky Borrower
(1973-84)

	Firms Listed on First Section of TSE	Firms Listed on Other Stock Exchanges	G(A)	G(B)	G(C)	Total Risky Borrowers G(T)	Total T
NS/NT	(%)						
NS(1)/NT	60.3	56.5	54.9	70.8	50.0	58.3	66.8
(NUS(1)+NS)/NT	(%) 25.9	24.2	25.8	25.0	23.5	25.0	41.2
(NUS(1)+NS(1)+NS(2))/NT	(%) 70.7	66.1	67.7	70.8	64.7	68.3	72.4
(NUS(1)+NS(1)+NS(2))/NT	(%) 48.3	45.2	45.2	50.0	47.1	46.7	54.1
NT	(Number of Firms) 58	62	62	24	34	120	743

Source: Adapted from Miwa [1990, p. 165], Table 6-8.

Table 6-9 Direction of Change in Mainbank's Loan Share (number of firms):
 Risky Borrowers (1), (1973-84)

	G(A)	G(B)	G(C)	G(T)
Up	33	11	17	61
Down	28	13	18	59
No change	1	1	1	3
Total	62	25	36	123

Source: Adopted from Miwa[1990, p. 166], Table 6-9.

Table 6-10 Direction of Change in Mainbank's Loan Share (number of firms):
 Risky Borrowers (2), (1983-84)

	G (A)	G (B)	G (C)	G (T)
Up	33	11	13	57
Down	34	13	21	68
No change	2	2	2	6
Total	69	26	36	131

Source: Adopted from Miwa [1990, p. 166], Table 6-10.

Table 6-11 Direction of Change in Mainbank's Loan Share (number of firms) :
 Risky Borrowers (3), (1973-84), G(B, L)

	G(A)	G(B)	G(C)	G(T)
Up	12	1	3	16
Down	7	8	8	23
No change	1	1	0	2
Total	20	10	11	41 (*)

Notes: (*) Data unavailable for 2 cases for 1973.

Source: Adopted from Miwa [1990, p. 168], Table 6-11.

Table 6-12 Direction of Change in Mainbank's Loan Share (number of firms) :
 Risky Borrowers (4), (1973-84), G(S, H)

	G(A)	G(B)	G(C)	G(T)
Up	15	6	13	34
Down	9	4	5	18
No change	0	0	0	0
Total	24	10	18	52(*)

Notes: (*) Data unavailable for 5 cases for 1973.

Source: Adopted from Miwa[1990, p.168], Table 6-12.