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Who Appoints Them, What Do they Do? Evidence on Outside Directors from Japan

by Yoshiro Miwa and J. Mark Ramseyer*

Abstract: Reformists argue that Japanese firms maintain inefficiently few outside directors, while theory suggests market competition should drive firms toward their firm-specifically optimal board structure (if any). The debate suggests three testable hypotheses. First, perhaps board composition does not matter. If so, then firm performance will show no relation to board structure, but outsiders will be randomly distributed across firms. Second, perhaps boards matter, but many have suboptimal numbers of outsiders. If so, then firms with more outsiders should outperform those with fewer. Last, perhaps board matter, but market constraints drive firms toward their firm-specific optimum. If so, then firm characteristics will determine board structure, but firm performance will show no observable relation to that structure.

To test these hypotheses, we assemble data on the 1000 largest exchange-listed Japanese firms from 1986-94. We first explore which firms tend to appoint outsiders to their boards, and find the appointments decidedly non-random: board composition matters. We then ask whether firms with more outside directors outperform those with fewer, and find that they do not: board composition is endogenous. As we find no robust evidence that board composition affects firm performance during either the thriving 1980s or the depressed early 1990s, we suspect that the optimal board structure may not depend on the macro-economic environment.

We note that until recently courts effectively barred shareholder suits in Japan. We speculate that the much higher level of outside directors in the U.S. may have nothing to do with efficiency or monitoring. Instead, it probably reflects the way U.S. courts let firms use such directors to insulate the firm from extortionate but otherwise costly-to-defend self-dealing claims.

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Persistently, reformers, journalists, and law professors claim that firms should increase the outside directors they name to the board. Directors monitor senior managers for shareholders, they explain. Unless independent from those managers, they will not aggressively monitor. Without an economic base outside the firm, they will not be independent. If a firm hopes to protect its shareholders from its managers, it simply must name more outsiders to its board.

The claim misses the tradeoffs, of course. What outsiders offer in independence, they sacrifice in expertise. The more independent they be, they less they know about the firm. In turn, the significance of that tradeoff will vary by firm. At some firms, independence will be crucial, and a broad business background may be all the expertise a director needs. At others, no amount of independence will help a director who does not know the details of the firm's business.

If boards matter, then in equilibrium competition should drive firms toward their firm-specifically optimal board composition. In most of the advanced capitalist world, most firms sell their output into competitive industries, buy their supplies from competitive sellers, and raise their funds on competitive capital markets. Facing the inevitable market constraints, those that adopt more efficient governance structures will have higher odds of survival. As a result, in equilibrium firms should move toward their firm-specifically optimal governance structures or die. In equilibrium, they should tend to appoint the number and types of outside directors they need, and no more.

Unfortunately, the plaintiffs' securities bar badly obscures this dynamic in the U.S. An NYSE-listed firm without outside directors is a firm begging for a shareholder suit. Rarely do such suits address real wrongdoing. Almost never do they yield significant recoveries, either to the firm or to its shareholders. Instead, they settle with a trivial remedy to the firm and a large payoff to the plaintiffs' lawyers.

In this world of extortionate litigation, outside directors buy protection. Absent such directors, a U.S. firm would be able to defend against self-dealing claims only at enormous expense. By routing their major business decisions past outside directors, however, the firm can dramatically lower the costs it incurs in defending against such claims. In the process, it can effectively insulate itself against the litigation.

By exploring the role of outside directors in Japan, we examine the role such directors play in a world without this legalized extortion. Japanese courts have never allowed class-action suits, and until recently maintained filing fees that effectively barred derivative suits as well. Accordingly, by examining the appointment of outside directors there, we can study whether (aside from their litigation-induced role in the U.S.) boards matter: which firms find what kind of outside directors advantageous.

By examining the ties between board composition and firm performance in Japan, we can also ask whether -- if boards do matter -- board structure is endogenous: whether market competition in modern capitalist economies does drive firms toward their firm-specific optimum. Finally, by comparing the relation between board composition and firm performance in the late 1980s and early 1990s, we can ask whether the optimal board composition depends on the macro-economic environment: whether the boards that facilitated high performance levels in the booming 1980s also did so in the depressed 1990s.

We examine the outside directors at the largest exchange-listed Japanese firms -- the approximately 1,000 firms listed on Section 1 of the Tokyo Stock Exchange in the late 1980s and

early 1990s. We find: (a) that bankers tended to serve on the boards of smaller firms, more heavily leveraged firms, and firms without a large stock of mortgageable assets; (b) that retired government bureaucrats disproportionately served on the boards of the construction firms specializing in public-sector civil engineering projects; and (c) that outside business executives primarily served on the boards either of construction firms specializing in large business-sector construction projects, or of firms in which the executive's own firm owned a large equity stake. Consistent with market pressure toward firm-specifically optimal patterns of board composition, we find no robust association between board composition and observable indices of firm performance. Consistent with the lack of any tie between optimal board composition and the macro-economic environment, we also find that this lack of association holds both for the late 1980s and the early 1990s.

We begin by reviewing the literature on board composition. (Section I). We explain our data set and variables (Section II). We then ask which firms appoint what kinds of directors (Section III.A.), and what observable effect these directors have on firm performance (Section III.B.).

I. Outside Directors -- The Literature

A. The Reformist Impulse:

Reformist intellectuals spare no trees in their paeans to outside directors. Directors work as agents for shareholders, they recite. As agents, they police managers. If themselves "company men," they lack the independence they need adequately to police. Even less do they have the incentives to push the firm toward "greater corporate morality" or to "apply ethical considerations."[1] Far better, they conclude, to appoint men not subject to the pressures that come from a lifetime at the firm.

Of the "reformers," retirement plans have been among the most aggressive. CalPERS claims a "substantial majority" of board members should be independent.[2] TIAA-CREF follows.[3] Increasingly, traditionalist organizations acquiesce. The Business Roundtable, for example, writes:[4]

> It is important for the board of a large publicly owned corporation to have a substantial degree of independence from management. Accordingly, a substantial majority of the directors of such a corporation should be outside (non-management) directors.

And as of mid-2002, the New York Stock Exchange even proposed to require that "[i]ndependent directors . . . comprise a majority of a company's board."[5]

Most large U.S. firms today do name outsiders to the board (a fact that may help explain why the NYSE capitulated to the reformers). According to one study, the fraction of manufacturing firms with a majority of outsiders "rose from 50 percent in 1938, to 61 percent in

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[1] Peter C. Kostant, Team Production and the Progressive Corporate law Agenda, 35 U.C. Davis L. Rev. 667, 690 (2002).

[2] CalPERS, Corporate Governance Core Principles & Guidelines: The United States (1998) (www.calpers_governance.org).

[3] TIAA-CREF, Policy Statement on Corporate Governance (2000) (www.tiaa-cref.org/libra/governance).

[4] Business Roundtable, Statement on Corporate Governance 10 (1999).

[5] NYSE Corporate Accountability and Listing Standards Committee, Report, June 6, 2002, at 2.

1961, to 71 percent in 1972, to 83 percent in 1976."[6] By 1973 the median large manufacturing firm had only 40 percent inside directors, and by 1988 the figure had fallen to a quarter.[7]

"Reformers" in Japan champion the same rhetoric. Take the "Corporate Governance Forum" headed by a prominent university president and legal scholar. Declares the Forum, "a majority of the board of directors should be composed of outside directors."[8] Some politicians propose legislation to require outside directors. And through avenues like the American Chamber of Commerce in Japan, foreigners now routinely put outside directors on this week's shopping list of changes to demand of Japan.

Western scholars often parrot these claims about Japan. Dore, for example, dismisses Japanese boards as "an 'insider system' over which shareholders exercise little monitoring control."[9] Ahmadjian asserts they "rarely play a supervisory role," few are outsiders, and "many outsiders are not independent."[10] And quoting a U.K. study, Monks & Minow insist that Japanese boards "represent the interests of the company and its employees" rather than "the interests of shareholders."[11]

B. The Economic Logic:

The logic to all this is obscure at best. What outsiders potentially contribute in independence from managers, they sacrifice in camaraderie and knowledge about the firm.[12] Although in some firms the former may outweigh the latter, in others it will not. Given that most firms everywhere raise funds, buy supplies, and sell goods and services in competitive markets, the firms that survive should disproportionately be firms with appropriate governance mechanisms: firms whose boards either could not make a difference, or already approach their firm-specific optimum.[13]

Demsetz & Lehn made the point in connection with ownership concentration.[14] Where for fifty years scholars had claimed that the dispersed shareholdings at large U.S. firms let managers ignore shareholder welfare, Demsetz & Lehn found the claim implausible on its face. Firms that

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[6] Edward S. Herman, Corporate Control, Corporate Power 35 (Cambridge: Cambridge University Press, 1981).

[7] Id.; Anup Agrawal & Charles R. Knoeber, Do Some Outside Directors Play a Political Role?, 44 J. Law & Econ. 179, 181 (2001).

[8] Japan Corporate Governance Forum, Koporeeto gabanansu gensoku [Principles of Corporate Governance] (1998) (www.jcgf.org/jp).

[9] Ronald Dore, Stock Market Capitalism: Welfare Capitalism -- Japan and Germany versus the Anglo-Saxons 79 (Oxford: Oxford University Press, 2000).

[10] Christina L. Ahmadjian, Changing Japanese Corporate Governance (unpublished, 2001).

[11] Robert A.G. Monks & Nell Minow, Corporate Governance 272 (Oxford: Blackwell, 1995).

[12] Eugene F. Fama & Michael C. Jensen, Separation of Ownership and Control, 26 J. Law & Econ. 301, 314-15 (1983); April Klein, Firm Performance and Board Committee Structure, 41 J. Law & Econ. 275 (1998).

[13] On competition in the postwar Japanese capital market, see Yoshiro Miwa & J. Mark Ramseyer, Directed Credit? The Loan Market in High-Growth Japan, __ J. Econ. & Mgmt Strategy __ (forthcoming 2003); on the pre-war capital market, see Yoshiro Miwa & J. Mark Ramseyer, Banks and Economic Growth: Implications from Japanese History, 45 J. Law & Econ. __ (forthcoming 2002).

[14] Harold Demsetz & Kenneth Lehn, The Structure of Corporate Ownership, 93 J. Pol. Econ. 1155 (1985). For the application to Japan, see Yoshiro Miwa & J. Mark Ramseyer, Does Ownership Matter? Evidence from the Zaibatsu Dissolution Program, __ J. Econ. & Mgmt. Strategy __ (forthcoming 2003).

raise their funds on competitive capital markets should choose ownership patterns close to their firm-specific optimum or die. If so, Demsetz & Lehn continued, then any attempt to regress shareholder returns on ownership structure will yield insignificant results. And so they found. Although some scholars since have claimed to find such results empirically, they substitute for the empirical quandary a theoretical one: as Jensen & Warner put it, why (if they were right) would "concentration [not be] chosen to maximize firm value"?[15]

The Demsetz-Lehn logic applies straightforwardly to board composition. Perhaps at some firms investors will want outsiders who protect against insider misbehavior. Perhaps at others they will want the sophistication and cohesion that an all-inside board brings, and use other means to monitor and constrain their managers. Perhaps at still others board composition will not matter. Given market pressures, firms without outsiders will necessarily tend to be those where outsiders would bring few gains.

Put otherwise, the benefit that legal scholars and reformers claim would accrue from more outsiders are $20 bills on sidewalks. Those firms that could benefit from outside directors will generally already have them. Those without are firms outsiders could not likely improve. Because the firms for which board composition matters will have boards approaching their firm-specific optimum, board composition should bear no observable relation to firm performance.[16]

Consistent with this endogeneity, the literature to date does not identify a positive association between outside directors and firm performance. Although some studies do find a positive association, others find the association negative.[17] Most studies reviewing the literature -- Hermalin & Weisbach, for example, or Romano and Bhagat & Black -- simply find no relationship between observed performance and board composition.[18] After a "meta-analytic" study of the results, Dalton, et al. conclude: "board composition has virtually no effect on firm performance."[19]

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[15] Michael Jensen & J. Warner, The Distribution of Power Among Corporate Managers, Shareholders, and Directors, 20 J. Finan. Econ. 3 (1988).

[16] Though largely ignored in the "reformist" legal literature, this endogeneity to board composition is central to such econometric studies as Marion Hutchinson, An Analysis of the Association Between Firms' Investment Opportunities, Board Composition, and Firm Performance (unpublished, 2002); Anup Agrawal & Charles R. Knoeber, Firm Performance and Mechanisms to Control Agency Problems between Managers and Shareholders, 31 J. Fin. & Quant. Anal. 377 (1996); Chenchuramaiah T. Bathala, & Ramesh P. Rao, The Determinants of Board Composition: An Agency Theory Perspective, 16 Managerial & Dec. Econ. 59 (1995); Randolph Beatty & Edward J. Zajac, Managerial Incentives, Monitoring, and Risk Bearing: A Study of Executive Compensation, Ownership, and board Structure in Initial Public Offerings, 39 Adm. Sci. Q. 313 (1994).

[17] Positive effects: e.g., Barry D. Baysinger & Henry N. Butler, Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition, 1 J. Law, Econ. & Org. 101 (1985); Mahmoud A. Ezzamel & Robert Watson, Organizational Form, Ownership Structure and Corporate Performance: A Contextual Empirical Analysis of UK Companies, 4 Brit. J. Mgmt. 161 (1993); James A. Brickley & Christopher M. James, The Takeover Market, Corporate Board Composition, and Ownership Structure: The Case of Banking, 30 J. Law & Econ. 161 (1987); David Mayers, Anil Shivdasani & Clifford W. Smith, Jr., Board Composition and Corporate Control: Evidence from the Insurance Industry, 70 J. Bus. 33 (1997). Negative effects: e.g., Idalene F. Kesner, Directors' Stock Ownership and Organizational Performance: An Investigation of Fortune 500 Companies, 13 J. Mgmt. 499 (1987); Agrawal & Knoeber, supra note (1996); Klein, supra note (insiders on key committees bring valuable information); Stanley C. Vance, Corporate Governance: Assessing Corporate Performance by Boardroom Attributes, 6 J. Bus. Res. 203 (1978).

[18] Benjamin E. Hermalin & Michael S. Weisbach, Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature, Fed. Res. Bank N.Y. Policy Rev. (forthcoming), at 6; Roberta Romano, Less is More: Making Institutional Investor Activism a Valuable Mechanism of Corporate Governance, 18 Yale J. Reg. 174, 192-95 (2001); Roberta Romano, Corporate Law and Corporate Governance, 5 Indus. & Corp. Change 277 (1996); see also Sanjai Bhagat & Bernard Black, The Uncertain Relationship Between Board Composition

C. The U.S.-Japan Contrast:

1. Misleading stereotypes. -- And yet, the contrast between the U.S. and Japan remains: exchange-listed U.S. firms have many outsiders on their boards; Japanese firms have few. The contrast poses the obvious preliminary puzzle: why do firms in the two countries appoint directors with such different backgrounds? The most obvious candidates are the easiest to dismiss.

First, the U.S.-Japan contrast does not reflect an inactive Japanese equity market, for the Japanese market is active. Japanese firms raise not just debt but equity, and raise the two types of funds in about the same proportions as U.S. firms. When observers claim Japanese firms are more heavily levered, they primarily capture accounting differences. Corrected for those differences, writes Stewart Myers, U.S. firms have a book-debt/asset ratio of 33 percent where Japanese firms have 37 percent. U.S. firms have a market-debt/asset ratio of 23 percent where Japanese firms have 17.[20]

Second, Japanese managers do not promote employee welfare over shareholder returns. Instead, Japanese firms maintain incentives structured directly to induce their managers to augment shareholder gains. Abe, Kaplan, and Kaplan & Minton, for instance, all find top executive tenure in Japan tied to firm performance.[21] All else equal, executives who earn shareholders large returns do better. Those who fail to earn them do worse.

Third, Japanese executives do not ignore corporate-control-market incentives, for they face a thriving market in corporate control. Although tender offers are rare, they have long been possible. Yet for managerial incentives, what matters is not the number of takeovers, but the potential for them. Indeed, if potential raiders could acquire a firm readily enough, in equilibrium they seldom would -- for managers would manage in ways that did not make themselves a target.[22]

What is more, in Japan mergers and asset sales are common. In 1994, Japanese firms engineered 1,917 mergers and 1,153 sales of all or substantially all their assets.[23] Crucially, mergers and asset sales move productive assets to their most productive use as effectively as tender offers.

Fourth, the government has not used regulation to soften capital market constraints. Although for years it purported to ration funds, for most of the last half-century firms have raised

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and Firm Performance, 54 Bus. Law. 921 (1999) (no strong relation between board composition and performance, but suggesting small number of independent directors may be beneficial).

[19] Dan R. Dalton, et al., Meta-Analytic Reviews of Board Composition, Leadership Structure, and Financial Performance, 19 Strategic Mgmt. J. 269, 278 (1998). To similar effect, see Romano, supra note (1996), at 287: "No matter variable is used to measure performance, virtually all studies find that there is no significant relation between performance and board composition."

[20] Stewart C. Myers, Capital Structure, 15(2) J. Econ. Perspectives 81, 83 (2001).

[21] Yukiko Abe, Chief Executive Turnover and Firm Performance in Japan, 11 J. Japanese & Int'l Econ. 2 (1997); Steven N. Kaplan, Top Executive Rewards and Firm Performance: A Comparison of Japan and the United States, 102 J. Pol. Econ. 510 (1994); Steven N. Kaplan & Bernadette A. Minton, Appointments of Outsiders to Japanese Boards: Determinants and Implications for Managers, 36 J. Finan. Econ. 225 (1994).

[22] A point ignored by Curtis Milhaupt & Mark West, Institutional Change and M&A in Japan: Diversity through Deals, in Curtis J. Milhaupt, ed., Global Markets, Domestic Institutions: Corporate Law and Governance in a New Era of Cross-Border Deals (New York: Columbia University Press, forthcoming 2003).

[23] Kosei torihiki iinkai, ed., Kosei torihiki iinkai nenji hokoku [Fair Trade Commission Annual Report] 181 (Tokyo: Kosei torihiki iinkai, 1994).

their money in competitive markets at competitive rates. The capital market restrictions it imposed simply did not bind. Even as early as the 1970s, firms borrowed at market rates.[24]

2. Shareholder suits. -- Perhaps, however, the puzzle is not why Japanese firms have so few outside directors. Perhaps the puzzle is why U.S. firms have so many. And although we do not purport to test the hypothesis, perhaps the explanation lies in the way outsiders help insulate U.S. firms from shareholder nuisance suits. For most of the last half-century, Japanese firms faced few such suits.[25] Since the 1970s, U.S. firms have faced them regularly.[26]

An American lawyer purporting to "represent" all shareholders can often do so by finding one shareholder who will nominally speak for all, either in a class action or in a derivative suit. The obvious settlement game follows: in exchange for letting the dependents keep class or corporate recoveries at trivial levels, the lawyer pockets a large fee. Busy courts routinely approve. Under Japanese civil procedure, lawyers can represent only the specific plaintiffs who appoint them rather than any purported class, and until recently owed such large filing fees on any derivative suits that they filed almost none.[27]

The U.S. suits do not produce shareholder gains. Instead, as the settlement game suggests, they produce gains only for the plaintiffs' bar. Romano, for example, finds that "while most suits settle, the settlements provide minimal compensation." Instead, the "principal beneficiaries of the litigation . . . appear to be attorneys, who win fee awards in 90 percent of settled suits."[28]

Outside directors matter in this game, because Delaware courts (the most common jurisdiction for exchange-listed firms) usually dismiss conflict-of-interest claims against firms that route contested decisions past outsiders. Suppose a shareholder alleges a senior managerial conflict-of-interest. If the board presented the transaction to nominally disinterested outsiders, the shareholder bears the burden of proving that the deal was so egregiously bad as to constitute "waste." If instead the board had no outsiders, the burden of proof shifts and the defendant must prove that the transaction was "intrinsically fair."[29]

Put more realistically, in conflict-of-interest claims Delaware courts generally hold that boards with outside directors win. Boards without them lose. Given all this, perhaps U.S. boards do not appoint the outside directors they do because outside directors monitor more independently. Perhaps they appointment them to insulate the firm from extortion.

Importantly for our project, during the 1980s Japanese law effectively barred this legalized extortion. As a result, the data on Japanese directorships let us explore board composition in an environment uncluttered by plaintiffs' securities suits. In turn, this lets us ask two questions. First,

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[24] Miwa & Ramseyer, supra note (Directed Credit).

[25] Mark D. West, Why Shareholders Sue: The Evidence from Japan, J. Legal Stud. 351 (2001).

[26] Roberta Romano, The Shareholder Suit: Litigation without Foundation?, 7 J. Law, Econ. & Org. 55, 60 (1991).

[27] J. Mark Ramseyer & Minoru Nakazato, Japanese Law: An Economic Approach 146 (Chicago: The University of Chicago Press, 1999) (class actions); West, supra note (derivative suits)

[28] Romano, supra note, at 84. See also Janet Cooper Alexander, Do the Merits Matter? A Study of Settlements in Securities Class Actions, 43 Stan. L. Rev. 497 (1991); Reinier Kraakman, Hyun Park & Steven Shavell, When Are Shareholder Suits in Shareholder Interests?, 82 Geo. L.J. 1733 (1994).

[29] See, e.g., 8 Del. § 144; Fliegler v. Lawrence, 261 A.2d 218 (Del. 1976); see generally Robert C. Clark, Corporate Law ch. 5 (Boston: Little Brown, 1986); Romano, supra note (1996), at 284. Note, however, that the evidence on whether outside board membership deters filings is ambiguous. See Romano, supra, at 294-95.

does board composition matter? Are outsider appointments random? If not, which firms find outside directors most advantageous, and which find them least? Second, if board composition often does matter, is it endogenous? Do firms with more outsiders outperform their rivals? Or does market pressure instead push firms toward their optimal board composition?

II. The Data

A. Introduction:

To study the determinants and effect of outside director appointments, we assemble information on all non-bank firms listed on Section 1 of the Tokyo Stock Exchange (the largest firms). We collect financial data from 1986 to 1994, and board composition in 1985. We then use the data to determine which firms appointed what kinds of directors (Section III.A.), and what observable effect those directors had on firm performance (Section III.B.). We exclude banks from this data set, and explore the question of outside director appointments to bank boards elsewhere.[30]

B. Sources:

We take our basic financial data from the Nikkei NEEDS data base. We then add several additional variables: from the Nikkei QUICK data base, we collect information on bank loans at firms; from the Kabushiki toshi shueki ritsu we obtain shareholder returns; from work by Asako, Kunimori, and others, we obtain Tobin's Q; and from the Kigyo keiretsu soran we collect information on board composition and the presence of a dominant shareholder.[31]

C. Variables:

With this data, we construct the following variables:

1. Performance variables. --

Q: Tobin's Q for TSE-listed manufacturing firms (not the whole data set), averaged over 1986-90 and 1990-94.[32]

ROI: Total annual shareholder returns on investment (annual rate of appreciation in stock price plus dividends received) for 1985-90 and 1990-95.

Operating-Income/TA: The ratio of a firm's operating income (#95 of the Nikkei NEEDS data base) to total assets (#89) for each year, averaged over 1986-90 and 1990-94.

Ordinary-Income/Eq: The ratio of a firm's ordinary income (operating plus non-operating income, less non-operating expenses [such as interest]; #110) to equity (#78) for each year, averaged over 1986-90 and 1990-94.

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[30] Yoshiro Miwa & J. Mark Ramseyer, Financial Malaise and the Myth of the Misgoverned Bank, in Milhaupt, supra note. We also ignore a firm's purported keiretsu affiliation, for reasons explained more fully in Yoshiro Miwa & J. Mark Ramseyer, The Fable of the Keiretsu, 11 J. Econ. & Mgmt. Strategy 169 (2002).

[31] Nikkei QUICK joho, K.K., NEEDS (Tokyo, Nikkei QUICK joho, as updated); Nikkei QUICK joho, K.K., QUICK (Tokyo, Nikkei QUICK joho, as updated); Nihon shoken keizai kenkyu jo, ed., Kabushiki toshi shueki ritsu [Rates of Return on Common Stocks] (Tokyo: Nihon shoken keizai kenkyu jo, updated); Toyo keizai, ed., Kigyo keiretsu soran [Firm Keiretsu Overview] (Tokyo: Toyo keizai, as updated); Kazumi Asako, et al., Setsubi toshi to tochi toshi: 1977-1994 [Investment in Equipment and Investment in Land: 1977-1994, in Kazumi Asako & Masayuki Otaki, eds., Gendai makuro keizai dogaku [Contemporary Economic Dynamics] (Tokyo: University of Tokyo Press, 1997) (see this article for an explanation of the Q data).

[32] Q is "multiple Q," given the consideration which the compilers gave to the impact of real estate prices on corporate performance. See Asako, et al., supra note.

Growth: The annual growth rate, in percentage, of a firm's total assets, averaged over 1986-90 and 1990-94.

2. Board composition variables. -- As of April 1985:

Former bankers: The number of directors (or executive directors) on the board with a past career at a bank.

Former other firm: The number of directors (or executive directors) on the board with a past career at another firm (other than a bank).

Former government employee: The number of directors (or executive directors) on the board with a past career in government.

Concurrent banker: The number of directors (or executive directors) on the board with a concurrent position at a bank.

Concurrent other firm: The number of directors (or executive directors) on the board with a concurrent position at another firm (other than a bank).

Total outside directors: The sum of the above directors (or executive directors).

3. Control variables. --

Board Size: The number of directors (or executive directors) at a firm in 1985.[33]

Dominant S/h: 1 if any shareholder held 25 percent or more of the firm's stock in 1985; 0 otherwise.

Top 5 Lenders: The fraction of the firm's debt in 1986 and 1990 from the 5 institutions lending the firm the largest amounts.

Volatility: The variance of the ratio of a firm's operating income (#95) to total assets (#89) over 1986-90 and 1990-94.

Total Assets: The average total assets of a firm (#89) over 1986-90 and 1990-94, in million yen.

Tangible Assets/TA: The average ratio of a firm's tangible assets (#21) to total assets (#89) over 1986-90 and 1990-94.

Sales/TA: A firm's average sales (#90) over 1986-90, divided by its average total assets (#89), over 1986-90.

Bank Debt/TA: The sum of a firm's short- (#46) and long-term (#47, 63) borrowings divided by its total assets (#89), averaged over 1986-90 and 1990-94.

Industry dummies: Dummy variables for affiliation in the construction, trade, service and finance (but excluding banks), utilities (including transportation and real estate), light industry, chemical, machinery, and metals industries.

We include selected summary statistics in Tables 1 and 2.

[Include Table 1 about here.]

[Include Table 2 about here.]

D. The Regressions:

We first explore the determinants of outside director appointments. Toward that end, we regress the number of outside directors of each type (both directors at any rank and executive

[33] For this and other director variables, the data cover those directors who, after serving in management elsewhere, are named to the board within 3-4 years of joining a given firm.

directors) on the board in 1985 on firm financials and industry affiliation. Because rational firms will choose their governance structure with an eye to their anticipated needs, we use 1986-90 financial data. Because by all accounts firms rarely change their basic board structure, we collect board composition data only for one year.

Second, we study the effect of board composition on firm performance. We do this by regressing performance in two separate periods on (i) the number of outside directors of each type, (ii) various firm financials, and (iii) industry dummies. To check for robustness, we use several distinct measures of performance.

III. Outside Directors -- the Discussion

A. Who Appoints Them?

1. Introduction. -- Consider a few preliminary observations. Most obviously, Japanese boards are big. At our 1,029 firms on Section 1 of the Tokyo Stock Exchange in 1985, the boards ranged from 6 directors to 54, with the mean at about 19. By contrast, large U.S. manufacturing firms in 1988 had a mean board of about 12.[34] Because of the large board size, most TSE firms maintain an executive board composed of several of the directors.[35] At our TSE firms, the executive directors ranged from 1 member to 32, with the mean at about 8.

A majority of Japanese directors are "insiders." Among our firms, 14 of the mean 19 directors were career firm employees and 6 of the mean 8 executive directors were. Put another way, at the mean firm 26 percent of the directors and 27 percent of the executive directors had either past or concurrent appointments at other institutions. Fifteen percent of the firms had at least half such outside directors, and 23 percent had at least half outside executive directors. Among large U.S. manufacturing firms, nearly three-quarters were outsiders.[36] Because outside directors are a minority at most Japanese firms, if they exert influence it will likely come from their presence rather than from any decisive impact on board votes. To capture any such effect, for our director variables we use the number of outsiders rather than their percentage.

Japanese "outside" directors are mostly firm employees -- lateral recruits rather than career employees. Few of the outsiders, in other words, are prominent law-firm partners, executive executives from other companies, university presidents, or successful investment bankers. Instead, they are men who quit such positions and took their directorships as (at least nominally) full-time posts.

At our mean firm, for example, 1.8 of the 19.5 directors were former executives at other firms, but only 1.1 currently held such positions; 1.1 were former bankers, but only 0.2 currently worked at banks; 0.5 were former government officials (a practice known as amakudari), and legal restrictions prevented current officials from holding board posts. Among the 7.9 executive directors at the mean firm, 1.0 were former executives at industrial firms, but only 0.1 currently held such positions; 0.5 were former bankers, but only 0.01 currently worked at banks; 0.3 were

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[34] Agrawal & Knoeber, supra note, at 182 tab. 1. In Japan, the correlation between firm size (**Total Assets**) and board size (**Board Size**) is 0.60. This high correlation probably explains why studies examining only the very largest listed Japanese firms find bigger boards. E.g., Kent E. Calder, Elites in an Equalizing Role: Ex-Bureaucrats as Coordinators and Intermediaries in the Japanese Government-Business Relationship, 21 Comp. Pol. 379, 384 (1989) (37-53 directors); Ahmadjian, supra note (30.6 directors).

[35] "Jomu" directors; see generally Yoshiro Miwa, Torishimari yaku kai to torishimari yaku [Boards of Directors and Directors, in Yoshiro Miwa, et al., eds., Kaisha ho no keizaigaku [The Economics of Corporate Law] 89, 104-11 (Tokyo: University of Tokyo Press, 1998)..

[36] Agrawal & Knoeber, supra note, at 182 tab. 1.

former government officials (Table 1). More generally, at the mean firm 6.9 percent (and 2.1 percent of the executive directors) held concurrent posts elsewhere. At only 3 firms were such directors at least half the board, and at only 9 were such directors at least half the executive directors.

We follow the literature on Japan in classifying all directors with past or concurrent careers at other institutions as "outsiders." The point is not innocuous. If such careers make a director an outsider, then (as the discussion above indicates) our board composition variables have the dispersion we need to study their effect on performance. If the more meaningful definition of outsider instead turns on whether a director holds another post concurrently, then arguably we lack that variation in the independent variables. In any event, note that notwithstanding the lack of any requirement that directors assume full-time employee status, Japanese firms have largely chosen to appoint only such directors.

2. Former bureaucrats. -- (a) The literature. Journalists and Japan-specialists routinely argue that the Japanese government uses retired bureaucrats to influence firm behavior. As Aoki puts it, retired bureaucrats allow a ministry to "extend its visible and invisible influence throughout its jurisdiction."[37] This results, according to Schaede, in "consultative capitalism," a system "where market mechanisms are supplemented by cooperative efforts of government and business to ameliorate potential antagonism between their respective interests." In this world, claims she, "a company president is careful to attend to the advice and counsel of former ministry officials." In turn, those officials "act to coordinate and harmonize relations between business and government."[38]

More generally, observers argue that the retired bureaucrats help the government guide the economy. Upon retirement, Schaede writes, bureaucrats "contribute directly to [the] alignment" of "corporate decisions with government interests." Given the confluence of widespread business regulation with such a "high number of amakudari board members," reasons she, "ex-government officials constitute an important factor in the Japanese governance structure."[39] According to Hoshi, the ex-bureaucrat directors illustrate "the influence of the government over private firms," and give it a way "to intervene in the management if necessary."[40] Bureaucrats allegedly exercise this influence, moreover, in economically important sectors. Claims Okimoto, MITI sends its ex-bureaucrats "to the very sectors identified as most central to the development of Japan's economy."[41]

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[37] Masahiko Aoki, Information, Incentives, and Bargaining in the Japanese Economy 299 (Cambridge, U.K.: Cambridge University Press, 1988).

[38] Ulrike Schaede, The "Old Boy" Network and Government-Business Relationship in Japan, 21 J. Japanese Stud. 293, 316 (1995); Ulrike Schaede, Understanding Corporate Governance in Japan: Do Classical Concepts Apply?, 3 Indus. & Corp. Change 285, 317 (1994).

[39] Schaede, supra note (1994), at 318-19.

[40] Takeo Hoshi, Japanese Corporate Governance as a System, in Klaus J. Hopt, et al., eds., Comparative Corporate Governance: The State of the Art and Emerging Research 847, 862 (Oxford: Oxford University Press, 1998).

[41] Daniel I. Okimoto, Between MITI and the Market: Japanese Industrial Policy for High Technology 162 (Stanford: Stanford University Press, 1989). More ambiguously, Calder, supra note, at 383, claims that ex-government officials are "quite numerous" in "some strategically important sectors of the economy" -- but then gives the construction industry as an example of a "strategically important" sector.

(b) The results. Although we do not purport to test the effect of the ex-bureaucrats on the enforcement of government policy, one should wonder. At root, ex-government directors are few and far between (Table 1). As noted immediately above, our 1,029 firms had only a mean 0.5 ex-government directors and 0.3 ex-government executive directors. Seventy-four percent of the firms had no ex-government directors at all, and 83 percent had no executive directors. What is more, few of the firms with ex-bureaucrats were in any of the industries that drove the post-war economic growth. Instead, as our Table 3 regression of the number of ex-bureaucrat directors (and executive directors) on firm characteristics shows (we discuss the issue more fully in Subsection 5), they were primarily in the construction industry.[42]

[Insert Table 3 about here.]

3. Bankers. -- (a) The literature. Banks play an important role in most analyses of Japanese corporate governance, and "main banks" are central to the accounts. Morck, Nakamura & Shivdasani proclaim that in Japan "corporate governance rights rest primarily with banks," and Sheard describes the banks and large shareholders as "the principal agents of direct corporate governance in Japan."[43] Japanese firms borrow heavily from banks, the story goes. Among the banks, one typically acts as the firm's "main bank." As such, it lends the firm the largest portion of its funds, and implicitly agrees to rescue it if times turn bad.[44] Relevant here, as Morck, Nakamura & Shivdasani again explain, it plays "a key corporate governance role."[45]

According to the standard accounts, the main bank also implicitly agrees to monitor the firm on behalf of the firm's other creditors. Typically, big Japanese firms borrow from many banks. Because the banks would waste resources if they all monitored all firms, each implicitly agrees to monitor those for which it serves as the "main bank." In Aoki's words, the main bank becomes the firm's "exclusive" monitor.[46] The banks, as Sheard modeled it, are "completely diversified in their lending but . . . spread the burden of being a monitor by having each bank be responsible for monitoring [only a small fraction of] firms." As a result, "[a]ll firms are monitored but each firm is monitored by only one bank."[47]

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[42] They were also in the banks, as we discuss in Miwa & Ramseyer, supra note (Financial). The other coefficients on the industry dummies in Table 3 are almost uniformly insignificant.

[43] Randall Morck, Masao Nakamura, & Anil Shivdasani, Banks, Ownership Structure, and Firm Value in Japan, 73 J. Bus. 539, 540 (2000); Paul Sheard, Banks, Blockholders and Corporate Governance: The Role of External Appointees to the Board, in Paul Sheard, ed., Japanese Firms, Finance and Markets 181 (Melbourne: Addison-Wesley, 1996).

[44] The claim is false, as we explain in Yoshiro Miwa & J. Mark Ramseyer, The Myth of the Main Bank: Japan and Comparative Corporate Governance, 27 Law & Soc. Inquiry 401 (2002). See also also Fumio Hayashi, The Main Bank System and Corporate Investment: An Empirical Reassessment, in Masahiko Aoki & Gary R. Saxonhouse, Finance, Governance, and Competitiveness in Japan 81 (Oxford: Oxford University Press, 2000); Brian J. Hall & David E. Weinstein, Main Banks, Creditor Concentration, and the Resolution of Financial Distress in Japan, in Aoki & Saxonhouse, supra, at 64.

[45] Morck, Nakamura & Shivdasani, supra note, at 540.

[46] Masahiko Aoki, Information, Corporate Governance, and Institutional Diversity: Competitiveness in Japan, the USA, and the Transitional Economies 79 (Oxford: Oxford University Press, 2000).

[47] Paul Sheard, Reciprocal Delegated Monitoring in the Japanese Main Bank System, 8 J. Japanese & Int'l Econ. 1, 8 (1994).

Consistent with these narratives, observers claim that the main bank wields power in the board room. Kester, for instance, writes that "one or more members of a typical (21-member) Japanese board frequently are former executives of the company's main bank(s)."[48] According to Monks & Minow, at large Japanese firms "outside directors usually represent major lenders."[49] And according to Sheard, "main banks directly exercise 'voice' by supplying managers to the board."[50]

(b) The results. Before examining the accuracy of these claims, note that ex-bank directors (and executive directors) are more likely to serve on the boards of firms with higher ratios of bank debt to total assets (**Bank Debt/TA**; Table 3). The more a firm has borrowed from banks, the more likely it will name ex-bankers to its board. The table suggests several other conclusions: directors with banking backgrounds are less likely to serve on the boards of bigger firms (**Total Assets**); they are less likely to serve on the boards of firms dominated by a major shareholder (**Dominant S/h**); and they are more likely to serve on the boards of firms without a large stock of mortgageable assets.[51]

Turn, however, to the conventional wisdom on Japanese corporate governance -- for in several fundamental ways our data flatly contradict these accounts. First, bank directors do not dominate corporate governance. Only half the firms had any ex-bankers on their board at all. Of all 1,029 firms, only 53 percent had an ex-banker director, and only 37 percent had an ex-banker executive director. The mean firm had 4.7 outside directors, but only 1.1 with a background at a bank. According to Cable, at the largest 100 German companies banks held 9.8 percent of all board seats; by contrast, at the largest 100 Japanese firms, ex-bankers held only 5.5 percent of the board seats, and 5.9 percent of the executive board seats.[52]

Second, the "bank directors" faced incentives not to protect the bank but to augment the firm's own profits. At root, they were "ex-bankers" rather than men currently working at banks. If they held their seats to monitor on a bank's behalf, one would not expect them to have traded their bank job for a full-time position at the firm. Instead, one would expect them to have retained their bank career. In fact, however, only 15 percent of the firms had any directors with concurrent bank positions, and fewer than 1 in a 100 had an executive director with a concurrent bank post. The mean firm had only 0.22 directors with concurrent bank jobs, and 0.01 executive directors (see Tab. 1; Panel A).

Third, at least by summary-statistics measures banker directors tended to serve at the service and financial firms rather than the manufacturers (Tab. 1). In the service and finance industry, the mean firm had 2.4 ex-bank directors and 1.1 ex-bank executive directors. By contrast, in the chemical industry the mean firm had 1.2 ex-banker directors and 0.6 executive directors; in

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[48] W. Carl Kester, Banks in the Board Room: Japan, Germany, and the United States, in Samuel L. Hayes, III, ed., Financial Services: Perspectives and Challenges 65, 70 (Boston: Harvard Business School Press, 1993).

[49] Monks & Minow, supra note, at 265.

[50] Sheard, supra note, at 181.

[51] The last conclusion is more suggestive: **Tangible Assets/TA** is correlated with **Bank Debt/TA** (at .15), and dropping the latter variable turns the coefficient on former significantly negative.

[52] John Cable, Capital Market Information and Industrial Performance: The Role of West German Banks, 95 Econ. J. 118, 119 (1985). Among all the firms in our sample, ex-banks held 5.6 percent of the directorships and 6.8 percent of the senior directorships.

the machinery industry it had 1.03 ex-bank directors and 0.5 executive directors; and in metals it had 0.8 ex-bank directors and 0.4 executive directors.

Fourth, the ex-bankers were not concentrated at the unsuccessful firms. Reflecting the conventional wisdom, Abegglen & Stalk suggest that firms were more likely to appoint bankers when they faced disaster.[53] By contrast, our Table 3 regressions (see coefficients on **ROI**) provide no evidence that the less profitable firms were more likely to name bankers to their boards.[54]

Last, the ex-bank directors only occasionally came from a firm's "main bank." Firms recruited 57 percent of their ex-bank directors from their main bank, and 64 percent of their ex-bank executive directors. Recall that the main bank is (by definition) the bank that has lent the most. If the cost-effective level of monitoring rises with the amount of debt outstanding, a main bank will necessarily have the greatest incentive to monitor -- "delegated" monitor or no. On the other hand, if it serves as the exclusive monitor for all other banks, only bankers from the main bank should appear on board. In fact, barely half the ex-bank directors are from the main bank.

4. Non-bank outside executives. -- The firms that appoint the most outside business executives to the board (non-bank, non-government outside directors) are those with a dominant shareholder. These are not rare firms. Over a fifth of the TSE firms have a shareholder with 25 percent or more of the stock (**Dominant S/h** = 1).

Firms with a dominant shareholder were far more likely than others to have at least one retired outside business executive on their board (see Tab. 4). Among all TSE firms, 57 percent had such a director (45 percent had an executive director). Among those with a dominant shareholder, however, 81 percent had such a director (78 percent had an executive director). Among all TSE firms, retired executives constituted 9.4 percent of the board (12.4 percent of the executive directors). At those with a dominant shareholder, they constituted 24 percent (36 percent of the executive directors). The pattern parallels the appointments of executives with concurrent appointments at other firms.

Predictably, these outside directors often came from the dominant shareholder itself. Of the 1,884 retired executives from other firms serving as directors at the TSE firms, 39.3 percent were from a dominant shareholder. Of the 403 serving as executive directors, 39.9 percent were.

Our basic Table 3 regressions reflect these appointment patterns. When we regress the number of retired outside executives on various firm characteristics, the coefficient on **Dominant S/h** is significant for both directors generally (Reg. A3) and for executive directors (B3). Indeed, the presence of a dominant shareholder increases the number of such retired directors by 2.4, the number of retired executive directors by 1.5, and the number of directors with concurrent posts in other firms by 1.4 (Regs. A3, A5, B3).

[Insert Table 4 about here.]

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[53] James C. Abegglen & George Stalk, Jr., Kaisha: The Japanese Corporation ch. 7 (New York: Basic Books, 1985).

[54] Nor does the situation change if we use as an independent variable shareholder **ROI** for 1980-90 rather than 1985-90, or accounting **Operating-Income/Total-Assets** for either 1980-85 or 1986-90.

5. Industry-specific effects. -- (a) Tables 1 and 3. Outside director appointments vary widely by industry. Disproportionately, both retired bureaucrats and retired executives work in a few industries. Indeed, disproportionately they work at the construction firms.[55]

Bureaucrats. Take the ex-bureaucrats. Where the average TSE firm had half an ex-bureaucrat on its board, the average construction firm (101 firms) had 2.6 (Tab. 1). Where a quarter of the TSE firms had ex-bureaucrat directors, 71 percent of the construction firms did. Where 17 percent of the TSE firms had ex-bureaucrat executive directors, 63 percent of the construction firms did. Of the 542 ex-bureaucrat directors at all TSE firms, nearly half (260 directors) were at the construction firms. Of the ex-bureaucrat executive directors, 55 percent were.

Okimoto to the contrary notwithstanding, firms in industries "central to the development of Japan's economy" did not recruit ex-bureaucrat directors. In the machinery industry (275 firms), nearly 80 percent of the firms had no former government officials on their board, and 90 percent had none as a executive director. In the chemical industry (156 firms), 89 percent had no government officials on their board, and 93 percent had none as a executive director. Indeed, the average machinery firm had only 0.32 ex-bureaucrats on its board, and the average chemical firm only 0.13.

Even financial services firms were no more likely to hire ex-bureaucrats than the construction firms. Because we explore banks more fully elsewhere, we exclude them from the sample here.[56] In fact, however, in 1986 only 2 of the large money center banks had a former Ministry of Finance (MoF) official as a executive director, and only 3 had any executive directors from the Bank of Japan (BoJ). Schaede's claim that "the CEOs of many major city banks were retired government ministry officials" is simply untrue.[57]

The regional banks had more ex-bureaucrats than the city banks, but no more than the construction firms. Of the 56 regional banks, only 48 percent had a MoF director and 50 percent a BoJ director; only 36 percent had a MoF executive director and 39 percent a BoJ executive director. Replicating the construction firm ratios, 71 percent of the regional banks had either a MoF or a BoJ director, and 63 percent had either a MoF or a BoJ executive director.[58] Of the 43 non-bank firms in the services and finance industry, 74 percent had no ex-bureaucrat directors, and 81 percent had no ex-bureaucrat executive directors.

The Table 3 regressions reflect this concentration of government officials in construction. According to Reg. A2, the coefficient on construction industry membership is 1.9. Consistent with

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[55] A point noted even by some of those who reach different conclusions about the hiring of ex-government officials. See, e.g., Schaede, supra note (1995), at 309; Okimoto, supra note, at 162; Calder, supra note, at 383); Tuvia Blumenthal, The Practice of Amakudari within the Japanese Employment System, 25 Asian Survey 310, 315 (1985).

[56] Miwa & Ramseyer, supra note (Financial). As defined here, the industry includes service firms not providing financial services.

[57] Schaede, supra note (1994), at 290-91. Similarly, see Masahiko Aoki, Hugh Patrick & Paul Sheard, The Japanese Main Bank System: An Introductory Overview, in Masahiko Aoki & Hugh Patrick, eds., The Japanese Main Bank System 1, 32 (Oxford: Oxford University Press, 1994) ("Many retired MOF bureaucrats and BOJ executives obtain executive positions at city banks and other financial institutions").

[58] Elsewhere, Schaede, supra note (1995), at 310 writes (apparently a claim diametrically opposed to that in Schaede, supra note (1994)) that "most firms" in the banking, investment banking, and insurance industries "do not hire OBs [ex-government officials] at all." In fact, as both the discussion in the text (for banks) and Tables 1 and 3 (for other financial services firms) show, this claim too is false: firms in these industries are at least as likely to hire them than as the average firm in the sample as a whole.

the Table 1 data, the average construction firm had 2 more ex-bureaucrats on its board than the other firms.

Executives. Outside executives too disproportionately worked at the construction firms. Consider again our Table 3 regressions. For both all directors (Reg. A3) and executive directors (B3), the coefficient on construction industry affiliation is larger and statistically more significant than on any other industry dummy. All told, 18.7 percent of the retired executives served at construction firms, and among the executive directors 19.5 percent did.

(b) Table 5. Appointment patterns reflected expected revenues.[59] Among the construction firms, those that focused on public-sector projects were most likely to appoint ex-bureaucrats. Those that focused on large private-sector projects were most likely to appoint retired executives from other firms. To show this, we create two new variables:[60]

Construction Rev: the percentage of a firm's revenues generated by construction projects (other than prefabricated housing) for 1985.

Civil Eng Rev: the percentage of a firm's revenues generated by civil engineering projects for 1985.

The two variables roughly proxy for a firm's dependence on business-sector projects and government projects, respectively. **Construction Rev** represents revenues from private-sector office construction, together with occasional government projects. **Civil Eng Rev** almost exclusively represents revenues from government projects like road construction. The correlation coefficient for the two is -.23.

In Regressions (A) and (B) of Table 5, we regress (a) the number of directors (or executive directors) who had retired from government posts on (b) **Construction Rev** and **Civil Eng Rev.** In Regressions (C) and (D), we do the same for the number of directors (or executive directors) who had retired from other firms.

The regressions generate three straightforward results. First, the more a firm relies on civil-engineering projects, the more ex-bureaucrats it names to directorships and executive directorships. Increased construction revenues also correlate with ex-bureaucrat directors, but the effect is much smaller. Second, the more a firm relies on construction projects, the more retired executives from other companies it names to its board. As noted above, civil engineering projects almost exclusively represent government contracts; construction projects primarily represent private-sector contracts, but include some government projects as well.

Third, firms with a dominant (25 percent or more) shareholder appointed more outside executives. Indeed, the presence of a dominant shareholder increased the number of retired outside executives on the board by more than 3, and the number of executive directors by more than 2. As the summary statistics in Table 4 show, the pattern applies not just to executives retired from other firms but to those holding concurrent appointments at other firms.

[Insert Table 5 about here.]

(c) The logic. -- Confronted with evidence that construction firms hire retired government bureaucrats, observers typically assume corruption. Given the bid-rigging scandals on public-

[59] For an analogous phenomenon in the U.S., see Agrawal & Knoeber, supra note.

[60] The data are from Kaisha shikiho [Seasonal Corporate News] (Tokyo: Toyo keizai, relevant issues).

sector projects, the assumption is superficially plausible enough. Journalists like van Wolferen assert it as fact, and Schaede explicitly claims:[61]

> The Japanese construction industry is characterized by secret bidding procedures (dango) for public work projects, where private firms collude to predetermine both the winner of the auction and the price this winner is to bid. This means that an OB [a retired bureaucrat at the firm] can be invaluable in acquiring prior information on planned public projects and government price ceilings on these projects. . . . The OBs in the construction industries therefore perform two functions: access to price and project information in the bid-rigging process, and lobbying for protection from foreign competition.

Despite its cynical appeal, the argument does not work. In Japan as in the U.S., bid-rigging is a serious crime. When in 1976 a mayor's campaign staffer solicited funds from a contractor in exchange for favorable treatment on a city housing project bid, he found himself prosecuted and convicted for bribery.[62] When in 1991 a executive construction firm director bribed a mayor for a contract for its new sports facility, he found himself sentenced to two years in prison (suspended), and civilly liable to the firm besides.[63] And when a director at a real estate development firm bribed a prefectural governor for regulatory clearance and favorable treatment on a bid, a court convicted them both: 2 years in prison for the governor, and 2-1/2 for the director, neither term suspended.[64]

The van-Wolferen-Schaede hypothesis founders precisely because bribery is such a serious crime. The Japanese police use and recruit under-cover agents, and bureaucrats know it. Given the penalties, most bureaucrats will hardly rig bids when they do not know well the person propositioning them (if even then). A Prefecture B official will not likely agree to the crime just because the man approaching him once worked for the Ministry of Construction (MoC). Even less will he much care whether the man once worked for prefecture A. Perhaps a retired bureaucrat from city C will help rig a bid with city C. He will hardly help cheat anywhere else.[65]

Crucially, the MoC does not auction public sector projects nation-wide, and neither does anyone else. Instead, for any given project the government unit involved solicits its own bids. Cities solicit bids for city projects, and prefectures solicit those for their own. The national government itself solicits less than 12 percent of all public-sector projects. As Table 6 shows,

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[61] Karel van Wolferen, The Enigma of Japanese Power 118 (New York: Vantage, 1989); Schaede, supra note (1995), at 309. The claims also appear in Brian Woodall, Japan Under Construction: Corruption, Politics, and Public Works 40-41, 70-71 (Berkeley: University of California Press, 1996). Analogous arguments about the banking industry appear in Akiyoshi Horiuchi & Katsutoshi Shimizu, Did Amakudari Undermine the Effectiveness of Regulator Monitoring in Japan?, 25 J. Banking & Fin. 573 (2001); Adrian A.R.J.M. van Rixtel & Wolter H.J. Hassink, Monitoring the Monitors: Are Old Boys Networks Being Used to Monitor Japanese Private Banks?, 16 J. Japanese & Int'l Econ. 1 (2002).

[62] Japan v. [No name given], 1199 Hanrei jiho 157 (Sup. Ct. June 27, 1987).

[63] Matsumaru v. Otsuru, 1518 Hanrei jiho 4 (Tokyo D. Ct. Dec. 22, 1994).

[64] Japan v. Kono, 1611 Hanrei jiho 36 (Tokyo D. Ct. March 21, 1997).

[65] Some observers (e.g., van Wolferen, supra note, at 118) argue that firms appoint bureaucrats to the board as a form of deferred compensation for colluding on past bids. Although we have no evidence that this is untrue, we are unaware that any commentator has proferred any evidence that it is indeed true. We note, however, both (i) that this implies bid-rigging on a phenomenally wide scale (after all, there were 260 ex-bureaucrats on construction firm boards in 1985), and (ii) that it would constitute highly (indeed, recklessly) visible way to pay off a bureaucrat for his complicity in a felony.

prefectural and municipal governments each solicit another 30 percent, and assorted public entities solicit the rest.

Table 5 instead suggests a more mundane explanation for the hiring patterns: construction firms appoint board members who will help them identify the services their principal customers want to buy. If they sell heavily to the public sector, they appoint men with experience in government. If they sell heavily to the private sector, they appoint executives with experience in business.

Manufacturing firms need to learn about customer preferences too, of course, but for them it is information they can cheaply obtain elsewhere. If a firm sells large quantities of standardized products (tractors, VCRs) into the general retail market, it can learn buyer preferences by surveying customers or auditing sales patterns. Kubota need not appoint a farmer to its board to learn which plow its customers want to buy. It can simply watch which plows sell.

By contrast, construction firms sell small numbers of non-standardized service packages (the construction of airports or office towers) to specific customers. To sell successfully, they need to tailor the packages they offer to buyer preferences. Yet surveys and sales audits will only haphazardly enable them to do that. To tailor their packages, they instead recruit men with a lifetime of experience at the types of organizations to which they sell.

Not only is this explanation more plausible than the claim that retired bureaucrats help firms convince sitting bureaucrats to commit felonies, it is also more parsimonious. At most, scholars like van Wolferen and Schaede explain the appointment of ex-bureaucrats. They do nothing to clarify the appointment of retired executives. By contrast, our hypothesis explains the appointment patterns both of government bureaucrats and of private-sector executives: construction firms hire the directors who can best give them information about potential clients. If they sell primarily to governments, they appoint retired bureaucrats. If they sell primarily to private firms, they appoint retired executives.

[Insert Table 6 about here.]

B. <u>What Do They Do?</u>

1. <u>Introduction</u>. -- For all the reasons Demsetz & Lehn explained, disproportionately the firms that survive in competitive capital, product, and input markets should be firms with governance mechanisms approaching their firm-specific optimum. Given those market constraints, any regression of firm performance on firm governance should yield insignificant results. Obviously, insignificant results will not prove that the firms are at their optimal structure. Insignificant results never do.

Instead, what regressing firm performance on governance structures will do is to check whether firms maintain observably <u>in</u>efficient structures. If the reformist intellectuals are right, they do: many Japanese firms maintain inefficiently low levels of outside directors. And if so, then the firms with more outside directors should out-perform the firms with fewer.

2. <u>The exercise.</u> -- In Table 7, we report the results of regressing (through OLS) firm performance on board composition. To check for robustness, we conduct the tests with four distinct indices of firm performance: Tobin's Q (**Q**; available only for the manufacturing firms), shareholder returns (**ROI**), and two measures of accounting profitability (**Operating-Inc/TA** and **Ordinary-Inc/Equity**). Because the business press occasionally claims (albeit without serious economic support) that Japanese firms pursue growth and market share at the expense of profits

and shareholder returns, we repeat the exercise with the growth rate of the firm's asset base (**Growth**).

With each performance index, we examine the effect (i) of the number of outside directors from each of several categories and (ii) of the total number of outside directors. Because some observers claim that the executive directors more closely parallel the U.S. board, we run our regressions both on all directors and on executive directors only. In each regression, we add financial variables and industry affiliation dummies. For expositional economy, we report the coefficients on these additional variables only in Panel A.

We use data from two distinct periods: 1986-90, and 1990-94. We break the data in 1990 because of the dramatic economic shift. where from 1986 to 1990, real Japanese GDP grew at about 5 percent a year, from 1991 to 1994 it grew barely 1 percent a year. Where from the NIKKEI stock index rose from 11,500 at the close of 1984 to a high of 38,900 at the end of 1989, by the close of 1994 it had fallen to 19,700 and by January 2002 had dropped below 10,000. Where the number of firms (with debt over 10 million yen) failing fell from 17,500 in 1986 to 6,500 in 1990, by 1994 it had rebounded to 14,000 and by 2001 to 19,200. The liabilities involved in the failures fell from 3.8 trillion yen in 1986 to 2 trillion in 1990, only to climb to 17 trillion by 2001.[66]

This macroeconomic shift lets us study the effect outside directors have in different economic environments. Depending on the stories told, outside directors might more effectively protect shareholders during slumps than during "go-go" years -- or vice versa. Perhaps good times tempt insiders to give themselves more lavish bonuses and perks. Perhaps bad times tempt them to protect their jobs by suboptimally shifting the firm away from high risk projects. From time to time reformists tell either story, and the break in Japanese economic performance lets us test them both.

If competition does push firms toward their optimal board structure, then the 1990 break in Japanese performance also lets us ask whether that optimum varies by economic environment. Because few market participants expected the 1990 plunge, it arguably constituted an exogenous shock. Yet suppose the optimal board structure depended on macroeconomic health. Even if board composition had no observable impact on performance in the 1980s, it might plausibly have had such impact in the early 1990s -- before the firms had had time to restructure their boards. If good board structure is not environment-specific, however, then that structure would not visibly have affected performance in either period.

[Insert Table 7 about here.]

3. 1986-90. -- The results from the late 1980s (Tab. 7, Panels A-D) largely confirm economic theory: board composition has no observable effect on firm performance. Even when statistically significant, the results are not robust to alternative performance measures.

Take the relation between board size and performance. A few scholars have found that U.S. firms with big boards outperform those with small. For that result, they usually propose only theoretically dubious explanations. And our own Panel A results illustrate the sensitivity such atheoretic inquiries show to quirks in the data: just as large boards are associated with significantly higher Tobin's **Q** (Reg. A1), they are associated with significantly lower **Growth** rates (Regs. A5).

The only other statistically significant coefficient on a director variable for the entire set of 1986-90 regressions appears in Reg. A1: ex-bankers are negatively associated with high Tobin's

[66] BOJ statistics, available at www.boj.or.jp.

Q. Showing again the sensitivity of the results to the performance measure used, the result does not appear among the executive directors (Panel C). Indeed, ex-bankers are associated with almost significantly positive **Growth** (Reg. A5). The coefficients on the total number of outside directors and executive directors are uniformly insignificant (Panels B and D).

4. 1990-94. -- For the early 1990s too, regressions of performance on board composition yield no reliably significant and robust results. Instead, the few significant coefficients that do appear again depend critically on the specific performance measure used. For example, former banker directors (Reg. E2) and concurrent banker executive directors (Reg. G2) are associated with higher shareholder returns (**ROI**), and the concurrent banker executive directors are associated with higher levels of **Operating-Inc/TA** (Reg. G3; this result also appears with the **Growth** regressions, reg. G5) as well. Simultaneously, however, ex-banker executive directors are associated with lower **Operating-Inc/TA** (Reg. G3).

Although directors concurrently holding positions at other firms are associated with higher Tobin's **Q** (Reg. E1) and **Operating-Inc/TA** (Reg. E3), this effect too is not robust. It does not appear either (i) with other performance measures (Regs. E2, E4, E5) or (ii) among executive directors (Panel G). Moreover, the coefficients on directors and executive directors who formerly (rather than concurrently) held such positions are uniformly insignificant (Panels E, G). Firms with more ex-bureaucrat executive directors appear to have higher **Growth** rates (Reg. G5), but this effect too appears nowhere else.

5. The construction industry. -- In Section III.A.5., we detailed the substantial role construction firms play in the market for outside directors. Here, we ask whether any observable relation between board composition and performance appears if we limit our data to those construction firms. In fact, the effects are yet again haphazard (see Tab. 8).

Most notoriously, those ex-bureaucrats who so dominate the popular and Japanese-studies accounts have no visible impact on performance -- whether among all directors or among executive directors, whether for the late 1980s or for the early 1990s. Directors and executive directors with past jobs in the private sector are indeed associated with higher **Operating-Inc/TA** measures (Reg. A3, C3, G3; the result seems to carry over to the regression on the total outside directors, Reg. B3). Yet the result appears neither with any of the other performance measures, nor with directors and executive directors who concurrently hold such positions. Similarly, ex-banker directors and executive directors are associated with higher **Ordinary-Inc/Equity** measures (Regs. A4, C4, G4) -- but the result appears neither with any of the other performance measures or among directors nor with executive directors who concurrently hold such positions.

[Insert Table 8 about here.]

IV. Conclusion

As in the U.S., so too in Japan: reformist intellectuals urge firms to appoint more outside directors. Yet as in the U.S., so too in Japan: theory should make us wonder. Provided boards matter, by standard economic theory market competition should drive firms toward their firm-specifically optimal board structure.

That optimum need not involve many outside directors. After all, outsiders trade expertise for their independence. If boards matter, then the optimal fraction of outside directors would seldom equal 1. Instead, the fraction would vary from industry to industry, firm to firm. Where

board expertise matters more than independence, firms would appoint more inside directors. Where independence matters more than expertise, they would appoint more outsiders.

All this suggests three testable implications. First, if the reformists are right, then Japanese boards matter, but most are structured inefficiently. Provided at least some substantial minority have a meaningful number of outsiders, the firms with more outsiders should observably outperform those with fewer. Second, perhaps board composition matters, but market constraints drive firms toward their firm-specific optimum. If so, then firm characteristics should determine board structure, but that structure should show no observable relation to firm performance. And last, perhaps board composition just does not matter. If so, then firm performance will show no relation to board structure, but outsiders will be randomly distributed across firms.

To test these rival hypotheses, we assemble board composition and financial data on the largest Japanese firms -- the approximately 1000 firms listed on Section 1 of the Tokyo Stock Exchange in the 1980s and early 1990s. We first explore which firms tend to appoint outsiders to their boards. If board composition is irrelevant, then outsider appointments should be random. They are not.

Instead, large Japanese firms most often appoint retired bankers when they borrow heavily, when the firm has fewer mortgageable assets, and when the firm is in the services and finance industry. They appoint retired government bureaucrats when they are in construction, and sell a large fraction of their output to government agencies. And they appoint other retired executives when they have a dominant parent corporation, or when they are in the construction industry selling heavily to the private sector. For many firms, board composition matters.

Yet firms with more outside directors do not visibly outperform those with fewer. Apparently, board composition is indeed endogenous: market constraints do push firms toward their firm-specifically optimal board structure, and that optimum seems unrelated to macroeconomic environment. When we regress firm performance on board composition, we largely obtain insignificant results, and the few significant results are not robust to alternative specifications -- whether for the go-go 1980s or the depressed 1990s. Firms with more outside directors simply do not observably outperform those with fewer.

Table 1: Selected Summary Statistics -- Outside Directors, by Industry

	N	Full Board			Executive Directors		
		minimum	mean	maximum	minimum	mean	maximum
A. All Industries							
Board Total	1029	6	19.49	54	1	7.91	32
Past bankers	1029	0	1.08	23	0	0.54	6
Past other firm	1029	0	1.83	15	0	0.98	8
Past government employee	1029	0	0.53	11	0	0.30	8
Concurrent banker	1029	0	0.22	6	0	0.01	2
Concurrent other firm	1029	0	1.06	11	0	0.12	6
B. Construction industry							
Board Total	101	11	24.98	51	2	11.45	32
Past bankers	101	0	1.18	6	0	0.69	3
Past other firm	101	0	3.50	13	0	1.95	8
Past government employee	101	0	2.57	11	0	1.71	8
Concurrent banker	101	0	0.07	1	0	0.01	1
Concurrent other firm	101	0	0.89	8	0	0.09	2
C. Trade							
Board Total	117	7	19.68	54	2	7.84	28
Past bankers	117	0	0.91	6	0	0.50	4
Past other firm	117	0	1.90	15	0	0.97	6
Past government employee	117	0	0.26	3	0	0.09	2
Concurrent banker	117	0	0.12	4	0	0.12	2
Concurrent other firm	117	0	0.95	8	0	0.21	6
D. Service & finance							
Board Total	43	9	19.07	32	2	6.53	13
Past bankers	43	0	2.42	19	0	1.12	6
Past other firm	43	0	2.51	12	0	1.09	4
Past government employee	43	0	0.67	7	0	0.28	2
Concurrent banker	43	0	0.60	6	0	0.05	1
Concurrent other firm	43	0	2.42	8	0	0.37	2
E. Utilities							
Board Total	87	7	20.52	39	1	8.48	20
Past bankers	87	0	1.01	15	0	0.51	5
Past other firm	87	0	1.24	8	0	0.66	5
Past government employee	87	0	0.53	5	0	0.30	4
Concurrent banker	87	0	0.49	4	0	0.01	1
Concurrent other firm	87	0	1.54	8	0	0.15	2
F. Light Industry							
Board Total	131	9	17.85	40	2	6.92	19
Past bankers	131	0	0.97	5	0	0.46	3
Past other firm	131	0	0.85	9	0	0.41	5
Past government employee	131	0	0.18	4	0	0.08	2
Concurrent banker	131	0	0.15	3	0	0.02	2
Concurrent other firm	131	0	0.69	4	0	0.08	2
G. Chemical							
Board Total	156	8	19.13	41	1	7.73	23
Past bankers	156	0	1.22	23	0	0.60	6
Past other firm	156	0	1.24	12	0	0.72	4
Past government employee	156	0	0.13	3	0	0.08	3
Concurrent banker	156	0	0.28	2	0	0.01	1
Concurrent other firm	156	0	1.02	11	0	0.04	1
H. Metals							
Board Total	119	6	18.89	52	2	8.14	29
Past bankers	119	0	0.80	5	0	0.39	3
Past other firm	119	0	1.71	9	0	0.98	8
Past government employee	119	0	0.36	3	0	0.25	3
Concurrent banker	119	0	0.14	3	0	0.01	1
Concurrent other firm	119	0	1.13	8	0	0.08	3

Table 1: Selected Summary Statistics -- Outside Directors, by Industry (Continued)

I. Machinery							
Board Total	275	8	18.44	54	1	7.13	20
Past bankers	275	0	1.03	7	0	0.49	4
Past other firm	275	0	2.13	13	0	1.13	7
Past government employee	275	0	0.32	4	0	0.13	3
Concurrent banker	275	0	0.19	3	0	0.01	1
Concurrent other firm	275	0	0.98	10	0	0.11	3

Sources: Nikkei QUICK joho, K.K., NEEDS (Tokyo, Nikkei QUICK joho, as updated); Nikkei QUICK joho, K.K., QUICK (Tokyo, Nikkei QUICK joho, as updated); Nihon shoken keizai kenkyu jo, ed., Kabushiki toshi shueki ritsu [Rates of Return on Common Stocks] (Tokyo: Nihon shoken keizai kenkyu jo, updated); Toyo keizai, ed., Kigyo keiretsu soran [Firm Keiretsu Overview] (Tokyo: Toyo keizai, as updated); Kazumi Asako, et al., Setsubi toshi to tochi toshi: 1977-1994 [Investment in Equipment and Investment in Land: 1977-1994, in Kazumi Asako & Masayuki Otaki, ed., Gendai makuro keizai dogaku [Contemporary Economic Dynamics] (Tokyo: University of Tokyo Press, 1997).

Table 2: Selected Summary Statistics -- Firm Characteristics

	n	Min	Mean	Max
A. Performance Variables:				
Q (1986-90)	315	-47.071	2.021	61.931
Q (1990-94)	315	-36.238	1.461	23.248
ROI (1985-90)	916	-15.3	21.949	78.6
ROI (1990-94)	990	-45	-10.902	17.4
Operating-Inc/TA (1986-90)	1,029	-.336	.048	.446
Operating-Inc/TA (1990-94)	1,029	-.133	.039	.370
Ordinary-Inc/Eq (1986-90)	1,029	-.318	.133	1.071
Ordinary-Inc/Eq (1990-94)	1,029	-4.346	.092	.841
Growth (1986-90)	999	-59.010	55.311	782.705
Growth (1990-94)	1,025	-72.898	15.562	166.955
B. Other Variables (1986-90):				
Dominant S/h	1,029	0	.204	1
Top 5 Lenders	931	.270	.723	1
Volatility ($x10^4$)	1,029	.007	3.623	198.31
Total Assets (x10? yen)	1,029	3,571	253,469	9,969,964
Tang Ast/TA	1,029	.0003	.243	.856
Sales/TA	1,029	.047	1.108	7.435
Bank Debt/TA	1,029	0	.207	.887
C. Other Variables (1990-94):				
Top 5 Lenders	916	.267	.742	1
Volatility ($x10^4$)	1,029	.001	4.343	262.064
Total Assets (x10? yen)	1,029	3,182	336,985	11,700,000
Tang Ast/TA	1,029	.001	.258	.867
Bank Debt/TA	1,029	0	.184	.933

Sources: See Table 1.

Table 3: Who Appoints Outsiders?
OLS Estimates of Number of Directors

A. All Directors:

	Past Position			Concurrent Position	
	(1) Bank	(2) Government	(3) Oth Firm	(4) Bank	(5) Other Firm
Total Dirs	.032 (3.22)	.046 (7.13)	-.003 (0.19)	.015 (3.89)	.037 (3.53)
Dominant S/h	-.516 (3.94)	-.108 (1.25)	2.403 (12.31)	-.104 (2.03)	1.653(11.99)
Top 5 Lenders	.188 (0.54)	.445 (1.94)	-.482 (0.93)	.159 (1.17)	-.251 (0.69)
ROI	-.002 (0.50)	.005 (1.77)	-.007 (1.02)	.001 (0.77)	-.001 (0.14)
Volatility	-18.083 (0.35)	15.032 (0.44)	26.611 (0.34)	14.443 (0.71)	168.754 (3.08)
Total Assets (x106)	-.349 (3.43)	-.117 (1.75)	-.320 (2.12)	-.019 (0.47)	-.264 (2.47)
Tang Ast/TA	-.680 (1.56)	-.250 (0.87)	.204 (0.31)	.152 (0.89)	.350 (0.76)
Sales/TA	.047 (0.45)	-.102 (1.48)	.119 (0.76)	-.056 (1.37)	-.204 (1.85)
Bank Debt/TA	2.496 (7.56)	.149 (0.68)	-.046 (0.09)	.110 (0.85)	.403 (1.16)
Industry dummies					
Construction	.226 (0.92)	2.025(12.51)	1.747 (4.76)	-.163 (1.70)	-.235 (0.91)
Trade	.014 (0.06)	-.009 (0.06)	.534 (1.46)	.051 (0.53)	.442 (1.71)
Serv & Finan	.269 (0.85)	.106 (0.51)	.502 (1.06)	.298 (2.40)	1.365 (4.08)
Utilities	.199 (0.82)	.164 (1.03)	-.068 (0.19)	.289 (3.05)	.315 (1.23)
Light Indus	.145 (0.70)	-.100 (0.74)	-.540 (1.75)	.002 (0.03)	-.055 (0.25)
Chemical	.580 (2.98)	-.208 (1.62)	-.347 (1.19)	.133 (1.74)	-.027 (0.13)
Machinery	.405 (2.25)	-.029 (0.25)	.568 (2.11)	.062 (0.89)	-.020 (0.11)
Adj R2	.10	.41	.23	.07	.20
N	832	832	832	832	832

B. Executive Directors:

	Past Position			Concurrent Position	
	(1) Bank	(2) Government	(3) Oth Firm	(4) Bank	(5) Other Firm
Total Dirs	.036 (4.18)	.076(10.65)	.035 (2.57)	-.000 (0.20)	-.002 (0.38)
Dominant S/h	-.381 (5.34)	-.008 (0.14)	1.464(13.16)	-.006 (0.45)	.228 (5.60)
Top 5 Lenders	.034 (0.18)	.175 (1.13)	-.290 (0.99)	.030 (0.89)	-.272 (2.55)
ROI	-.003 (1.00)	.003 (1.64)	-.000 (0.11)	.001 (1.46)	-.002 (1.15)
Volatility	-6.236 (0.22)	46.554 (1.99)	-1.256 (0.03)	5.309 (1.03)	1.829 (0.11)
Total Assets (x106)	-.227 (4.24)	-.103 (2.33)	-.302 (3.62)	-.001 (0.07)	-.028 (0.92)
Tang Ast/TA	-.214 (0.90)	-.335 (1.71)	.190 (0.51)	-.024 (0.56)	-.249 (1.84)
Sales/TA	.044 (0.77)	-.089 (1.91)	.084 (0.95)	-.010 (0.98)	-.044 (1.37)
Bank Debt/TA	1.488 (8.31)	.011 (0.08)	.319 (1.14)	.061 (1.89)	.008 (0.08)
Industry dummies					
Construction	.263 (1.98)	1.306(11.95)	.815 (3.94)	.002 (0.09)	.011 (0.14)
Trade	.132 (0.98)	-.016 (0.15)	.280 (1.34)	.025 (1.03)	.216 (2.81)
Serv & Finan	.326 (1.88)	.095 (0.67)	.019 (0.07)	.063 (2.02)	.264 (2.68)
Utilities	.104 (0.78)	.162 (1.49)	-.153 (0.74)	-.001 (0.04)	.129 (1.71)
Light Indus	.077 (0.68)	-.022 (0.24)	-.293 (1.67)	.025 (1.22)	.061 (0.95)
Chemical	.303 (2.85)	-.071 (0.81)	-.095 (0.57)	.013 (0.69)	-.036 (0.60)
Machinery	.260 (2.65)	-.027 (0.34)	.344 (2.24)	.001 (0.07)	.027 (0.47)
Adj R2	.14	.45	.24	.00	.06
N	832	832	832	832	832

Notes: OLS estimates on the number of directors on the board (either all directors or executive directors) of a firm who (1) held past positions at a bank, (2) held past positions with the government, (3) held past positions at other non-financial firms, (4) held concurrent positions with a bank, or (5) held concurrent positions at other non-financial firms. The table gives the coefficient, followed by the absolute value of the t-statistic. All equations include a constant, not reported here. The omitted industry dummy is Metals.

Sources: See Table 1.

Table 4: Non-Bank, Non-Government Outside Directors

	All Firms	Firms with Dominant S/h	Firms without Dominant S/h
A. All directors:			
Any former OF	56.7	81.4	50.3
% former OF	10.4	24.2	7.0
Any concurrent OF	44.2	78.1	35.5
% concurrent OF	5.9	13.1	4.0
B. Executive directors:			
Any former OF	44.6	77.6	36.1
% former OF	14.7	35.5	9.4
Any concurrent OF	8.5	19.0	5.7
% concurrent OF	1.9	4.5	1.2
n	1,029	210	819

Notes: OF == other firm. The table reports the percentage of firms with any such director, followed by the mean percentage of such directors.

Sources: See Table 1.

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Table 5: Outside Directors in the Construction Industry: OLS Estimates

	(A)	(B)	(C)	(D)
	Dependent Variable			
	Past Government Employee		Past Other Firm	
	All Dir.	Executive Dir.	All Dir.	Executive Dir.
Total Directors	.116 (3.10)		-.054 (0.88)	
Total Executive Dir		.202 (7.44)		.022 (0.53)
Dominant S/h	-.175 (0.41)	-.389 (1.59)	3.678 (5.32)	2.173 (5.72)
Total Assets (x 10^5)	-.153 (1.72)	-.152 (3.20)	-.123 (0.85)	-.125 (1.70)
Construction Rev (%)	.007 (1.44)	.006 (1.94)	.017 (2.11)	.007 (1.60)
Civil Eng Rev (%)	.043 (6.22)	.024 (5.97)	-.018 (1.56)	-.125 (2.03)
Adjusted R2	.48	.65	.34	.31
n	101	101	101	101

Notes: The regressions are OLS. All specifications include a constant term, not reported. The table reports the coefficient, followed by the absolute value of the t-statistic in parenthesis. The dependent variable is the number of directors (or executive directors) with former government (or other firm) employees.

Sources: See sources cited in Table 1 and Kaisha shikiho [Seasonal Corporate News] (Tokyo: Toyo keizai, relevant issues)

Table 6: Public-Sector Construction Expenditures

	National Government	Public Organiz'n.	National Firms	Prefectural Government	Municipal Government	Regional Firms	Other
1980	1279 (11.2)	1013 (8.9)	1418(12.4)	3183 (27.8)	3180 (27.8)	882 (7.7)	484 (4.2)
1985	1172 (10.7)	891 (8.1)	800 (7.3)	3527 (32.1)	3329 (30.3)	848 (7.7)	433 (3.9)
1990	1673 (11.5)	1402 (9.6)	379 (2.6)	4684 (32.1)	4925 (33.7)	936 (6.4)	605 (4.1)
1994	1979 (11.3)	1484 (8.5)	416 (2.4)	5630 (32.1)	6107 (34.8)	1152 (6.6)	788 (4.5)

Notes: The table gives the amount of construction services purchased, by government unit, in billion yen, followed by the percentage.

Source: Kensetsu sho kensetsu keizai kyoku, ed., Kensetsu tokei yoran [Construction Statistics Overview] (Tokyo: Kensetsu bukka chosa kai, various years).

Table 7: What Do Outsiders Do?
OLS Estimates on the Number of Directors (All Industries)

	(1) Q	(2) ROI	(3) Oper Inc/ Tot Asts	(4) Ord-Inc/ Equity	(5) Growth
A. 1986-90 (All Directors; All Director Variables):					
Director Variables					
Past bankers	-.647 (2.46)	-.104 (0.40)	-.001 (0.83)	-.004 (0.91)	2.305 (1.91)
Past other firm	-.001 (0.01)	-.132 (0.74)	.001 (1.51)	.002 (0.53)	-.065 (0.08)
Past government employee	.075 (0.09)	.625 (1.56)	-.000 (0.00)	-.002 (0.36)	-1.579 (0.87)
Concurrent banker	-.380 (0.47)	.501 (0.75)	-.000 (0.05)	-.010 (0.83)	-.776 (0.25)
Concurrent other firm	.431 (1.51)	-.036 (0.14)	.001 (1.51)	.008 (1.79)	.845 (0.71)
Board Size	.268 (2.46)	-.132 (1.71)	-.000 (1.60)	.001 (0.96)	-.786 (2.18)
Dominant S/h	3.166 (2.47)	-.856 (0.76)	-.005 (1.65)	.007 (0.40)	3.335 (0.65)
Top 5 Lenders	1.594 (0.52)	-1.097 (0.43)	-.019 (2.87)	-.120 (2.70)	-3.287 (0.27)
Volatility	1490 (1.97)	537 (1.38)	8.979 (8.95)	-2.440 (0.37)	744 (0.41)
Total Assets (x105)	-.488 (3.57)	-.119 (1.55)	.000 (1.04)	.001 (0.63)	1.01 (2.77)
Tang Ast/TA	-10.927 (2.31)	2.406 (0.74)	.050 (6.08)	-.022 (0.41)	-59.258 (4.05)
Bank Debt/TA	-3.329 (1.01)	11.295 (4.48)	-.103 (15.69)	-.331 (7.68)	-84.656 (7.13)
Construction		10.377 (5.13)	-.010 (1.99)	.017 (0.50)	9.475 (1.05)
Trade		3.239 (1.98)	-.009 (2.10)	-.004 (0.15)	6.808 (0.94)
Serv & Finan		1.019 (0.43)	-.008 (1.20)	-.021 (0.49)	49.684 (4.17)
Utilities		.149 (0.08)	.002 (0.34)	.037 (1.20)	29.234 (3.51)
Light Indus	3.396 (2.35)	-.834 (0.55)	-.012 (3.05)	-.027 (1.06)	-1.194 (0.17)
Chemical	3.517 (2.71)	-5.354 (3.68)	.002 (0.47)	.001 (0.05)	.076 (0.01)
Machinery	2.224 (1.84)	-3.219 (2.39)	-.020 (5.89)	-.102 (4.51)	-10.268 (1.67)
Adj R2	.12	.16	.32	.10	.09
N	285	832	931	931	903
B. 1986-90 (All Directors; Total Director Variable; Other Variables Not Reported):					
Total Outside Directors	-.096 (0.69)	-.043 (0.36)	.000 (1.50)	.001 (0.74)	.527 (0.94)
C. 1986-90 (Executive Directors Only; All Director Variables; Other Variables Not Reported):					
Past bankers	-.676 (1.15)	-.500 (1.04)	-.001 (0.85)	-.005 (0.58)	3.846 (1.72)
Past other firm	-.069 (0.20)	.027 (0.09)	.001 (0.72)	-.002 (0.36)	-.000 (0.00)
Past government employee	-.171 (0.16)	.869 (1.49)	-.001 (0.50)	.001 (0.07)	-.973 (0.35)
Concurrent banker	5.815 (0.84)	3.750 (1.42)	.009 (1.31)	.062 (1.35)	5.396 (0.44)
Concurrent other firm	.945 (0.96)	-1.051 (1.25)	-.001 (0.44)	-.003 (0.22)	.689 (0.17)
D. 1986-90 (Executive Directors Only; Total Director Variable; Other Variables Not Reported):					
Total Outside Directors	-.111 (0.38)	-.163 (0.65)	.000 (0.36)	-.002 (0.41)	1.134 (1.00)
E. 1990-94 (All Directors; All Director Variables; Other Variables Not Reported):					
Past bankers	-.174 (0.99)	.343 (2.56)	-.001 (1.69)	-.006 (1.28)	.005 (0.01)
Past other firm	.081 (0.56)	.055 (0.56)	.000 (0.58)	.001 (0.28)	.081 (0.23)
Past government employee	.106 (0.20)	-.115 (0.52)	.001 (1.09)	.004 (0.66)	1.480 (1.84)
Concurrent banker	-.373 (0.69)	-.366 (0.98)	.001 (0.80)	.016 (1.45)	1.730 (1.27)
Concurrent other firm	.390 (2.04)	.144 (1.01)	.002 (2.72)	.008 (1.81)	.365 (0.71)
F. 1990-94 (All Directors; Total Director Variable; Oher Variables Not Reported):					
Total Outside Directors	.076 (0.85)	.117 (1.79)	.000 (1.42)	.002 (1.01)	.262 (1.11)
G. 1990-94 (Executive Directors Only; All Director Variables; Other Variables Not Reported):					
Past bankers	-.101 (0.26)	.088 (0.34)	-.002 (2.28)	-.011 (1.38)	.648 (0.69)
Past other firm	.009 (0.04)	-.008 (0.04)	.000 (0.71)	.001 (0.21)	.295 (0.47)
Past government employee	-.360 (0.50)	-.429 (1.26)	.001 (0.55)	.018 (1.79)	2.930 (2.41)
Concurrent banker	1.063 (0.23)	3.191 (2.00)	.013 (2.13)	.073 (1.56)	14.291 (2.54)
Concurrent other firm	.802 (1.11)	-.593 (1.18)	.000 (0.23)	-.003 (0.21)	1.631 (0.90)
H. 1990-94 (Executive Directors Only; Total Director Variable; Other Variables Not Reported):					
Total Outside Directors	.046 (0.24)	.055 (0.40)	-.000 (0.27)	-.002 (0.59)	.488 (0.98)

Notes: Construction firms only. OLS estimates of the performance of firms during 1986-90, measured by (1) shareholder returns on investment, (2) operating income/total assets, (3) ordinary income/equity, and (4) growth (in total assets, as percentage). The table gives the coefficient, followed by the absolute value of the t-statistic. All equations include the full range of variables given in Panel A, but for expositional brevity the financial variables are reported for the remaining panels. All equations include a constant term, also not reported here.

Sources: See Table 1.

Table 8: What Do Outsiders Do?
OLS Estimates (Construction Firms Only)

	(2) ROI	(3) Oper Inc/ Tot Asts	(4) Ord-Inc/ Equity	(5) Growth .
A. 1986-90 (All Directors; All Director Variables):				
Director variables				
Past bankers	1.108 (0.95)	.001 (0.58)	.015 (2.14)	5.090 (1.51)
Past other firm	-.398 (0.76)	.002 (2.18)	.002 (0.66)	-1.798 (1.15)
Past government employee	.634 (0.80)	-.000 (0.27)	-.004 (0.93)	-1.608 (0.70)
Concurrent banker	2.274 (0.46)	.003 (0.40)	.008 (0.22)	-1.383 (0.08)
Concurrent other firm	.818 (1.01)	.002 (1.35)	.004 (0.66)	5.735 (1.84)
Board Size	.138 (0.47)	-.000 (0.16)	.003 (1.47)	-.283 (0.29)
Dominant S/h	1.731 (0.42)	-.001 (0.16)	.062 (2.37)	-2.971 (0.22)
Construction %	.051 (1.25)	-.000 (0.05)	.000 (1.64)	-.062 (0.51)
Civil Engineering %	.011 (0.19)	-.000 (0.26)	.000 (0.85)	-.208 (1.12)
Top 5 Lenders	-1.873 (0.20)	.024 (1.74)	.013 (0.19)	-56.188 (1.83)
Volatility	11838 (1.72)	17.435 (2.10)	67.361 (1.69)	-32422 (1.74)
Total Assets (x105)	-.621 (1.01)	.001 (0.99)	-.007 (1.66)	.723 (0.36)
Tang Ast/TA	-36.376(1.26)	.179 (4.58)	-.005 (0.03)	239.448 (2.70)
Bank Debt/TA	-.147 (0.01)	-.030 (1.76)	.013 (0.15)	-68.735 (1.78)
Adj R2	-.02	.50	.11	.13
N	82	95	95	90
B. 1986-90 (All Directors; Total Director Variable; Financial Variables Not Reported):				
Total Outside Directors	.187 (0.49)	.001 (2.45)	.002 (0.83)	-.154 (0.12)
C. 1986-90 (Executive Directors Only; All Director Variables; Financial Variables Not Reported):				
Past bankers	2.325 (1.30)	.001 (0.50)	.026 (2.31)	3.038 (0.55)
Past other firm	.466 (0.47)	.003 (2.35)	.006 (0.96)	-2.264 (0.82)
Past government employee	.150 (0.13)	-.001 (0.74)	-.012 (1.50)	-2.543 (0.65)
Concurrent banker	12.593 (1.14)	.010 (0.63)	-.001 (0.02)	17.036 (0.46)
Concurrent other firm	.149 (0.04)	.003 (0.67)	.017 (0.69)	16.051 (0.96)
D. 1986-90 (Executive Directors Only; Total Director Variable; Financial Variables Not Reported):				
Total Outside Directors	.466 (0.64)	.002 (1.65)	.004 (0.76)	-1.567 (0.68)
E. 1990-94 (All Directors; All Director Variables; Financial Variables Not Reported):				
Past bankers	.105 (0.21)	-.001 (0.57)	.014 (1.51)	-1.940 (0.91)
Past other firm	-.024 (0.11)	.000 (0.71)	-.003 (0.74)	.604 (0.64)
Past government employee	-.548 (1.52)	-.001 (1.31)	-.004 (0.55)	-1.184 (0.80)
Concurrent banker	-.075 (0.03)	.005 (0.71)	.006 (0.13)	-7.831 (0.80)
Concurrent other firm	-.101 (0.26)	.001 (1.21)	.008 (1.11)	.534 (0.33)
F. 1990-94 (All Directors; Total Director Variable; Financial Variables Not Reported):				
Total Outside Directors	-.095 (0.57)	.001 (1.13)	.000 (0.03)	.276 (0.40)
G. 1990-94 (Executive Directors Only; All Director Variables; Financial Variables Not Reported):				
Past bankers	.195 (0.26)	.000 (0.17)	.031 (2.33)	-4.866 (1.59)
Past other firm	.041 (0.10)	.002 (2.02)	.003 (0.38)	.162 (0.10)
Past government employee	-.415 (0.74)	-.002 (1.33)	-.003 (0.28)	.292 (0.13)
Concurrent banker	.083 (0.02)	.012 (0.78)	.044 (0.46)	-17.989 (0.82)
Concurrent other firm	-1.044 (0.56)	-.002 (0.34)	.007 (0.21)	-1.647 (0.23)
H. 1990-94 (Executive Directors Only; Total Director Variable; Financial Variables Not Reported):				
Total Outside Directors	-.101 (0.31)	.001 (0.86)	.004 (0.66)	-.226 (0.17)

Notes: Construction firms only. OLS estimates of the performance of firms during 1986-90, measured by (1) shareholder returns on investment, (2) operating income/total assets, (3) ordinary income/equity, and (4) growth (in total assets, as percentage). The table gives the coefficient, followed by the absolute value of the t-statistic. All equations include the financial variables given in Panel A, but for expositional brevity the coefficients are not reported for the remaining panels. All equations include a constant term, also not reported here.

Sources: See Table 1.