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Banks and Corporate Control in Japan

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ABSTRACT

Using a large sample of Japanese firm level data, we find that Japanese banks act primarily in the short term interests of creditors when dealing with firms outside bank groups. Corporate control mechanisms other than bank oversight appear necessary in these firms. When dealing with firms in bank groups, banks may act in the broader interests of a range of stakeholders, including shareholders. However, our findings are also consistent with banks "propping up" troubled bank group firms. We conclude that bank oversight need not lead to value maximizing corporate governance.

POOR LIQUIDITY AND CASH FLOW PREDICT banker appointments to the boards of bank group firms; poor share price performance does not. When dealing with firms in bank groups, banks act in the broader interests of a range of stakeholders, including shareholders. Poor stock market performance, job creation, liquidity, and cash flow all predict banker appointments to bank group firms. We argue that Japanese banks' dual role as creditors and shareholders (Prowse (1992)) constrains their incentives to advance shareholders' interests, especially in firms outside bank groups. Corporate governance mechanisms other than oversight by banks would seem necessary in these firms.

Firms outside bank groups undergo sharp downsizing following banker appointments but bank group firms do not, consistent with banks "propping up" weak bank group firms (Hoshi, Kashyap, and Scharfstein (1990)). Entertainment spending falls as cash flow falls in firms outside bank groups, but does not in bank group firms. (A similar, but statistically insignificant pattern exists in entertainment spending per dollar of sales.) If entertainment expenses represent "perks" consumption, rather than investment in networking, closer bank monitoring may lead to "tighter ships" outside bank

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groups, but not among bank group firms. In short, bank oversight appears strictest where banks' incentives are least aligned with shareholder value maximization.

Section I of this paper is a historical overview of Japanese corporate governance. Sections II and III describe the data and empirical results respectively. Section IV concludes.

I. Corporate Governance in Japan

The history of Japanese corporate ownership is important because, upon close examination, it tends to undermine arguments that Japan has a sophisticated "alternative" corporate governance regime.

Up to two thirds of listed Japanese firms' shares are held by other firms (Hodder and Tschoegl (1992)). Some corporate blockholders, called *stable shareholders*, almost never sell out and consistently support management. A group of companies linked by stable intercorporate shareholdings is called a *keiretsu*. A keiretsu in which a bank plays a central role is called a *bank group* or *financial keiretsu*.

Stable intercorporate share ownership is a potent barrier to takeovers. For example, in 1990 the American takeover entrepreneur T. Boone Pickens owned 26.43 percent of the Japanese company Koito, and was its largest shareholder. Despite this, he could not force management to give him a seat on the board. Together, nineteen Japanese firms owned a majority of Koito's stock, and all supported management.

Although the fortitude of intercorporate stock ownership as a takeover barrier is clear, it is less widely known that, in many cases, *intercorporate ownership in Japan developed expressly as a takeover barrier* (see Sheard (1989, 1991, 1992) and Aoki and Sheard (1992)). The U.S. postwar occupation force broke up the family-controlled corporate groups, or *zaibatsu*, that had dominated Japanese business. By 1952, Japanese firms were mostly widely held. Firms formerly in zaibatsu groups, including Taisho Marine, Mitsubishi Real Estate, and Mitsui Real Estate, faced hostile takeover attempts by Japanese investors. In response, the managers of former zaibatsu companies set up cross-holding with the explicit aim of blocking potential hostile raids. Takeover threats and even greenmail (Sheard (1991)) occurred again in the mid 1960s. In response, the Fuji, Sanwa, and Daiichi-Kangyo banks began major efforts to increase cross-holding among firms associated with them, again with the explicit aim of blocking potential hostile takeovers. This trend intensified in the 1970s as the prospect of capital market liberalization led to fears of takeovers by foreign investors (Sheard (1991)).

The origins of stable shareholdings have not been forgotten. The following warning is from a recent Japanese guidebook for taking firms public:

> Large corporations, foreign investors, and speculative investment groups holding large amounts of capital can acquire a majority of the shares in your newly listed firm, resulting in your losing management control. To

avoid such a takeover attempt, it is essential that you take the precautionary measure of locating stable shareholders [such as banks and related companies].

Kato and Matsuno (1991), p. 51
(our translation)

Cross holdings among Japanese keiretsu firms are devices to entrench management. Although conglomerate-type efficiency gains might arise in Japanese keiretsu (Kester (1991); MacDonald (1989)), work on U.S. conglomerates makes this claim suspect (Lang and Stulz (1994)). Comprehensive takeover barriers in the United States are associated with reduced firm value and performance (see, e.g., Karpoff and Malatesta (1995)).

Kaplan and Minton (1994) suggest that Japanese economic performance might not be compromised if bank oversight substitutes for a market for corporate control, and present carefully qualified evidence that it does. They show that banker appointments follow poor performance and are correlated with additional executive turnover. However, there are again historical reasons for questioning this interpretation of their findings. Bank lobbying was instrumental in blocking the formation of bond markets until the late 1970s (Karp and Koike (1990)). Bank lobbying also preserved the Foreign Exchange Law's ban on issuing bonds abroad until the 1980s (Hamao (1991); Karp and Koike (1990)). Japanese banks have repeatedly used their considerable lobbying power to further their own interests at the expense of the economy in general. Given this history, the idea that banks might altruistically protect small shareholders should not be accepted too readily. Some executives being blamed when a liquidity problem arises does not necessarily imply a broad or effective corporate governance role for banks.

A Japanese firm generally has a *main bank*, which holds the largest block of equity among bank shareholders and is its major lender. Caves and Uekusa (1976) show that main banks charge their client firms higher than market interest rates. For keiretsu firms, this premium is proportional to dependence on group financial institutions. Yet Nakatani (1984) shows keiretsu firms to be more levered than independent firms. Aoki (1988) describes these high debt costs as an "agency fee paid by individual shareholders [for bank monitoring]." Another possibility, more consistent with the historical facts, is that it is an insurance premium. Hoshi et al. (1990) find that when their client firms become financially distressed, main banks orchestrate bailouts and assume disproportionate responsibility for bad debts, and that this insurance role is more evident in keiretsu firms. This propping up role might lead main banks, as creditors, to monitor client firms closely: Kang and Shivdasani (1995) and Kaplan and Minton (1994) find increased top management turnover around bank appointments to boards. But the history described above suggests that CEO turnover and banker dominated boards might not imply value maximization, or economic efficiency.

In the analysis below, we present evidence consistent with the view that, in bank group firms, banks act mainly to prop up weak firms. In other firms, banks' oversight role is primarily to defend creditors', not necessarily shareholders', interests.

II. Data

We follow 383 manufacturing firms in the first section (large firms) of the Tokyo Stock Exchange from 1981 until 1987. Our panel consists of 2,371 firm-year observations. Because of omissions in our data sources, the panel is unbalanced. We have no reason to think this causes any statistical bias.

As a proxy for increased bank attention to a firm, we use the appointment of a bank employee to its board. These events are rare, and trigger the interest of financial analysts and the press. They also often presage the replacement of some top executives (Kang and Shivdasani (1994); Kaplan and Minton (1994)). Of course, some such appointments are doubtlessly routine. This causes noise, but not bias. Financial markets likely begin to react to the bank's increased interest prior to the actual appointment date. Thus, an event day, or even event month, is almost certainly meaningless. We therefore consider event years. Our information on board appointments is from Toyo Keizai, a Japanese financial information company similar to Value Line. For the period from 1981 to 1987, there were 171 appointments of directors from banks. Both χ^2 and Kolmogorov-Smirnov independence tests accept the null hypotheses that appointments are distributed evenly over time and industries. In 20 cases, a single bank executive is appointed as an outside director. In 54 cases, the new director becomes a full-time executive in the firm. In 5 cases, the new director serves as CEO, either immediately or soon after joining the board. In 92 cases, two or more bankers arrive as new directors simultaneously.[1]

We employ a number of variables to capture various firm and industry characteristics. Univariate statistics are in Table I. A brief description of each follows.

A. *Measures of the Strength of Bank Linkages*

We use both indirect and direct measures of the strength of a firm's ties to its main bank. Our primary indirect measure is leverage: The ratio of true financial debt (i.e., book values of bank debt, short-term notes, long-term bonds, etc.) net of cash and marketable securities to total assets. Our second measure is debt structure, bank loans as a fraction of total debt. Data to construct our leverage and debt structure variables are from the Japan Development Bank's financial database. As a direct measure of the strength of a firm's links to its main bank, we use a bank group dummy. We set the

[1] We include auditors as directors. Excluding them, or otherwise distinguishing different subsets of directors, does not affect our results.

Table I

Descriptive Sample Statistics

The sample consists of 2,371 firm-year observations, pooled from 383 manufacturing firms from the first section of the Tokyo Stock Exchange for the period 1981 to 1987. The group affiliations of the 383 firms in our sample are as follows: Mitsui group (31 firms), Mitsubishi group (35), Sumitomo group (33), Fuji group (31), Daiichi Kangyo group (26), and Sanwa group (25). Thus 181 firms are in major bank groups, 202 are not. In 171 cases, bankers are appointed to the firm's boards of directors in the year in question. Of the 171 board appointment events, 37 are in 1981, 14 in 1982, 49 in 1983, 24 in 1984, 11 in 1985, 13 in 1986, and 23 in 1987. Kolomogorov-Smirnov and χ^2 tests of independence both accept the null hypothesis that events are distributed independently over the seven-year period. Leverage is financial debt (book values of bank debt, short-term notes, long-term bonds, etc.) net of cash and marketable securities divided by total assets. Bank loans over total debt is the book value of bank loans over financial debt, as defined above. Stock return is *cum*-dividend stock return. Tobin's q is adjusted for real estate and equity price changes. Sales growth is year-to-year growth rates in real sales. Employment growth is year-to-year growth rate in number of workers. Cash flow over assets is income gross of depreciation and interest but not of taxes divided by total assets. Cash flow over interest is income gross of depreciation and interest but not of taxes divided by interest payments. Entertainment cost over cash flow is entertainment expenses over income gross of depreciation and interest but not of taxes. Entertainment cost over sales is entertainment expenses over sales. Investment over assets is investment in plant and equipment per yen of total assets. Industry-adjusted values are calculated by subtracting the industry average, which is calculated for each firm separately, and do not incorporate data for that firm. Liquidity crunch dummy #1 is set to 1 if both cash flow over assets and cash flow over interest are in their lowest quartiles. Liquidity crunch dummy #2 is set to 1 for firms whose industry-adjusted cash flow over assets and cash flow over interest are in their lowest quartiles. Industry classifications are from the Tokyo Stock Exchange. Kolmogorov-Smirnov and χ^2 tests of independence both accept the null hypothesis that the events are distributed independently across industries. Only observations for which all relevant variables exist are included.

Panel A: Indicator Variables

Dummy variable indicating	Zeros	Ones	Sample
Banker appointed to board	2200	171	2371
Bank group	1168	1203	2371
Liquidity crunch dummy #1	2179	192	2371
Liquidity crunch dummy #2	2185	186	2371

Panel B: Continuous Variables

Variable		Median	Mean	Std. Dev.	Minimum	Maximum
Leverage		0.560	0.577	0.047	0.515	0.648
Bank loans to total debt		0.276	0.294	0.227	0.000	0.834
Stock return	ind.-adj.	−0.042	0.000	0.330	−0.770	3.78
	ind.-av.	0.151	0.170	0.157	−0.230	0.616
Tobin's q	ind.-adj.	−0.174	0.000	1.14	−2.58	11.9
	ind.-av.	0.974	1.03	0.556	0.231	2.72
Assets growth rate	ind.-adj.	0.000	0.000	0.053	−0.372	0.531
	ind.-av.	0.051	0.061	0.045	−0.182	0.553
Sales growth rate	ind.-adj.	0.000	0.000	0.060	−0.285	0.328
	ind.-av.	0.069	0.076	0.047	−0.144	0.333
Employment growth rate	ind.-adj.	0.002	0.000	0.048	−0.225	0.384
	ind.-av.	−0.004	−0.004	0.020	−0.084	0.081
Cash flow over total assets	ind.-adj.	−0.001	0.000	0.020	−0.195	0.150
	ind.-av.	0.060	0.060	0.006	0.043	0.085

Table I—*Continued*

Panel B: Continuous Variables (*Continued*)

Variable		Median	Mean	Std. Dev.	Minimum	Maximum
Cash flow over interest	ind.-adj.	−1.10	0.000	3.60	−12.6	14.9
	ind.-av.	2.73	2.89	2.13	0.000	11.0
Entertainment cost over cash flow	ind.-adj.	−0.008	0.000	0.095	−1.72	2.43
	ind.-av.	0.041	0.043	0.019	0.018	0.221
Entertainment cost over sales	ind.-adj.	−0.00004	0.000	0.00011	−0.00016	0.00008
	ind.-av.	0.0016	0.0018	0.0003	0.0009	0.0028
Investment over assets	ind.-adj.	0.001	0.000	0.023	−0.049	0.194
	ind.-av.	0.012	0.018	0.007	0.000	0.049

Panel C: Tokyo Stock Exchange Industry Classifications

Industry	Appointments	Firm-years
Foodstuffs	14	254
Textiles	7	119
Pulp and paper	6	70
Chemicals	43	478
Petroleum and coal products	2	27
Rubber products	3	38
Glass and pottery	3	94
Iron and steel	5	147
Nonferrous metals	10	118
Metal products	4	90
Machinery	18	285
Electric machinery	24	366
Transport machinery	20	180
Equipment	8	64
Others	4	47

bank group dummy to one if a firm is classified by Nakatani (1984) as in one of the six main financial keiretsu, or if Toyo Keizai (1981 through 1987) lists it in a corresponding financial keiretsu presidents' club. Our sample of 383 firms contains 31 Mitsui companies, 35 Mitsubishi companies, 33 Sumitomo companies, 31 Fuji companies, 26 Daiichi Kangyo companies, and 25 Sanwa companies, for a total of 181 firms in bank groups. We interpret high leverage, a high ratio of loans to total debt, and bank group membership as indicating strong bank ties.

B. Stock Market Performance Measures

We employ two measures of stock performance: total real annual return and Tobin's q ratio. The former is compounded from monthly *cum*-dividend returns provided by the Japan Securities Research Institute.[2] Adjusted q

[2] Our cum dividend returns are total returns, inclusive of cash dividends and adjusted for stock dividends, stock splits, and other relevant factors.

ratios are provided by Asako et al. (1989). The importance of adjusting for land and equity price appreciation and taxes in computing q ratios for Japanese firms is emphasized by Hayashi and Inoue (1991), Hoshi and Kashyap (1990), and Asako et al. (1989). We interpret stock returns as measuring investors' collective opinions about recent management decisions. We interpret q ratios as measuring long-term historical performance. Tobin's q measures the value investors put on a firm compared to the cost of setting up such a firm. If q is greater than one, value has been added to the firm over the years. If q is less than one, value has disappeared. We interpret industry averages of these variables as indicators of the financial health of the firm's industry. Since stock prices fluctuate for reasons beyond management control, we construct industry-adjusted stock returns and industry-adjusted q's, equal to unadjusted variables minus industry average stock returns and industry average q's respectively, calculated excluding the firm in question. Industry groups are based on the Tokyo Stock Exchange's manufacturing industry classifications, described in Table I, Panel C.

C. Accounting Performance Measures

As general performance measures, we use assets growth, sales growth, labor force growth, cash flow over assets (we define cash flow as income gross of depreciation and interest but net of taxes and divide this by the book value of total assets), investment rate (investment in plant and equipment per yen of assets), and liquidity (cash flow over interest payments if cash flow is positive, zero otherwise). We also use a weak firm dummy (one if return on assets and liquidity are both in their lowest quartiles). Finally, we examine entertainment costs and discuss possible interpretations of this variable, which is measured in two ways: per yen of sales and per yen of cash flow. In the latter, we drop observations where cash flow is nonpositive.[3] These variables are calculated annually and, except for the liquidity crunch dummy, are industry adjusted in the same way as our stock market measures. We interpret industry averages of these variables as indicators of the health of the industry. Data are from the Japan Development Bank's financial database.

III. Empirical Results

Table II contains probit regressions using bank linkage and performance variables to explain appointments of bankers to boards. High debt, bank loans, and bank group links are important predictors. Kester (1986) finds a negative correlation between leverage and profitability in Japanese firms, Kang and Stulz (1997) find that a high reliance on bank loans is associated with poor stock market performance in the 1990s, and Hoshi, Kashyap, and Scharfstein (1993) report higher net worth firms distancing themselves from

[3] We are grateful to an anonymous referee for suggesting the definitions of our liquidity variable, liquidity crunch dummy, and entertainment expenses measures.

banks in recent years. Thus, including these variables may be overcompensating. We therefore consider probits both with and without controlling for bank links when we examine performance measures.

A. The Economic Significance of Poor Performance in Predicting Banker Appointments to Boards

Consistent with Kaplan and Minton (1994), Table II shows poor stock performance raising the probability of a banker being appointed to the board. Industry-adjusted and industry-average stock performances are always jointly significant, with χ^2 tests significant at 5 percent or better. Consistent with Kang and Shivdasani (1994), industry average stock performance matters more than performance vis à vis industry benchmarks.

Probit 2.1 includes only stock performance, to allow maximal values for these coefficients. These imply that dropping a firm's industry-adjusted stock return from zero (i.e., par with its industry) to the lowest quartile relative to industry levels, −20.6 percent, raises the probability of a banker being appointed to its board from 6.3 percent only to 6.7 percent. If performance falls to the lowest decile, −32.6 percent, the probability of a banker being appointed rises further, but only to 6.8 percent. If the firm continues to match the performance of its industry (i.e., industry-adjusted return remains at zero), but the industry as a whole falls behind the economy's overall performance (industry average return is at the lowest quartile of 4.3 percent), the probability of a bank appointment rises slightly more sharply: by one-fifth to 7.5 percent. If the firm is matching the performance of an industry at the lowest decile level of industry performance, the probability rises by one-third to 8.4 percent.[4] Adding leverage, bank loans, and bank-group membership controls in probit 2.2 causes little change in the point estimates on the stock return variables, and both remain statistically significant. However, bank links are clearly an important predictor of bank appointments, with the bank loans variable the most statistically significant of our measures.

Probits 2.3, 2.4, and 2.5 show that the importance of stock market performance does not drop off when measures of employment growth, liquidity, and current earnings are included, though poor earnings and liquidity also significantly predict bank appointments. These results are consistent with banks reacting to protect creditors as well as shareholders.

Low current earnings and liquidity are more economically significant than stock performance. If all industry performance measures in probit 2.5 are set to their medians, and all industry-adjusted performance measures are

[4] In probits analogous to 2.1, but using Tobin's q rather than stock return, the results are similar. When industry average q falls from the median to the lowest quartile, 0.601, the probability of a banker being appointed to the board rises from 6.3 percent to 7.4 percent. When industry performance is at the lowest decile level, 0.449, the probability of a banker's appointment rises to 8.0 percent. This is similar in magnitude to the change in the probability of a hostile takeover when q changes by similar amounts in U.S. data (see Morck, Shleifer, and Vishny (1989)).

set to zero, the probability of a banker appointment is 6.0 percent. If industry-adjusted liquidity and cash flow fall to the lowest quartiles of their distributions, this probability almost doubles, to 11 percent. With liquidity and cash flow at their lowest deciles, the probability rises only slightly, to 12 percent.

Our results are robust. The point estimates and significance levels do not change greatly if alternative measures of leverage are used.[5] Assets and sales growth are less powerful than employment growth. Year dummies corresponding to the early 1980s are significant, but their inclusion does not materially change the other coefficients' point estimates or significance. Using separate dummies for each of the six major bank groups rather than a single bank group dummy does not materially change the coefficients on the other variables, however only the Mitsubishi and Daiichi Kangyo dummies are significant. The other four show no significant history of appointments unrelated to financial performance.[6] Firm size measures have little effect on other variables and are insignificant themselves. Adjusting returns for ß risk does not qualitatively change the results. Neither does altering the dependent variable to count only appointments to more senior board positions or appointments of directors who also become full-time firm employees. Probits in which unadjusted stock market performance is used (rather than the decomposition into industry-adjusted and industry-average performance) are markedly less significant, with χ^2 goodness of fit statistics reduced by 50 percent to 67 percent. Lags of more than one year and averages over several previous years perform worse than one-year lags. The same is true for probits using q ratios rather than returns.

B. Differences between Bank Group Members and Nonmembers

Banks have more extensive direct and indirect stakes in the member firms of their bank groups than in other firms. Consequently, the triggers of increased bank interest in management decisions should be different for bank group firms versus other firms. We therefore run probits 2.6 and 2.8 on bank group firms only and probits 2.7 and 2.9 on other firms only.

Low stock returns matter for bank group firms, but not for other firms. They are also economically more significant for bank group firms alone than for the full sample. With all industry performance measures at their medi-

[5] Our results do not change when we use a variety of alternative leverage variables, including one with market value of equity replacing total assets in the denominator. This leverage measure reflects the large cash balances many Japanese firms held in the 1980s (which probably reduced their effective leverage) and mitigates problems associated with various reserve measures related to retained earnings (long-term liability reserves, special reserves, etc.) which Japanese accounting practice allows to be included as liabilities rather than as part of net worth.

[6] Daiichi Kangyo Bank is reputed to have a more interventionist "style." The type of firm in a group may also influence the degree of bank oversight. Since many of the firms in the Mitsubishi group are relatively old and in heavy industries, Mitsubishi bank might keep a closer watch on its client firms than would Mitsui Bank, whose client firms tend to be in newer industries.

Table II

Probit Regression Results

The likelihood of bank appointment in a firm's board as a function of bank linkages, stock market performance, and other performance measures for the full sample, bank group member firms and other firms. Numbers in parentheses are t-ratio magnitudes. The full sample consists of 2,371 observations pooled over 383 manufacturing firms from the first section of the Tokyo Stock Exchange for the period 1981 to 1987. The bank group sample consists of 1203 observations, and the sample of firms not in bank groups contains 1168 observations. Only those observations for which all relevant variables exist are included in the sample. The dependent variable is one if a bank employee is appointed as a director and zero otherwise. The bank group dummy is set equal to zero if a firm belongs to one of the big-six bank-based financial keiretsu and zero otherwise. All continuous regressor variables are lagged one year. Leverage is financial debt (book values of bank debt, short-term notes, long-term bonds, etc.) net of cash and marketable securities divided by total assets. Bank loans over total debt is the book value of bank loans over financial debt, as defined above. Stock return is *cum*-dividend stock return. Tobin's q is adjusted for real estate and equity price changes. Employment growth is year-to-year growth rate in number of workers. Cash flow over assets is income gross of depreciation and interest but not of taxes divided by total assets. Cash flow over interest is income gross of depreciation and interest but not of taxes divided by interest payments. Industry-adjusted values are calculated by subtracting the industry average, which is calculated for each firm separately, and does not incorporate data for that firm. Liquidity crunch dummy #1 is set to 1 if both cash flow over assets and cash flow over interest are in their lowest quartiles. Liquidity crunch dummy #2 is set to 1 for firms whose industry-adjusted cash flow over assets and cash flow over interest are in their lowest quartiles. Industry classifications are from the Tokyo Stock Exchange. The chi-squared statistic is $\chi^2 \equiv 2\{\ln L(\Omega) - \ln L(\omega)\}$ where $L(\Omega)$ is the maximum value of the likelihood function and $L(\omega)$ is its value under the hypothesis that all coefficients except the constant are zero. The degrees of freedom is the number of regressors excluding the constant term. This statistic can be interpreted as a measure for the goodness of fit analogous to R^2 in an ordinary least squares regression.

	(2.1) Full Sample	(2.2) Full Sample	(2.3) Full Sample	(2.4) Full Sample	(2.5) Full Sample	(2.6) Bank Group	(2.7) Other Firms	(2.8) Bank Group	(2.8) Other Firms
Constant	−1.40***	−2.54***	−2.96***	−2.87***	−2.86***	−1.66*	−4.59***	−1.73*	−4.63***
	(42.5)	(4.36)	(4.41)	(4.23)	(4.21)	(1.81)	(4.37)	(1.82)	(4.39)
Leverage (financial debt over total assets)	—	1.41	1.47	1.49	1.49	−0.261	4.31**	−0.261	4.31**
		(1.46)	(1.21)	(1.22)	(1.22)	(1.59)	(2.24)	(1.59)	(2.24)
Debt structure (bank loans over total debt)	—	0.779	0.803	0.832	0.832	0.679	1.05***	0.679	1.05***
		(1.46)	(1.21)	(1.22)	(1.22)	(1.59)	(2.24)	(1.59)	(2.24)
Bank group membership indicator variable	—	0.067*	0.052	0.059*	0.059*	—	—	—	—
		(1.66)	(1.55)	(1.64)	(1.64)				

Table II—*Continued*

Industry-adjusted stock return	−0.140**	−0.104*	−0.111*	−0.104*	−0.104*	−0.613**	0.318	−0.613**	0.318
	(2.09)	(1.64)	(1.71)	(1.66)	(1.66)	(2.24)	(1.56)	(2.24)	(1.58)
Industry-average stock return	−0.849***	−0.668***	−0.651***	−0.671***	−0.671***	−1.23***	−0.120	−1.23***	−0.120
	(5.99)	(2.24)	(2.16)	(2.22)	(2.22)	(2.94)	(1.26)	(2.94)	(1.26)
Industry-adjusted employment growth rate	—	—	−0.051	−0.230	−0.230	2.47	−1.87*	2.47	−1.87*
			(0.531)	(0.238)	(0.238)	(1.55)	(1.69)	(1.55)	(1.69)
Industry-average employment growth rate	—	—	2.20	2.04	2.04	0.688	4.79	0.688	4.79
			(0.931)	(0.862)	(0.862)	(0.218)	(1.27)	(0.218)	(1.27)
Industry-adjusted cash flow per yen of total assets	—	—	−3.50**	−1.19	−1.03	−6.32*	2.77	−6.32*	2.77
			(2.01)	(0.498)	(0.383)	(1.65)	(0.803)	(1.65)	(0.803)
Industry-average cash flow per yen of total assets	—	—	4.89	3.12	3.01	2.98	1.83	2.98	1.83
			(0.616)	(1.13)	(1.01)	(0.282)	(0.141)	(0.282)	(0.141)
Industry-adjusted cash flow per yen of interest payments	—	—	−0.004**	−0.003*	−0.003*	−0.027*	−0.003*	−0.029*	−0.003*
	—	—	(1.98)	(1.71)	(1.76)	(1.65)	(1.68)	(1.65)	(1.68)
Industry-average cash flow per yen of interest payments	—	—	0.027	0.012	0.015	−0.004*	−0.014	−0.004*	−0.014
	—	—	(0.622)	(0.605)	(0.638)	(0.115)	(0.429)	(0.115)	(0.429)
Liquidity crunch dummy #1	—	—	—	0.377**	—	0.374**	0.361**	—	—
				(2.55)		(1.98)	(1.98)		
Liquidity crunch dummy #2	—	—	—	—	0.386***	—	—	0.376**	0.363*
					(2.67)			(2.01)	(1.69)
Log likelihood value	−549	−538	−533	−530	−530	−298	−221	−298	−221
χ^2 goodness of fit statistic	10.8***	32.4***	41.6***	47.9***	47.9***	35.6***	32.7***	35.6***	32.7***

***, **, * Different from zero at 1, 5, and 10 percent significance, respectively.

ans and all industry-adjusted performance measures at zero, the probability of a banker appointment in probit 2.8 is 6.4 percent. When the industry-adjusted stock return falls to the lowest quartile and then the lowest decile, the probability of a banker being appointed rises to 7.6 percent and then to 8.8 percent. When firm performance matches industry performance falling to its lowest quartile and then lowest decile, the probability rises to 8.4 percent and then to 9.7 percent.

Industry-adjusted employment growth is irrelevant for bank group firms, but has a significant negative coefficient for other firms. This might be taken as suggesting a response to workers' interests. However, Table III shows that other firms lay workers off more readily than bank group firms do.

Low industry-adjusted cash flow is an important predictor of bank appointments in bank group firms. Low industry-adjusted liquidity is significant for both subsamples, but has a substantially larger coefficient among bank group firms. Cash flow and liquidity problems are also much more economically significant in bank group firms. If industry-adjusted liquidity and cash flow are reduced to their lowest quartiles, the probability of a banker being appointed to the board in probit 2.8 jumps to 15 percent. With liquidity and cash flow at their lowest deciles, the probability rises to 18 percent—almost triple the base probability of 6.4 percent. For other firms, the baseline probability of a banker appointment in probit 2.9, when all industry performance measures are at their medians and all industry-adjusted performance measures are at zero, is 3.9 percent. When industry-adjusted liquidity and cash flow fall to their lowest quartiles, the probability increases to only 7.4 percent. Even with liquidity and cash flow at their lowest deciles, the probability rises only to 7.6 percent. Banker appointments to boards of firms outside bank groups appear to require more impending liquidity problems.

Liquidity and cash flow relative to industry benchmarks are ex ante measures of credit risk, as prudent levels of financial slack differ across industries. However, when a liquidity problem is at hand, the absolute values of these variables become more important. What matters is whether or not the firm can pay its interest bills. When we rerun the two probits above using absolute performance measures (not shown), rather than the decomposition into industry-adjusted and industry-average measures, the χ^2 goodness-of-fit statistics for the bank group firms falls markedly. The difference in specifications is significant at 1 percent. In contrast, the χ^2 goodness-of-fit statistic for firms not in bank groups does not change significantly when the analogous specification change is made in that regression.[7] The decomposition is

[7] The lower overall significance of probit 2.9 must be acknowledged in drawing economic conclusions here. Also, if industry benchmarks are relevant to assessing firms' creditworthiness, for example if different industries have different optimal liquidity ratios, this line of reasoning is weakened.

important for bank group firms, but absolute liquidity alone works as well for other firms. Again, banker appointments correspond to more imminent liquidity problems in firms outside bank groups.

Our results for bank group and other firms are robust to the same general specification changes discussed in connection with probits 2.1 through 2.5.

C. Longer Term Performance Preceding and Following Banker Appointments to Boards

To study the longer term performance of our event firms around the appointments of bank executive to their boards, we use a simple event study methodology. For each event firm, the year of the bank appointment is called year 0. Firms are followed from year −3 (three years before the bank appointment) to year +9 (nine years after).

Interpreting the year by year performance of our sample of 171 event firms, as displayed in Table IV, is straightforward. The first entry, −0.021, indicates that event firms' unadjusted growth in assets averaged −2.1 percent during the third year prior to the banker appointments to their boards. The standard deviation of this variable is 0.6 percent. Since there is clearly an industry effect in the probits in Tables II, standard t-tests that ignore this dependence are likely to be biased, so despite a t-ratio of 3.5, statistical significance is problematic. We therefore consider industry-adjusted growth assets in the next column of Table IV. The entry −0.024 there indicates that assets growth for event firms averaged 2.4 percent below that of their industry rivals during the third year before bankers were appointed to their boards. The standard error of this estimate is 0.6 percent, implying a t-ratio of 2.67 and statistical significance at 1 percent. Although significance levels are indicated for each industry-adjusted figure, we prefer to emphasize broad patterns in the point estimates. Caution is especially warranted after year +3 as the sample becomes attenuated. There has not been sufficient time since our most recent events to allow a full panel beyond that year. We do, however, have a complete panel from year −3 to year +3. We have no reason to think our more recent events are qualitatively different, so our later observations are presumably only noisier. Table III contains industry-adjusted figures only, but for bank group firms and other firms separately.

Table IV shows asset, sales, and employment growth dropping behind industry benchmarks prior to the appointment year. Asset growth and sales growth begin to fall below industry norms at least three years prior to the banker appointment, and remain depressed until two years after it. Employment growth falls off in year −1, and does not return to industry norms until year +4. Table III shows that these declines are markedly less severe in bank group firms.[8] Asset, sales and especially employment growth rates

[8] Sheard (1991) argues that group firms can issue shares to other member firms to raise funds. Since their asset base is not declining, the recovery in their cash flows is real. If other firms must rely on asset sales, their improved cash flow to assets ratio might be at least partly due to a smaller denominator. The same might be true of investments over assets.

Table III

Long-Term Performance of Bank Group Firms and Other Firms

This table displays the long-term performance of Japanese firms that are members of bank groups (financial keiretsu) and that are not members of bank groups. Firm performance is shown for each year before and after year 0, the event year when bankers are appointed to their boards. Assets growth is year-to-year growth rates in real assets. Sales growth is year-to-year growth rates in real sales. Employment growth is year-to-year growth rate in number of workers. Cash flow over assets is income gross of depreciation and interest but not of taxes divided by total assets. Investment over assets is investment in plant and equipment per yen of assets. Cash flow over interest is income gross of depreciation and interest but not of taxes divided by annual interest costs. Entertainment costs are divided first by total sales and second by cash flow. Tobin's q is estimated market value over estimated replacement cost adjusted for real estate and equity price changes. Stock return is annual *cum*-dividend stock return. Industry-adjusted values are calculated by subtracting industry averages calculated for each firm separately and not incorporating data for that firm. Numbers in parentheses are standard errors. Numbers in brackets are sample sizes. The sample size declines with time because data subsequent to year 0 is unavailable for recent appointments. No firms disappear because of mergers or bankruptcies.

	Growth Rates in:			Cash Flow over	Invest. over	Cash Flow over	Entertainment Costs over:		Tobin's q	Stock
Yr.	Assets	Sales	Jobs	Assets	Assets	Interest	Sales	Cash Flow	Ratio	Return
					Bank Group Firms					
−3	−0.020**	−0.018*	−0.006	−0.004**	−0.003	−1.01*	−0.00005	−0.060*	−0.045*	−0.013
	(0.008)	(0.010)	(0.006)	(0.002)	(0.002)	(0.061)	(0.0002)	(0.030)	(0.080)	(0.029)
	[92]	[92]	[92]	[92]	[92]	[92]	[81]	[81]	[92]	[92]
−2	−0.017**	−0.005	−0.001	−0.005**	−0.002	−1.75*	−0.00006	0.001	−0.000	−0.028
	(0.008)	(0.010)	(0.005)	(0.002)	(0.002)	(0.981)	(0.0002)	(0.004)	(0.177)	(0.033)
	[92]	[92]	[92]	[92]	[92]	[92]	[81]	[81]	[92]	[92]
−1	−0.007	−0.009	−0.005	−0.005**	0.001	−1.41***	−0.00012	−0.002	−0.087	−0.056***
	(0.014)	(0.012)	(0.008)	(0.002)	(0.003)	(0.512)	(0.0002)	(0.007)	(0.162)	(0.022)
	[92]	[92]	[92]	[92]	[92]	[92]	[91]	[91]	[92]	[92]
0	−0.004	0.003	0.001	−0.006***	−0.000	−1.21	−0.00005	0.042**	−0.123	0.090***
	(0.010)	(0.013)	(0.011)	(0.002)	(0.002)	(0.813)	(0.0002)	(0.017)	(0.076)	(0.033)
	[92]	[92]	[92]	[92]	[92]	[92]	[87]	[87]	[92]	[92]
1	−0.008	−0.001	0.002	−0.007***	0.000	−1.11	−0.00009	0.052	0.153	−0.035
	(0.013)	(0.012)	(0.006)	(0.002)	(0.003)	(0.856)	(0.0001)	(0.034)	(0.151)	(0.030)
	[92]	[92]	[92]	[92]	[92]	[92]	[72]	[72]	[76]	[92]
2	−0.009	−0.015	0.005	−0.004**	−0.004	−0.800	−0.00002	0.109***	0.082	0.024
	(0.014)	(0.012)	(0.006)	(0.002)	(0.003)	(0.612)	(0.0001)	(0.031)	(0.102)	(0.032)
	[92]	[92]	[92]	[92]	[92]	[92]	[56]	[56]	[73]	[92]
3	−0.001	0.001	0.001	−0.001	−0.004	−0.251	0.00002	0.066**	−0.134	0.037
	(0.012)	(0.012)	(0.007)	(0.002)	(0.003)	(0.521)	(0.0002)	(0.027)	(0.159)	(0.034)
	[92]	[92]	[92]	[92]	[92]	[92]	[54]	[54]	[61]	[92]
4	0.019	0.027*	0.003	−0.005**	−0.000	−0.667	0.00003	0.053***	0.029	0.028
	(0.016)	(0.015)	(0.007)	(0.002)	(0.003)	(0.519)	(0.0002)	(0.019)	(0.313)	(0.031)
	[76]	[76]	[76]	[76]	[76]	[76]	[39]	[39]	[46]	[76]
5	0.022	0.013	0.008	−0.011***	0.002	−2.67**	0.00006	0.216	−0.223	0.066**
	(0.020)	(0.017)	(0.006)	(0.004)	(0.003)	(1.24)	(0.0003)	(0.067)	(0.199)	(0.033)
	[73]	[73]	[73]	[73]	[73]	[73]	[8]	[8]	[21]	[73]
6	0.041**	0.034***	0.012**	−0.006***	0.005	−0.751	−0.00010	0.067	−0.239	0.010
	(0.019)	(0.014)	(0.005)	(0.002)	(0.004)	(0.621)	(0.0003)	(0.043)	(0.328)	(0.029)
	[69]	[69]	[69]	[69]	[69]	[69]	[9]	[9]	[16]	[69]

Table III—*Continued*

Yr.	Growth Rates in: Assets	Sales	Jobs	Cash Flow over Assets	Invest. over Assets	Cash Flow over Interest	Entertainment Costs over: Sales	Cash Flow	Tobin's *q* Ratio	Stock Return
					Bank Group Firms (Continued)					
7	0.007	0.028***	0.022***	−0.003	0.012**	−0.251	—	—	—	0.048
	(0.021)	(0.009)	(0.009)	(0.002)	(0.006)	(0.526)				(0.035)
	[55]	[55]	[55]	[55]	[55]	[55]				[55]
8	0.031	−0.009	0.048*	−0.003	0.012	0.331	—	—	—	0.050
	(0.029)	(0.014)	(0.025)	(0.004)	(0.011)	(0.322)				(0.040)
	[24]	[24]	[24]	[24]	[24]	[24]				[24]
9	−0.007	−0.003	0.038	−0.003	0.003	−0.613	—	—	—	0.018
	(0.030)	(0.017)	(0.031)	(0.003)	(0.010)	(0.628)				(0.040)
	[19]	[19]	[19]	[19]	[19]	[19]				[19]
					Other Firms					
−3	−0.028***	−0.032**	−0.009	−0.002	−0.001	−0.461	−0.00005	−0.031**	0.519*	0.018
	(0.011)	(0.014)	(0.007)	(0.002)	(0.004)	(0.612)	(0.0001)	(0.014)	(0.276)	(0.036)
	[79]	[79]	[79]	[79]	[79]	[79]	[68]	[68]	[78]	[79]
−2	−0.028**	−0.034***	−0.020	−0.007**	−0.006	−0.351*	−0.00007	0.008	0.280	−0.048
	(0.012)	(0.014)	(0.008)	(0.003)	(0.005)	(0.203)	(0.0001)	(0.005)	(0.197)	(0.048)
	[79]	[79]	[79]	[79]	[79]	[79]	[68]	[68]	[78]	[79]
−1	−0.024*	−0.012	−0.025***	−0.007**	−0.005	−1.12**	−0.00013	−0.0006	0.152	0.039
	(0.013)	(0.016)	(0.007)	(0.003)	(0.004)	(0.512)	(0.0001)	(0.007)	(0.164)	(0.034)
	[79]	[79]	[79]	[79]	[79]	[79]	[73]	[73]	[78]	[79]
0	−0.019	−0.038***	−0.031***	−0.004	−0.003	−0.721	−0.00008	0.038	0.316	0.031
	(0.015)	(0.014)	(0.012)	(0.003)	(0.003)	(0.631)	(0.0001)	(0.026)	(0.321)	(0.034)
	[79]	[79]	[79]	[79]	[79]	[79]	[70]	[70]	[78]	[79]
1	−0.046***	−0.040***	−0.043***	−0.005	−0.008	0.731	−0.00009	0.027	0.390**	−0.101***
	(0.012)	(0.013)	(0.013)	(0.004)	(0.005)	(0.652)	(0.0001)	(0.026)	(0.171)	(0.037)
	[79]	[79]	[79]	[79]	[79]	[79]	[65]	[65]	[53]	[79]
2	−0.057***	−0.036**	−0.034***	0.000	0.001	0.092*	−0.00003	0.048**	0.480**	0.026
	(0.017)	(0.015)	(0.012)	(0.002)	(0.010)	(0.052)	(0.0001)	(0.021)	(0.202)	(0.033)
	[79]	[79]	[79]	[79]	[79]	[79]	[74]	[74]	[44]	[79]
3	−0.028	−0.032**	−0.028**	0.003	0.004	0.813	0.00001	0.049**	−0.066	−0.024
	(0.023)	(0.014)	(0.011)	(0.003)	(0.011)	(0.762)	(0.0001)	(0.029)	(0.194)	(0.037)
	[79]	[79]	[79]	[79]	[79]	[79]	[63]	[63]	[45]	[79]
4	−0.044*	−0.012	−0.020**	−0.003	−0.005	−1.21	0.00002	0.044*	0.029	−0.027
	(0.024)	(0.015)	(0.008)	(0.003)	(0.015)	(1.56)	(0.0002)	(0.024)	(0.313)	(0.034)
	[68]	[68]	[68]	[68]	[68]	[68]	[43]	[43]	[36]	[68]
5	0.146	−0.016	−0.035**	−0.008	−0.020*	−1.21	0.00004	0.104	0.467	0.042
	(0.151)	(0.015)	(0.016)	(0.011)	(0.012)	(2.11)	(0.0002)	(0.101)	(0.441)	(0.045)
	[58]	[58]	[58]	[58]	[58]	[58]	[8]	[8]	[22]	[58]
6	0.165	0.030**	−0.010	−0.004	−0.007	0.663	−0.00014	0.080	0.022	0.002
	(0.156)	(0.015)	(0.009)	(0.005)	(0.012)	(0.782)	(0.0002)	(0.051)	(0.301)	(0.039)
	[55]	[55]	[55]	[55]	[55]	[55]	[8]	[8]	[13]	[55]
7	0.161	0.032*	−0.017	−0.001	−0.004	−0.723	—	—	—	0.056*
	(0.191)	(0.018)	(0.015)	(0.002)	(0.012)	(0.511)				(0.032)
	[46]	[46]	[46]	[46]	[46]	[46]				[46]
8	0.291	−0.019	−0.033	−0.001	−0.003	−1.54	—	—	—	0.067**
	(0.326)	(0.016)	(0.022)	(0.002)	(0.006)	(0.981)				(0.034)
	[28]	[28]	[28]	[28]	[28]	[28]				[28]
9	−0.085**	0.007	−0.035*	0.009*	−0.007	1.90	—	—	—	0.040
	0.039)	(0.020)	(0.019)	(0.005)	(0.006)	(1.78)				(0.042)
	[18]	[18]	[18]	[18]	[18]	[18]				[18]

***, **, * Different from zero at 1, 5, and 10 percent significance, respectively.

Table IV

Long Term Performance

This table shows the long term performance of Japanese firms in the years before and after year 0, the event year when bankers are appointed to their boards. Assets growth is year-to-year growth rate in real assets. Sales growth is year-to-year growth rate in real sales. Employment growth is year-to-year growth rate in number of workers. Cash flow over assets is income gross of depreciation and interest but not of taxes divided by total assets. Investment over assets is investment in plant and equipment per yen of assets. Cash flow over interest is income gross of depreciation and interest but not of taxes divided by annual interest costs. Entertainment costs are divided first by total sales and second by cash flow. Tobin's q is estimated market value over estimated replacement cost adjusted for real estate and equity price changes. Stock return is annual *cum*-dividend stock return. Industry-adjusted values are calculated by subtracting industry averages from the absolute (i.e., unadjusted) measures. Industry averages are calculated for each firm separately and do not incorporate data for that firm. Numbers in parentheses are standard errors. Numbers in brackets are sample sizes. The sample size declines with time because complete data subsequent to year 0 is unavailable for recent appointments. No firms disappear because of mergers or bankruptcies.

	Assets Growth Rate		Sales Growth Rate		Employment Growth Rate		Cash Flow over Assets		Investment over Assets	
Yr.	Abs.	Adj.	Abs.	Adj.	Abs.	Adj.	Abs.	Adj.	Abs.	Adj.
−3	−0.021	−0.024***	0.087	−0.024***	−0.018	−0.007*	0.060	−0.003	0.014	−0.002***
	(0.006)	(0.006)	(0.010)	(0.009)	(0.004)	(0.004)	(0.002)	(0.002)	(0.001)	(0.001)
	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]
−2	−0.022	−0.024***	0.078	−0.012	−0.009	−0.007	0.056	−0.006***	0.015	−0.003***
	(0.007)	(0.007)	(0.009)	(0.008)	(0.005)	(0.005)	(0.002)	(0.002)	(0.001)	(0.001)
	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]
−1	−0.011	−0.014	0.069	−0.010	−0.006	−0.009*	0.054	−0.006***	0.017	−0.002
	(0.009)	(0.009)	(0.011)	(0.009)	(0.005)	(0.005)	(0.002)	(0.002)	(0.002)	(0.002)
	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]
0	0.007	0.011	0.032	−0.015	−0.011	0.014*	0.053	−0.005**	0.018	0.001
	(0.009)	(0.008)	(0.009)	(0.010)	(0.008)	(0.008)	(0.002)	(0.002)	(0.002)	(0.002)
	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]
1	−0.024	−0.024***	0.032	−0.018**	−0.014	−0.017**	0.047	−0.006**	0.017	−0.002
	(0.009)	(0.009)	(0.009)	(0.009)	(0.006)	(0.007)	(0.003)	(0.003)	(0.002)	(0.002)
	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]
2	−0.033	−0.030***	0.027	−0.024***	−0.009	−0.012*	0.050	−0.002	0.017	−0.003
	(0.011)	(0.011)	(0.008)	(0.009)	(0.007)	(0.007)	(0.004)	(0.004)	(0.002)	(0.002)
	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]
3	−0.013	−0.013	0.023	−0.013	−0.007	−0.012**	0.050	0.001	0.018	−0.002
	(0.009)	(0.009)	(0.010)	(0.009)	(0.006)	(0.006)	(0.005)	(0.003)	(0.002)	(0.002)
	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]	[171]
4	0.001	−0.006	0.035	0.009	−0.009	−0.007	0.043	−0.004	0.017	−0.001
	(0.012)	(0.011)	(0.009)	(0.010)	(0.008)	(0.006)	(0.007)	(0.006)	(0.002)	(0.002)
	[144]	[144]	[144]	[144]	[144]	[144]	[144]	[144]	[144]	[144]
5	0.094	0.077	0.037	0.001	−0.014	−0.010	0.033	−0.010**	0.017	−0.001
	(0.070)	(0.063)	(0.012)	(0.011)	(0.008)	(0.008)	(0.005)	(0.005)	(0.002)	(0.002)
	[131]	[131]	[131]	[131]	[131]	[131]	[131]	[131]	[131]	[131]
6	0.100	0.088	0.078	0.031***	0.001	0.003	0.038	−0.005	0.020	0.003
	(0.070)	(0.065)	(0.001)	(0.011)	(0.009)	(0.009)	(0.008)	(0.005)	(0.003)	(0.003)
	[124]	[124]	[124]	[124]	[124]	[124]	[124]	[124]	[124]	[124]
7	0.084	0.070	0.102	0.028***	0.009	0.005	0.041	−0.002	0.004	0.004
	(0.089)	(0.082)	(0.010)	(0.009)	(0.008)	(0.008)	(0.007)	(0.005)	(0.003)	(0.004)
	[101]	[101]	[101]	[101]	[101]	[101]	[101]	[101]	[101]	[101]

Table IV—*Continued*

	Assets Growth Rate		Sales Growth Rate		Employment Growth Rate		Cash Flow over Assets		Investment over Assets	
Yr.	Abs.	Adj.	Abs.	Adj.	Abs.	Adj.	Abs.	Adj.	Abs.	Adj.
8	0.162	0.145	0.083	−0.017*	0.014	0.006	0.044	−0.002	0.022	0.001
	(0.166)	(0.157)	(0.012)	(0.010)	(0.017)	(0.017)	(0.006)	(0.007)	(0.005)	(0.004)
	[52]	[52]	[52]	[52]	[52]	[52]	[52]	[52]	[52]	[52]
9	−0.028	−0.045*	0.085	−0.001	0.023	0.005	0.047	0.003	0.020	−0.004
	(0.024)	(0.022)	(0.014)	(0.012)	(0.019)	(0.019)	(0.003)	(0.018)	(0.004)	(0.004)
	[37]	[37]	[37]	[37]	[37]	[37]	[37]	[37]	[37]	[37]

	Cash Flow over Interest		Entertainment Costs over Sales		Entertainment Costs over Cash flow		Tobin's q		Stock Return	
Yr.	Abs.	Adj.	Abs	Adj.	Abs.	Adj.	Abs.	Adj.	Abs.	Adj.
−3	1.67	−0.751	0.0018	−0.00005	0.022	−0.047**	0.803	−0.093	0.143	0.004
	(0.031)	(0.811)	(0.0003)	(0.0001)	(0.016)	(0.021)	(0.092)	(0.094)	(0.020)	(0.023)
	[171]	[171]	[149]	[149]	[149]	[149]	[170]	[170]	[171]	[171]
−2	1.55	−1.10*	0.0018	−0.00007	0.038	0.004	0.820	−0.179**	0.110	−0.032
	(0.028)	(0.641)	(0.0003)	(0.0001)	(0.004)	(0.008)	(0.088)	(0.090)	(0.021)	(0.024)
	[171]	[171]	[149]	[149]	[149]	[149]	[170]	[170]	[171]	[171]
−1	1.34	−1.21***	0.0019	−0.00012	0.036	−0.004	0.735	−0.150	0.087	−0.041**
	(0.028)	(0.405)	(0.0004)	(0.0001)	(0.006)	(0.006)	(0.092)	(0.098)	(0.017)	(0.019)
	[171]	[171]	[164]	[164]	[164]	[164]	[170]	[170]	[171]	[171]
0	1.51	−0.998	0.0018	−0.00007	0.057	0.040*	0.847	−0.075	0.189	0.064**
	(0.030)	(0.751)	(0.0004)	(0.0001)	(0.086)	(0.023)	(0.100)	(0.101)	(0.025)	(0.027)
	[171]	[171]	[157]	[157]	[157]	[157]	[170]	[170]	[171]	[171]
1	1.54	−0.939	0.0018	−0.00009	0.073	0.035	0.788	0.004	0.159	−0.063***
	(0.028)	(0.897)	(0.0003)	(0.0001)	(0.042)	(0.042)	(0.109)	(0.107)	(0.023)	(0.023)
	[171]	[171]	[137]	[137]	[137]	[137]	[129]	[129]	[171]	[171]
2	1.66	−0.401	0.0017	−0.00003	0.114	0.081**	0.814	−0.106	0.232	0.025
	(0.030)	(0.511)	(0.0004)	(0.0001)	(0.035)	(0.035)	(0.115)	(0.113)	(0.022)	(0.026)
	[171]	[171]	[130]	[130]	[130]	[130]	[117]	[117]	[171]	[171]
3	1.78	0.249	0.0020	0.00001	0.097	0.062	10.07	−0.115	0.191	0.010
	(0.035)	(0.211)	(0.0004)	(0.0001)	(0.030)	(0.030)	(0.111)	(0.107)	(0.027)	(0.025)
	[171]	[171]	[117]	[117]	[117]	[117]	[106]	[106]	[171]	[171]
4	1.72	−1.05	0.0018	0.00002	0.137	0.050***	10.11	0.212**	0.229	0.003
	(0.034)	(0.891)	(0.0005)	(0.0002)	(0.035)	(0.025)	(0.160)	(0.097)	(0.028)	(0.027)
	[144]	[144]	[82]	[82]	[82]	[82]	[82]	[82]	[144]	[144]
5	1.50	−2.21*	0.0019	0.00005	0.099	0.151	10.30	0.415**	0.284	0.056**
	(0.033)	(1.21)	(0.0005)	(0.0003)	(0.046)	(0.097)	(0.263)	(0.191)	(0.029)	(0.027)
	[131]	[131]	[16]	[16]	[16]	[16]	[43]	[43]	[131]	[131]
6	1.91	−0.124	0.0018	−0.00013	0.108	0.071	0.974	0.254	0.221	0.006
	(0.045)	(0.122)	(0.0004)	(0.0003)	(0.043)	(0.044)	(0.234)	(0.193)	(0.028)	(0.024)
	[124]	[124]	[17]	[17]	[17]	[17]	[29]	[29]	[124]	[124]
7	2.15	−0.499	—	—	—	—	—	—	0.134	0.052**
	(0.048)	(0.561)							(0.035)	(0.024)
	[101]	[101]							[101]	[101]
8	2.31	−0.677	—	—	—	—	—	—	0.281	0.058**
	(0.051)	(0.578)							(0.035)	(0.026)
	[52]	[52]							[52]	[52]
9	2.35	0.598	—	—	—	—	—	—	−0.100	0.028
	(0.051)	(0.601)							(0.028)	(0.026)
	[37]	[37]							[37]	[37]

***, **, * Different from zero at 1, 5, and 10 percent significance, respectively.

for firms not in bank groups are more negative than those for bank group firms, and are more statistically significant. Absolute employment growth figures (not shown) for other firms are *negative* during these years, indicating that these firms actually shrink. Banker appointments accompany a general downsizing. In bank group firms, this downsizing is mild and ends by or soon after the appointment year. In other firms, it is more severe and long-lasting.

Although more routine banker appointments (i.e., unrelated to financial problems) might occur in bank group firms, this cannot be the whole story. Table IV shows that event firm's cash flow, and especially interest coverage, lag behind industry norms prior to the appointment years but recover quickly thereafter. Of special note is event firms' interest coverage, which is significantly below industry norms in year -1, but subsequently becomes statistically indistinguishable from industry norms. This is consistent with our probit results: banker appointments follow a period of below-industry-average liquidity. The increase in liquidity is consistent with the coinsurance or propping up role of Japanese banks proposed by Hoshi et al. (1990). In Table III, both bank group firms and other firms exhibit statistically similar liquidity relative to industry means prior to the appointments, though firms not in bank groups have worse absolute liquidity. Relative liquidity is statistically indistinguishable from industry norms from the appointment year on for firms in both groups, though the point estimates suggest more marked bailouts of firms outside bank groups.

If Japanese banks improve corporate governance in firms they monitor, closer monitoring should plausibly imply less waste and better share price performance. The entertainment expenses of Japanese firms are large, totalling ¥6.14 trillion in 1991. In comparison, total R&D spending that year was ¥9.74 trillion. Some students of Japanese business stress the importance of networking and therefore view entertainment costs as a prudent investment. We are skeptical of this interpretation, and are unaware of any hard evidence to back it up.[9] We therefore tentatively use entertainment expenses as a proxy for corporate waste, but recognize that other interpretations of this variable may ultimately be proved more valid.

Entertainment costs in Tables III and IV are measured both per yen of sales and per yen of cash flow. Entertainment spending, measured either way, does not fall following banker appointments. Table III shows that the proportions of cash flow spent on entertainment by bank group firms are significantly higher than the proportions by benchmark firms in years 0, 2, 3, and 4.

[9] Indeed, on April 24, 1988, a front page *Financial Times* article by Michiyo Nakamoto, entitled "Corporate Hospitality: You Can't with Nissan," reported that Nissan had banned almost all corporate entertainment spending, and that other businesses, including Hitachi Electronics and NKK Steel, planned to follow suit. The article reported that the move might have been a reaction to adverse publicity about corporate wining and dining of senior government officials, but also noted that Nissan had recently forecast sharply reduced profits.

Those by nongroup firms exceed industry benchmarks only in years 2, 3, and 4 and by uniformly less than group firms' entertainment spending. A similar, though statistically insignificant, pattern is evident for entertainment costs per yen of sales. Industry-adjusted growth in the yen value of entertainment expenses (not shown) is insignificantly negative (−0.5 percent) in year −1, insignificantly positive (1.3 percent) in year 0, and insignificantly negative (−0.9 percent) in year 1. It is positive in all subsequent years, and industry benchmarks are significantly exceeded in year 4 (5.4 percent) and year 6 (10.2 percent). Thus, bank group firms' entertainment spending in yen rises at uniformly higher rates than benchmark firms' and nongroup firms' in these years, although the differences are not statistically significant. If cuts in entertainment budgets indicate tighter ships, little clear evidence of tightening follows bank appointments—especially in bank group firms.

If closer bank monitoring improves corporate governance, share values should rise upon banker appointments. Table IV presents the initially puzzling result that share prices rise by 6.4 percent (relative to industry benchmarks) the year of the appointment and then fall by almost the same amount the following year. This is tracked in Tobin's q figures, though the pattern is insignificant and more spread out over time. Table III clarifies the situation. The share prices of bank group firms rise in year 0 and remain elevated. The share values of other firms do not rise the year of the appointment, fall significantly in year 1, and remain depressed. If Japanese banks protect the interests of small shareholders by monitoring managers, this effect is more evident in bank group firms. In other firms, shareholders do not appear to benefit from closer bank attention, and alternative governance mechanisms such as oversight by a large customer (Kaplan and Minton (1994)) could be paramount.

IV. Conclusions

Close inspection of the history of Japanese corporate ownership suggests keiretsu are management entrenchment devices. Bankers are indeed appointed to firms' boards following poor performance, but this appears to be a response more to poor current liquidity than to lagging share values. This is especially true for firms outside bank groups, though more imminent liquidity problems appear necessary to spur banker appointments there. Perhaps banks have less scope to influence these firms before they face impending crises. (Corporate governance mechanisms not involving banks could be paramount outside bank groups, as Kaplan and Minton (1994) suggest.) Within bank groups, banker appointments to boards may be in response to poor share price performance, or perhaps even poor employment creation records, but liquidity considerations are very important here too. If banker appointments to boards are disciplinary devices, firms seeking to avoid discipline should maintain high current earnings and liquidity. This is at odds with the popular view that freedom from shareholder pressure lets Japanese firms take a long-term view.

Banker appointments to boards follow low liquidity and herald liquidity improvements. Thus, bankers are plausibly appointed to boards to supervise bailouts. Banker appointments correlate with downsizing and perks cutbacks in firms outside bank groups, but not in bank group firms. Though bank group firms' liquidity problems may be less urgent, this finding is consistent with banks insulating bank group firms from financial pressure (Hoshi et al. (1990)).

Share prices of bank group firms rise as bankers join their boards, possibly reflecting better expected corporate governance, but perhaps reflecting only the bailout and expectations of more. The stock prices of firms not in bank groups fall, indicating shareholders do not expect the subsequent restructuring and cutbacks to add value for them. Bank monitoring thus could foster downsizing and cutbacks primarily in firms where these actions add little or nothing to shareholder value, yet the monitoring could foster stability elsewhere. We also find that entertainment spending does not fall subsequent to banker appointments in bank group firms, but does in other firms. If entertainment spending measures perks consumption, rather than valuable networking, this is consistent with undisturbed corporate governance in group firms. If our interpretation of our findings is valid, bank oversight is an imperfect substitute for shareholder oversight.

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