# Shareholding and Lending Activity of Financial Institutions in Japan

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*This paper investigates the share ownership and lending activity of financial institutions with emphasis on the relationship between the two. We obtained the following results. The mobility of lending order was somewhat higher than that of shareholding order. The correlation between lending order and shareholding order was not so high. We found the different outcomes of the stability of main banks between main banks defined traditionally as the largest lenders and "main banks" defined by as being both largest lenders and top shareholders. It should be pointed out, however, that the above results were greatly modified when we analyzed banks, trust banks, and life insurance companies separately.*

## I. Introduction

Intercorporate share ownership (or the crossholding of shares) and bank lending (or the main bank system) have been investigated separately in Japan, except for a few studies. The purpose of this paper is to examine statistically the relationship between financial institutions' share ownership and their lending to non-financial corporations. Although economic rationality (or irrationality) and interpretations of the relationship between intercorporate share ownership and lending are discussed, the principal concern is to examine two large data sets of individual non-financial firms and individual financial institutions and to explain the empirical findings derived.

Two features of corporate finance in Japan, however, prompted our present undertaking. The first is the stability of the main bank system as studied by Miwa (1985), Suto and Takahashi (1986), Horiuchi and Fukuda (1987), and Hirota (1989) which were concerned with stability of the main bank system. The degree to which non-financial firms change their main banks was the principal interest, and there was a fairly solid consensus that the degree of stability was not as high (around 60~70%) as previously thought. Since all past studies were interested in the transition between main bank status and non-main bank status (i.e. the transition between one bank and the rest), we thought it would be interesting to inquire into the transition of all banks in terms of lending activity. Since the term "quasi" or "semi" main banks, which take second, third, or fourth position after main bank in terms of lending amount, is frequently used, not only main banks but also all other banks should be considered carefully. At the same time, we considered that it would be instructive to inquire into changes in shareholding order because it has not been closely scrutinized. The paper pays equal attention to changes in shareholding.

The second is intercorporate share ownership. Very few studies have paid attention to the role of share ownership in investigating bank lending activities or the main bank system, although several studies suggested the possibility of a relationship between them. Exceptions are Obata (1983) and Hirota (1989). The former is a thorough and comprehensive study of bank shareholdings but is not very systematic, and the latter is an examination of the relationship between only main banks and top shareholders. These two studies prompted us to investigate the relationship more quantitatively and systematically by utilizing large data sets. Specifically, the correlation between lending order and shareholding order is estimated, and implications discussed. When intercorporate share ownership, in particular financial institutions' ownership of other firms' shares, is the central subject, trust banks and insurance companies cannot be ignored. As will be shown later, trust banks and insurance companies (particularly the latter) are major holders of other firms' shares and, in some cases, hold more stock in several industries than do city banks. The paper gives equal weight to trust banks and insurance companies as well as to city banks and long-term credit banks.

The organization of the paper is as follows. Section II briefly examines various issues pertaining to corporate finance in Japan, and suggests some interpretations. Section III describes the data sources, and the empirical results of mobility tables (i.e. transition matrices) of both the lending and shareholding orders of various categories of financial institutions. Then, the relationship between lending and shareholding is examined by applying several elementary statistical techniques. Section IV focuses on firms which are the target of the largest lenders and the top shareholders, and gives several economic interpretations. Various definitions of a main bank are examined and discussed. Finally, in Section V, concluding remarks.

## II.   Main Banks and Intercorporate Share Ownership in Japan

Japan's main bank system has received considerable attention. A main bank is the biggest lender to any particular firm (called the largest lender for simplicity) among a large number of banks lending funds, although some sceptical opinions regarding this definition have been presented by Schoenholtz and Takeda (1985), Miwa (1985), and Suto and Takahashi (1986). Some economists maintain that a main bank handles foreign exchange transactions exclusively, holds the largest amount on current account, or acts as a financial intermediary for shareholding. These are surely simply the effects of being a main bank, while the single most important element is being the largest lender. Very few authors, however, have rigorously defined a main bank. Our definition of a main bank in the strict sense is one which is the largest lender to a firm and at the same time the top shareholder of that firm, as will be shown in Section IV. However, we do not proclaim that this is necessarily the most appropriate definition. Perhaps the "largest lender and top shareholder simultaneously" may be preferable. Some economists believe that shareholdings should be secondary or only complementary, and that the amount of lending is the most crucial factor in defining a main bank. We will examine various definitions of a main bank in Section IV. As for the rationality of the main bank system, various ideas were presented. For example, Nakatani (1984) and Ikeo (1985) suggested the concept of insurance against default risk of a borrower, while Aoki (1988) and Horiuchi (1990) stress the relationship with the long-term employment system in Japan.

Table 1 presents changes in the composition of share ownership. As is frequently mentioned, the proportion of institutional shareholders has increased constantly while

Table 1
Distribution of Share Ownership (%)

|  | 1950 | 1960 | 1970 | 1979 | 1984 | 1988 |
|---|---|---|---|---|---|---|
| Central and Local Governments | 3.1 | 0.5 | 0.3 | 0.2 | 0.9 | 0.4 |
| Financial Institutions | 12.6 | 20.4 | 32.3 | 38.8 | 41.5 | 44.1 |
| a.  Long-term Credit Banks, City and Regional Banks |  |  | (15.4) | (19.5) | (14.9) | (15.7) |
| b.  Trust Banks |  |  |  |  | (7.3) | (9.8) |
| c.  Life Insurance Cos. |  |  | (11.1) | (12.3) | (12.8) | (12.6) |
| d.  Casualty Insurance Cos. |  |  | (4.0) | (4.9) | (4.0) | (4.1) |
| e.  Others |  |  | (1.8) | (2.1) | (2.5) | (2.0) |
| Non-financial Firms | 11.0 | 21.3 | 23.1 | 26.1 | 30.1 | 29.0 |
| Securities Houses | 11.9 | 3.5 | 1.2 | 2.0 | 2.1 | 2.3 |
| Individuals | 61.3 | 46.7 | 39.9 | 30.4 | 20.1 | 19.9 |
| Foreigners | 0.0 | 0.2 | 0.2 | 0.0 | 5.3 | 4.3 |

Source:   Zenkoku Shoken Torihikisho Kyogikai, Share Distribution Survey, various years.

that of individual shareholders has declined constantly. In 1988 over 75 percent of shares in Japan were held by institutions (equivalently, non-individuals). Among institutional shareholders the portion held by trust banks and insurance companies was large, 27.2 percent of all shares outstanding. This number is larger than the 16.3 percent held by city, long-term credit, and regional banks. Therefore, it is quite important to investigate the role of trust banks and insurance companies as well as city, long-term credit, and regional banks in examining intercorporate shareholding and lending activities. Each category of financial institution behaves differently with respect to reasons for holding shares and in determining lending, and hence we provide empirical findings for each category as well as the aggregate of financial institutions.

Institutional share ownership is not only seen in Japan but is a world trend. Significant differences, however, between Japan and other industrialized countries must be recognized:

First, the motives for holding shares of other corporations are considerably different, even for financial institutions. Financial institutions in Japan hold shares of other corporations for other purposes than just income and capital gains.

Several such purposes have been suggested by various authors such as Aoki (1984), Tanigawa (1986), Horiuchi, Packer, and Fukuda (1988), Ariga (1989), Horiuchi (1990), Ito, Misumi, and Ichimura (1990), and others. For example, it is an essential precondition for long-term business relationship and for maintaining managers' independence from shareholders, as suggested by Horiuchi and others. It also serves as a barrier to the threat of merger and acquisition. Intercorporate share ownership enables firms to reduce corporate tax, as suggested by Aoki and Tanigawa. According to Horiuchi and Ariga, banks hold shares of other firms in order to ensure smooth monitoring, which could be one of the important causes of economies of scope between lending activity and other activities (including securities business) as suggested by Tachibanaki, Mitsui, and Kitagawa (1981). It may be useful to suggest one naive hypothesis, namely, that a financial institution which holds a substantial bloc of shares in a firm has the power to urge that firm to borrow large sums from it, and that a firm has to comply because it gains various benefit from the fact that the financial institution holds its shares.

Financial institutions in other countries regard shares as simply a normal financial asset which is expected to yield higher monetary returns. For Japan, the objectives of income and capital gains are usually less important. Share ownership by Japanese financial institutions is for other purposes as just described. Non-financial firms understand this. Therefore, Japanese financial institutions do not complain of low returns or yields. Institutional share ownership in other countries can perhaps be described as a principal-agency relationship since institutional shareholders are, to a large extent, really only agents for households. Institutional shareholders such as pension funds, trust funds, and other similar funds are more knowledgeable and skillful in asset management than individual shareholders. Needless to say, the above distinction between Japan and other

countries is somewhat oversimplified. For example, trust banks and life insurance companies in Japan which manage occupational (or enterprise) pensions seek higher monetary returns from share ownership than do other financial institutions such as banks.

Second, regulatory frameworks significantly affect and determine financial institutions' shareholding in other corporations. For example, the U.S. Banking Law of 1933 prohibits banks from holding shares and Japan imposes a maximum holding rate, 5 percent for banks and 10 percent for insurance companies according to Article 11 of the Anti-Trust Law, while the U.K. and West Germany (before unification) impose no concrete regulations. An interesting observation with respect to the U.K. and West Germany is that U.K. banks do not wish to hold shares in other corporations despite there being no regulation, while German banks actually hold very large blocs in other corporations, which suggests that regulations alone do not determine financial institutions' share ownership but that other factors such as economic rationality and historical background are also important. Such factors are certainly important in the case of Japan.

## III. Share Ownership and Lending Activity

### A. Data source

The *Kogin Zaimu Data File* gives the financial statements of nearly all financial firms in Japan. Despite the large number of items given in this data set, we have utilized only three: (1) financial institutions' names, (2) borrowers' names, and (3) the amount of lending, enabling us to rank the main lenders for each firm. In other words, it is possible to count the number of borrowers belonging to a particular order ranked by lending amount. Utilizing the number of borrowers for two different years, we can construct a transition matrix from one year to the other for each financial institution. However, since it is too cumbersome to evaluate all such matrices, aggregation is attempted. It should be noted that lending amounts are the sum of both short- and long-term lendings.

The second data source is the *Ookabunushi File* (principal shareholders' file), which gives the largest 20 (sometimes 30) shareholders and number of shares held respectively. Data is based on financial statements. Since financial institutions as well as corporated firms are principal shareholders in Japan as noted previously, it is possible to construct transition matrices for shareholdings which are similar to those for lendings. It is necessary, however, to eliminate non-financial corporate firms from the list because we are mainly interested in the relationship between financial institutions' lending activity and share ownership.

We used data for 1982 and 1986 to construct transition matrices for lending and shareholding. While it would be interesting to inquire into the situation during the period of rapid economic growth, crossholding data is not readily available and hence it is impossible to investigate rigorously. Nevertheless, some comments are included referring to casual observations and past studies.

The following categories of financial institutions were aggregated separately: (1) all financial institutions excluding governmental financial institutions and securities houses (since securities houses normally do not engage in lending, they are eliminated from the list); (2) private banks; (3) trust banks; and (4) insurance companies, in particular life insurance companies (casualty insurance companies were excluded because their lending is only very minor). Subsequent analyses are largely based on the above categories, drawing attention to the differences according to category.

## B.  Mobility tables for lending order and shareholding order

Table 2 comprises two transition tables for all financial institutions, one for lending (Table 2A), and the other for shareholding (Table 2B). The 21st rank represents all firms appearing below the 20th place either in 1982 or in 1986. We also prepared transition matrices which eliminated the 21st rank, but since there were no significant differences, we do not compare them here. Several useful findings can be derived from Table 2. Lending is discussed first. The top figure in each cell is the number of non-financial firms, and the lower one the percent share of the row total. The diagonal elements show no change in order of bank lending to non-financial firms. In particular, the (1×1) element signifies stability of the main bank system defined traditionally because it indicates the number of firms which received the largest loan amount in both years. Off-diagonal elements show some changes in lending order.

Table 2A provides us with the following observations. First, diagonal elements are normally much larger than off-diagonal ones. This is particularly true for the top left quadrant of the matrix. The ranking of lending by financial institutions is fairly constant and stable. This is especially true for financial institutions which maintain higher positions in the hierarchy of lending.

Second, values close to the diagonal elements are much smaller than actual diagonal values. However, values decline considerably as the order (i.e. distance from 1982 to 1986) widens. Let us take an example. We look at the second row, i.e. the second rank in 1982. The largest share is the diagonal element, namely 845 non-financial firms (57.72 percent) in 1986 out of 1464 non-financial firms in 1982. This signifies that 57.72 percent of firms retained second position in the borrowing hierarchy from particular financial institutions in both 1982 and 1986. In other words, 57.72 percent retained second position in financial institutions' lending hierarchy in 1986 among all financial institutions which ranked second in 1982. Adjacent elements to the diagonal one, namely 11.34 percent (2×1) and 12.98 percent (2×3) are much smaller than the diagonal element, namely 57.72 percent. Moving right, the share declines almost constantly. This implies that big changes in ranking rarely occur. It should be noted, however, that columns such as 13, 14, 15, 16, and 17 are not zero. Similar symmetry is observed at the extreme bottom left of the matrix. There are several cases in which the order changed dramatically.

Third, one of the most controversial subjects is discussed, namely, stability of the

Table 2A
Transition Matrix of Lending Order for All Financial Institutions from 1982 to 1986

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 99 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1148 | 180 | 45 | 39 | 16 | 11 | 9 | 6 | 2 | 4 | 4 | 1 | 5 | 1 | 1 | 1 | 0 | 1 | 2 | 1 | 3 | 1480 |
| | 77.57 | 12.16 | 3.04 | 2.64 | 1.08 | 0.74 | 0.61 | 0.41 | 0.14 | 0.27 | 0.27 | 0.07 | 0.34 | 0.07 | 0.07 | 0.07 | 0.00 | 0.07 | 0.14 | 0.07 | 0.20 | |
| 2 | 166 | 845 | 190 | 82 | 54 | 39 | 31 | 15 | 7 | 9 | 8 | 6 | 3 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 5 | 1464 |
| | 11.34 | 57.72 | 12.98 | 5.60 | 3.69 | 2.66 | 2.12 | 1.02 | 0.48 | 0.61 | 0.55 | 0.41 | 0.20 | 0.07 | 0.00 | 0.07 | 0.14 | 0.00 | 0.00 | 0.00 | 0.34 | |
| 3 | 49 | 210 | 682 | 204 | 88 | 53 | 47 | 30 | 19 | 11 | 10 | 6 | 7 | 3 | 6 | 1 | 2 | 0 | 2 | 0 | 4 | 1434 |
| | 3.42 | 14.64 | 47.56 | 14.23 | 6.14 | 3.70 | 3.28 | 2.09 | 1.32 | 0.77 | 0.70 | 0.42 | 0.49 | 0.21 | 0.42 | 0.07 | 0.14 | 0.00 | 0.14 | 0.00 | 0.28 | |
| 4 | 48 | 78 | 218 | 534 | 177 | 103 | 79 | 42 | 44 | 20 | 15 | 13 | 13 | 8 | 3 | 2 | 2 | 4 | 1 | 1 | 7 | 1412 |
| | 3.40 | 5.52 | 15.44 | 37.82 | 12.54 | 7.29 | 5.59 | 2.97 | 3.12 | 1.42 | 1.06 | 0.92 | 0.92 | 0.57 | 0.21 | 0.14 | 0.14 | 0.28 | 0.07 | 0.07 | 0.50 | |
| 5 | 11 | 49 | 98 | 212 | 462 | 190 | 107 | 77 | 52 | 24 | 23 | 22 | 7 | 6 | 4 | 4 | 3 | 2 | 4 | 5 | 6 | 1368 |
| | 0.80 | 3.58 | 7.16 | 15.50 | 33.77 | 13.89 | 7.82 | 5.63 | 3.80 | 1.75 | 1.68 | 1.61 | 0.51 | 0.44 | 0.29 | 0.29 | 0.22 | 0.15 | 0.29 | 0.37 | 0.44 | |
| 6 | 13 | 35 | 60 | 108 | 195 | 393 | 170 | 92 | 73 | 50 | 29 | 19 | 18 | 15 | 8 | 8 | 9 | 6 | 6 | 0 | 14 | 1321 |
| | 0.98 | 2.65 | 4.54 | 8.18 | 14.76 | 29.75 | 12.87 | 6.96 | 5.53 | 3.79 | 2.20 | 1.44 | 1.36 | 1.14 | 0.61 | 0.61 | 0.68 | 0.45 | 0.45 | 0.00 | 1.06 | |
| 7 | 6 | 15 | 31 | 75 | 126 | 181 | 343 | 157 | 104 | 60 | 50 | 34 | 31 | 9 | 11 | 8 | 3 | 6 | 6 | 1 | 17 | 1274 |
| | 0.47 | 1.18 | 2.43 | 5.89 | 9.89 | 14.21 | 26.92 | 12.32 | 8.16 | 4.71 | 3.92 | 2.67 | 2.43 | 0.71 | 0.86 | 0.63 | 0.24 | 0.47 | 0.47 | 0.08 | 1.33 | |
| 8 | 11 | 13 | 31 | 36 | 86 | 133 | 137 | 294 | 144 | 82 | 44 | 43 | 33 | 24 | 17 | 11 | 7 | 11 | 5 | 6 | 24 | 1192 |
| | 0.92 | 1.09 | 2.60 | 3.02 | 7.21 | 11.16 | 11.49 | 24.66 | 12.08 | 6.88 | 3.69 | 3.61 | 2.77 | 2.01 | 1.43 | 0.92 | 0.59 | 0.92 | 0.42 | 0.50 | 2.01 | |
| 9 | 7 | 7 | 13 | 35 | 54 | 67 | 124 | 140 | 245 | 135 | 91 | 54 | 28 | 29 | 16 | 16 | 14 | 15 | 6 | 3 | 29 | 1128 |
| | 0.62 | 0.62 | 1.15 | 3.10 | 4.79 | 5.94 | 10.99 | 12.41 | 21.72 | 11.97 | 8.07 | 4.79 | 2.48 | 2.57 | 1.42 | 1.42 | 1.24 | 1.33 | 0.53 | 0.27 | 2.57 | |
| 10 | 4 | 8 | 14 | 23 | 30 | 42 | 68 | 107 | 125 | 224 | 118 | 69 | 49 | 32 | 31 | 21 | 12 | 16 | 11 | 4 | 29 | 1037 |
| | 0.39 | 0.77 | 1.35 | 2.22 | 2.89 | 4.05 | 6.56 | 10.32 | 12.05 | 21.60 | 11.38 | 6.65 | 4.73 | 3.09 | 2.99 | 2.03 | 1.16 | 1.54 | 1.06 | 0.39 | 2.80 | |
| 11 | 6 | 4 | 9 | 14 | 22 | 19 | 49 | 63 | 86 | 109 | 205 | 95 | 67 | 60 | 40 | 26 | 18 | 12 | 10 | 14 | 45 | 973 |
| | 0.62 | 0.41 | 0.92 | 1.44 | 2.26 | 1.95 | 5.04 | 6.47 | 8.84 | 11.20 | 21.07 | 9.76 | 6.89 | 6.17 | 4.11 | 2.67 | 1.85 | 1.23 | 1.03 | 1.44 | 4.62 | |
| 12 | 4 | 6 | 7 | 13 | 9 | 21 | 25 | 43 | 55 | 78 | 102 | 177 | 100 | 53 | 41 | 40 | 25 | 16 | 19 | 12 | 49 | 895 |
| | 0.45 | 0.67 | 0.78 | 1.45 | 1.01 | 2.35 | 2.79 | 4.80 | 6.15 | 8.72 | 11.40 | 19.78 | 11.17 | 5.92 | 4.58 | 4.47 | 2.79 | 1.79 | 2.12 | 1.34 | 5.47 | |
| 13 | 1 | 2 | 6 | 5 | 14 | 16 | 21 | 21 | 43 | 55 | 76 | 103 | 159 | 78 | 45 | 41 | 30 | 25 | 15 | 15 | 61 | 832 |
| | 0.12 | 0.24 | 0.72 | 0.60 | 1.68 | 1.92 | 2.52 | 2.52 | 5.17 | 6.61 | 9.13 | 12.38 | 19.11 | 9.38 | 5.41 | 4.93 | 3.61 | 3.00 | 1.80 | 1.80 | 7.33 | |
| 14 | 1 | 1 | 2 | 9 | 10 | 14 | 21 | 23 | 33 | 36 | 46 | 60 | 91 | 132 | 69 | 52 | 30 | 22 | 24 | 13 | 75 | 764 |
| | 0.13 | 0.13 | 0.26 | 1.18 | 1.31 | 1.83 | 2.75 | 3.01 | 4.32 | 4.71 | 6.02 | 7.85 | 11.91 | 17.28 | 9.03 | 6.81 | 3.93 | 2.88 | 3.14 | 1.70 | 9.82 | |
| 15 | 0 | 2 | 7 | 5 | 5 | 10 | 14 | 15 | 24 | 32 | 31 | 49 | 47 | 86 | 127 | 63 | 44 | 26 | 18 | 15 | 82 | 702 |
| | 0.00 | 0.28 | 1.00 | 0.71 | 0.71 | 1.42 | 1.99 | 2.14 | 3.42 | 4.56 | 4.42 | 6.98 | 6.70 | 12.25 | 18.09 | 8.97 | 6.27 | 3.70 | 2.56 | 2.14 | 11.68 | |
| 16 | 1 | 1 | 1 | 2 | 2 | 10 | 5 | 15 | 13 | 27 | 25 | 32 | 27 | 52 | 81 | 96 | 63 | 41 | 20 | 21 | 107 | 642 |
| | 0.16 | 0.16 | 0.16 | 0.31 | 0.31 | 1.56 | 0.78 | 2.34 | 2.02 | 4.21 | 3.89 | 4.98 | 4.21 | 8.10 | 12.62 | 14.95 | 9.81 | 6.39 | 3.12 | 3.27 | 16.67 | |
| 17 | 0 | 1 | 3 | 2 | 4 | 3 | 5 | 12 | 10 | 11 | 22 | 20 | 34 | 40 | 44 | 74 | 94 | 46 | 30 | 21 | 104 | 580 |
| | 0.00 | 0.17 | 0.52 | 0.34 | 0.69 | 0.52 | 0.86 | 2.07 | 1.72 | 1.90 | 3.79 | 3.45 | 5.86 | 6.90 | 7.59 | 12.76 | 16.21 | 7.93 | 5.17 | 3.62 | 17.93 | |
| 18 | 0 | 1 | 4 | 0 | 1 | 2 | 2 | 9 | 9 | 15 | 18 | 18 | 24 | 32 | 37 | 43 | 49 | 74 | 47 | 23 | 120 | 528 |
| | 0.00 | 0.19 | 0.76 | 0.00 | 0.19 | 0.38 | 0.38 | 1.70 | 1.70 | 2.84 | 3.41 | 3.41 | 4.55 | 6.06 | 7.01 | 8.14 | 9.28 | 14.02 | 8.90 | 4.36 | 22.73 | |
| 19 | 1 | 1 | 1 | 4 | 4 | 1 | 3 | 5 | 10 | 6 | 7 | 14 | 23 | 12 | 19 | 30 | 34 | 40 | 67 | 39 | 146 | 467 |
| | 0.21 | 0.21 | 0.21 | 0.86 | 0.86 | 0.21 | 0.64 | 1.07 | 2.14 | 1.28 | 1.50 | 3.00 | 4.93 | 2.57 | 4.07 | 6.42 | 7.28 | 8.57 | 14.35 | 8.35 | 31.26 | |
| 20 | 0 | 0 | 2 | 3 | 0 | 1 | 0 | 4 | 2 | 7 | 8 | 16 | 9 | 22 | 13 | 19 | 26 | 31 | 32 | 67 | 142 | 404 |
| | 0.00 | 0.00 | 0.50 | 0.74 | 0.00 | 0.25 | 0.00 | 0.99 | 0.50 | 1.73 | 1.98 | 3.96 | 2.23 | 5.45 | 3.22 | 4.70 | 6.44 | 7.67 | 7.92 | 16.58 | 35.15 | |
| 99 | 3 | 5 | 10 | 7 | 9 | 12 | 14 | 22 | 28 | 42 | 41 | 44 | 57 | 69 | 89 | 85 | 114 | 137 | 151 | 162 | 677 | 1778 |
| | 0.17 | 0.28 | 0.56 | 0.39 | 0.51 | 0.67 | 0.79 | 1.24 | 1.57 | 2.36 | 2.31 | 2.47 | 3.21 | 3.88 | 5.01 | 4.78 | 6.41 | 7.71 | 8.49 | 9.11 | 38.08 | |
| TOTAL | 1480 | 1464 | 1434 | 1412 | 1368 | 1321 | 1274 | 1192 | 1128 | 1037 | 973 | 895 | 832 | 764 | 702 | 642 | 581 | 531 | 476 | 423 | 1746 | 21675 |

Notes:   First column and row show rankings. Upper figures indicate number of firms, and lower ones percentage share of row total.

Table 2B
Transition Matrix of Shareholding Order for All Financial Institutions from 1982 to 1986

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 99 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1013 | 165 | 62 | 11 | 8 | 1 | 1 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 423 | 1688 |
| | 60.01 | 9.77 | 3.67 | 0.65 | 0.47 | 0.06 | 0.06 | 0.06 | 0.00 | 0.06 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.06 | |
| 2 | 121 | 823 | 183 | 62 | 20 | 7 | 6 | 4 | 3 | 2 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 425 | 1660 |
| | 7.29 | 49.58 | 11.02 | 3.73 | 1.20 | 0.42 | 0.36 | 0.24 | 0.18 | 0.12 | 0.12 | 0.00 | 0.06 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.60 | |
| 3 | 45 | 119 | 682 | 234 | 56 | 26 | 11 | 6 | 5 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 438 | 1626 |
| | 2.77 | 7.32 | 41.94 | 14.39 | 3.44 | 1.60 | 0.68 | 0.37 | 0.31 | 0.18 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.94 | |
| 4 | 14 | 51 | 123 | 557 | 222 | 83 | 46 | 23 | 9 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 431 | 1567 |
| | 0.89 | 3.25 | 7.85 | 35.55 | 14.17 | 5.30 | 2.94 | 1.47 | 0.57 | 0.26 | 0.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.50 | |
| 5 | 15 | 22 | 41 | 124 | 455 | 197 | 99 | 40 | 16 | 10 | 4 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 463 | 1493 |
| | 1.00 | 1.47 | 2.75 | 8.31 | 30.48 | 13.19 | 6.63 | 2.68 | 1.07 | 0.67 | 0.27 | 0.33 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.01 | |
| 6 | 9 | 8 | 27 | 43 | 121 | 392 | 187 | 69 | 32 | 22 | 6 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 460 | 1383 |
| | 0.65 | 0.58 | 1.95 | 3.11 | 8.75 | 28.34 | 13.52 | 4.99 | 2.31 | 1.59 | 0.43 | 0.14 | 0.29 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 33.26 | |
| 7 | 6 | 10 | 13 | 22 | 46 | 101 | 281 | 191 | 76 | 42 | 10 | 9 | 5 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 419 | 1233 |
| | 0.49 | 0.81 | 1.05 | 1.78 | 3.73 | 8.19 | 22.79 | 15.49 | 6.16 | 3.41 | 0.81 | 0.73 | 0.41 | 0.00 | 0.08 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 33.98 | |
| 8 | 2 | 4 | 9 | 17 | 29 | 34 | 90 | 228 | 130 | 68 | 36 | 15 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 397 | 1067 |
| | 0.19 | 0.37 | 0.84 | 1.59 | 2.72 | 3.19 | 8.43 | 21.37 | 12.18 | 6.37 | 3.37 | 1.41 | 0.37 | 0.19 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 37.21 | |
| 9 | 0 | 2 | 8 | 7 | 15 | 20 | 29 | 52 | 178 | 99 | 55 | 35 | 16 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 336 | 865 |
| | 0.00 | 0.23 | 0.92 | 0.81 | 1.73 | 2.31 | 3.35 | 6.01 | 20.58 | 11.45 | 6.36 | 4.05 | 1.85 | 0.92 | 0.46 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 38.84 | |
| 10 | 1 | 2 | 4 | 3 | 3 | 10 | 21 | 31 | 40 | 126 | 82 | 41 | 18 | 13 | 1 | 0 | 1 | 0 | 0 | 0 | 299 | 696 |
| | 0.14 | 0.29 | 0.57 | 0.43 | 0.43 | 1.44 | 3.02 | 4.45 | 5.75 | 18.10 | 11.78 | 5.89 | 2.59 | 1.87 | 0.14 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 | 42.96 | |
| 11 | 1 | 1 | 1 | 3 | 3 | 2 | 10 | 14 | 20 | 43 | 89 | 54 | 36 | 17 | 14 | 3 | 0 | 1 | 0 | 0 | 237 | 549 |
| | 0.18 | 0.18 | 0.18 | 0.55 | 0.55 | 0.36 | 1.82 | 2.55 | 3.64 | 7.83 | 16.21 | 9.84 | 6.56 | 3.10 | 2.55 | 0.55 | 0.00 | 0.18 | 0.00 | 0.00 | 43.17 | |
| 12 | 1 | 1 | 0 | 1 | 3 | 3 | 3 | 4 | 12 | 12 | 37 | 59 | 42 | 23 | 14 | 8 | 3 | 0 | 1 | 0 | 175 | 402 |
| | 0.25 | 0.25 | 0.00 | 0.25 | 0.75 | 0.75 | 0.75 | 1.00 | 2.99 | 2.99 | 9.20 | 14.68 | 10.45 | 5.72 | 3.48 | 1.99 | 0.75 | 0.00 | 0.25 | 0.00 | 43.53 | |
| 13 | 0 | 0 | 1 | 1 | 2 | 1 | 3 | 1 | 3 | 6 | 10 | 27 | 40 | 26 | 12 | 12 | 2 | 0 | 0 | 0 | 124 | 271 |
| | 0.00 | 0.00 | 0.37 | 0.37 | 0.74 | 0.37 | 1.11 | 0.37 | 1.11 | 2.21 | 3.69 | 9.96 | 14.76 | 9.59 | 4.43 | 4.43 | 0.74 | 0.00 | 0.00 | 0.00 | 45.76 | |
| 14 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | 3 | 3 | 1 | 4 | 7 | 11 | 28 | 17 | 5 | 8 | 3 | 0 | 0 | 87 | 183 |
| | 0.00 | 0.55 | 0.00 | 0.55 | 0.00 | 0.00 | 2.19 | 1.64 | 1.64 | 0.55 | 2.19 | 3.83 | 6.01 | 15.30 | 9.29 | 2.73 | 4.37 | 1.64 | 0.00 | 0.00 | 47.54 | |
| 15 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 2 | 5 | 8 | 9 | 21 | 10 | 6 | 0 | 1 | 0 | 52 | 118 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.85 | 0.85 | 0.00 | 0.85 | 0.00 | 1.69 | 4.24 | 7.63 | 7.63 | 17.80 | 8.47 | 5.08 | 0.00 | 0.85 | 0.00 | 44.07 | |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 8 | 3 | 1 | 1 | 1 | 33 | 57 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.77 | 7.02 | 14.04 | 5.26 | 1.75 | 1.75 | 1.75 | 57.89 | |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 3 | 0 | 1 | 1 | 13 | 24 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.33 | 16.67 | 12.50 | 0.00 | 4.17 | 4.17 | 54.17 | |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 66.67 | |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 50.00 | 0.00 | 0.00 | 50.00 | |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | |
| 99 | 202 | 207 | 240 | 263 | 319 | 348 | 335 | 338 | 334 | 291 | 250 | 199 | 149 | 106 | 54 | 40 | 23 | 11 | 4 | 2 | 0 | 3715 |
| | 5.44 | 5.57 | 6.46 | 7.08 | 8.59 | 9.37 | 9.02 | 9.10 | 8.99 | 7.83 | 6.73 | 5.36 | 4.01 | 2.85 | 1.45 | 1.08 | 0.62 | 0.30 | 0.11 | 0.05 | 0.00 | |
| TOTAL | 1430 | 1416 | 1394 | 1349 | 1302 | 1226 | 1128 | 1005 | 862 | 731 | 591 | 461 | 337 | 239 | 147 | 92 | 49 | 17 | 8 | 4 | 4818 | 18606 |

Notes:   First column and row show rankings. Upper figures indicate number of firms, and lower ones percentage share of row total.

main bank system defined traditionally. This is represented by the (1×1) element of the matrix. If we define a main bank as a bank which has the largest share of lending, 77.57 percent retained their position as main banks. In other words, 22.43 percent lost main bank status during the period. Compared with other studies, we obtained the highest stability. According to the present study, the main bank system defined traditionally is surprisingly stable.

It is necessary to explain in detail why this study obtained a very high degree of stability, or a very low rate of change in main banks defined traditionally, and some possible caveats. First, the present study relies only on lending amount, while some other studies consider not only lending amount but also other conditions. The effect of share-holding will be explained shortly. Second, Table 2 includes not only banks but also trust banks and insurance companies. Moreover, banks in this study include nearly all types of private banks, including regional banks and *sogo* banks. The majority of past studies only consider large banks, in particular city banks, and one or two long-term credit banks. The sample number of financial institutions in this study is over 200, while in other studies it is very limited, say 15 at most. The difference in the number of financial institutions is significant, although we admit that the role of city banks and long-term credit banks is far more important judging from the amount of lending. Nevertheless, it is also important to investigate the relationship between smaller banks and smaller firms because no attention has been paid to them so far. This leads us to the following point. Third, in the majority of past studies, borrowers from financial institutions were limited to listed corporations or large firms. This study, in principle, includes a large number of non-financial firms as borrowers. Thus, it is possible that the picture of banks' lending order is different from the usual understanding. In sum, the data used in this study is more extensive. Thus, readers should not be surprised that this study results in some different findings.

Table 2B is the transition matrix of shareholding from 1982 to 1986. Comparisons with lending order are emphasized during our interpretation. First, nearly all diagonal elements are somewhat smaller than those in the case of the lending table. However, diagonal elements are still much larger than off-diagonal elements. These two results suggest that most financial institutions retained the same share ownership position, although the degree is somewhat less than in the case of lending.

Second, the (1×1) element is examined. This represents the top shareholders and shows that all financial institutions retained 1,013 firms in 1986 of 1,688 firms in 1982 as top shareholders, a 60.01 percent rate. While this is fairly high, it is slightly lower than that with respect to retaining largest lender status. Whether changes in top shareholding are accompanied by changes in largest lender status will be examined later.

Third, while rates close to diagonal elements are fairly large, they are much lower than diagonal element ones, which is very similar to the lending matrix. There is, however, an important difference — rates in the bottom left and top right, i.e. extreme off-diagonal elements, are nearly all zero except for the last row and column. This implies

that few firms see dramatic changes in their order of intercorporate share ownership, i.e. the distance between the two rankings is not so wide when the order of financial institutions' share ownership is changed.

The above discussion suggests the necessity of inquiring into a comparison between the lending matrix and shareholding matrix with respect to overall mobility. Two measures are utilized to obtain such mobility based on the transition matrices. The first is the Bartholomew measure (Bartholomew, 1973), and the second the Shorrocks measure (Shorrocks, 1976, 1978). A measurement of mobility based on transition matrices is not easy because it involves several technical difficulties. For example, the assumptions of no new entries and/or no withdrawals, a common rank (or class) of transition matrices, etc. Since the number of observations in this study is large, such difficulties are not serious. Therefore, we do not adjust for new entries or withdrawals, nor pay attention to the number of classes in the matrices. As for the number of classes it is important to compare two matrices on the basis of a common class, say (5×5), (10×10), or others. We give two different results of mobility measures. The first is estimated for the entire transition matrices, although various ranks are selected. The second is estimated for (2×2) matrices, where the entire transition matrices are aggregated into (2×2). Various forms of distinctions about the order of ranking (i.e. classes) are adopted to make the (2×2) matrices.

Table 2C-I shows results based on entire matrices. Several observations can be made. First, both Bartholomew and Shorrocks measures show that the degree of mobility for the lending matrix is higher than that for the shareholding matrix. Financial institutions' lending order is more mobile. This may sound contradictory to the previous result where shareholding mobility as judged by diagonal elements was higher than that of the lending order. As noted previously, probability at the diagonal element for the shareholding matrix was lower than that for the lending matrix. The reason for obtaining a higher degree of mobility for the overall lending matrix is due to the inclusion of extreme off-diagonal elements. The values at such elements for the lending matrix were not zero, while those for the shareholding matrix were almost zero. At the same time, the contribution of elements which are close to the diagonal elements is not negligible. By combining these effects, we see that the lending order is more mobile than the share ownership order. It also suggests that it is somewhat misleading to evaluate the degree of mobility based only on diagonal elements. A judgement on mobility must be made based on all elements of a matrix, although a message from the diagonal elements, especially the (1×1) element, has a particular value and is intuitively appealing.

Second, as the number of classes of the matrix increases, the degree of mobility increases. Also, the difference between lending and shareholding widens with respect to degree of mobility as the number of classes increases. This is true for both the Bartholomew and the Shorrocks measures. It is not surprising to have an increasing degree of mobility accompanying more classes, because it gives increased possibility for new firms

Table 2C-I

Mobility in Lending Order and Shareholding Order for Financial Institutions

| Rank of Matrix | Bartholomew | | Shorrocks ($\alpha = 0.1$, T = 4) | |
|:---:|:---:|:---:|:---:|:---:|
| | Lending | Shareholding | Lending | Shareholding |
| 2 × 2 | 0.149 | 0.134 | 0.00887 | 0.00778 |
| 3 × 3 | 0.266 | 0.250 | 0.0236 | 0.0197 |
| 4 × 4 | 0.408 | 0.350 | 0.0458 | 0.0362 |
| 5 × 5 | 0.527 | 0.441 | 0.0709 | 0.0556 |
| 6 × 6 | 0.656 | 0.522 | 0.101 | 0.0776 |
| 7 × 7 | 0.796 | 0.620 | 0.134 | 0.104 |
| 8 × 8 | 0.920 | 0.708 | 0.168 | 0.135 |
| 9 × 9 | 1.042 | 0.779 | 0.206 | 0.160 |
| 10 × 10 | 1.144 | 0.856 | 0.241 | 0.187 |
| 11 × 11 | 1.244 | 0.916 | 0.275 | 0.220 |
| 12 × 12 | 1.340 | 0.976 | 0.308 | 0.254 |
| 13 × 13 | 1.435 | 1.028 | 0.344 | 0.291 |
| 14 × 14 | 1.517 | 1.082 | 0.378 | 0.319 |
| 15 × 15 | 1.594 | 1.119 | 0.410 | 0.345 |
| 16 × 16 | 1.667 | 1.140 | 0.444 | 0.366 |
| 17 × 17 | 1.734 | 1.151 | 0.478 | 0.395 |
| 18 × 18 | 1.810 | 1.177 | 0.507 | 0.455 |
| 19 × 19 | 1.884 | 1.206 | 0.534 | 0.459 |
| 20 × 20 | 1.942 | xxxx | 0.557 | xxxx |
| 21 × 21 | 2.242 | 7.422 | 0.600 | 0.652 |

Notes: Bartholomew measure is given by $B = \sum_i P^* \sum_j P_{ij}| i\text{-}j|$ where $P_i^*$ is the number of class i at equilibrium, and $P_{ij}$ is the transition matrix. The Shorrocks measure is given by $S = 1 - | det P |^{\frac{\alpha}{T}}$, where $\alpha > 0$ and T is the time period. The 21st rank contains all firms which are below the 20th rank either in 1982 or in 1986. The sign (xxxx) signifies that it was not possible to calculate degree of mobility for the (20 × 20) matrix because nearly all observations at the 20th rank were zero.

to enter. This obviously raises the degree of mobility. Therefore, a common number of classes must be applied in order to assure comparability with respect to degree of mobility.

Table 2C-II gives another measure which is estimated for the aggregated (2×2) matrices. The (2×2) matrix is made on the basis of the first part (i.e. up to the $n$th rank) and the second part (i.e. the rest of the ranks). We considered various values of $n$. This table is quite different from Table 2C-I. For example, shareholding order is more mobile than lending order if $n=1$, where the distinction between only the first rank and the rest is the target. We have already proposed this by focusing on the (1×1) element of the entire transition matrices. A similar situation is observed for all values of $n$. In other words, all aggregated (2×2) transition matrices show the fact that shareholding order is more

Table 2C-II
Mobility in Lending Order and Shareholding Order for All Financial Institutions
when Transition Matrices were Aggregated into (2 × 2)

|  | Bartholomew | | Shorrocks ($\alpha = 0.1$, T = 4) | |
| --- | --- | --- | --- | --- |
|  | Lending | Shareholding | Lending | Shareholding |
| (1 × 1)   and rest | 0.0306 | 0.0464 | 0.00686 | 0.0137 |
| (2 × 2)   and rest | 0.0558 | 0.0840 | 0.00677 | 0.0133 |
| (3 × 3)   and rest | 0.0796 | 0.124 | 0.00707 | 0.0139 |
| (4 × 4)   and rest | 0.0989 | 0.167 | 0.00725 | 0.0152 |
| (5 × 5)   and rest | 0.117 | 0.217 | 0.00769 | 0.0175 |
| (6 × 6)   and rest | 0.129 | 0.266 | 0.00784 | 0.0205 |
| (7 × 7)   and rest | 0.134 | 0.313 | 0.00783 | 0.0246 |
| (8 × 8)   and rest | 0.137 | 0.354 | 0.00794 | 0.0304 |
| (9 × 9)   and rest | 0.136 | 0.394 | 0.00801 | 0.0403 |
| (10 × 10) and rest | 0.135 | 0.425 | 0.00830 | 0.0586 |
| (11 × 11) and rest | 0.135 | 0.450 | 0.00876 | 0.0961 |
| (12 × 12) and rest | 0.134 | 0.468 | 0.00940 | 0.0527 |
| (13 × 13) and rest | 0.130 | 0.478 | 0.00990 | 0.0405 |
| (14 × 14) and rest | 0.127 | 0.485 | 0.0108 | 0.0340 |
| (15 × 15) and rest | 0.122 | 0.487 | 0.0118 | 0.0309 |
| (16 × 16) and rest | 0.118 | 0.489 | 0.0132 | 0.0290 |
| (17 × 17) and rest | 0.113 | 0.489 | 0.0149 | 0.0283 |
| (18 × 18) and rest | 0.107 | 0.489 | 0.0172 | 0.0280 |
| (19 × 19) and rest | 0.104 | 0.489 | 0.0213 | 0.0279 |
| (20 × 20) and rest | 0.0989 | 0.489 | 0.0276 | 0.0278 |

*Note: Aggregation made on the basis of the first n ranks (n = 1, ..., 20) and the rest of the ranks.*

mobile than lending order regardless of the value of $n$.

We believe that the result of Table 2C-I (i.e. without aggregating entire matrices into (2×2) matrices) is better for evaluating mobility because aggregation eliminates a substantial portion of information. Simply, an aggregation bias is possible. Therefore, we do not provide estimated results which correspond to Table 2C-II for various categories of financial institutions. Only the case for all financial institutions is presented for the purpose of revealing the difference. It should be noted, however, that some of the results such as $n=1$ have a particular value even in Table 2C-I.

Tables 3A and 3B are transition matrices for all banks, excluding trust banks. In other words, the samples are city banks, long-term credit banks, and regional banks. Also, the degree of mobility is presented. It is natural that there are some differences in numbers and shares between Table 2 (all financial institutions) and Table 3 (banks, excluding trust banks). Since overall results, however, are not so different, detailed

Table 3A
Transition Matrix of Lending Order for All Banks Excluding Trust Banks from 1982 to 1986

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 99 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1057 | 145 | 41 | 29 | 13 | 9 | 5 | 2 | 5 | 3 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 1316 |
|   | 80.32 | 11.02 | 3.12 | 2.20 | 0.99 | 0.68 | 0.38 | 0.15 | 0.38 | 0.23 | 0.08 | 0.00 | 0.15 | 0.00 | 0.08 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.15 | |
| 2 | 150 | 697 | 154 | 57 | 39 | 27 | 23 | 10 | 3 | 5 | 4 | 4 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 1179 |
|   | 12.72 | 59.12 | 13.06 | 4.83 | 3.31 | 2.29 | 1.95 | 0.85 | 0.25 | 0.42 | 0.34 | 0.34 | 0.08 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.34 | |
| 3 | 44 | 187 | 583 | 144 | 75 | 48 | 24 | 17 | 6 | 7 | 1 | 8 | 5 | 2 | 2 | 1 | 0 | 0 | 1 | 0 | 3 | 1158 |
|   | 3.80 | 16.15 | 50.35 | 12.44 | 6.48 | 4.15 | 2.07 | 1.47 | 0.52 | 0.60 | 0.09 | 0.69 | 0.43 | 0.17 | 0.17 | 0.09 | 0.00 | 0.00 | 0.09 | 0.00 | 0.26 | |
| 4 | 42 | 71 | 192 | 455 | 128 | 78 | 58 | 35 | 15 | 7 | 6 | 3 | 7 | 4 | 0 | 2 | 0 | 1 | 0 | 0 | 6 | 1110 |
|   | 3.78 | 6.40 | 17.30 | 40.99 | 11.53 | 7.03 | 5.23 | 3.15 | 1.35 | 0.63 | 0.54 | 0.27 | 0.63 | 0.36 | 0.00 | 0.18 | 0.00 | 0.09 | 0.00 | 0.00 | 0.54 | |
| 5 | 7 | 43 | 94 | 191 | 400 | 155 | 71 | 51 | 26 | 10 | 13 | 8 | 3 | 5 | 4 | 3 | 3 | 0 | 3 | 0 | 3 | 1093 |
|   | 0.64 | 3.93 | 8.60 | 17.47 | 36.60 | 14.18 | 6.50 | 4.67 | 2.38 | 0.91 | 1.19 | 0.73 | 0.27 | 0.46 | 0.37 | 0.27 | 0.27 | 0.00 | 0.27 | 0.00 | 0.27 | |
| 6 | 12 | 28 | 65 | 99 | 164 | 336 | 128 | 68 | 48 | 28 | 18 | 12 | 12 | 5 | 4 | 2 | 2 | 1 | 2 | 0 | 6 | 1040 |
|   | 1.15 | 2.69 | 6.25 | 9.52 | 15.77 | 32.31 | 12.31 | 6.54 | 4.62 | 2.69 | 1.73 | 1.15 | 1.15 | 0.48 | 0.38 | 0.19 | 0.19 | 0.10 | 0.19 | 0.00 | 0.58 | |
| 7 | 4 | 13 | 27 | 62 | 110 | 158 | 297 | 114 | 64 | 34 | 30 | 21 | 10 | 11 | 13 | 1 | 3 | 4 | 3 | 1 | 15 | 995 |
|   | 0.40 | 1.31 | 2.71 | 6.23 | 11.06 | 15.88 | 29.85 | 11.46 | 6.43 | 3.42 | 3.02 | 2.11 | 1.01 | 1.11 | 1.31 | 0.10 | 0.30 | 0.40 | 0.30 | 0.10 | 1.51 | |
| 8 | 9 | 13 | 28 | 22 | 63 | 102 | 136 | 277 | 100 | 57 | 39 | 20 | 16 | 16 | 7 | 5 | 4 | 3 | 5 | 3 | 12 | 937 |
|   | 0.96 | 1.39 | 2.99 | 2.35 | 6.72 | 10.89 | 14.51 | 29.56 | 10.67 | 6.08 | 4.16 | 2.13 | 1.71 | 1.71 | 0.75 | 0.53 | 0.43 | 0.32 | 0.53 | 0.32 | 1.28 | |
| 9 | 6 | 4 | 8 | 34 | 46 | 52 | 95 | 121 | 229 | 95 | 53 | 36 | 17 | 24 | 10 | 7 | 3 | 4 | 1 | 1 | 14 | 860 |
|   | 0.70 | 0.47 | 0.93 | 3.95 | 5.35 | 6.05 | 11.05 | 14.07 | 26.63 | 11.05 | 6.16 | 4.19 | 1.98 | 2.79 | 1.16 | 0.81 | 0.35 | 0.47 | 0.12 | 0.12 | 1.63 | |
| 10 | 3 | 2 | 7 | 16 | 18 | 36 | 49 | 82 | 108 | 199 | 82 | 48 | 46 | 18 | 15 | 10 | 9 | 4 | 6 | 4 | 17 | 779 |
|   | 0.39 | 0.26 | 0.90 | 2.05 | 2.31 | 4.62 | 6.29 | 10.53 | 13.86 | 25.55 | 10.53 | 6.16 | 5.91 | 2.31 | 1.93 | 1.28 | 1.16 | 0.51 | 0.77 | 0.51 | 2.18 | |
| 11 | 3 | 3 | 6 | 9 | 21 | 18 | 37 | 45 | 68 | 99 | 149 | 80 | 47 | 41 | 22 | 16 | 9 | 9 | 2 | 4 | 35 | 723 |
|   | 0.41 | 0.41 | 0.83 | 1.24 | 2.90 | 2.49 | 5.12 | 6.22 | 9.41 | 13.69 | 20.61 | 11.07 | 6.50 | 5.67 | 3.04 | 2.21 | 1.24 | 1.24 | 0.28 | 0.55 | 4.84 | |
| 12 | 4 | 3 | 6 | 11 | 5 | 16 | 24 | 39 | 37 | 59 | 110 | 134 | 71 | 38 | 21 | 18 | 14 | 9 | 5 | 5 | 25 | 654 |
|   | 0.61 | 0.46 | 0.92 | 1.68 | 0.76 | 2.45 | 3.67 | 5.96 | 5.66 | 9.02 | 16.82 | 20.49 | 10.86 | 5.81 | 3.21 | 2.75 | 2.14 | 1.38 | 0.76 | 0.76 | 3.82 | |
| 13 | 1 | 1 | 6 | 3 | 6 | 5 | 17 | 16 | 30 | 52 | 58 | 86 | 119 | 61 | 31 | 16 | 14 | 11 | 5 | 7 | 40 | 585 |
|   | 0.17 | 0.17 | 1.03 | 0.51 | 1.03 | 0.85 | 2.91 | 2.74 | 5.13 | 8.89 | 9.91 | 14.70 | 20.34 | 10.43 | 5.30 | 2.74 | 2.39 | 1.88 | 0.85 | 1.20 | 6.84 | |
| 14 | 0 | 1 | 4 | 5 | 9 | 15 | 8 | 15 | 23 | 23 | 37 | 54 | 64 | 98 | 54 | 23 | 17 | 11 | 10 | 4 | 42 | 517 |
|   | 0.00 | 0.19 | 0.77 | 0.97 | 1.74 | 2.90 | 1.55 | 2.90 | 4.45 | 4.45 | 7.16 | 10.44 | 12.38 | 18.96 | 10.44 | 4.45 | 3.29 | 2.13 | 1.93 | 0.77 | 8.12 | |
| 15 | 0 | 2 | 3 | 2 | 1 | 6 | 7 | 7 | 15 | 14 | 18 | 24 | 33 | 57 | 93 | 43 | 18 | 8 | 12 | 3 | 62 | 428 |
|   | 0.00 | 0.47 | 0.70 | 0.47 | 0.23 | 1.40 | 1.64 | 1.64 | 3.50 | 3.27 | 4.21 | 5.61 | 7.71 | 13.32 | 21.73 | 10.05 | 4.21 | 1.87 | 2.80 | 0.70 | 14.49 | |
| 16 | 0 | 1 | 1 | 0 | 2 | 4 | 6 | 7 | 10 | 16 | 16 | 18 | 14 | 33 | 40 | 76 | 39 | 30 | 10 | 7 | 46 | 376 |
|   | 0.00 | 0.27 | 0.27 | 0.00 | 0.53 | 1.06 | 1.60 | 1.86 | 2.66 | 4.26 | 4.26 | 4.79 | 3.72 | 8.78 | 10.64 | 20.21 | 10.37 | 7.98 | 2.66 | 1.86 | 12.23 | |
| 17 | 0 | 1 | 0 | 1 | 0 | 0 | 3 | 10 | 8 | 3 | 9 | 20 | 16 | 18 | 24 | 44 | 61 | 30 | 13 | 8 | 53 | 322 |
|   | 0.00 | 0.31 | 0.00 | 0.31 | 0.00 | 0.00 | 0.93 | 3.11 | 2.48 | 0.93 | 2.80 | 6.21 | 4.97 | 5.59 | 7.45 | 13.66 | 18.94 | 9.32 | 4.04 | 2.48 | 16.46 | |
| 18 | 1 | 0 | 2 | 2 | 2 | 1 | 2 | 4 | 4 | 3 | 12 | 5 | 14 | 13 | 11 | 27 | 29 | 40 | 21 | 11 | 58 | 262 |
|   | 0.38 | 0.00 | 0.76 | 0.76 | 0.76 | 0.38 | 0.76 | 1.53 | 1.53 | 1.15 | 4.58 | 1.91 | 5.34 | 4.96 | 4.20 | 10.31 | 11.07 | 15.27 | 8.02 | 4.20 | 22.14 | |
| 19 | 1 | 0 | 1 | 1 | 1 | 2 | 0 | 1 | 3 | 5 | 1 | 9 | 10 | 7 | 15 | 10 | 14 | 23 | 25 | 22 | 46 | 197 |
|   | 0.51 | 0.00 | 0.51 | 0.51 | 0.51 | 1.02 | 0.00 | 0.51 | 1.52 | 2.54 | 0.51 | 4.57 | 5.08 | 3.55 | 7.61 | 5.08 | 7.11 | 11.68 | 12.69 | 11.17 | 23.35 | |
| 20 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 5 | 5 | 11 | 7 | 9 | 15 | 16 | 12 | 49 | 141 |
|   | 0.00 | 0.71 | 0.00 | 0.00 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 1.42 | 1.42 | 1.42 | 3.55 | 3.55 | 7.80 | 4.96 | 6.38 | 10.64 | 11.35 | 8.51 | 34.75 | |
| 99 | 1 | 4 | 5 | 4 | 8 | 9 | 15 | 21 | 24 | 35 | 47 | 49 | 48 | 65 | 76 | 76 | 86 | 82 | 82 | 82 | 187 | 1006 |
|   | 0.10 | 0.40 | 0.50 | 0.40 | 0.80 | 0.89 | 1.49 | 2.09 | 2.39 | 3.48 | 4.67 | 4.87 | 4.77 | 6.46 | 7.55 | 7.55 | 8.55 | 8.15 | 8.15 | 8.15 | 18.59 | |
| TOTAL | 1345 | 1220 | 1233 | 1147 | 1112 | 1078 | 1006 | 943 | 827 | 756 | 706 | 641 | 560 | 521 | 454 | 387 | 336 | 285 | 222 | 174 | 725 | 15678 |

Notes:   First column and row show rankings. Upper figures indicate number of firms, and lower ones percentage share of row total.

Table 3B
Transition Matrix of Shareholding Order for All Banks Excluding Trust Banks from 1982 to 1986

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 99 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 946 | 156 | 22 | 9 | 1 | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 371 | 1510 |
| | 62.65 | 10.33 | 1.46 | 0.60 | 0.07 | 0.13 | 0.07 | 0.07 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.57 | |
| 2 | 61 | 587 | 141 | 36 | 14 | 8 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 303 | 1158 |
| | 5.27 | 50.69 | 12.18 | 3.11 | 1.21 | 0.69 | 0.26 | 0.26 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.17 | |
| 3 | 9 | 63 | 470 | 154 | 53 | 16 | 12 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 309 | 1091 |
| | 0.82 | 5.77 | 43.08 | 14.12 | 4.86 | 1.47 | 1.10 | 0.27 | 0.09 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.32 | |
| 4 | 5 | 17 | 71 | 324 | 131 | 39 | 18 | 8 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 279 | 899 |
| | 0.56 | 1.89 | 7.90 | 36.04 | 14.57 | 4.34 | 2.00 | 0.89 | 0.44 | 0.22 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.03 | |
| 5 | 0 | 4 | 18 | 42 | 195 | 97 | 36 | 18 | 9 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 244 | 667 |
| | 0.00 | 0.60 | 2.70 | 6.30 | 29.24 | 14.54 | 5.40 | 2.70 | 1.35 | 0.30 | 0.15 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 | 36.58 | |
| 6 | 0 | 2 | 6 | 16 | 32 | 141 | 67 | 20 | 7 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 194 | 496 |
| | 0.00 | 0.40 | 1.21 | 3.23 | 6.45 | 28.43 | 13.51 | 4.03 | 1.41 | 1.61 | 0.60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 39.11 | |
| 7 | 0 | 0 | 4 | 4 | 16 | 22 | 76 | 35 | 17 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 122 | 303 |
| | 0.00 | 0.00 | 1.32 | 1.32 | 5.28 | 7.26 | 25.08 | 11.55 | 5.61 | 1.32 | 0.99 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 40.26 | |
| 8 | 0 | 1 | 1 | 0 | 2 | 6 | 20 | 50 | 19 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 88 | 197 |
| | 0.00 | 0.51 | 0.51 | 0.00 | 1.02 | 3.05 | 10.15 | 25.38 | 9.64 | 2.03 | 2.54 | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 44.67 | |
| 9 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 10 | 19 | 8 | 2 | 3 | 0 | 0 | 0 | 0 | 39 | 84 |
| | 0.00 | 1.19 | 0.00 | 0.00 | 0.00 | 1.19 | 1.19 | 11.90 | 22.62 | 9.52 | 2.38 | 3.57 | 0.00 | 0.00 | 0.00 | 0.00 | 46.43 | |
| 10 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 9 | 4 | 7 | 3 | 0 | 0 | 0 | 0 | 18 | 45 |
| | 0.00 | 0.00 | 0.00 | 2.22 | 0.00 | 2.22 | 2.22 | 2.22 | 20.00 | 8.89 | 15.56 | 6.67 | 0.00 | 0.00 | 0.00 | 0.00 | 40.00 | |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 2 | 0 | 0 | 0 | 3 | 12 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 33.33 | 25.00 | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | 25.00 | |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 33.33 | 66.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 99 | 144 | 167 | 175 | 203 | 202 | 178 | 124 | 101 | 59 | 49 | 16 | 8 | 2 | 3 | 1 | 1 | 0 | 1433 |
| | 10.05 | 11.65 | 12.21 | 14.17 | 14.10 | 12.42 | 8.65 | 7.05 | 4.12 | 3.42 | 1.12 | 0.56 | 0.14 | 0.21 | 0.07 | 0.07 | 0.00 | |
| TOTAL | 1165 | 998 | 908 | 789 | 646 | 511 | 359 | 250 | 146 | 87 | 44 | 16 | 5 | 3 | 1 | 1 | 1970 | 7899 |

Notes:   First column and row show rankings. Upper figures indicate number of firms, and lower ones percentage share of row total.

## Table 3C
### Mobility in Lending Order and Shareholding Order for Banks
### (City Banks, Long-term Credit Banks, and Regional Banks)

| Rank of Matrix | Bartholomew | | Shorrocks ($\alpha = 0.1$, T = 4) | |
|---|---|---|---|---|
| | Lending | Shareholding | Lending | Shareholding |
| 2 × 2 | 0.144 | 0.113 | 0.00880 | 0.00670 |
| 3 × 3 | 0.260 | 0.190 | 0.0237 | 0.0164 |
| 4 × 4 | 0.383 | 0.300 | 0.0447 | 0.0317 |
| 5 × 5 | 0.496 | 0.389 | 0.0690 | 0.0494 |
| 6 × 6 | 0.622 | 0.478 | 0.0990 | 0.0698 |
| 7 × 7 | 0.734 | 0.591 | 0.130 | 0.0939 |
| 8 × 8 | 0.832 | 0.648 | 0.160 | 0.118 |
| 9 × 9 | 0.911 | 0.694 | 0.191 | 0.142 |
| 10 × 10 | 0.980 | 0.772 | 0.223 | 0.240 |
| 11 × 11 | 1.049 | 0.810 | 0.256 | 0.190 |
| 12 × 12 | 1.120 | 0.859 | 0.295 | 0.241 |
| 13 × 13 | 1.189 | 0.908 | 0.331 | 0.233 |
| 14 × 14 | 1.253 | 0.908 | 0.365 | 0.343 |
| 15 × 15 | 1.305 | – | 0.394 | – |
| 16 × 16 | 1.345 | – | 0.420 | – |
| 17 × 17 | 1.386 | – | 0.449 | – |
| 18 × 18 | 1.421 | – | 0.481 | – |
| 19 × 19 | 1.461 | – | 0.518 | – |
| 20 × 20 | 1.486 | – | 0.565 | – |
| 21 × 21 | 1.770 | – | 0.616 | – |

explanation is not given for Table 3. More interesting results are obtained for trust banks and life insurance companies if they are estimated separately.

Tables 4A and 4B are mobility tables of lending and shareholding for trust banks. The most important observation is the very high rates for keeping the same position with respect to the hierarchy of trust banks' lending, because all diagonal elements are larger than 55 percent. In particular, the (1×1) element is over 90 percent. Trust banks occupying first position in lending order are very likely to keep that position. It does not necessarily imply, however, that all these trust banks are the largest lenders because this table is only for trust banks. Nevertheless, it is important to recognize that the mobility of trust banks' lending order is very low, which is consistent with a general observation such that *yokonarabi* (a horizontal line) is strong at trust banks.

The picture of trust banks' shareholding is considerably different. The highest rate is only 59.02 percent for diagonal elements, and the great majority of even diagonal elements are about 30 percent. This high degree of mobility for trust banks reflects the fact

Table 4A

Transition Matrix of Lending Order for Trust Banks from 1982 to 1986

|  | 1\| | 2\| | 3\| | 4\| | 5\| | 6\| | 7\| | 99\| | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1134 \| | 100 \| | 12 \| | 4 \| | 1 \| | 1 \| | 1 \| | 4 | 1257 |
|  | 90.21 \| | 7.96 \| | 0.95 \| | 0.32 \| | 0.08 \| | 0.08 \| | 0.08 \| | 0.32 | |
| 2 | 87 \| | 664 \| | 83 \| | 19 \| | 4 \| | 0 \| | 0 \| | 12 | 869 |
|  | 10.01 \| | 76.41 \| | 9.55 \| | 2.19 \| | 0.46 \| | 0.00 \| | 0.00 \| | 1.38 | |
| 3 | 24 \| | 73 \| | 370 \| | 38 \| | 9 \| | 2 \| | 0 \| | 18 | 534 |
|  | 4.49 \| | 13.67 \| | 69.29 \| | 7.12 \| | 1.69 \| | 0.37 \| | 0.00 \| | 3.37 | |
| 4 | 3 \| | 18 \| | 41 \| | 183 \| | 16 \| | 6 \| | 1 \| | 31 | 299 |
|  | 1.00 \| | 6.02 \| | 13.71 \| | 61.20 \| | 5.35 \| | 2.01 \| | 0.33 \| | 10.37 | |
| 5 | 1 \| | 5 \| | 5 \| | 16 \| | 92 \| | 6 \| | 0 \| | 26 | 151 |
|  | 0.66 \| | 3.31 \| | 3.31 \| | 10.60 \| | 60.93 \| | 3.97 \| | 0.00 \| | 17.22 | |
| 6 | 0 \| | 2 \| | 3 \| | 6 \| | 7 \| | 37 \| | 1 \| | 9 | 65 |
|  | 0.00 \| | 3.08 \| | 4.62 \| | 9.23 \| | 10.77 \| | 56.92 \| | 1.54 \| | 13.85 | |
| 7 | 0 \| | 0 \| | 0 \| | 0 \| | 0 \| | 1 \| | 6 \| | 0 | 7 |
|  | 0.00 \| | 0.00 \| | 0.00 \| | 0.00 \| | 0.00 \| | 14.29 \| | 85.71 \| | 0.00 | |
| 99 | 10 \| | 13 \| | 20 \| | 19 \| | 11 \| | 11 \| | 1 \| | 0 | 85 |
|  | 11.76 \| | 15.29 \| | 23.53 \| | 22.35 \| | 12.94 \| | 12.94 \| | 1.18 \| | 0.00 | |
| TOTAL | 1259 | 875 | 534 | 285 | 140 | 64 | 10 | 100 | 3267 |

Table 4B

Transition Matrix of Shareholding Order for Trust Banks from 1982 to 1986

|  | 1\| | 2\| | 3\| | 4\| | 5\| | 6\| | 7\| | 99\| | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 700 \| | 92 \| | 23 \| | 8 \| | 4 \| | 1 \| | 0 \| | 358 | 1186 |
|  | 59.02 \| | 7.76 \| | 1.94 \| | 0.67 \| | 0.34 \| | 0.08 \| | 0.00 \| | 30.19 | |
| 2 | 58 \| | 160 \| | 34 \| | 18 \| | 5 \| | 1 \| | 1 \| | 196 | 473 |
|  | 12.26 \| | 33.83 \| | 7.19 \| | 3.81 \| | 1.06 \| | 0.21 \| | 0.21 \| | 41.44 | |
| 3 | 8 \| | 30 \| | 37 \| | 12 \| | 6 \| | 0 \| | 0 \| | 72 | 165 |
|  | 4.85 \| | 18.18 \| | 22.42 \| | 7.27 \| | 3.64 \| | 0.00 \| | 0.00 \| | 43.64 | |
| 4 | 3 \| | 0 \| | 3 \| | 11 \| | 2 \| | 0 \| | 0 \| | 20 | 39 |
|  | 7.69 \| | 0.00 \| | 7.69 \| | 28.21 \| | 5.13 \| | 0.00 \| | 0.00 \| | 51.28 | |
| 5 | 0 \| | 0 \| | 1 \| | 0 \| | 1 \| | 0 \| | 0 \| | 4 | 6 |
|  | 0.00 \| | 0.00 \| | 16.67 \| | 0.00 \| | 16.67 \| | 0.00 \| | 0.00 \| | 66.67 | |
| 99 | 381 \| | 375 \| | 272 \| | 165 \| | 91 \| | 31 \| | 1 \| | 0 | 1316 |
|  | 28.95 \| | 28.50 \| | 20.67 \| | 12.54 \| | 6.91 \| | 2.36 \| | 0.08 \| | 0.00 | |
| TOTAL | 1150 | 657 | 370 | 214 | 109 | 33 | 2 | 650 | 3185 |

Notes: First column and row show rankings. Upper figures indicate number of firms,
and lower ones percentage share of row total.

Table 5A

Transition Matrix of Lending Order for Life Insurance Companies from 1982 to 1986

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 99 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 755 | 105 | 25 | 4 | 2 | 0 | 1 | 0 | 0 | 35 | 927 |
| | 81.45 | 11.33 | 2.70 | 0.43 | 0.22 | 0.00 | 0.11 | 0.00 | 0.00 | 3.78 | |
| 2 | 107 | 375 | 49 | 21 | 3 | 1 | 1 | 0 | 0 | 50 | 607 |
| | 17.63 | 61.78 | 8.07 | 3.46 | 0.49 | 0.16 | 0.16 | 0.00 | 0.00 | 8.24 | |
| 3 | 24 | 51 | 203 | 22 | 10 | 2 | 1 | 1 | 0 | 50 | 364 |
| | 6.59 | 14.01 | 55.77 | 6.04 | 2.75 | 0.55 | 0.27 | 0.27 | 0.00 | 13.74 | |
| 4 | 7 | 14 | 26 | 98 | 20 | 4 | 1 | 1 | 0 | 49 | 220 |
| | 3.18 | 6.36 | 11.82 | 44.55 | 9.09 | 1.82 | 0.45 | 0.45 | 0.00 | 22.27 | |
| 5 | 0 | 4 | 8 | 21 | 62 | 5 | 0 | 0 | 1 | 38 | 139 |
| | 0.00 | 2.88 | 5.76 | 15.11 | 44.60 | 3.60 | 0.00 | 0.00 | 0.72 | 27.34 | |
| 6 | 0 | 5 | 3 | 2 | 8 | 32 | 1 | 1 | 0 | 24 | 76 |
| | 0.00 | 6.58 | 3.95 | 2.63 | 10.53 | 42.11 | 1.32 | 1.32 | 0.00 | 31.58 | |
| 7 | 0 | 0 | 1 | 2 | 0 | 3 | 17 | 0 | 1 | 12 | 36 |
| | 0.00 | 0.00 | 2.78 | 5.56 | 0.00 | 8.33 | 47.22 | 0.00 | 2.78 | 33.33 | |
| 8 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 6 | 1 | 10 | 20 |
| | 0.00 | 5.00 | 0.00 | 0.00 | 5.00 | 5.00 | 0.00 | 30.00 | 5.00 | 50.00 | |
| 9 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 2 | 6 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | 33.33 | 16.67 | 33.33 | |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | |
| 99 | 17 | 20 | 13 | 14 | 8 | 8 | 6 | 2 | 0 | 0 | 88 |
| | 19.32 | 22.73 | 14.77 | 15.91 | 9.09 | 9.09 | 6.82 | 2.27 | 0.00 | 0.00 | |
| TOTAL | 910 | 575 | 328 | 184 | 114 | 57 | 28 | 13 | 4 | 271 | 2484 |

Notes:  First column and row show rankings. Upper figures indicate number of firms, and lower ones percentage share of row total.

Table 5B

Transition Matrix of Shareholding Order for Life Insurance Companies from 1982 to 1986

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 99 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 981<br>67.15 | 73<br>5.00 | 7<br>0.48 | 1<br>0.07 | 1<br>0.07 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 398<br>27.24 | 1461 |
| 2 | 55<br>5.41 | 585<br>57.52 | 70<br>6.88 | 4<br>0.39 | 1<br>0.10 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 302<br>29.70 | 1017 |
| 3 | 6<br>0.93 | 57<br>8.88 | 324<br>50.47 | 49<br>7.63 | 8<br>1.25 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 198<br>30.84 | 642 |
| 4 | 0<br>0.00 | 5<br>1.44 | 35<br>10.09 | 149<br>42.94 | 31<br>8.93 | 4<br>1.15 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 123<br>35.45 | 347 |
| 5 | 1<br>0.53 | 2<br>1.06 | 5<br>2.65 | 21<br>11.11 | 70<br>37.04 | 18<br>9.52 | 3<br>1.59 | 0<br>0.00 | 0<br>0.00 | 69<br>36.51 | 189 |
| 6 | 1<br>0.98 | 0<br>0.00 | 0<br>0.00 | 6<br>5.88 | 20<br>19.61 | 40<br>39.22 | 6<br>5.88 | 1<br>0.98 | 0<br>0.00 | 28<br>27.45 | 102 |
| 7 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 3<br>4.84 | 6<br>9.68 | 21<br>33.87 | 6<br>9.68 | 0<br>0.00 | 26<br>41.94 | 62 |
| 8 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 1<br>3.57 | 1<br>3.57 | 7<br>25.00 | 8<br>28.57 | 3<br>10.71 | 8<br>28.57 | 28 |
| 9 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 1<br>10.00 | 2<br>20.00 | 2<br>20.00 | 1<br>10.00 | 4<br>40.00 | 10 |
| 10 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 3<br>100.00 | 3 |
| 11 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 0<br>0.00 | 1<br>100.00 | 1 |
| 99 | 190<br>29.41 | 161<br>24.92 | 126<br>19.50 | 90<br>13.93 | 46<br>7.12 | 25<br>3.87 | 7<br>1.08 | 1<br>0.15 | 0<br>0.00 | 0<br>0.00 | 646 |
| TOTAL | 1234 | 883 | 567 | 320 | 181 | 95 | 46 | 18 | 4 | 1160 | 4508 |

Notes: First column and row show rankings. Upper figures indicate number of firms, and lower ones percentage share of row total.

that they are likely to buy and sell stocks much more frequently than banks. They are committed to volumious transactions in stocks. One example are *tokkin* funds.

Next, Tables 5A and 5B for life insurance companies are examined. Their lending order is fairly similar to that of banks if we compare diagonal elements. In other words, the likelihood of retaining the same position during the period for life insurance companies is almost the same as for banks. It is, however, lower than for trust banks. As for shareholding order, diagonal elements are smaller than those for lending. This is similar to the case of trust banks. However, overall mobility is lower in the case of shareholding order than that in the case of lending order, as confirmed by Table 5.

The difference in the degree of mobility in shareholding order can be examined by the composition of transactions of stocks by various investors. Insurance companies accounted for only 1.2 percent in 1982 and 0.6 percent in 1986 of total stock transactions as buyers and sellers. The figures for banks are 2.8 percent and 11.8 percent, and for individual investors 31.7 percent and 26.5 percent, respectively. It is impressive that insurance companies effect so few stock transactions, which indirectly supports that shareholding mobility for these companies is very low. There are several reasons. First, their motives for holding shares are different from those of other financial institutions.

Tables 4C and 5C
Mobility in Lending Order and Shareholding Order for
Trust Banks and Life Insurance Companies

| Rank of Matrix | Bartholomew | | Shorrocks ($\alpha = 0.1$, T = 4) | |
|---|---|---|---|---|
| | Lending | Shareholding | Lending | Shareholding |
| 4C (Trust Banks) | | | | |
| 2 x 2 | 0.0954 | 0.162 | 0.00547 | 0.0120 |
| 3 x 3 | 0.163 | 0.279 | 0.0147 | 0.0380 |
| 4 x 4 | 0.207 | 0.370 | 0.0250 | 0.0557 |
| 5 x 5 | 0.229 | 0.445 | 0.0337 | 0.0796 |
| 6 x 6 | 0.244 | – | 0.0454 | – |
| 7 x 7 | 0.248 | – | 0.0497 | – |
| 8 x 8 | 0.466 | – | 0.116 | – |
| 5C (Life Insurance Companies) | | | | |
| 2 x 2 | 0.158 | 0.0767 | 0.0105 | 0.00421 |
| 3 x 3 | 0.242 | 0.138 | 0.0221 | 0.0119 |
| 4 x 4 | 0.297 | 0.175 | 0.0353 | 0.0217 |
| 5 x 5 | 0.332 | 0.213 | 0.0513 | 0.0359 |
| 6 x 6 | 0.348 | 0.235 | 0.0643 | 0.0559 |
| 7 x 7 | 0.361 | 0.244 | 0.0722 | 0.0679 |
| 8 x 8 | 0.369 | 0.250 | 0.0823 | 0.0963 |
| 9 x 9 | 0.374 | 0.251 | 0.126 | 0.166 |

For example, strategy for enterprise pensions or collective life insurance, and *antei kabu-nushi* (silent shareholders), etc. Second, by law, capital gains from holding shares cannot be included in life insurers' funds for dividends.

## C.  Correlation between lending and shareholding

This part investigates the relationship between the lending activity of financial institutions and their shareholdings in client firms. We took a naive hypothesis such that when a bank (or a life insurance company) lends a large amount to a non-financial firm, it holds a large amount of stock in that non-financial firm for various reasons. This hypothesis is tested by data. Table 6 is presented to grasp easily the relationship between the lending and shareholding of financial institutions and shows estimated rank correlation coefficients (both Pearson and Spearman) between lending order indicated by "L" and shareholding order indicated by "S" for six combinations classified by (1) lending order and shareholding order, and (2) years, namely 1982 and 1986.

The two most interesting combinations in this table are L82 and S82, and L86 and S86, because they represent the relationship between lending order and shareholding order for the common years. Pearson coefficients for all financial institutions are considerably lower, namely 0.387 in 1982 and 0.357 in 1986, than those for L82 and L86, and

Table 6
Rank Correlation Coefficients between Lending Order and
Shareholding Order for All Industries

|  | L86 | L82 | S86 |  | L86 | S82 | S86 |
|---|---|---|---|---|---|---|---|
|  | All Financial Institutions | | |  | Trust Banks | | |
| L82 | 0.822 (0.844) | 0.387 (0.479) | 0.394 (0.476) | L82 | 0.881 (0.880) | 0.635 (0.668) | 0.627 (0.689) |
| L86 |  | 0.341 (0.448) | 0.357 (0.454) | L86 |  | 0.594 (0.627) | 0.601 (0.643) |
| S82 |  |  | 0.895 (0.902) | S82 |  |  | 0.608 (0.660) |
|  | Banks | | |  | Life Insurance Companies | | |
| L82 | 0.835 (0.856) | 0.595 (0.686) | 0.563 (0.661) | L32 | 0.847 (0.820) | 0.723 (0.732) | 0.722 (0.729) |
| L86 |  | 0.569 (0.673) | 0.540 (0.652) | L86 |  | 0.706 (0.677) | 0.723 (0.680) |
| S82 |  |  | 0.852 (0.870) | S82 |  |  | 0.937 (0.929) |

Notes: *L and S mean lending order and shareholding order, respectively. 82 and 86 signify years. Figures in tables are Pearson rank correlation coefficients, and those in parentheses Spearman rank correlation coefficients.*

S86 and S86. Since there is no significant difference between the Pearson and Spearman coefficient with respect to relative magnitude, only the Pearson coefficient is used to discuss this table. Implications of the coefficients, such as for L82 and L86, and S82 and S86 have already been extensively discussed in utilizing the transition matrices and degrees of mobility. The considerably lower correlation coefficients between lending order and shareholding order in both 1982 and 1986 for all financial institutions do not support the naive hypothesis previously proposed, namely that a financial institution holds a large amount of stock in a non-financial firm when it lends a large amount to the same firm. Financial institutions' motive for holding shares is fairly independent of the amount of lending to them. It is, however, impossible to deny that there is no connection, because estimated coefficients for all financial institutions are not negligible, namely the Pearson coefficients of 0.387 in 1982 and 0.357 in 1986. It is perhaps preferable to conceive of only a modest connection between the determination of shareholding and that of lending.

This modest connection is stronger for banks, trust banks, and life insurance companies than for all financial institutions, if evaluated separately. Estimated rank correlation coefficients are 0.595 and 0.540 for banks, 0.635 and 0.601 for trust banks, and 0.723 and 0.723 for life insurance companies. This may imply that financial institutions which belong to the same category such as banks, trust banks, or life insurance companies, may watch others in the same category carefully when deciding lending amount and shareholding. This is frequently termed *yokonarabi* (a horizontal line) for financial institutions in Japan. The result suggests that *yokonarabi* is strongest at life insurance companies, followed by trust banks, and lowest at banks, judging from the coefficients. Finally, it should be noted that the correlation coefficients declined in most cases from 1982 to 1986, which may signify that the degree of connection between lending and shareholding has been on a declining trend. It is possible to surmise that the degree of connection was much stronger during the period of rapid economic growth because the role of financial institutions was more significant than now in terms of industrial development and capital formation.

A reservation needs to be made with respect to the higher correlation coefficients for banks, trust banks, and life insurance companies than for all financial institutions, namely that a much larger number of sample financial institutions and non-financial firms was used for all financial institutions than banks, trust banks, and life insurance companies in Table 6. It is possible that smaller sample observations result in a lower rank correlation coefficient. In other words, it would be preferable to make an identical number of sample observations in order to ensure a rigorous comparison, if rank correlation coefficients were used. To maintain an identical number is not an easy task because of the large data sets adopted for the present study. Moreover, even if an identical number of observations were made, a significantly different result would be unlikely. Therefore, we have to keep in mind that Table 6 may include minor adjustments (or errors). It should be emphasized, however, that the interpretations based on Table 6 are not affected by any adjustments.

**D.   Changes in lending order and shareholding order**

Rank correlation coefficients between L82 and S82, and L86 and S86 given in Table 6 indicate changes in lending order and shareholding order to a limited extent. Table 7 presents the pattern of change, in particular direction in lending order and shareholding order from 1982 to 1986 more systematically. Concretely, changes both in lending order and in shareholding from 1982 to 1986 can be decomposed into three, namely (1) the rank

Table 7
Changes in Lending Order and Shareholding Order from 1982 to 1986

| Lending/Shareholding | Down | Equal | Up | Total |
|---|---|---|---|---|
| All Financial Institutions | | | | |
| Down | 1,010 (3.2) | 5,738 (18.4) | 850 (2.8) | 7,607 (24.4) |
| Equal | 4,502 (14.5) | 6,228 (20.1) | 5,184 (16.7) | 15,914 (51.1) |
| Up | 1,131 (3.6) | 5,541 (17.8) | 937 (3.0) | 7,607 (24.4) |
| Total | 6,643 (21.3) | 17,507 (56.2) | 6,980 (22.4) | 31,130 (100.0) |
| Banks | | | | |
| Down | 791 (3.5) | 5,280 (23.2) | 720 (3.2) | 6,791 (29.8) |
| Equal | 2,219 (9.7) | 4,483 (19.7) | 3,060 (13.4) | 9,762 (42.9) |
| Up | 779 (3.4) | 4,755 (20.9) | 676 (3.0) | 6,210 (27.3) |
| Total | 3,789 (16.6) | 14,518 (63.8) | 4,456 (19.6) | 22,763 (100.0) |
| Life Insurance Companies | | | | |
| Down | 193 (3.6) | 415 (7.8) | 127 (2.4) | 735 (13.9) |
| Equal | 1,123 (21.2) | 1,002 (18.9) | 1,157 (21.9) | 3,282 (62.0) |
| Up | 314 (5.9) | 726 (13.7) | 237 (4.5) | 1,277 (24.1) |
| Total | 1,630 (30.8) | 2,143 (40.5) | 1,521 (28.7) | 5,294 (100.0) |

Notes: Down, Equal, and Up mean direction of change in order from 1982 to 1986. Figures in
parentheses = share of total.

went down (called "Down"), (2) the rank was the same ("Equal"), or (3) the rank went up ("Up"). Since two dimensions, namely lending and shareholding are being considered, nine cells are prepared in Table 7.

All financial institutions are examined first. The largest share is given by the center cell, i.e. "Equal" for both lending order and shareholding order, 20.1 percent which is not impressively high but rather surprisingly low. There are not many cases which maintain the same rank in both lending order and shareholding order. This is in contrast to the previous result where diagonal elements in either the transition matrix of lending or the transition matrix of shareholding were considerably higher. In other words, the same ranks are retained to a large extent when we pay attention to either lending order or shareholding order.

The second highest shares, somewhat smaller than center cell shares, are located either in the "Equal" column/row, and are roughly equal, namely 14.5 percent, 18.4 percent, 17.8 percent, and 16.7 percent. This implies that the highest probability is associated with no change in either lending order or shareholding order, and that nearly the same probability of "Down," "Equal," and "Up" is observed on the shareholding side when no changes in order on the lending side are seen. The same story is true on the lending side when no changes in order on the shareholding side are observed.

Third, corner cell shares are very small and equally distributed, roughly speaking. It was anticipated that combinations of "Down" and "Down," and "Up" and "Up" would be higher than that of "Down" and "Up." The reason for this was that it was thought that ranks in both lending order and shareholding order would likely move in the same direction, but this turned out to be erroneous. It is false to assume that the rank of shareholding order will always be promoted (or demoted) when the rank in lending order is promoted (or demoted), or that shareholding will always increase (or decrease) when the amount of lending increases (or decreases). A similar assumption will work when the rank in shareholding is changed.

We have not paid any attention to the difference due to the category of financial institution with respect to changes in lending order and shareholding order. Similar tables as those for all financial institutions are presented for banks and life insurance companies separately. Some minor differences appear when considered separately. First, the largest rate is not given by the center cell (i.e. "Equal" and "Equal"), unlike the aggregated case. Second, "Equal" is largest on the shareholding side for banks, while it is largest on the lending side for life insurance companies, as figures in the total of each table suggest. Third, corner cells give the lowest rates in both cases, although the rates are very marginally different. An "Up" figure of 5.9 percent on the lending side and "Down" on the shareholding side is fairly high for life insurance companies in comparison with others, and indicates a modest inverse movement between lending order and shareholding order.

## IV.  Largest Lenders and Top Shareholders

This section is concerned with financial institutions which remain both largest lenders and top shareholders: these are our "main banks" in the strict sense. As described previously, the present study emphasizes two dimensions, namely lending and shareholding of financial institutions, to investigate the role of financial institutions in corporate finance in Japan. Therefore, we identify the biggest borrowers of banks whose largest shareholders are the same banks. It should be emphasized again that shareholding is ranked only among financial institutions.

Table 8 presents figures for "main banks." Since their mobility is a subject of controversy in various studies, column (A) is presented to give those maintaining main bank status in both 1982 and 1986, column (B) those maintaining main bank status in the same years but only from the popular and traditional viewpoint of being the largest lenders, and column (C) those continuing to be the top shareholders but with no consideration given to lending. Column (D) is presented as a reference to show the number of firms for which each bank was the main bank defined traditionally. The data source for column (D), *Tokyo Shōkō Research*, covers a much larger number of borrowers because it includes firms with equity capital of 50 million yen and over. The number of firms is 36,737. The great majority are non-listed, and they are unlikely to issue shares. This source provides data only for city banks. The difference between column (D) and columns (A), (B), and (C) must be remembered in interpreting Table 8 because the former includes a great number of non-listed firms while the latter three include only large listed firms.

We interpret column (A) first. Banks continue to be the largest lenders to a significant number of firms for which they are the largest shareholders. The largest number, 40, is posted by Fuji Bank, and followed by Daiichi-Kangyo, 35. Figures in parentheses are the percentage shares of all firms (290) that maintain the same status. The Industrial Bank of Japan and Tokai Bank have considerably high shares, 10.69 and 9.31 percent, respectively. It is interesting to note that ex-*zaibatsu* banks, or those in the big three *keiretsu* groups of Mitsui, Mitsubishi, and Sumitomo, do not have such high shares. Banks lacking large assets naturally have smaller numbers in column (A). This is supported also by column (D). Very few trust banks maintain main bank status in terms of both lending and shareholding, and only one among life insurance companies.

What kind of firms belong to column (A)? The firms and their capital values for representative banks are listed in the Appendix. It is obvious that most are not gigantic nor those belonging to the "Presidents' Club" (*Shacho-kai*) within the *keiretsu* group. Also, their capital value is generally not large on average. It was anticipated that firms which were likely to appear in column (A) would necessarily be extremely big ones and core members of the President's Club. It is possible to surmise that all financial institutions which belong to a *keiretsu* may act as a "main bank" together. For example,

Table 8
Number of Firms for which the Financial Institution is
the Largest Lender and/or Top Shareholder

| | (A) | (B) | (C) | (D) | | (A) | (B) | (C) |
|---|---|---|---|---|---|---|---|---|
| **Banks** | | | | | Trust Banks | | | |
| IBJ[a] | 31 (10.69) | 98 | 49 | | Mitsui | 4 | 21 | 9 |
| LTCB[b] | 5 (1.72) | 26 | 11 | | Mitsubishi | 4 | 20 | 10 |
| Daiichi-Kangyo | 35 (12.07) | 103 | 72 | 3,236 | Yasuda | 0 | 14 | 2 |
| Mitsui | 15 (5.17) | 51 | 35 | 1,760 | Sumitomo | 8 | 21 | 12 |
| Fuji | 40 (13.79) | 95 | 70 | 2,197 | Life Insurance | | | |
| Mitsubishi | 22 (7.59) | 79 | 49 | 2,543 | Nihon | 0 | 0 | 95 |
| Kyowa | 10 (3.45) | 26 | 15 | 848 | Chiyoda | 0 | 0 | 14 |
| Sanwa | 21 (7.26) | 66 | 60 | 2,073 | Daiichi | 0 | 0 | 41 |
| Sumitomo | 18 (6.21) | 80 | 42 | 2,155 | Yasuda | 0 | 0 | 20 |
| Daiwa | 0 (0.0) | 19 | 0 | 894 | Asahi | 1 | 1 | 24 |
| Tokai | 27 (9.31) | 55 | 51 | 1,640 | Meiji | 0 | 0 | 31 |
| Hokkaido-Taku. | 3 (1.03) | 7 | 7 | 787 | Mitsui | 0 | 0 | 20 |
| Taiyokobe | 7 (2.41) | 26 | 25 | 1,258 | Sumitomo | 0 | 0 | 35 |
| Tokyo | 1 (0.34) | 7 | 2 | 126 | | | | |
| Saitama | 8 (2.76) | 17 | 15 | 529 | | | | |

[a] IBJ:   Industrial Bank of Japan.
[b] LTCB:  Long-Term Credit Bank of Japan.

Notes: (A): The number of firms for which the financial institution was the main bank in terms of both lending and shareholding in both 1982 and 1986. Figures in parentheses are percentage shares of all firms (290) maintaining the same status.

(B): The number of firms for which the financial institution was the largest lender in both 1982 and 1986, but not the top shareholder.

(C): The number of firms for which the financial institution was the top shareholder in both 1982 and 1986, but not the largest lender.

(D): The number of firms for which the bank was the largest lender in 1990. Borrowers are firms with equity capital of 50 million yen or over. Data source: Tokyo Shoko Research.

Mitsubishi Bank, Mitsubishi Trust Bank, Meiji Life Insurance, and Tokyo Marine may form a "main bank" for non-financial firms in the Mitsubishi group. Since the purpose of this work is not to discuss *keiretsu* group, further comments are not given. Nevertheless, it is important to recognize that somewhat smaller firms than the extremely big ones are those having the greatest association with "main banks," when they are defined by both lending and shareholding. Also, the percentage of firms coming under the "main bank" category to total firms with which the bank has some business association either in terms of lending or shareholding, is very low. For example, they are 2.67 percent for the Industrial Bank of Japan, 2.75 percent for Daiichi-Kangyo, and 2.69 percent for Mitsubishi Bank. Therefore, it may be concluded that "main banks," according to our definition, play a relatively minor role in corporate finance in Japan. Some may say that a sound corporate financial system is possible in Japan because fewer firms are monitored or controlled by the "main banks." If a bank were both the largest lender and top shareholder for a particular firm for a long time, the management of that firm would find difficulty avoiding the influence of the bank. On the other hand, some economists who applaud the advice and monitoring provided by financial institutions may advocate that banks should be the largest lenders and top shareholders for more firms.

It is interesting to note that several firms in column (A) are firms which have experienced business difficulties or near bankrupcy. Banks were obliged to help them and thus they are the largest lenders and top shareholders. In such cases, the firm requested meaningful assistance from its main bank, and in return accepted significant monitoring and control. See Sheard (1989) who made relevant case studies.

It may be concluded on the basis of the current study that firms which are the target of the "main banks" in the strict sense are either medium-sized firms (*chuken kigyo*) in terms of size and equity capital (certainly not gigantic firms), or those which have had serious difficulties. These firms can enjoy the advantages of the "main bank" system epitomized as helpful monitoring and control, which is the whole story of the "main bank system." Other firms do not have continuous strong ties with financial institutions in terms of both lending and shareholding because they dislike monitoring and control, and wish to maintain their independence. Such firms are either certainly very big or post good business results.

If we ignore the dimension of shareholding, the number of firms for which a bank is the continuous largest lender increases. Figures in column (B) are double, triple, or even quadruple those in column (A). The Industrial Bank of Japan is the traditional main bank for 10.46 percent of firms it lends to; 10.68 percent is the figure for Daiichi-Kangyo, 8.37 percent for Mitsubishi Bank, and 9.69 for Sumitomo Bank. These rates are fairly high, and suggest that banks are the main banks of many firms if the amount of lending is the only criterion. It should be pointed out that several gigantic corporations, or firms which belong to one of the *keiretsu* groups, appear as traditional main banks which are defined only by the amount of lending unlike previous "main banks." It may not be easy for

financial firms to be "main banks" in the strict sense for gigantic corporations or *keiretsu* firms. Moreover, it may be neither necessary nor profitable to be "main banks" of such firms for various reasons. Finally, it is noted that trust banks are the largest lenders for a considerable number of firms, but not life insurance companies.

Column (C) gives us interesting figures. These are the numbers of firms for which financial institutions are continuous top shareholders. Although the figures are lower than those in column (B), they are considerably higher than those in column (A). City banks and long-term credit banks maintain the status of being top shareholders in many firms. It should be emphasized that shareholding order is only by financial institution in this table. Therefore, the number of top shareholders is much bigger than figures given in other studies which do not make any adjustment. There are many non-financial firms which rank high in shareholding, including being top shareholders. In other words, non-financial firms are also large shareholders in other non-financial firms. Therefore, whether non-financial firms are included or excluded changes the hierarchy of shareholding substantially. The present paper is concerned with the role of Japanese financial institutions in the relationship between lending and shareholding. Thus, it is natural to exclude the contribution of non-financial firms' shareholdings. The figures in column (C) are the outcome of this exercise, and suggest that many city banks and long-term credit banks maintain their position as top shareholders for a long time.

The role of life insurance companies is particularly impressive with respect to this point. There are many companies whose top shareholders are life insurance companies both in 1982 and 1986. The position of Nihon Life Insurance Company is extraordinary. Life insurance companies are also top shareholders for banks. For example, they are top shareholders in 11 of 13 city banks, 12 of 58 regional banks, and five of six trust banks. Moreover, they have maintained top status in the chemical, transportation, and electric power and gas industries. It would be an interesting subject to inquire into why life insurance companies are so important as shareholders not only for non-financial firms but also for financial firms, and how they are different from city banks and trust banks in evaluating the organization and working of Japan's financial market. Since such a work needs a separate study, no further comments are made here.

## V.  Concluding Remarks

This paper has investigated the share ownership and lending activity of financial institutions with emphasis on the relationship between the two. By using two large data sets, namely (i) the *Kogin Zaimu Data File*, and (ii) the *Toyokeizai Ookabunushi File*, various aspects with respect to lending order and shareholding order were examined statistically. We estimated, first, transition matrices for lending order and shareholding order, and calculated the degree of mobility. Several statistical methods were applied to analyze various aspects such as changes in lending order and shareholding order, the

correlations between the two, and the directions of the change. Attention was paid to the status of the largest lenders and top shareholders in view of the fact that main banks receive the highest attention in Japan. The paper examined not only city banks, long-term credit banks, and regional banks, but also trust banks and life insurance companies.

The paper obtained the following observations. First, the mobility of lending order was somewhat higher than that of shareholding order. Second, the stability of main banks, which are defined traditionally as only the largest lenders, was considerably higher in this study compared with other studies. Third, the correlation between lending order and shareholding order was not so high, contrary to expectations. This was also supported by examination of the direction of change in lending order and shareholding order. Fourth, there were not so many instances of "main banks" defined as being both largest lenders and top shareholders. Also, there were very few cases of such main bank status continuing over several years. This does not necessarily deny, however, that there are a considerable number of cases in which financial institutions are either the largest lenders or top shareholders continuously. Several economic interpretations of the above four observations were offered and discussed. Fifth, it should be pointed out that the above four conclusions would be greatly modified if we analyzed banks, trust banks, and life insurance companies separately. Each category of financial institution has its own specificity with respect to motives for shareholding in other corporations and also lending activity; such specificity was confirmed by this study and discussed.

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## Appendix

### Firms for which the Financial Institutions are
### the Largest Lender and/or Top Shareholder
### (Nikkei code; capital in billion yen)

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|---|---|---|---|---|---|
| **Industrial Bank of Japan (A)** | | | 1975 | 1640 | Asahi Kogyosha |
| 1515 | 3465 | Nittetsu Mining | 2202 | 28113 | Meiji Seika |
| 1832 | 3740 | Okazaki Kogyo | 2217 | 2081 | Morozoff |
| 2112 | 1750 | Ensuiko Sugar Refining | 2264 | 13285 | Morinaga Milk Industry |
| 2218 | 911 | Nichiryo Baking | 2281 | 5323 | Prima Meat Packers |
| 3702 | 19145 | Sanyo-Kokusaku Pulp | 3512 | 1037 | Nippon Felt |
| 3867 | 5880 | Kanzaki Paper Mfg. | 3583 | 1220 | Aubex |
| 3945 | 733 | Superbag | 4002 | 3115 | Nitto Chemical Industry |
| 3946 | 2663 | Tomoku | 4065 | 1800 | Kibun Food Chemifa |
| 4041 | 4200 | Nippon Soda | 5458 | 1504 | Takasago Tekko |
| 4044 | 8772 | Central Glass | 5701 | 25363 | Nippon Light Metal |
| 4112 | 4132 | Hodogaya Chemical | 6013 | 3223 | Takuma |
| 4185 | 10696 | Japan Synthetic Rubber | 6213 | 1660 | O-M |
| 4219 | 600 | Plas-Tech | 6216 | 500 | Kotobuki Industry |
| 5007 | 27206 | Cosmo Oil | 6354 | 550 | Hitachi Kiden Kogyo |
| 5011 | 1320 | Nichireki Chemical Industry | 6376 | 2879 | Nikkiso |
| 5410 | 3408 | Godo Steel | 6453 | 3151 | Silver Seiko |
| 5454 | 2250 | Daido Steel Sheet | 6507 | 7134 | Shinko Electric |
| 5480 | 11583 | Nippon Yakin Kogyo | 6517 | 1421 | Denyo |
| 5657 | 1200 | Suzuki Metal Industry | 6751 | 5500 | Japan Radio |
| 5714 | 14094 | Dowa Mining | 6851 | 2327 | Ohkura Electric |
| 6102 | 2975 | Ikegai | 6857 | 14001 | Advantest |
| 6203 | 5799 | Howa Machinery | 6970 | 5382 | Nipponcoinco |
| 6462 | 4230 | Riken | 7142 | 4126 | Nippon Air Brake |
| 6711 | 2408 | Takamisawa Electric | 7407 | 3025 | Japan Aircraft Mfg. |
| 7021 | 1100 | Nitchitsu Industries | 8059 | 2093 | Daiichi Jitsugyo |
| 7263 | 3734 | Aichi Machine Industry | 8262 | 6805 | Nagasakiya |
| 7270 | 27254 | Fuji Heavy Industries | 8267 | 14391 | Jusco |
| 7756 | 3165 | Copal | 8269 | 11178 | Nichii |
| 9017 | 1400 | Niigata Kotsu | | | |
| 9065 | 10120 | Sankyu | **Mitsui (A)** | | |
| 9355 | 1200 | Niigata Rinko Kairiku Unso | 1809 | 2105 | Fujiko |
| **Long-Term Credit Bank of Japan (A)** | | | 1891 | 2000 | Daito Kogyo |
| | | | 1971 | 880 | Chuo Build Industry |
| 1351 | 3000 | Hoko Fishing | 2875 | 5380 | Toyo Suisan |
| 4088 | 2855 | Hoxan | 3114 | 540 | Doko Spinning |
| 5976 | 2097 | Neturen | 3119 | 800 | Daiichi Spinning |
| 6648 | 1640 | The Kawasaki Electric | 4183 | 15835 | Mitsui Petrochemical Ind. |
| 9710 | 1549 | The Dai-ichi Hotel | 5803 | 19687 | Fujikura |
| | | | 5922 | 600 | Nasu Denki-Tekko |
| **Daiichi-Kangyo (A)** | | | 6201 | 12415 | Toyoda Automatic Loom Works |
| 1803 | 35700 | Shimizu | 6495 | 550 | Miyairi Valve Mfg. |
| 1816 | 3750 | Ando Construction | 6761 | 3857 | Aiwa |
| 1818 | 4004 | Nissan Construction | 7913 | 1738 | Tosho Printing |
| 1884 | 4274 | The Nippon Road | 8266 | 7863 | Izumiya |
| 1898 | 2300 | Seikitokyu Kogyo | 9401 | 6737 | Tokyo Broadcasting System |
| 1917 | 1056 | Nisseki House Industry | | | |

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|---|---|---|---|---|---|
| **Mitsubishi (A)** | | | 7278 | 2002 | Daikin Mfg. |
| | | | 7305 | 2748 | Araya Industrial |
| 1817 | 1100 | Katsumura Construction | 7977 | 5500 | France Bed |
| 1827 | 2319 | Nakanogumi | 8017 | 1155 | Hankyu Kyoei Bussan |
| 1860 | 9704 | Toda Construction | 8196 | 4350 | Kasumi |
| 2201 | 14118 | Morinaga | 8817 | 4143 | Hankyu Realty |
| 2611 | 504 | Settsu Oil Mill | | | |
| 3591 | 12510 | Wacoal | | | |
| 4103 | 4300 | Taiyo Sanso | **Fuji (A)** | | |
| 5972 | 1000 | Nihon Kentetsu | 1805 | 11146 | Tobishima |
| 6365 | 810 | DMW | 1810 | 1290 | Matsui Construction |
| 6772 | 1277 | Tokyo Cosmos Electric | 1815 | 6953 | Tekken Construction |
| 6809 | 1172 | Toa Electric | 1820 | 13772 | Nishimatsu Construction |
| 6850 | 2800 | Chino | 1863 | 1214 | Nippon Tetrapod |
| 6936 | 950 | Toyo Takasago Dry Battery | 1885 | 8860 | Toa |
| 6951 | 3240 | JEOL | 1893 | 15066 | Penta-Ocean Construction |
| 7920 | 1051 | Miura Printing | 1919 | 3486 | Kobori Juken |
| 8018 | 3000 | Sankyo Seiko | 1922 | 2200 | Taisei Prefab Construction |
| 8019 | 2530 | Ichida | 1943 | 1647 | Daimei Telecom Engineering |
| 8027 | 1129 | N. Nomura | 1950 | 2350 | Nippon Densetsu Kogyo |
| 8042 | 1050 | Nihon Matai | 1954 | 3127 | Nippon Koei |
| 8084 | 1985 | Ryoden Trading | 1979 | 1590 | Taikisha |
| 8136 | 16166 | Sanrio | 2204 | 3016 | Nakamuraya |
| 9365 | 735 | Dainichi Tsuun | 2284 | 11227 | Itoham Foods |
| | | | 2531 | 10558 | Takara Shuzo |
| **Kyowa (A)** | | | 2891 | 1916 | Oriental Yeast |
| 1819 | 3600 | Taihei Kogyo | 3010 | 500 | Jomo Twisting Thread |
| 1870 | 1320 | Yahagi Construction | 3403 | 3944 | Toho Rayon |
| 2211 | 6317 | Fujiya | 4271 | 1000 | The Japan Carlit |
| 5702 | 1893 | Daiki Aluminium Industry | 5204 | 1772 | Ishizuka Glass |
| 6377 | 500 | Koyo Iron Works & Construction | 5451 | 10292 | Yodogawa Steel Works |
| 6796 | 13013 | Clarion | 5691 | 1010 | Tokyo Shering |
| 7256 | 1210 | Kasai Kogyo | 5913 | 1215 | Matsuo Bridge |
| 7285 | 2976 | Ikeda Bussan | 5919 | 910 | Japan Steel Tower |
| 8182 | 2260 | Inageya | 6138 | 1131 | Dijet Industrial |
| 9360 | 660 | 3S Shinwa | 6218 | 2391 | Enshu |
| | | | 6368 | 2087 | Japan Organo |
| **Sanwa (A)** | | | 6710 | 2025 | Taiko Electric Works |
| 1890 | 8173 | Toyo Construction | 6712 | 2112 | Tamura Electric Works |
| 1920 | 7205 | Shokusan Jutaku Sogo | 6921 | 1320 | Toko Electric |
| 1980 | 1540 | ODD | 7231 | 7957 | Topy Industries |
| 5486 | 17075 | Hitachi Metals | 7281 | 1970 | Kanto Seiki |
| 6210 | 525 | Toyo Machinery & Metals | 7729 | 1608 | Tokyo Seimitsu |
| 6305 | 5687 | Hitachi Construction Machinery | 8039 | 1000 | Tsukiji Uoichiba |
| 6329 | 770 | Hitachizosen Engineer & Const. | 8051 | 4090 | Yamazen |
| 6332 | 1749 | Tsukishima Kikai | 8181 | 1117 | Totenko |
| 6374 | 4268 | Toyo Umpanki | 8253 | 11774 | Seibu Credit |
| 6585 | 2548 | Japan Servo | 8259 | 3025 | Jujiya |
| 6704 | 5618 | Iwatsu Electric | 9601 | 3049 | Shochiku |
| 6715 | 4909 | Nakayo Telecommunications | | | |
| 6992 | 748 | Kokusan Denki | **Sumitomo (A)** | | |
| 7014 | 1500 | Namura Shipbuilding | 1503 | 3309 | Sumitomo Coal Mining |
| 7104 | 1325 | Fuji Car Mfg. | 1833 | 12231 | Okumura |

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 1845 | 1050 | Morimoto-Gumi | **Taiyokobe (A)** | | |
| 1861 | 34713 | Kumagai Gumi | | | |
| 1918 | 1110 | Toyodo Housing | 2898 | 716 | Sonton Food Industry |
| 1921 | 1754 | Tomoegumi Iron Works | 4362 | 1413 | Nippon Fine Chemical |
| 4538 | 2193 | Fuso Pharmaceutical Ind. | 6018 | 800 | The Hanshin Diesel Works |
| 5453 | 5040 | Toyo Kohan | 6776 | 660 | Tensho Electric Industries |
| 5738 | 13387 | Sumitomo Light Metal Ind. | 7975 | 1004 | Lihit Industrial |
| 6350 | 1104 | Shin Nippon Machinery | 9083 | 1000 | Shinki Bus |
| 6357 | 1086 | Sansei Yusoki | 9364 | 11073 | Kamigumi |
| 6508 | 12530 | Meidensha | | | |
| 6708 | 5656 | Toyo Communication Equipment | **Tokyo (A)** | | |
| 8115 | 958 | Moon Bat | | | |
| 8241 | 1455 | The Hanshin Department Store | 5009 | 3990 | Fuji Kosan |
| 8818 | 2330 | Keihanshin Real Estate | | | |
| 8831 | 1528 | Hanshin Real Estate | **Saitama (A)** | | |
| 9605 | 7140 | Toei | | | |
| | | | 3123 | 600 | Saibo |
| **Tokai (A)** | | | 4224 | 1507 | Lonseal |
| | | | 4903 | 501 | Oriental Photo Ind. |
| 1923 | 4400 | Misawa Homes | 6369 | 4128 | Toyo Kanetsu |
| 2209 | 1016 | Imuraya Confectionery | 6392 | 600 | Yamada Yuki Seizo |
| 2806 | 250 | Yutaka Shoyu | 6982 | 658 | The Lead |
| 2808 | 392 | Sanbishi | 7724 | 1575 | Kimmon Mfg. |
| 3117 | 1500 | Kowa Spinning | 8274 | 1335 | Tobu Store |
| 3585 | 848 | The Shine Mills (Kyokuichi) | | | |
| 5461 | 1230 | Chubu Steel Plate | **Mitsubishi Trust (A)** | | |
| 5462 | 1260 | Toshiba Steel Tube | | | |
| 5753 | 1305 | Nippon Shindo | 1887 | 6254 | JDC |
| 5993 | 411 | Chita Kogyo | 8032 | 5673 | Japan Pulp & Paper |
| 5994 | 550 | Tokyo Sintered Metal | 8056 | 3685 | Nippon Univac |
| 6137 | 1561 | Koike Sanso Kogyo | 9671 | 3566 | Yomiuri Land |
| 6397 | 606 | Go Iron Works | | | |
| 6480 | 3979 | Nippon Thompson | **Yasuda Trust (A)** | | |
| 6623 | 2145 | Aichi Electric | | | |
| 6955 | 3907 | Fuji Electrochemical | 1859 | 660 | Tatsumura Gumi |
| 7102 | 6313 | Nippon Sharyo | 4090 | 1520 | Toyo Sanso |
| 7269 | 14864 | Suzuki Motor | 5810 | 7231 | Optec Daiichi Denko |
| 7903 | 200 | Nagoya Lumber | 9069 | 4358 | Senko |
| 7907 | 207 | Dainihon Wood-Preserving | | | |
| 8076 | 880 | Kanoh Steel | **Sumitomo Trust (A)** | | |
| 8130 | 1304 | Sangetsu | | | |
| 8190 | 883 | Yamanaka | 1888 | 5001 | Wakachiku Construction |
| 8193 | 1688 | Suzutan | 1949 | 1039 | Sumitomo Densetsu |
| 8235 | 9765 | Matsuzakaya | 5457 | 1265 | Nippon Pipe Mfg. |
| 8270 | 7688 | Uny | 5728 | 908 | Tokyo Tungsten |
| 9357 | 1627 | Meiko Trans. | 6126 | 761 | Osaka Diamond Industrial |
| | | | 6242 | 1620 | Nihon Spindle Mfg. |
| **Hokkaido Takushoku (A)** | | | 8192 | 1500 | Nakagawa Musen |
| | | | 8194 | 2500 | Life Stores |
| 8085 | 1155 | Narasaki Sangyo | | | |
| 8177 | 1523 | Sogo Denki | **Industrial Bank of Japan (B)** | | |
| 9071 | 311 | Sapporo Express | 3110 | 18092 | Nitto Boseki |
| | | | 3129 | 504 | Toyama Spinning |
| | | | 3405 | 17686 | Kuraray |
| | | | 3408 | 2800 | Sakai Textile Mfg. |
| | | | 3706 | 2750 | Tokai Pulp |
| | | | 3863 | 25041 | Jujo Paper |

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|---|---|---|---|---|---|
| 3872 | 1100 | Mishima Paper | 7758 | 694 | Sekonic |
| 3881 | 3511 | Tokushu Paper Mfg. | 8083 | 2966 | Sun Telephone |
| 3887 | 2288 | Chuo Paperboard | 8179 | 4246 | Royal |
| 3942 | 880 | Chiyoda Shigyo | 9067 | 1482 | Maruwn Transport |
| 3944 | 640 | Furubayashi Shiko | 9077 | 990 | Meitetsu Transport |
| 4021 | 6922 | Nissan Chemical Industries | 9115 | 1800 | Meiji Shipping |
| 4022 | 2774 | Rasa Industries | 9193 | 501 | Tokyo Kisen |
| 4093 | 2261 | Toho Acetylene | | | |
| 4097 | 2475 | Koatsu Gas Kogyo | **Daiichi-Kangyo (B)** | | |
| 4099 | 2552 | Shikoku Chemicals | | | |
| 4119 | 729 | Nippon Pigment | 1804 | 12082 | Sato Kogyo |
| 4151 | 25261 | Kyowa Hakko Kogyo | 1837 | 14376 | Hazama-Gumi |
| 4201 | 3039 | Nippon Synthetic Chemical Ind. | 1871 | 1100 | P.S. Concrete |
| 4212 | 1655 | Sekisui Jushi | 1948 | 500 | Kodensha |
| 4228 | 4603 | Sekisui Plastics | 1955 | 1820 | Toyo Telecommunications Const. |
| 4619 | 836 | Nihon Tokushu Toryo | 1956 | 1650 | Nippon Denwa Shisetsu |
| 4620 | 770 | Fujikura Kasei | 2008 | 500 | Masuda Flour Milling |
| 5195 | 4877 | Bando Chemical Industries | 2215 | 2402 | First Baking |
| 5196 | 2712 | Kinugawa Rubber Industrial | 2267 | 4558 | Yakult Honsha |
| 5233 | 26741 | Onoda Cement | 2536 | 7448 | Sanraku |
| 5236 | 2352 | Chichibu Cement | 2605 | 240 | Kumazawa Seiyu Sangyo |
| 5355 | 654 | Nippon Crucible | 3101 | 37061 | Toyobo |
| 5359 | 1500 | Harima Refractories | 3205 | 1675 | Daido Worsted Mills |
| 5401 | 331835 | Nippon Steel | 3407 | 67452 | Asahi Chemical Industry |
| 5444 | 4152 | Yamato Kogyo | 3502 | 540 | Toshiki |
| 5471 | 17610 | Daido Steel | 3513 | 1635 | Ichikawa Woolen Textile |
| 5481 | 8026 | Sanyo Special Steel | 3552 | 700 | Toyo Cloth |
| 5541 | 7362 | Pacific Metals | 3576 | 504 | Kansai Hanpu Kagaku Bosui |
| 5544 | 1600 | Yahagi Iron | 3889 | 500 | Taihei Paper Mfg. |
| 5612 | 1600 | Nippon Chutetsukan | 4205 | 14631 | Nippon Zeon |
| 5642 | 513 | Japan Drop Forge | 4210 | 1200 | Toyo Chemical |
| 5659 | 1035 | Nippon Seisen | 4501 | 21315 | Sankyo |
| 5727 | 1214 | Toho Titanium | 4526 | 1039 | Riken Vitamin |
| 5808 | 810 | Riken Electric Wire | 4614 | 1000 | Toa Paint |
| 5954 | 1258 | Topura | 4989 | 2609 | Ihara Chemical Industry |
| 6041 | 9958 | Diesel Kiki | 5123 | 500 | Toyo Bosuifu Mfg. |
| 6140 | 3797 | Asahi Diamond Industrial | 5562 | 6800 | Japan Metals & Chemicals |
| 6247 | 4150 | Hisaka Works | 5715 | 9042 | Furukawa |
| 6311 | 1600 | Seirei Industry | 5801 | 31715 | The Furukawa Electric |
| 6393 | 2448 | Yuken Kogyo | 5911 | 1525 | Yokogawa Bridge Works |
| 6501 | 141228 | Hitachi | 5926 | 600 | Ajikawa Iron Works & Construct |
| 6587 | 8592 | Matsushita Seiko | 5930 | 2660 | Bunka Shutter |
| 6651 | 973 | Nitto Electric Works | 5958 | 1760 | Sanyo Industries |
| 6762 | 6017 | TDK | 5981 | 5707 | Tokyo Rope Mfg. |
| 6798 | 3467 | SMK | 5996 | 535 | New Tachikawa Aircraft |
| 6991 | 25728 | Matsushita Electric Works | 6134 | 1297 | Fuji Machine Mfg. |
| 7237 | 3229 | Jidosha Kiki | 6313 | 2333 | Kioritz |
| 7248 | 8256 | Nihon Radiator | 6361 | 11607 | Ebara |
| 7277 | 950 | Tokyo Buhin Kogyo | 6379 | 1097 | Sanko Engineering & Construct |
| 7309 | 3172 | Shimano Industrial | 6395 | 3385 | Tadano |
| 7723 | 2340 | Aichi Tokei Denki | 6504 | 32144 | Fuji Electric |
| 7734 | 1446 | Riken Keiki | 6506 | 10910 | Yaskawa Electric Mfg. |
| 7741 | 5256 | Hoya | 6702 | 116812 | Fujitsu |
| | | | 6743 | 693 | Daido Signal |

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|---|---|---|---|---|---|
| 6805 | 540 | Yagi Antenna | 5333 | 15018 | NGK Insulators |
| 6844 | 4221 | Shindengen Electric Mfg. | 5632 | 7200 | Mitsubishi Steel Mfg. |
| 6853 | 1309 | Kyowa Electronic Instruments | 5914 | 3000 | Miyaji Iron Works |
| 6972 | 1254 | Elna | 5916 | 506 | Harumoto Iron Works |
| 7012 | 66553 | Kawasaki Heavy Industries | 6135 | 5162 | Makino Milling Machine |
| 7202 | 40801 | Isuzu Motors | 6245 | 560 | Hirano Kinzoku |
| 7726 | 935 | Kuroda Precision Industries | 6339 | 2618 | Sintokogio |
| 7750 | 6064 | Asahi Optical | 6388 | 1350 | Misawa Van |
| 7762 | 17170 | Citizen Watch | 6443 | 1000 | Toyo Engineering Works |
| 7914 | 4510 | Kyodo Printing | 6491 | 840 | Toa Valve |
| 7951 | 13500 | Yamaha | 6503 | 139154 | Mitsubishi Electric |
| 7961 | 1500 | Nissan Nohrin Kogyo | 6644 | 1302 | Osaki Electric |
| 8046 | 1948 | Marufuji Sheet Piling | 6645 | 8589 | Omron Tateisi Electronics |
| 8050 | 4800 | Hattori Seiko | 6802 | 4252 | Akai Electric |
| 8101 | 2854 | Gunze Sangyo | 6973 | 2038 | Kyoei Sangyo |
| 8102 | 7795 | Hitachi Sales | 7267 | 57804 | Honda Motor |
| 8292 | 700 | Tokyo Isuzu Motor | 7274 | 1888 | Showa Mfg. |
| 9062 | 51517 | Nippon Express | 7731 | 28116 | Nippon Kogaku |
| 9304 | 3549 | The Shibusawa Warehouse | 7994 | 6158 | Okamura |
| 9470 | 5600 | Gakken | 8025 | 1375 | Tsukamoto Shoji |
| 9661 | 569 | Kabukiza | 8030 | 2050 | Chuo Gyorui |
| 9674 | 803 | Kagetsuenkanko | 8095 | 1500 | Iwaki |
| 9731 | 2410 | Hakuyosha | 8107 | 2727 | Kimuratan |
| 9765 | 660 | Ohba | 8234 | 11659 | The Daimaru |
|  |  |  | 8237 | 4470 | Matsuya |
| **Mitsubishi (B)** |  |  | 8238 | 10691 | Isetan |
|  |  |  | 8252 | 27297 | Marui |
| 1702 | 1502 | Kyoritsu Ceramic Materials | 8802 | 76291 | Mitsubishi Estate |
| 1813 | 5520 | Fudo Construction | 9301 | 7584 | Mitsubishi Warehouse & Transport |
| 1825 | 1088 | Ishihara Construction | 9310 | 2000 | Yokkaichi Warehouse |
| 1842 | 845 | Shimato Construction |  |  |  |
| 1855 | 8295 | Tokyu Construction | **Sumitomo (B)** |  |  |
| 1947 | 3025 | The Nippon Telecommunications |  |  |  |
| 1958 | 882 | Sanwa Daiei Elec. Construction | 1812 | 43460 | Kajima |
| 1969 | 4964 | Takasago Thermal Engineering | 1822 | 2632 | Daiho Construction |
| 1974 | 500 | Miyaji Construction & Engin. | 1823 | 10715 | Sumitomo Construction |
| 2503 | 51202 | Kirin Brewery | 1852 | 3531 | Asanuma Gumi |
| 2801 | 8109 | Kikkoman | 1857 | 3000 | Matsumura-Gumi |
| 2802 | 57378 | Ajinomoto | 1864 | 714 | Asakawagumi |
| 2899 | 1757 | Nagatanien-Honpo | 1924 | 5643 | National House Industrial |
| 3104 | 5400 | Fuji Spinning | 1940 | 735 | Kitanihon Tsushinkensetsu |
| 3111 | 3030 | Omikenshi | 1982 | 947 | Hibiya Engineering |
| 3864 | 13510 | Mitsubishi Paper Mills | 2604 | 1100 | Yoshihara Oil Mill |
| 4010 | 61084 | Mitsubishi Chemical Industries | 2607 | 4019 | Fuji Oil |
| 4182 | 19311 | Mitsubishi Gas Chemical | 2809 | 5512 | Q.P. |
| 4184 | 17945 | Mitsubishi Petrochemical | 3009 | 4666 | Kawashima Textile Manufacturer |
| 4509 | 10125 | Yoshitomi Pharmaceutical Ind. | 3941 | 6504 | Rengo |
| 4514 | 1089 | Teikoku Hormone Mfg. | 4005 | 78680 | Sumitomo Chemical |
| 4516 | 2500 | Nippon Shinyaku | 4086 | 6248 | Teisan |
| 4914 | 4388 | Takasago International | 4502 | 41332 | Takeda Chemical Industries |
| 5004 | 15000 | Mitsubishi Oil | 4503 | 18151 | Yamanouchi Pharmaceutical |
| 5201 | 52497 | Asahi Glass | 4505 | 11287 | Daiichi Seiyaku |
| 5301 | 7611 | Tokai Carbon | 4519 | 13290 | Chugai Pharmaceutical |
| 5331 | 6146 | Noritake | 4615 | 1400 | Shinto Paint |

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 4990 | 545 | Showa Chemical Industry | 5397 | 557 | Mie Horo |
| 5191 | 3972 | Tokai Rubber Industries | 5398 | 512 | Nihon Kenshi |
| 5202 | 24997 | Nippon Sheet Glass | 6320 | 2833 | Shin-Daiwa Kogyo |
| 5232 | 12452 | Sumitomo Cement | 6342 | 750 | Taihei Machinery Works |
| 5478 | 3841 | Nippon Stainless Steel | 6345 | 1186 | Aichi Sharyo |
| 5566 | 1200 | Chuo Denki Kogyo | 6474 | 10899 | Nachi-Fujikoshi |
| 5603 | 1500 | Kobe Cast Iron Works | 6646 | 1138 | Energy Support |
| 5713 | 26017 | Sumitomo Metal Mining | 6709 | 1954 | Meisei Electric |
| 5725 | 2535 | Osaka Titanium | 6846 | 310 | Chuo Seisakusho |
| 5737 | 2709 | Toyo Aluminium | 7765 | 1293 | Ricoh Elemex |
| 5802 | 44651 | Sumitomo Electric Industries | 7916 | 500 | Mitsumura Printing |
| 6301 | 41574 | Komatsu | 8015 | 9631 | Toyota Tsusho |
| 6335 | 4001 | Tokyo Kikai Seisakusho | 8122 | 2080 | OSG |
| 6355 | 2037 | Sumitomo Precision Products | 8261 | 2028 | Meitetsu Department Store |
| 6367 | 13250 | Daikin Industries | 8263 | 15308 | Daiei |
| 6407 | 4501 | CKD | 9306 | 1391 | Toyo Warehouse |
| 6442 | 3020 | Copyer | 9318 | 750 | Nihonbashi Warehouse |
| 6516 | 3707 | Sanyo Denki | 9359 | 1717 | Isewan Terminal Service |
| 6622 | 5934 | Daihen | | | |
| 6641 | 5246 | Nissin Electric | **Hokkaido-Takushoku (B)** | | |
| 6701 | 114501 | NEC | 1849 | 3367 | Tokai Kogyo |
| 6754 | 7689 | Anritsu | 8094 | 340 | Nakamichi Machinary |
| 6759 | 4767 | Tokin | 8097 | 3024 | San-Ai Oil |
| 6768 | 6507 | Tamura | 8106 | 350 | Hakodate Seimo Sengu |
| 6807 | 10515 | Japan Aviation Electronics Ind. | | | |
| 6847 | 3181 | Ando Electric | **Mitsubishi Trust (B)** | | |
| 7240 | 7600 | NOK | 4092 | 3750 | Nippon Chemical Industrial |
| 7261 | 60373 | Mazda Motor | 4404 | 3600 | Miyoshi Oil & Fat |
| 7733 | 14212 | Olympus Optical | 4611 | 6055 | Dai Nippon Toryo |
| 7905 | 5759 | Daiken Trade & Industry | 5103 | 583 | Showa Rubber |
| 7985 | 501 | Nepon | 5305 | 2252 | Toyo Carbon |
| 7990 | 3150 | Daiwa Seiko | 5605 | 1000 | Automobile Foundry |
| 8012 | 6997 | Nagase | 5707 | 5000 | Toho Zinc |
| 8022 | 5546 | Mizuno | 5771 | 2000 | Mitsubishi Shindoh |
| 8026 | 500 | Tachikawa | 5942 | 900 | Nippon Filcon |
| 8074 | 3710 | Yuasa Shoji | 6745 | 1176 | Hochiki |
| 8829 | 7235 | Daiwa Danchi | 7233 | 1114 | Jidosha Buhin Kogyo |
| 8830 | 63621 | Sumitomo Realty & Development | 7235 | 540 | Tokyo Radiator Mfg. |
| 9303 | 6359 | Sumitomo Warehouse | 7260 | 1374 | Fuji Kiko |
| 9666 | 7600 | Nippon Dream Kanko | 7275 | 5655 | Atsugi Motor Parts |
| 9732 | 500 | Toei Chemical Industry | 7952 | 3600 | Kawai Musical Instruments Mfg. |
| | | | 9636 | 564 | Kinki Eiga Gekijyo |
| **Tokai (B)** | | | **Yasuda Trust (B)** | | |
| 1869 | 1100 | Meiko Construction | 1851 | 1278 | Ohki Construction |
| 1883 | 4190 | Maeda Road Construction | 3551 | 1644 | Dynic |
| 1892 | 829 | Tokura Construction | 4461 | 1300 | Dai-ichi Kogyo Seiyaku |
| 1936 | 687 | Chubu Communication Construct | 5142 | 9616 | Achilles |
| 1938 | 880 | Chitose Electrical Construct | 5272 | 1200 | Asano Slate |
| 3113 | 2408 | Hirabo | 5341 | 500 | Asahi Eito |
| 3210 | 600 | The Bisai Wool Yarn Spinning | 5660 | 1839 | Shinko Wire |
| 3581 | 353 | Gisen | 5854 | 550 | Tokyo Rika Mfg. |
| 3947 | 1813 | Dainippon Shigyo | 6391 | 870 | Kaji Iron Works |
| 5342 | 683 | Janis | | | |

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 6431 | 633 | Nippon Typewriter | 5804 | 8411 | Mitsubishi Cable Industries |
| 6492 | 743 | Okano Valve Mfg. | 6140 | 3797 | Asahi Diamond Industrial |
| 6794 | 2136 | Foster Electric | 6331 | 3957 | Mitsubishi Kakoki |
| 8291 | 1705 | Tokyo Nissan Auto Sales | 6773 | 15778 | Pioneer Electronic |
| 9319 | 740 | Chuo Warehouse | 8064 | 1605 | Kinsho-Mataichi |
| | | | 8070 | 800 | Tokyo Sangyo |
| **Sumitomo (B)** | | | 8335 | 24186 | Ashikaga Bank |
| | | | 8344 | 7500 | Yamagata Bank |
| 3878 | 1991 | Tomoegawa Paper | 8359 | 26100 | Hachijuni Bank |
| 3883 | 17325 | Settsu | 8367 | 11500 | Nanto Bank |
| 4087 | 2551 | Daido Sanso | 8375 | 3685 | Bank of Ikeda |
| 5214 | 12967 | Nippon Electric Glass | 8379 | 25000 | Bank of Hiroshima |
| 5351 | 3300 | Shinagawa Refractories | 8391 | 5400 | Shinwa Bank |
| 5358 | 780 | Isolite Insulating Products | 8405 | 8400 | Nippon Trust Bank |
| 5633 | 2400 | Kanto Special Steel Works | 8584 | 7024 | Jaccs |
| 5853 | 693 | Kyoto Die-Casting | 8603 | 73079 | Nikko Securities |
| 5932 | 5938 | Sankyo Aluminium Industry | 8751 | 68144 | Tokio Marine and Fire Insurance |
| 6378 | 1030 | Kimura Chemical Plants | | | |
| 6473 | 7014 | Koyo Seiko | **Sumitomo (C)** | | |
| 6478 | 500 | Osaka Bearing | | | |
| 8133 | 3448 | C. Itoh Fuel | 2116 | 4473 | Nissin Sugar Mfg. |
| | | | 3407 | 67452 | Asahi Chemical Industry |
| **Industrial Bank of Japan (C)** | | | 4008 | 2500 | Seitetsu Kagaku |
| | | | 4514 | 1089 | Teikoku Hormone Mfg. |
| 1701 | 900 | Showa Mining | 4535 | 15000 | Taisho Pharmaceutical |
| 3304 | 1523 | Tosco | 5423 | 4513 | Tokyo Steel Mfg. |
| 5351 | 3300 | Shinagawa Refractories | 5463 | 4477 | Maruichi Steel Tube |
| 5707 | 5000 | Toho Zinc | 6122 | 500 | Wakayama Precision |
| 5712 | 43073 | Nippon Mining | 6141 | 3778 | Mori Seiki |
| 5852 | 600 | Fuso Light Alloys | 6351 | 2439 | Tsurumi Mfg. |
| 6016 | 500 | Kobe Diesel | 6587 | 8592 | Matsushita Seiko |
| 6364 | 1001 | Hokuetsu Industries | 6714 | 1155 | Kanda Tsushin Kogyo |
| 7124 | 500 | Yusoki Kogyo | 6752 | 89537 | Matsushita Electric Industrial |
| 7201 | 116483 | Nissan Motor | 7246 | 5730 | Press Kogyo |
| 7222 | 7387 | Nissan Shatai | 7984 | 6137 | Kokuyo |
| 7301 | 1320 | Miyata Industry | 8024 | 2354 | Naigai Clothes |
| 8339 | 9000 | Tokyo Tomin Bank | 8140 | 11195 | Ryosan |
| 8345 | 8190 | Bank of Iwate | 8371 | 6750 | Bank of Osaka |
| 8511 | 9700 | Japan Securities Finance | 8532 | 11000 | Hyogo Sogo Bank |
| 8550 | 2265 | Tochigi Sogo Bank | 8545 | 3520 | Kansai Sogo Bank |
| 9110 | 8100 | Shinwa Kaiun | 8809 | 3204 | Sankei Building |
| 9119 | 7800 | Iino Kaiun | 9470 | 5600 | Gakken |
| | | | 9665 | 1512 | Yoshimoto Kogyo |
| **Mitsubishi (C)** | | | 9713 | 1866 | Royal Hotel |
| 1959 | 2904 | Kyushu Denkikoji | | | |
| 2003 | 1991 | Nitto Flour Milling | **Tokai (C)** | | |
| 2805 | 1586 | S & B Shokuhin | | | |
| 2893 | 2100 | Teishoku | 1956 | 1650 | Nippon Denwa Shisetsu |
| 3305 | 500 | Tokyo Ramie Spinning | 2811 | 3483 | Kagome |
| 4527 | 2640 | Rohto Pharmaceutical | 2892 | 1600 | Nihon Shokuhin Kako |
| 4531 | 770 | Yuki Gosei Kogyo | 5992 | 3574 | Chuo Spring |
| 4534 | 3969 | Mochida Pharmaceutical | 6439 | 906 | Nakanippon Casting |
| 4540 | 10331 | Tsumura Juntendo | 6586 | 10106 | Makita Electric Works |
| 4619 | 836 | Nihon Tokushu Toryo | 6856 | 1955 | Horiba |

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 6995 | 2549 | Tokai Rika | 1934 | 1432 | Tohoku Electrical Construction |
| 7221 | 3830 | Toyota Auto Body | 1940 | 735 | Kitanihon Tsushinkensetsu |
| 7249 | 615 | Owari Precise Products | 1947 | 3025 | The Nippon Telecommunications |
| 7250 | 2323 | Pacific Industrial | 2053 | 1033 | Chubu Shiryo |
| 7283 | 1941 | Aisan Industry | 2286 | 4455 | Hayashikane Sangyo |
| 8003 | 31336 | Toyo Menka | 2871 | 15070 | Nichirei |
| 8035 | 8844 | Tokyo Electron | 3115 | 3250 | Teikoku Sangyo |
| 8245 | 1980 | Maruei Department Store | 3401 | 45635 | Teijin |
| 8293 | 1279 | Aichi Toyota Motor | 3405 | 17686 | Kuraray |
| 8408 | 11415 | Chuo Trust and Banking | 4043 | 11343 | Tokuyama Soda |
| 8513 | 200 | Chubu Securities Financing | 4099 | 2552 | Shikoku Chemicals |
| 8527 | 4300 | Chuo Sogo Bank | 4182 | 19311 | Mitsubishi Gas Chemical |
| 8588 | 7012 | Central Finance | 4202 | 17180 | Daicel Chemical Industries |
| 9402 | 1320 | Chubu-Nippon Broadcasting | 4215 | 2767 | Takiron |
| 9643 | 270 | Nakanihon Theatrical | 4217 | 8345 | Hitachi Chemical |
| 9664 | 450 | Misonoza Theatrical | 4222 | 1580 | Kodama Chemical Industry |
| 9762 | 7558 | Daiwa Kosho Lease | 4501 | 21315 | Sankyo |
| | | | 4502 | 41332 | Takeda Chemical Industries |

**Hokkaido Takushoku (C)**

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 2108 | 8279 | Nippon Beet Sugar Mfg. | 4505 | 11287 | Daiichi Seiyaku |
| 8524 | 4500 | Hokuyo Sogo Bank | 4511 | 13183 | Fujisawa Pharmaceutical |
| 8531 | 2100 | Hokkaido Sogo Bank | 4613 | 10114 | Kansai Paint |
| 9085 | 1010 | Hokkaido Chuo Bus | 4914 | 4388 | Takasago International |
| | | | 5205 | 1323 | Nippon Muki |
| | | | 5233 | 26741 | Onoda Cement |

**Mitsui Trust (C)**

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 1834 | 1086 | Odakyu Construction | 5660 | 1839 | Shinko Wire |
| 4471 | 4866 | Sanyo Chemical Industries | 5936 | 1781 | Toyo Shutter |
| 5814 | 500 | Kyosan Electric Wire | 5975 | 3689 | Topre |
| 6770 | 19265 | Alps Electric | 6103 | 8412 | Okuma Machinery Works |
| 9358 | 1455 | Utoku Express | 6206 | 4111 | Toyoda Machine Works |
| | | | 6370 | 4628 | Kurita Water Industries |
| | | | 6373 | 2226 | Daido Kogyo |

**Mitsubishi Trust (C)**

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 1825 | 1088 | Ishihara Construction | 6395 | 3385 | Tadano |
| 1941 | 2363 | Chugoku Elec. Construction | 6473 | 7014 | Koyo Seiko |
| 4216 | 5000 | Asahi Organic Chemicals Ind. | 6501 | 141228 | Hitachi |
| 4543 | 14100 | Terumo | 6583 | 7853 | Matsushita Refrigeration |
| 5104 | 1920 | Nitto Kako | 6590 | 1265 | Shibaura Engineering Works |
| 6645 | 8589 | Omron Tateisi Electronics | 6753 | 51648 | Sharp |
| | | | 6805 | 540 | Yagi Antenna |
| | | | 6996 | 5155 | Nichicon |

**Sumitomo Trust (C)**

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 2206 | 5947 | Ezaki Glico | 6997 | 6164 | Nippon Chemi-Con |
| 5405 | 133499 | Sumitomo Metal Industries | 7012 | 66553 | Kawasaki Heavy Industries |
| 8601 | 81089 | Daiwa Securities | 7013 | 64925 | Ishikawajima-Harima Heavy Ind. |
| 9737 | 8870 | CSK | 7122 | 3000 | Kinki Sharyo |
| | | | 7205 | 15929 | Hino Motors |
| | | | 7210 | 9888 | Nissan Diesel Motor |

**Nihon Life Insurance (C)**

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 1333 | 15000 | Taiyo Fishery | 7276 | 9264 | Koito Mfg. |
| 1802 | 35980 | Ohbayashi | 7723 | 2340 | Aichi Tokei Denki |
| 1855 | 8295 | Tokyu Construction | 7735 | 12891 | Dainippon Screen Mfg. |
| 1886 | 20266 | Aoki | 7752 | 29212 | Ricoh |
| 1892 | 829 | Tokura Construction | 7936 | 11929 | Asics |
| | | | 8022 | 5546 | Mizuno |
| | | | 8128 | 726 | F-One |

| Code | Capital Value | Firm | Code | Capital Value | Firm |
|------|------|------|------|------|------|
| 8233 | 10591 | Takashimaya | | | |
| 8234 | 11659 | The Daimaru | **Meiji Life Insurance (C)** | | |
| 8243 | 12376 | Sogo | | | |
| 8261 | 2028 | Meitetsu Department Store | 2503 | 51202 | Kirin Brewery |
| 8320 | 131422 | Sanwa Bank | 3404 | 31256 | Mitsubishi Rayon |
| 8324 | 17000 | Daishi Bank | 4010 | 61084 | Mitsubishi Chemical Industries |
| 8385 | 15800 | Iyo Bank | 4092 | 3750 | Nippon Chemical Industrial |
| 8386 | 12000 | Hyakujushi Bank | 4516 | 2500 | Nippon Shinyaku |
| 8538 | 3500 | Niigata Sogo Bank | 4611 | 6055 | Dai Nippon Toryo |
| 8583 | 27513 | Nippon Shinpan | 4617 | 2866 | Chugoku Marine Paints |
| 8611 | 10338 | Cosmo Securities | 5238 | 20179 | Mitsubishi Mining & Cement |
| 8759 | 13500 | Dowa Fire and Marine Insurance | 5632 | 7200 | Mitsubishi Steel Mfg. |
| 9001 | 42836 | Tobu Railway | 5771 | 2000 | Mitsubishi Shindoh |
| 9006 | 22207 | Keihin Electric Express Rail | 5916 | 506 | Harumoto Iron Works |
| 9009 | 13584 | Keisei Electric Railway | 6245 | 560 | Hirano Kinzoku |
| 9014 | 1480 | Shin-Keisei Electric Railway | 6503 | 139154 | Mitsubishi Electric |
| 9019 | 3000 | Izukyu | 7105 | 1780 | Nippon Yusoki |
| 9041 | 71610 | Kinki Nippon Railway | 7701 | 14521 | Shimadzu |
| 9042 | 37238 | Hankyu | 8081 | 1452 | Kanagawa Electric |
| 9043 | 12703 | Hanshin Electric Railway | 8246 | 1540 | Iwataya Department Store |
| 9044 | 20771 | Nankai Electric Railway | 8302 | 103680 | Industrial Bank of Japan |
| 9045 | 20293 | Keihan Electric Railway | 8312 | 39200 | Hokkaido Takushoku Bank |
| 9048 | 32708 | Nagoya Railroad | 8313 | 106500 | Bank of Tokyo |
| 9049 | 1000 | Keifuku Electric Railroad | 8315 | 133261 | Mitsubishi Bank |
| 9075 | 11388 | Fukuyama Transporting | 8341 | 16800 | 77 Bank |
| 9404 | 7086 | Nippon Television Network | 8355 | 30000 | Shizuoka Bank |
| 9405 | 1800 | Asahi Broadcasting | 8360 | 8400 | Yamanashi Chuo Bank |
| 9431 | 33931 | Kokusai Denshin Denwa | 8363 | 16500 | Hokkoku Bank |
| 9503 | 466899 | The Kansai Electric Power | 8392 | 4860 | Oita Bank |
| 9504 | 176002 | The Chugoku Electric Power | 8402 | 59934 | Mitsubishi Trust and Banking |
| 9506 | 242400 | Tohoku Electric Power | 9301 | 7584 | Mitsubishi Warehouse & Transport |
| 9507 | 110368 | Shikoku Electric Power | 9310 | 2000 | Yokkaichi Warehouse |
| 9509 | 101000 | The Hokkaido Electric Power | 9502 | 361580 | Chubu Electric Power |
| 9532 | 111385 | Osaka Gas | 9508 | 226464 | Kyushu Electric Power |
| 9533 | 27176 | Toho Gas | | | |
| 9536 | 14500 | Saibu Gas | | | |
| 9642 | 500 | Koma Stadium | | | |
| 9724 | 1470 | Hotel New Hankyu | | | |

*Notes:*   *(A) signifies that the financial institution was the "main bank" for the firm in terms of both lending and shareholding both in 1982 and 1986.*

*(B) signifies that the financial institution was the largest lender for the firm in both 1982 and 1986, but not the top shareholder in either 1982 or 1986.*

*(C) signifies that the financial institution was the top shareholder for the firm in both 1982 and 1986, but not the largest lender either in 1982 or 1986.*

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