

Bank Governance in the Japanese Economic System

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The Japanese economy has been praised for its excellent system of corporate financing and governance – the ‘main bank system’. In this system, each business firm has a long-term relationship with a bank, usually its largest lender, which is delegated the role of monitoring the firm on behalf of other lenders. The main bank monitors the firm closely, utilizing information accumulated through its long-term relationship with the firm, signaling its judgment to other lenders through its lending behavior and, if the firm encounters difficulties, playing a leading role in the rescuing and restructuring operation. It has been claimed that such a system has minimized information costs by preventing the duplication of information processing by lender banks, and that efficient monitoring has enhanced the welfare of the economy by avoiding resource misallocation caused by setting high rates of interest on safe borrowers.

The research of the last decade has left us with substantial knowledge of the mechanism and effects, at least qualitative ones, of corporate monitoring by the banking sector, as is exemplified in the papers in Aoki and Patrick (1994). However, as for the question of how banks themselves have been monitored, the state of knowledge is still insufficient and fragmentary, although a couple of important empirical research papers have been written by Rixtel and Hassink (1996) and Horiuchi and Shimizu (1996). The purpose of this paper is to deliberate on the changing mechanism of bank governance in Japan in relation to the micro-structural characteristics of the Japanese economy. Two questions are addressed. The first is how prudential regulations by the government have affected the performance of

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the banking sector in terms of the static and dynamic efficiency and stability of the financial system. The prudential regulation of Japan consists of *ex ante* and *ex post* regulations (safety nets). The former comprise competition-preventing measures (regulation of interest rates, entry and lending areas), balance sheet regulation (regulation of maximum lendings to a single borrower, net position of foreign exchange transactions and capital adequacy), and direct inspection by the Ministry of Finance (MoF) and the Bank of Japan (BoJ). The latter regulations include the lender-of-last-resort role of the BoJ, fixed-rate deposit insurance which was introduced in 1972, and rescue operations by the BoJ. In addition to these formal measures of prudential regulation, an informal measure of regulation called *amakudari* ('descending from heaven') – the sending of retired, high-ranking MoF or BoJ bureaucrats to the board of directors of banks – and various kinds of administrative guidance (*gyoseishido*) have been frequently utilized.

Until 1994 there had been no bank failures in post-World War II Japan¹ and this has usually been accounted for by the modality of implementation of competition-preventing policies. Such modality was called the convoy system: policies were implemented so as to let the most inefficient banks exist and grow alongside other banks. However, it must be noted that the convoy system is not specific to the banking industry, but is a part of the overall system of industrial coordination, characteristic of the micro-structure of the Japanese economy. Likewise, *amakudari* is not specific to the banking industry, but has been a widespread custom in almost all industries in Japan, and this comprises another important aspect of the industrial coordination system. It follows that in order to understand the mechanism and effects of competition-preventing policies, and the future of prudential regulations, we must examine the changing role and pattern of industrial coordination in the Japanese economic system.

The second question concerns the role of bank stockholders in the governance of the banking industry. As will be shown below, stocks issued by banks are mostly held by related firms, financial and non-financial, for whom banks stand as main shareholders and also as largest lenders ('main banks'). The cross-shareholding relationship implies enhanced autonomy of bank managers from stockholders.

¹ Poorly-managed banks that were facing bankruptcy were usually merged with larger, sound banks under the guidance of the MoF and BoJ.

The behavior of firms which have a stockholding relationship with the bank is usually motivated not only by the rate of return on bank stocks but also by other factors such as the availability of bank credits. Moreover, residuals or bank profits are not distributed entirely to bank shareholders but shared by managers and workers as well. In such a system, it is reasonable that bank managers should take into consideration not only the stock price but also various requests by other stakeholders such as bank workers and related firms. The franchise value of the bank, or regulations on risk-asset ratios, tend to influence the behavior of bank managers directly rather than through the profit maximizing behavior of bank stockholders. However, once again, such managerial behavior is not specific to banks, but is by and large common to other industrial firms belonging to business groups called *keiretsu*, characterized by a high degree of cross-shareholding among group firms. Managers in *keiretsu* groups usually enjoy a high degree of independence from stockholders, but are subject to demands by other stakeholders. It should be noted that compared with managers in other *keiretsu* linked firms the position of bank managers is notable in two senses: they are assigned the role of monitoring other firms in the main bank system and they are subject to special government regulations aimed at maintaining stability in the financial system. Nevertheless, except for these two differences, the behavior of bank managers is subject to constraints which are common to managers in other *keiretsu* firms, and the future role of the bank manager is closely related to the future of the *keiretsu* system in the Japanese economy. To understand the changing role of bank managers and stockholders in bank governance, therefore, we have to relate our argument to the broader issue of the stockholder-manager relationship in the *keiretsu* system.

In order to address the above issues this paper is organized as follows. Section 1 offers a brief summary of the micro-structural characteristics of the Japanese economy, considering the industrial coordination system, *keiretsu*-main bank system, and Japanese-style firm system. Section 2 is concerned with the relative role of stockholders and government regulations in the bank governance system, with some reference to the possible role played by other stakeholders. Section 3 examines the working of the bank governance of Japan in a specific situation, the emergence, bursting and aftermath of the bubble economy covering the period 1985-1995. Section 4 concludes the paper with some remarks on the future pattern of bank govern-

ance in a situation of change in the financial system and micro-economic structure of the Japanese economy.

1. Micro-structure of the Japanese economic system

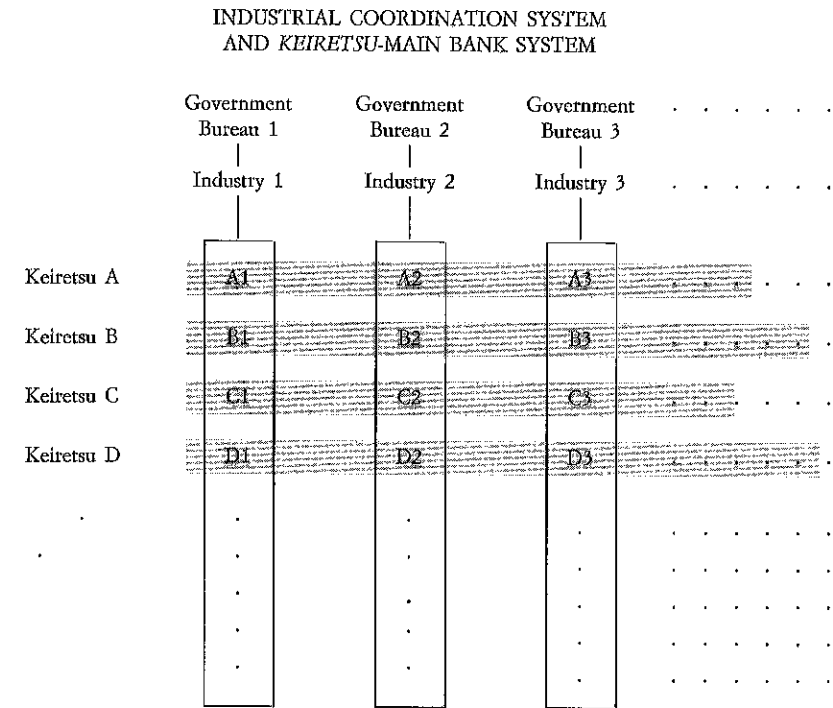
A close relationship exists between the overall micro-structural characteristics of the economic system and the bank governance system in Japan. The micro-structure of the Japanese economy is composed of three pillars: the industrial coordination system, *keiretsu*-main bank system and Japanese-style firm system. The role of the government in bank control is best understood as a part of the industrial coordination system, and the role of stockholders is related to the *keiretsu*-main bank system.

This Section offers a brief review of the overall micro-structural characteristics of the Japanese economy. Figure 1 depicts the relationship between the first two pillars of the system. $A_1, A_2, B_1, B_2, \dots$ etc. represent individual firms. Rectangles drawn with solid lines represent industrial associations, and those with broken lines the *keiretsu* relationship. If industry 1 is the banking industry, A_1, B_1, C_1, \dots represent the main banks for the corresponding *keiretsu* groups.² The industrial coordination system, the first pillar, is a vertical system of interaction between a government bureau, which is related to the specific industry, and an industrial association to which almost all firms in the industry belong. In between the bureau and the association, a deliberative council is frequently organized in order to facilitate information flow and consensus building. Information about and requests by industry i are collected and conveyed to the government bureau through the i -th industrial association. Bureau i , after negotiating with other bureaus and ministries related to the industry concerned and sometimes consulting with deliberative councils and

² The diagram is a simplified representation of the micro-structure in the following two senses: *i*) it refers only to horizontal *keiretsu*. There are, however, important firm groups called independent groups, which consist of a hierarchy of technologically related firms clustered around big companies such as Matsushita (electric machinery) and Toyota (automobiles); *ii*) the *keiretsu*-main bank system and Japanese-style firm system - are only seen in the modern sector of the Japanese economy. The indigenous sector, composed of agriculture and service industries, is characterized by more or less neo-classical and competitive markets, and spot transactions (Teranishi 1995).

politicians, issues instructions or guidance to the industry through industrial association i .

FIGURE 1



The above system has fulfilled two roles. The first role is that of an industrial policy tool. By adjusting the interests of various industries, the government has been able to effectively coordinate investment activity and technological development.³ The second role has been to adjust income distribution. In Japan after the mid-1950s, state intervention in income distributional conflicts has been implemented mainly through adjustment of industrial interests, rather than class interests. In other words, people lobby the state to ask for better treatment for the industry in which they are employed, not for the class to which they belong. The government has responded by

³ Coordination through information channeling is emphasized in Yonekura (1993). Murakami (1992) points out that this system was effective in realizing increasing returns in strategic industries.

regulating the input and output prices and the competitive conditions of the industry, thus effectively controlling the value-added for the industry. Industrial associations are used as a conduit for demands and regulations, and government bureaus and politicians negotiate with each other in pursuit of the particular industrial interests they represent (Teranishi 1996).

The *keiretsu*-main bank system, the second pillar, is a horizontal system characterized by cross-shareholding and a main bank lending-monitoring system. This system developed as a device to introduce outside funds to a group of firms without mitigating the group-tie. Cross-shareholding in pre-war *zaibatsu* was introduced for this purpose, and the main bank system, characterized by non-exclusive lendings with exclusive monitoring,⁴ was also born in a similar context (Teranishi 1994b). The merits of this system are the lowering of agency costs through long-term transactions, main bank monitoring, coordination through CEO meetings (*shachokai*) as well as risk sharing among the members. An important property of *keiretsu*, related to the governance issue, is the high degree of autonomy of corporate managers. Cross-shareholding means that the liquidity of quoted stocks is kept low, making it difficult for outside shareholders to control managers by means of hostile takeovers.

The third pillar, the Japanese-style firm system, stands in close institutional complementarity with the first two pillars. For one thing, the firm system, characterized by life-time employment, a seniority wage system and firm-specific labor unions, works as a part of the income distributional system. As is explained above, the value-added for each industry is determined through the industry coordination system. After value-added for each firm in the industry is determined through competition within the industry, the distribution of the value-added within the firm is implemented through negotiations among the firm's stockholders, managers and employees (Aoki 1988). It is well known that bonus payments to employees include an aspect of residual sharing by employees. For example, Kaplan (1992) and Murase (1995) have found that managers' pecuniary income and

⁴ In a main bank system, each firm in a *keiretsu* borrows not only from its main bank but also from banks in other *keiretsu*, although the main bank is usually the largest lender to firms within its own *keiretsu*. Therefore, lending is 'not exclusive'. On the other hand, the firm is monitored exclusively by its main bank, a role which is delegated to the main bank by other lenders. 'Exclusive' monitoring is another characteristic of the main bank system.

bonuses, in Japan, have a strong positive correlation with the firm's profits. In this sense, the industrial coordination system and Japanese-style employment system comprise an integrated income distribution mechanism. It must also be noted that, while the *keiretsu* system is an exclusive system with closed membership, industrial associations are open to any firms belonging to the industry. In this sense, the income distributional device in the Japanese economy has been effective in bringing about equality of opportunity, or *ex ante* equality.

The Japanese-style firm system, together with the *keiretsu*-main bank system, constitutes an integrated corporate incentive mechanism. Since corporate managers in *keiretsu* enjoy a high degree of autonomy from shareholders, it is both necessary and incentive-compatible for the main bank to monitor them. Furthermore, under the life-time employment system, corporate manager is the uppermost position of the company's hierarchical ladder. The rank hierarchy system (Aoki 1988) is an efficient incentive system for employees and managers.

Incidentally, it must be noted that the micro-structural characteristics of the Japanese economy, depicted above, are closely related to the high performance of the Japanese economy after the mid-1950s in the following two senses. First, it has been claimed that the efficient production of information, owing to exclusive monitoring by main banks and long-term relationships, reduced agency costs in the economy. Second, it could be claimed that some mechanism embedded in the micro-structure of the economy enabled firms to behave with a longer time horizon and independently of short-term business fluctuations, leading to investment with a high long-term profit rate. Such mechanisms include: *i*) risk sharing among *keiretsu* group firms, between large firms and their sub-contractors, and among employees, managers and stockholders; *ii*) the protection of franchise values for each firm by competition preventing policy; *iii*) the rank hierarchy within a firm, the effective working of which requires long-term expansion of the firm's activities.

2. Bank governance

Let us return to the bank governance issue and discuss it in relation to the micro-structural characteristics of the Japanese econ-

omy. According to Dewatripont and Tirole's theory (1993), the governance of the banking sector could be analyzed as analogous to that of the nonfinancial firm sector except for the fact that bank debt holders (depositors) are so small and dispersed that they do not have sufficient incentive to monitor banks. The analogy is particularly applicable to the Japanese case. In other words, the governance system of the banking sector comprises part of the micro-structure of the Japanese economy. Government regulation policy, often called the 'convoy system', is a typical example of the industrial coordination system, and bank managers are characterized by having even higher independence from shareholder control than managers in non-financial firms in the *keiretsu* system.

2.1. Holders of bank shares

As of 1991, 34.3% of shares issued by large banks (city banks, trust banks and long-term credit banks) were held by financial institutions, 57.8% by nonfinancial firms, and only 6.2% by individuals, whereas, in the case of all listed firms (including nonfinancial firms), 46.9% were held by financial institutions, 25.2% by nonfinancial firms and 23.1% by individuals (Sheard 1994). This means that shares issued by large banks are mostly held by other firms, financial or nonfinancial, and the stakes of individual stockholders are lower than in the case of nonfinancial firms.

As for the question of which firms hold bank shares, Table 1 shows that about 10% of bank shares were held by related firms or as cross-shareholdings and 5-15% of shares were held by insurance companies, and that the sum of the above two roughly corresponded to the percentage shares held by the top ten shareholders. More detailed data on Da-ichi Kangyo Bank (DKB), one of the largest city banks in 1991, showed that the top three shareholders of DKB were life insurance companies, the sum of the shares held by the three amounting to 14.3% of the total shares issued by DKB. The next 17 largest shareholders (from 4 to 20) were all financial and nonfinancial firms, and the sum of shares held by them amounted to 16.4% of the total. DKB was either among the top three shareholders or lenders for 15 of these 17 firms (Sheard 1994).

These data show that the shares of large banks in Japan are held by *keiretsu* insiders. Since *keiretsu* firms are tied by cross-sharehold-

TABLE 1

COMPOSITION OF BANK SHAREHOLDINGS (%)

	1965	1975	1985
(a) Shares held by ten shareholders	18.3	24.3	6.5
(b) Cross shareholding and shares held by related firms	10.4	11.5	10.6
(c) Shares held by life insurance companies	5.5	11.1	14.5
(d) = (b) + (c)	15.9	22.6	25.1

Note: City banks and The Industrial Bank of Japan.
Source: Okazaki (1995, p. 174).

ings, the liquidity of the market in these stocks is not sufficient for effective take-over bids. Banks can raise equity capital without considering the share price, because other firms in the same *keiretsu* are ready to subscribe to the new issue of equity (often) at face value. Consequently, it can be said that bank managers are more or less independent from the control of shareholders. Moreover, for the following two reasons the degree of independence of bank managers from stockholders seems to be higher than in the case of nonfinancial firms. First, the proportion of shares held by individuals is lower than in the case of nonfinancial firms, as is explained above. Second, the average number of outside directors is also lower for banks compared with nonfinancial firms. As Table 2 shows, the average number of outside directors is 1.62 for banks and 3.39 for manufacturing firms. If we exclude outside directors originating from the government and the BoJ, these figures are 0.46 and 3.10 respectively.

2.2. Regulation by the government

It might be safe to assume that banks in Japan are not controlled by shareholders in the literal sense.⁵ This leaves us with two questions: *i*) what is the *modus operandi* of government control over

⁵ Some important researches such as those conducted by Horiuchi and Shimizu (1996) and by Nakajima and Taguchi (1995), however, assume that banks are controlled by shareholders. These will be critically examined in the next Section.

banks in Japan?; and *ii*) what is the modality of bank managers' behavior when effective shareholder control is absent? Let us discuss the first question here.

TABLE 2

AVERAGE NUMBER OF DIRECTORS FROM OUTSIDE INSTITUTIONS PER LARGE MANUFACTURING FIRM AND LARGE BANK IN 1985

Origin	Manufacturing firms	Origin	Large banks
Main bank	0.65	MoF ⁷	0.77
Other private financial institutions	0.57	BoJ	0.38
Trading companies	0.18	Insurance companies	0.23
Securities companies	0.01	Business firms	0.15
Other business firms	1.69	Municipal governments	0.08
Government ministries, BoJ, government financial institutions and others	0.29		
<i>Total</i>	<i>3.39</i>	<i>Total</i>	<i>1.62</i>

Note: Average of a selection of 234 listed manufacturing firms and of city banks and The Industrial Bank of Japan.
Source: Okazaki (1995, p. 158).

Among the formal policy measures of bank control, competition-preventing measures have, until recently, been most widely used. Deposit rate regulations have been rapidly abolished since the mid-1980s as is shown by the share of unregulated interest rate deposits⁶ (Table 3). However, other regulations such as restrictions on lending areas and on entry into the banking business are still in existence, although these have gradually been weakened. It is well known that these regulations were introduced with the intention of securing the stability of the financial system, the absence of which had plagued the Japanese economy throughout the period between World War I and World War II (Teranishi 1990).

However, there was another purpose to these regulations which was to adjust the industrial interests of the banking sector *vis-à-vis* other industries. In other words, the competition-preventing regulations in the banking sector comprised an important part of the

⁶ All interest rates on time deposits were liberalized in June 1993.

TABLE 3

INDICES OF DEREGULATION OF FINANCIAL MARKETS

	Ratio of transactions to outstanding volume of government bonds	Ratio of money market assets to GNP	Unregulated interest rate deposits as a percentage of total time deposits
1981	2.4	6.5	0.0
1983	2.7	8.4	0.0
1985	12.6	12.2	17.5
1987	25.6	15.8	42.0
1989	15.6	23.5	73.6

Source: Teranishi (1994a).

overall industrial coordination system of the economy. The first example of this was where coordination was used to influence income distribution. Regulations were intended to control the value-added of the banking sector in relation to other industries. Control of deposit interest rates was simply a control on the input price for the banking industry. Two-thirds of inputs (deposits) came from other industrial firms, the remaining one-third from the household sector.⁷ Output prices were also regulated. Long-term and short-term (over one million yen) lending rates had been under *de facto* control until the mid-1970s,⁸ although the widespread practice of compensating depositors seems to have mollified this control. The income distributional considerations were most explicit during the 1950s and 1960s. The most important reason for the introduction of the regulation of deposit interest rates in 1949 was to expiate losses in bank income suffered because of compulsory holding of government bonds with controlled interest rates (Teranishi 1993). Moreover, the government has continued to intervene in various aspects of the income accounts of the banking sector. The ratio of current costs to current revenue was the most important measure related to administrative guidance of the banking sector until 1968, and the distribution of bank profits, especially dividend payments, was strictly controlled until 1970, when the so-called efficiency-oriented guidance (*koritsuka gyosei*) was introduced.

⁷ The percentage share of deposits held by the corporate sector was 66.3% in 1965 and 59.6% in 1975.

⁸ The so-called self-restrained interest rate on short-term lending was abolished in 1975.

The second example is coordination for the purpose of industrial policy. The competitive conditions of the industry have been determined through negotiations with other financial industries, through the government bureau – deliberative council – industrial association mechanism, and this is related to the entire industrial coordination system. In other words, the investment levels of financial industries were coordinated through this mechanism. New entry into the banking industry has been completely closed since the mid-1950s. Each type of bank – city banks, regional banks, trust banks, and so on – has its own industrial association and each has tried to protect and expand its own lending areas. Banks have been involved in a fierce struggle with the securities industry over business areas, and also with the official postal savings system. With regard to the postal savings system, determination of the interest rates on postal savings has been the focus of continuing controversy between the MoF and the Ministry of postal savings and telecommunications. Recently, the conflict has been extended to the area of payment service by the postal savings system. The industrial association of banks (Zenkoku Ginkokyokai) has devoted significant efforts to realizing an asset taxation system favorable to bank deposits (Zenkoku Ginko-kyokai 1979, pp. 10 and 111-134). Although the origin of the prevalence of indirect financing in the Japanese financial system lies in the historical process undergone since the interwar period, the phenomenon of bank dominance since the end of World War II could not be understood without considering this mechanism. Investments, both human and physical, have been allocated favorably to the banking industry compared with the securities industry, probably reflecting the strong power of the banking sector in mobilizing votes (mostly indirectly) and providing political funds in elections.

It must be noted that the term 'convoy system', which was given to the competition-preventing regulations in the banking sector, has two connotations: the coordination of distributional conflicts among financial industries and prudential regulation related to financial sector stability. The financial system was quite stable until recently and this was probably due to the 'convoy system'. However, the *modus operandi* of the competition-preventing policy with respect to financial sector stability seems to be slightly different in Japan from the textbook explanation. Under the 'convoy system' with strict regulations on deposit rates, entry and lending areas, it is conceivable that a substantial amount of the franchise value – present value of

monopoly rents banks are expected to earn as going concerns – had already been accumulated. With an efficient stock market, the value is represented by a rise in the price of bank stocks. However, because of the regulations on dividends and on bank stock prices until 1970, this did not occur. As Table 4 shows, the market value of bank capital, equal to the value of bank stock evaluated at market prices, was quite low and less than the book value of bank capital (book value of bank stocks plus retained earnings). After 1970, when regulations on bank stocks were removed (as is evidenced by the increase in the coefficient of variation of bank stock prices (j)), the franchise value – difference between the market value and book value of bank capital – as a ratio of the market price of total bank assets increased to the 4% level, and after 1985 to the 10% level. A textbook explanation would predict that the increase in the franchise value after 1970 was due to two things: *i*) more prudent lending behavior by banks and *ii*) investment with a longer time horizon as regards monitoring capability or more efficient branching (Hellman, Murdock and Stiglitz 1996 and 1997). The explanation fits well with the case of the United States (Kelly 1990). However, in Japan banking sector failures occurred after the rise of the franchise value and, moreover, it is difficult to find any convincing evidence for the hypothesis that protected banks undertook investment activity to achieve higher efficiency. The first of these issues will be dealt with in the next Section and the second below.

Before proceeding to the issue of the behavior of bank managers, let us briefly touch upon the informal measures of bank regulation. The role of *amakudari*, a most extensively used measure of informal control, is usually explained as a tool of government control over banks. For example, Schaede (1992) and Rixtel (1993) consider that *amakudari* is an instrument used by the government to control the private sector. Likewise, Aoki, Patrick and Sheard (1994) regard the sending of *amakudari* bureaucrats to private banks as a form of government sanction imposed on those who do not obey government regulations. This view could be valid for a phase of extreme bank failures, as in the first half of the 1990s. Both Rixtel (1993) and Okazaki (1995) found that *amakudari* during this period was toward (small) banks in distress.

However, this understanding seems to be related to only one-side of the coin, because *amakudari* has been a widespread practice since the early post-war years when banks were by and large regarded

CHANGES IN BANK CAPITAL AND ASSETS

	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995
(a) Market value of bank assets (trillion yen)	0.94	3.89	10.09	24.28	50.96	121.52	207.87	408.22	729.43	600.48
(b) Book value of bank capital (trillion yen)	0.02	0.12	0.28	0.60	1.57	3.18	4.62	7.37	20.58	16.74
(c) Market value of bank capital (trillion yen)	0.01	0.05	0.18	0.47	2.31	5.39	8.22	41.51	84.13	63.16
(d) = (b)/(a) (%)	2.05	2.97	2.77	2.47	3.07	2.62	2.22	1.81	2.82	2.79
(e) = (c)/(a) (%)	0.81	1.19	1.77	1.92	4.53	4.44	3.96	10.17	11.53	10.52
(f) = (e) - (d) (%)	-1.24	-1.78	-1.00	-0.55	1.46	1.82	1.74	8.36	8.71	7.77
(g) Profit margin of banks (%)	1.65	1.62	1.04	0.80	1.30	0.54	0.06	0.12	0.25	0.32
(h) Bank stock price index (1990 = 100)	2.00	3.20	3.30	3.90	9.80	13.60	15.30	63.50	100.00	77.80
(i) Stock price index of all industries (1990 = 100)	0.60	2.20	6.10	6.00	8.30	18.20	27.80	59.10	100.00	91.0
(j) Coefficient of variation of bank stock prices	0.05	0.09	0.07	0.09	0.23	0.17	0.26	0.38	0.36	0.53

Notes and sources: Banks are large banks comprising city banks, trust banks and long-term credit banks except for (g), which is for ordinary banks; a) values at the end of fiscal year, calculated as the sum of liabilities and the market value of bank stocks. Liabilities are taken from Zenkoku Ginko-kyokai (Federation of Bankers Association of Japan) *Zenkoku Ginko Zaimushoto-bunseki*; b) at the end of fiscal year. *Zenkoku Ginko-kyokai* (Federation of Bankers Association of Japan), *Zenkoku Ginko Zaimushoto-bunseki* (various years); Sum of outstanding stocks and reserves;

c) values at the end of fiscal year. Number of stocks outstanding (calculated as book value of outstanding stocks/face value of a stock until 1973 and, after 1974, obtained from Nikkei NEEDS database) multiplied by the stock price at the end of the fiscal year;

g) obtained from BoJ, *Keizai Tokai-nempo*. Simple average of the first and the second half yearly values;

h) obtained as (c)/total number of bank stocks outstanding;

i) obtained from BoJ, *Keizai Tokai-nempo* (TSE 1st section price index);

j) calculated as standard deviation of bank stock prices/mean of bank stock prices.

as safe. The other side of the coin is related to the industrial coordination mechanism, which has fulfilled two roles – investment coordination and adjustment of distributional interests among industries. In this regard, one of the additional roles of *amakudari* seems to be that of an informational channel for coordination (Calder 1989 and Aoki 1988), and another a reward to bureaucrats in the bureau which intermediated policies favorable to the banking industry.⁹

2.3. Behavior of bank managers

In understanding the behavior of bank managers in Japan, three points should be taken into consideration: *i)* managers are selected internally from the bank's employees and the position represents a final step on the hierarchical ranking system; *ii)* managers are more or less independent from shareholders' interests; and *iii)* managers are working within the microstructure of the Japanese economy which is characterized by industrial coordination and the *keiretsu* system, or more specifically within the 'convoy system' and the main bank system.

Under these conditions the behavior of bank managers seems to be characterized by *i)* less concern with current and future profits, and hence stock prices, *ii)* more concern with the continuation of the bank as a going concern and *iii)* more concern with the expansion of the scale of bank activities. With respect to profits, managers have stakes as far as they participate in the sharing of residuals. However, their stakes in the residuals seem to be more or less confined to the stable part of residuals that are related to bonus payments and retirement allowances, and extraordinarily high profits do not affect their behavior. Consequently, they are rarely seen to take high risk profit-taking actions which sacrifices the interests of depositors or fixed-rate deposit insurance. Moreover, since most of them are not stockholders, stock prices do not have a significant bearing on their behavior even if they have a stake in the current and future returns.

Bank managers in Japan seem to have been largely motivated to achieve scale expansion of the banking business for the following reasons. First, they have to find employment opportunities for peer

⁹ It must be noted that rewards are not for individual bureaucrats but for a bureau. The *amakudari* position is not chosen by individual bureaucrats but determined and allocated by the bureau as an institution.

bankers, especially for experienced college graduates in the same bank. Second, other firms in the same *keiretsu*, which hold the majority of bank stocks, are interested in the expansion of their services to the bank. Typical examples of such services are the selling of life insurance to bank employees by life insurance companies and the management of annuity funds of bank employees by trust banks and securities companies. Third, the special characteristics of bank regulation in the 'convoy system' have acted as incentives for managers to expand the scale of operations. One characteristic of the industry coordination system is that regulations are more or less equally applied to all the members of a particular industry. In the case of the 'convoy system', this meant that government regulations such as branching policy were applied equally to all banks depending on the amount of their deposit balances. This gave bank managers a strong incentive to expand deposits and, with a limited number of branch offices approved, banks hired extra employees for this purpose. During the 1960s and 1970s, many college graduates were hired for the sake of expanding the customer base. A recent study by Honma, Godo and Teranishi (1996), that uses panel data of city banks and regional banks during 1964 and 1967, has shown that significant inefficiency existed in the sense that employment and deposit taking were overexpanded.

3. Banks in the 'bubble' economy

Let us examine the working of the bank governance system, described above, in the context of the birth and bursting of the speculative 'bubble' economy, covering the period 1985 to 1990.

After 1986, the Japanese economy experienced a significant upsurge of economic activity, characterized not only by a relatively high rate of growth of production but also by the rapid expansion of speculative financial dealings. As Table 5 shows, the stock price index rose from 60.5 in 1985 to 100.0 in 1990, recording a historical high average price for the Tokyo Stock Exchange (TSE) in 1989. The land price index also rose tremendously from 33.6 in 1985 to 100.0 in 1990. The money supply and bank lending almost doubled during the same period.

TABLE 5

INDICATORS OF THE 'BUBBLE' ECONOMY

	1980	1985	1990	1995
Stock price index (TOPIX, 1990 = 100)	28.5	60.5	100.0	91.0
Consumer price index (1990 = 100)	81.7	93.5	100.0	107.0
Land price index (six large city areas, 1990 = 100)	24.5	33.6	100.0	54.7
Money supply (M2+CD) (trillion yen)	199.0	296.0	483.0	536.0
Lendings of banks (domestically licensed banks, trillion yen)	136.0	237.0	443.0	486.0
Interest rate on bank lendings (%)	8.2	6.0	8.0	2.2

Source: BoJ, *Keizai-tokei nempo*, 1995.

The end of the boom came around 1990 when the BoJ tightened monetary policy by raising the official discount rate continually from 2.50% (May 1989) to 6.00% (August 1990). The bursting of the 'bubble' economy has entailed not only a significant decline in asset prices, especially land prices, but also a huge amount of non-performing loans in the balance sheets of banks, and the stagnation of bank lendings for a long period after 1990 (Table 5).

There are both demand and supply side reasons for the birth and bursting of the bubble economy. Demand side factors are related to the activity of the nonfinancial corporate sector. During the boom period, the corporate sector, especially large firms, actively engaged in investment not only in real but also in financial assets, financed by new equity issues, mostly in the form of convertible bonds and warrant bonds (Table 6). Real investment was aimed at the improvement of productivity, based on information-related technology. Certain authors explain the end of the boom in terms of the termination of the real investment boom, and explain the stagnation thereafter by the fall of investment activity. For example, Yoshikawa *et al.* (1994) consider that the stagnation of bank lendings after 1990 was mainly due to a decline in corporate firms' demand for funds as not only the quantity of lendings but also lending rates stayed extremely low during this period. If the shift in supply is significant, interest rates should have risen concomitant with the fall in lending quantity, they argue. However, if bank loans to small- and medium-sized firms are curtailed and only large firms, to whom low prime rates were applied, could borrow, then the observed phenomenon – low lending volume and low interest rates – would come about (Miyagawa 1996).

TABLE 6

SOURCES AND USES OF FUNDS OF LARGE
MANUFACTURING FIRMS DURING THE 'BUBBLE' PERIOD
(Trillion yen, fiscal year)

	1981-85 average	1986-89 average
Sources		
Internal funds	4.8	6.7
External funds	1.7	4.3
Borrowings	0.1	-2.1
Equity	1.6	6.6
Uses		
Equipment, inventories and real estate	4.7	6.3
Financial investments	1.6	4.5

Source: Teranishi (1994a)

With respect to the supply side, some authors lay the blame on the lax monetary policy applied since the Plaza agreement (Noguchi 1992). However, in view of the huge non-performing loans, related to real estate lendings, left after the 'bubble' burst, one cannot be convinced by the explanation that only monetary policy is responsible for the phenomena. The lendings related to real estate and non-banks (of all banks except for regional banks) increased from 40.4 trillion yen in December 1985 (18.1% of total lendings of 223 trillion yen) to 90.0 trillion yen (25.9% of total lendings of 348 trillion yen) in December 1992. The amount of non-performing loans at large banks (city banks, trust banks and long-term credit banks) was 8.0 trillion yen in March 1992 (2.0% of total lendings of 398 trillion yen), 12.8 trillion yen in March 1993 (3.2% of total lendings of 396 trillion yen), and 23.4 trillion yen in September 1995 (6.0% of total lendings of 391 trillion yen) (Nakajima and Taguchi 1995).

We will not pursue the controversy over the relative importance of demand and supply factors here, but rather will focus on the behavior of the banking sector as one of the supply side factors responsible for the 'bubble' economy. In particular we will discuss what the role of the bank governance system was in the unprecedented expansion of loans related to real estate and non-banks during the 'bubble' period, and the accumulation of non-performing loans and loan stagnation thereafter.

Let us first examine the literature which assumes shareholders control banks. Nakajima and Taguchi (1995) emphasize the effects of the reduction in banks' franchise value as the reason for the birth of the 'bubble'. They consider that Japanese banks had enjoyed huge franchise values owing to the 'convoy system' and that, as the franchise value declined rapidly following the liberalization of the financial market in the 1980s, the banks undertook risky lending behavior in an attempt to compensate. However, as row (f) of Table 4 shows, there is no evidence for a significant decline in the franchise value of banks during the 'bubble' period. After dividend payments were deregulated in 1970, the franchise value (the difference between the market value and book value of bank equity) rose from a negative to a positive level,¹⁰ and after 1985 stayed at the 8% level. As evidence of a decline in franchise value, Nakajima and Taguchi (1995) point to the liberalization of deposit rate control (Table 3) and the decline in banks' profit margins (row (g) in Table 4). However, these are only partial determinants of franchise value. Although deposit rates were liberalized, entry into the banking sector was still rigorously controlled, and to date no new banks have emerged since the mid-1950s. Banks still enjoy a dominant, and hence monopolistic, position in the financial industry of Japan. Moreover, in view of recent developments in financial technology the banking sector has high growth potential as a new leading industry, provided that it succeeds in updating its technology. Taking these points into consideration, it is not surprising that franchise value, measured as the difference between market and book value of stocks, has increased after 1980 as shown in Table 4, contrary to the assumption in Nakajima and Taguchi (1995).

Nakajima and Taguchi's paper (1995) is concerned with the birth of the 'bubble' economy, while Horiuchi and Shimizu (1996) seek reasons for the low growth rate of bank lendings during the first half of the 1990s. They focus on the fact that with the burst of the 'bubble' bank capital has decreased. This in turn is due to the increase in non-performing loans and the loss of unrealized capital gains on equity assets in the banks' balance sheets. Furthermore, banks were allowed to issue subordinated debt in order to compensate for their

¹⁰ Negative values occur because the market price of bank stocks failed to reflect not only future profits but also the value of existing reserves, which were under the control of the MoF.

low capital bases. Subordinated debt is categorized as tier II capital in the BIS regulations, and most of such debt was purchased by, or rationed to, the major stockholders of banks, such as life insurance companies and other firms in the same *keiretsu* groups. In a regression using panel data on 21 large banks during 1990-1995, Horiuchi and Shimizu (1996) have found that subordinated debts (or the risk-adjusted bank capital-asset ratio) have significant negative effects on the rate of increase in bank lendings. Their interpretation is that as bank capital increases owing to the rationing of subordinated debt, bank stockholders and managers become more prudent and cautious in their lending activity, with the consequent decline in the growth rate of bank lendings after 1990. They call this hypothesis an inverse moral hazard by bank stockholders.

This interesting and careful analysis has, however, left three questions unanswered. First, their regression analyses do not exclude the possibility that both the decline in lending activity and the increase in subordinated debt are caused by a third variable, which is not considered in their analysis. Below, we will suggest that this third element is the decline in the bank managers' incentive for scale expansion or the increase in their concern over banks' safety as going concerns. Second, their analysis does not explain the aggregate phenomenon in the time series data of a concurrent decline in bank lendings and risk-adjusted capital asset ratios. Third, they have found using the same panel-data that franchise value is insignificant in explaining bank lending growth. They interpret this either as evidence of the inability of stock prices to reflect franchise value adequately due to inefficiency in the stock market, or of the consumption of franchise value by managers or other bank employees. However, the first interpretation contradicts a large amount of research which points to the relative efficiency of the stock market in recent Japan, and the second one contradicts their assumption of bank stockholders' sovereignty.

If, then, hypotheses based on bank stockholder's sovereignty are ineffective in explaining the misconduct in the banking sector, what would be alternatives? Let us suggest an explanation based on managerial behavior in the context of the micro-structural backdrop of the Japanese economy. After 1985, two things happened. First, large firms, which used to be customers of large banks, found ways of raising finance in international markets using equity-related instruments (warrant bonds and convertible bonds). Second, owing to the

excessive hiring of college graduates during the 1960s and 1970s for the purpose of deposit expansion, banks were saddled with an excess of experienced college graduate employees, and this was coupled with an overall excess supply of experienced college graduates in the economy.¹¹ Under these conditions, it would be natural for bank managers to be motivated to find new customers in non-traditional business areas such as small- and medium-sized firms and real estate related businesses. This was because finding second jobs after retirement for employees, especially for experienced college graduates, was an implicit commitment for top managers, who were recruited from the pool of bank employees.¹² Table 7 shows that large financial firms had a high share of college graduates amongst their employees, and although they made greater efforts to downsize their total workforces from 1981 to 1991 than manufacturing firms, the number of college graduates employed grew substantially. Since banks had no expertise in non-traditional areas, and their capability in finding new industries was not necessarily excellent,¹³ such expansive behavior was risky. After the failure of expansive behavior, managers were possessed with the fear of bankruptcy, and this led them to take an extremely cautious line – confining lendings only to good customers to whom the prime rate could be applied, and issuing subordinated debt in order to reduce the probability of bankruptcy.

¹¹ A recent paper by Genda (1996) shows that in Japan after the mid-1990s the wage rates of senior employees (experienced college graduates) have tended to be suppressed because of the massive hiring of college graduates during the high growth era and the decline in the probability of promotion.

¹² It is well known that many nonbanks and *jusen* (housing finance companies) were established by large banks and provided a substantial number of jobs to retired bankers. For the case of 18 listed real estate companies, which have data on their director's job before coming to the companies, the number of directors sent from large banks (city banks, long-term credit banks and trust banks) has risen from 45 in 1986 to 55 in 1996 (calculated from *Kigyokeiretsu-soran* 1986 and 1996).

¹³ It seems that although Japanese banks have had high monitoring capabilities with respect to the profit condition of individual firms, they are not necessarily good at finding promising new industries. One of the reasons for this lies in the fact that the choice of industry was conducted through industrial policy in an industrial coordination system which involved a political process based on interest politics among industries. A second reason might be that there were regulations on underwriting by banks, and the widespread custom of collateral taking reduced the incentive for banks to take risks in new industries which did not have sufficient collateral (Aoki, Patrick and Sheard 1994, p. 136).

TABLE 7

NUMBER OF EMPLOYEES IN THE MANUFACTURING AND FINANCIAL SECTORS

	Large firms in manufacturing sector		Large firms in financial sector	
	1981	1991	1981	1991
(a) Total employees (thousand)	2103	2398	439	444
(b) College graduates (thousand)	398	617	213	289
(c) = (b)/(a) (%)	18.9	25.8	48.5	65.1

Note: firms with more than 1,000 employees.

Source: Ministry of Labor, *Chingin Tokai Kihon-chosa Hokoku*, Tokyo, 1981 and 1991.

It must be noted that under the assumption of the autonomy of bank managers, the reckless lendings before 1990 and the lending stagnation after 1990 have nothing to do with moral hazard behavior. When banks are controlled by stockholders, risk taking will increase the put option value of bank stocks under fixed-rate deposit insurance, and the incentive for risk taking would be higher the lower is the capital/asset ratio. However, the stakes of managers in bank residuals are more or less fixed, so that their income will not be greatly affected by moral hazard behavior should they choose to undertake it. Instead, the behavior of bank managers seems to be constrained to a far greater extent by the commitment to the continuation and expansion of bank business for the sake of employees in the rank hierarchy.

4. Concluding remarks: bank governance in a changing financial landscape

So far, the following propositions about the bank governance system of Japan have been suggested: *i)* bank managers have been more or less independent from the control of stockholders; *ii)* they have been motivated by the continuation of the banking business and the expansion of the scale of activities; *iii)* the main instrument of government control over banks comprised competition preventing policies. These have been effective in preventing bank failures until

recently not because the franchise value they created induced bank stockholders to be prudent, but because they assured profits even for the most inefficient banks; *iv)* the risk-adjusted capital-asset ratio or franchise value did not have any significant influence on bank behavior.

With the rapid liberalization of financial markets and the introduction of BIS regulations, a shift toward market-based prudential policy is expected to occur in Japan also. However, the question of whether or not a market-based governance system will work well in Japan hinges crucially on the future degree of stockholders' sovereignty in the banking industry, and this, in turn, depends on the future micro-structural characteristics of the Japanese economy, as depicted in Figure 1.

The future of the micro economic system of Japan seems to be dependent on three things. The first is the changing direction in the Japanese-style employment system. The second is the future of cross-shareholding. The third is the future prospects of the industrial coordination system. It is well-known that in Japan all these elements have recently been evolving toward a more market-oriented, competitive system. At the same time, however, the institutional complementarity among the three elements seems to be sufficiently strong to warrant rejection of any idea of complete change in the system. The most stubborn element would be the corporate managers who will never be inclined to abandon their autonomy. In order to maintain their autonomy, they will try to extend cross-shareholding relationships to new firms and new industries as much as possible. Since most major firms in new industries tend to be established through the diversification strategy of existing mature firms, especially during a period of rapid and drastic restructuring of the industrial structure, there is nothing to suggest a significant decline in cross-shareholdings. If this observation is true, the micro-structural characteristics of the Japanese economy will remain intact henceforth. With regard to the bank governance system, more reliance should be placed on direct inspection by the government and improved disclosure of bank information to depositors, and less on the prudential behavior of bank stockholders. At the same time, the idea of a pure bank, which separates the payment system function from the asset management function, deserves more attention.

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