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THE GROWTH OF INSTITUTIONAL STOCK OWNERSHIP: A PROMISE UNFULFILLED

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Academics have pointed to the dramatic growth of institutional stock ownership in the United States during the past 20 years as our best hope for reversing the shift in power from corporate owners to corporate managers that began in the 1930s.[1] In their 1932 classic, *The Modern Corporation and Private Property*, Berle and Means recognized what was to become the dominant corporate paradigm of 20th-century American capitalism: the transfer of effective control from stockholders, the owners, to professional corporate managers. In their words, "[T]he central mass of the twentieth century American revolution [is a] massive collectivization of property devoted to production, with [an] accompanying decline of individual decision-making and control, [and] a massive dissociation of wealth from active management." The "[s]tockholder [vote] is of diminishing importance as the number of shareholders in each corporation increases—diminishing in fact to negligible importance as the corporations become giants. As the number of stockholders increases, the capacity of each to express opinions is extremely limited."[2] Berle and Means correctly foresaw that shareholders would become "passive" investors, leaving corporate managers in full control of their corporations. For many, the growth of institutional stock ownership that has occurred during the last two decades—institutions now hold nearly 56% of outstanding stock in the U.S.—is a hopeful development that promises to change the face of American capitalism in the next century.[3] As large shareholders, institutions have a greater incentive to be active shareholders and to monitor corporate managers than do small shareholders. In particular, institutions are better able to overcome the agency costs and information asymmetries associated with diffuse stock ownership.[4] In principle, therefore, institutional stock ownership should result in improved corporate governance generally and an accompanying increase in corporate efficiency and shareholder wealth.

This promise of better corporate governance through more active institutional shareholders has been reinforced by a recent empirical study of institutional ownership by Paul Gompers and Andrew Metrick, who find that in the U.S. "...the concentration of institutional ownership... has risen sharply since 1980."[5] Based on this growth in institutional ownership, they conclude that "...the importance of large [institutional] shareholders for corporate governance in the United States will increase" in the future.[6]

Such optimism about the prospects of a corporate governance revolution led by a growth in "institutional-investor capitalism" may be premature. First, while institutional stock ownership concentration has indeed increased since 1980, it is generally still quite low. Second, there are good reasons to believe that, unless significant changes are made in the legal and cultural environment of institutional funds management, ownership concentration

*The authors wish to thank Eric Engstrom for invaluable research assistance.

1. See, for example, Bernard Black, "Next Steps in Proxy Reform," *Journal of Corporation Law* 18 (1992); and Mark J. Roe, *Strong Managers, Weak Owners: The Political Roots of American Corporate Finance.* Princeton, N.J.: Princeton University Press, 1994.

2. See Roe, 1994, p. 6, cited above.

3. See, for example, Financial Economists Roundtable, "Statement on Institutional Investors and Corporate Governance." *Journal of Financial Services Research* 15 (February 1999): pp. 77-79.

4. See Andrei Shleifer and Robert Vishny, "A Survey of Corporate Governance," *Journal of Finance* 52 (1997): pp. 737-784.

5. Paul A. Gompers and Andrew Metrick, "How Are Large Institutions Different from Other Investors? Why Do These Differences Matter?" Working Paper, Harvard Business School, March 1998, pp. 22 and 30.

6. *Ibid*, p. 32.

in the U.S. is unlikely to reach the level at which institutional investors will have a powerful voice in corporate boardrooms. Third, institutional fund managers face significant legal and institutional constraints that deter them from both accumulating large ownership positions and attempting to use those positions to control corporate managers.[7] Finally, notwithstanding journalistic accounts of the rise of institutional shareholder activism, empirical studies suggest that such activism has had at best a modest effect on the performance of targeted firms.[8]

Our primary message in this paper is that, despite the increase in institutional stock ownership that has occurred since 1980, institutional investors are unlikely to alter significantly the way U.S. corporations are governed in the future unless changes are made in the laws and the institutional structure that govern the behavior of institutional fund managers. Indeed, to date institutional investors have done little to change the structure of corporate governance in the U.S. Apart from the episodic activities of a few large public pension funds, institutional investors on the whole have not taken an active role in corporate governance.[9]

The rest of this paper is organized in the following four sections. In the first, we examine the data on institutional ownership and draw somewhat different conclusions from prior studies about the growth of institutional ownership and in particular about the growth of ownership concentration. The second section explores the determinants of institutional ownership and again reaches some conclusions that differ from those of prior studies. The third section describes the legal and institutional obstacles faced by fund managers in both taking large ownership positions and in using those positions to influence corporate managers. The fourth section discusses changes in the legal and institutional structure that we believe would encourage a more active involvement of institutional investors in corporate governance. Some of these recommendations derive from the legal and organizational structure currently used by hedge funds.

INSTITUTIONAL OWNERSHIP REVISITED

We first examine the growth of institutional ownership and ownership concentration. In particular, based on the quarterly 13F reports submitted to the SEC on all common-stock positions greater than 10,000 shares or $200,000, CDA/Spectrum has compiled a data base on institutional ownership. We use those data for the years 1980, 1985, 1990, and 1995 through 1997. In organizing these data Spectrum assigns one of the following manager types to each reporting institution: (1) bank; (2) insurance company; (3) investment company (mutual fund); (4) independent advisor (usually a large brokerage firm or securities firm); or (5) other (public pension funds and university and charitable foundation endowments).[10]

This classification is not always precise. In particular, if a fund manager reports that more than 50% (say, 55%) of the total assets that it has under management fall into category (4), all of the assets managed by that manager are then classified as being in category (4), even though the other 45% of the assets managed by the manager may be in mutual funds. In this case category (4) assets will be overstated and category (3) assets understated. Alternatively, the reverse could be true. This reporting problem is likely to be greater for categories (3) and (4) than for other institutional categories because the same fund managers are active as both mutual fund managers and private pension fund managers. While in principle this reporting problem could result in either overreporting or underreporting of the assets in either category (3) or (4), our findings indicate that in practice it results in the overstating of category (4) assets and the understating of category (3), or mutual fund assets. This underreporting of mutual fund assets is exacerbated by the fact that mutual fund assets managed by banks and insurance companies also are reported as being in categories (1) and (2) rather than in category (3).

To obtain a better estimate of category (3) assets, we supplemented the CDA/Spectrum classification system with separate data on all mutual funds with

7. See Robert C. Pozen, “Institutional Investors: The Reluctant Activists.” *Harvard Business Review* (January/February 1994).

8. See, *e.g.*, Bernard Black, “Shareholder Activism and Corporate Governance,” in Peter Newman, ed., *The New Palgrave Dictionary of Economics and Law*, London: MacMillan Reference Limited, (1998), pp. 459-464; Stuart L. Gillan and Laura Starks, “A Survey of Shareholder Activism: Motivation and Empirical Evidence,” *Contemporary Finance Digest* 31 (Autumn 1998); and Jonathan M. Karpoff, “Does Shareholder Activism Work?: A Survey of Empirical Findings.” Mimeograph, April 1998.

9. See, for example, the review of studies of the role of institutional investors and the interviews of institutional investors reported by Gile R. Downes, Jr., Ehud Houminer, and R. Glenn Hubbard, *Institutional Investors and Corporate Behavior*, American Enterprise Institute, 1999.

10. Analysis of flow-of-funds data on private, defined-benefit, pension funds suggests that category (4) closely parallels the growth of defined-benefit pension funds. However, category (4) managers also include private equity funds, hedge funds, venture capital funds, etc.

TABLE 1
INSTITUTIONAL EQUITY HOLDINGS BY TYPE OF INSTITUTION, BILLIONS OF DOLLARS

	1980	1985	1990	1995	1996	1997
ALL INSTITUTIONS						
Total	504.27	986.29	1522.97	3785.51	4845.76	6390.74
Average Size	0.91	1.26	1.59	2.99	3.66	4.38
Pct. of U.S.	36%	45%	51%	56%	59%	60%
Top 5/Class	10%	10%	12%	18%	19%	19%
BANKS						
Total	222.91	342.91	407.24	781.94	948.09	1236.58
Average Size	0.99	1.43	1.88	3.80	5.10	6.87
Pct. of 13F	44%	35%	27%	21%	20%	19%
Pct. of U.S.	16%	16%	14%	12%	12%	12%
Top 5/Class	20%	26%	31%	41%	42%	44%
INSURANCE COMPANIES						
Total	59.07	80.10	111.34	350.91	423.89	577.77
Average Size	0.84	1.13	1.61	4.50	5.81	7.31
Pct. of 13F	12%	8%	7%	9%	9%	9%
Pct. of U.S.	4%	4%	4%	5%	5%	5%
Top 5/Class	45%	50%	54%	66%	68%	68%
INDEPENDENT ADVISORS						
Total	110.35	338.02	611.68	1301.25	1690.75	2140.00
Average Size	0.84	0.99	1.20	1.59	1.86	2.09
Pct. of 13F	22%	34%	40%	34%	35%	33%
Pct. of U.S.	8%	15%	21%	19%	21%	20%
Top 5/Class	26%	16%	21%	18%	20%	23%
PUBLIC AND NON-PROFIT						
Total	60.86	112.58	182.26	316.43	346.65	453.35
Average Size	0.79	1.31	2.00	4.06	4.50	5.46
Pct. of 13F	12%	11%	12%	8%	7%	7%
Pct. of U.S.	4%	5%	6%	5%	4%	4%
Top 5/Class	31%	31%	39%	42%	44%	44%
MUTUAL FUNDS						
Total	51.07	112.68	210.44	1034.98	1436.38	1983.05
Average Size	0.30	0.47	0.72	1.87	2.49	3.35
Pct. of 13F	10%	11%	14%	27%	30%	31%
Pct. of U.S.	4%	5%	7%	15%	17%	19%
Top 5/Class	26%	26%	34%	34%	35%	37%

more than $100 million under management. The drawback of this procedure is that it does nothing to correct problems in measuring category (4) assets, and may result in some double-counting, which may in turn cause total institutional ownership to be overstated. Despite this drawback, we prefer this procedure because it enables us to obtain a more accurate picture of mutual fund assets, the fastest-growing type of institutional investor.

Using our data sources, we find that mutual funds accounted for 10% of all reported 13F assets in 1980 and 31% in 1997. Correspondingly, assuming that the persistent underreporting of mutual fund assets that we find occurred largely because of an over-reporting of category (4) assets, we estimate that category (4) assets (independent advisors) would have represented 33% of 13F equity in 1997 (see Table 1).

Despite the increase in institutional stock ownership that has occurred since 1980, institutional investors are unlikely to alter significantly the way U.S. corporations are governed in the future unless changes are made in the laws and the institutional structure that govern the behavior of institutional fund managers.

OWNERSHIP CONCENTRATION

We measure institutional ownership (IO) as the proportion of a company's outstanding stock owned by all types of institutional investors, and ownership concentration (C5) by the proportion of a company's outstanding stock owned by the five largest institutional owners. (We also examine alternative measures of concentration, such as C1, C10, and a block ownership measure, and find a high degree of correlation among these measures.) Our figures on institutional ownership and on ownership concentration are based on the firms reported in the CDA database. We make no assumption about the institutional ownership of firms not included in the CDA database.[11] We find that, in the median CDA firm, the five-investor concentration ratio (C5) increased from 9% in 1980 to 17% in 1997, an increase of eight percentage points; and that, in the 75th percentile firm, C5 increased from 16% in 1980 to 26% in 1997, an increase of 10 percentage points (see Table 2).

The question, of course, is of what importance is the growth in ownership concentration. Does, for example, a figure of 17% for C5 for the median CDA firm suggest that institutional investors are now in position to influence or control most corporate managers? To begin with, C5 is probably not a very good measure of ownership power. A 15% figure for C5 could mean that five different institutions each owned three percent of the firm, or that one institution owned 11% and four owned one percent each. Clearly, the incentive to exercise control over managers would be much stronger for an institution owning 11% of the firm than for an institution owning only three percent. Thus, the distribution of stock ownership among the large owners can make a significant difference in both the incentive and ability of an owner to exercise control. The more equal it is, the less the incentive for any one institution to exercise ownership power, and probably the higher the costs of coordinating joint ownership activities.

To capture differences in the distribution of ownership shares among institutional owners we use a version of the Herfindahl Index (H).[12] An increase in H can occur if the ownership shares increase or if ownership shares become more unequal. The higher the value of H the more unequal are ownership shares, and the more likely it is that some institutional investors will have an incentive to influence corporate managers. We find that increases in H since 1980 have not been particularly significant: H increased from 6% in 1980 to about 10% in 1997 for the median firm, and increased from 10% to 15% for the 75th percentile firm (see Table 2). Further, in absolute terms, a Herfindahl index of 10 to 15% is typically not considered to be a high level of concentration (by, for example, antitrust standards, where the ability to undertake coordinated activities is of paramount importance).

Another way of viewing ownership concentration is in terms of large block ownership. Arguably, unless an institution owns a sizeable block of a company's stock, it has little incentive to expose itself to the costs and risks associated with activities directed at controlling or influencing corporate managers. It might simply opt to sell its shares in an under-performing company. We define a "block owner" as an owner who owns at least five percent of a company's shares (BO), and we measure ownership concentration as the percentage of a company's shares owned by all block owners (BOC). For the median firm, BOC increased from zero in 1980 to 6% in 1997; and for the 75th percentile firm BOC increased from 7% in 1980 to 17% in 1997. Thus, for most firms, there is no more than one block owner even today, and for the 75th percentile firm all block owners control only 17% of outstanding shares (see Table 2).

Examining the pattern of institutional ownership concentration also reveals why concentration has not increased as fast as has total institutional ownership in CDA firms. Since 1980, total institutional ownership in the median CDA firm went from 12 to 29%, and from 29 to 57% in the 75th percentile CDA firm. In contrast, ownership concentration (C5) has risen only from 9 to 17% in the median CDA firm, and from 16 to 26% in the 75th percentile CDA firm (see Table 2). Ownership concentration has not risen as fast as total institutional ownership because institutional investors have increasingly diversified

11. In contrast, Gompers and Metrick use a sample consisting of all companies reported by CRSP and assume that any CRSP company not included in the CDA data has zero institutional ownership. *Ibid.* We found many instances of large firms with institutional ownership that were inexplicably omitted from the CDA data, especially in the earlier years.

12. *H* is the root sum of squared ownership shares of all institutional owners of a stock.

TABLE 2
INSTITUTIONAL OWNERSHIP CONCENTRATION, CDA FIRMS*

	1980	1985	1990	1995	1996	1997
TOTAL OWNERSHIP						
Mean	18%	24%	27%	31%	33%	35%
Median	12%	18%	20%	25%	26%	29%
25%-ile	3%	6%	5%	8%	9%	9%
75%-ile	29%	38%	43%	51%	53%	57%
CONCENTRATION 1						
Mean	6%	6%	6%	7%	7%	7%
Median	4%	5%	5%	6%	6%	6%
25%-ile	2%	2%	2%	3%	3%	3%
75%-ile	7%	8%	8%	9%	9%	9%
CONCENTRATION 5						
Mean	11%	14%	15%	17%	18%	18%
Median	9%	12%	13%	15%	16%	17%
25%-ile	3%	5%	5%	7%	7%	8%
75%-ile	16%	20%	22%	25%	26%	26%
CONCENTRATION 10						
Mean	14%	18%	19%	22%	23%	24%
Median	11%	16%	16%	20%	21%	22%
25%-ile	3%	5%	5%	8%	9%	9%
75%-ile	21%	26%	29%	34%	35%	36%
HERFINDAHL INDEX						
Mean	7%	8%	9%	10%	10%	11%
Median	6%	7%	7%	9%	9%	10%
25%-ile	2%	3%	3%	4%	4%	5%
75%-ile	10%	11%	12%	14%	14%	15%
TOTAL OWNERSHIP OF BLOCK OWNERS[a]						
Mean	5%	7%	8%	9%	10%	11%
Median	0%	0%	0%	6%	6%	6%
25%-ile	0%	0%	0%	0%	0%	0%
75%-ile	7%	11%	13%	15%	16%	17%

*Concentration X is defined as the total shares held by the top X institutions divided by a company's outstanding shares. The Herfindahl Index is the root sum of squared institutional holdings of a firm's stock.
a. Block ownership is defined for a firm as the sum of ownership positions that individually comprise at least 5% of shares outstanding.

their holdings to more (and smaller) firms as the size of their portfolios has increased. In particular, the percentage of institutional investors' equity portfolios accounted for by either their largest stock position or their largest ten stock positions has declined significantly since 1980: the percent accounted for by the largest ten positions, for example, has fallen from 43 to 34% (see Table 3).

THE DETERMINANTS OF INSTITUTIONAL OWNERSHIP

Institutional investors also prefer to invest in companies that can be characterized as "prudent" investments: large companies that pay dividends, have highly liquid stocks that have performed well in the recent past, and can be viewed as "value"

If acquiring control were an important objective, we would expect to see institutions taking large ownership positions in smaller companies where they could obtain a much larger voice in the corporate governance process. Further, since such investments would presumably be more long term, stock liquidity should be much less of a consideration.

TABLE 3
PERCENTAGE OF INSTITUTIONAL INVESTORS' EQUITY PORTFOLIOS ACCOUNTED FOR BY LARGEST EQUITY POSITIONS, CDA FIRMS

	1980	1985	1990	1995	1996	1997
LARGEST POSITION						
Mean	14%	12%	10%	9%	9%	9%
Median	8%	8%	6%	5%	5%	5%
75%-ile	14%	13%	10%	9%	9%	9%
90%-ile	28%	23%	19%	16%	17%	17%
LARGEST TEN POSITIONS						
Mean	47%	45%	43%	38%	38%	38%
Median	43%	42%	39%	34%	34%	34%
75%-ile	55%	54%	52%	47%	47%	48%
90%-ile	75%	71%	70%	66%	66%	66%

TABLE 4
DETERMINANTS OF INSTITUTIONAL OWNERSHIP

	Pooled OLS		Industry (SIC4) Effects		Firm-Fixed Effects	
	Coefficient	t-stat	Coefficient	t-stat	Coefficient	t-stat
Log Size	0.092	49.12	0.091	59.03	0.027	13.35
Log Size Squared	–0.005	–32.43	–0.005	–39.25	0.002	11.44
Log Momentum	–0.606	–4.53	–0.053	–0.85	0.304	8.07
Log Price	0.038	28.17	0.064	55.88	0.023	14.63
Log Volatility	–0.456	–9.01	–0.358	–11.60	–0.027	–1.43
Log Dividend Yield	–2.943	–22.89	–1.710	–11.95	0.482	4.49
Log Book-to-Market	0.007	6.99	0.079	59.74	0.037	20.18
Log Turnover	0.044	73.77	0.043	83.56	0.004	9.29
S&P 500 Dummy	0.069	26.19	0.056	20.97	–0.002	–0.47
Constant	–0.437	–65.59	–0.571	–95.35	–0.030	–4.01
Obs.		66197		66197		66197
R-Squared		0.47		0.41		0.33
			pval - ind.eff.	0.00	pval - firm.eff.	0.00

Note: Time dummies are included in all specifications, but are not reported. The sample period is 1995:1 to 1997:4. The sample includes all CDA firms for which both COMPUSTAT and CRSP data are available.
Variable Definitions are as follows. **Ownership Measures**: *IO:* Total shares owned by institutional investors divided by a firm's total outstanding shares. *C1,C5,C10* :Total shares owned by the 1, 5, or 10 largest institutional investors for a firm divided by the firm's total shares outstanding. *Block IO:* Total shares owned by institutions that hold at least five percent of a firm's total outstanding shares divided by the firm's total outstanding shares. *Herfindahl Index:* The root sum of squared institutional holdings of a firm's stock. **Firm Characteristics**: *Size:* Total shares outstanding for a firm multiplied by price per share at end of quarter. *Momentum:* Total per share return calculated over the last twelve months excluding the most recent three months. *Price:* Price per share of a firm's stock calculated at end of quarter. *Volatility:* Standard deviation of daily returns calculated over the current quarter. *Dividend Yield:* Dividends per share divided by price per share for the current quarter. *Book-to-Market:* Book value of a firms total assets divided by its market capitalization (size). *Turnover:* Average daily volume of shares traded divided by total shares outstanding for a firm. *S&P 500 Dummy:* Bivariate dummy variable set to 1 if the firm was included in the S&P500 Index for at least two months of the current quarter and 0 otherwise.

stocks.[13] In other words, institutions take large ownership positions in companies that fund managers can easily defend as "prudent" investments and that can be sold quickly if they perform poorly.

Table 4 reports our estimates of the determinants of institutional ownership. This table shows the results for three estimated equations: a pooled OLS equation for all CDA firms over the 12 quarters from 1995:1 through 1997:4, including time dummies for each quarter; the same equation with dummy variables added for all four-digit-SIC industries; and a firm-fixed-effects specification that re-

13. See Diane Del Guercio, "The Distorting Effect of the Prudent-Man Laws on Institutional Equity Investments." *Journal of Financial Economics* 40 (1996), pp. 31-62; S.G. Badrinath, G.D. Gay, and J.R. Kale, "Patterns of Institutional Investment and the Managerial 'Safety-net' Hypothesis," *Journal of Risk and Insurance* 56 (1989), pp. 605-629; and Gompers and Metrick, cited above.

TABLE 5
DETERMINANTS OF OWNERSHIP CONCENTRATION (C1,C5), FIRM-FIXED-EFFECTS ESTIMATION

	C1		C5	
	Coefficient	**t-stat**	**Coefficient**	**t-stat**
Log Size	0.008	8.08	0.025	16.72
Log Size Squared	–0.001	–9.23	–0.002	–15.43
Log Momentum	0.036	1.90	0.094	3.37
Log Price	0.004	5.48	0.013	11.05
Log Volatility	0.013	1.37	–0.009	–0.61
Log Dividend Yield	0.061	1.15	0.094	1.18
Log Book-to-Market	0.005	5.92	0.018	13.49
Log Turnover	–0.002	–10.11	–0.003	–9.12
S&P 500 Dummy	–0.001	–0.48	–0.006	–1.80
Constant	0.047	12.62	0.063	11.29
Obs.		66197		66197
R-Squared		0.01		0.07
pval - ind.eff.				0.00

Note: Time dummies are included but are not reported. The sample period is 1995:1 to 1997:4. The sample includes all CDA firms for which both COMPUSTAT and CRSP data are available.

moves firm-specific means of the variables.[14] Although the third model is the most informative, we report results for all three equations.

The results for the pooled OLS equation indicate that total institutional ownership is higher in larger companies and in companies with higher stock prices (expressed as dollars per share), greater stock turnover (or more liquid stocks), higher book-to-market ratios (or are "value" companies), and for those included in the S&P 500 Index. Institutional ownership is lower in companies that have more volatile stock returns and, surprisingly, in firms that pay relatively high dividends and whose stock prices have increased significantly in the last year (momentum stocks). Estimates from our second model, which includes industry dummy variables, yield similar conclusions, except that the momentum variable becomes insignificant.

When we estimate the firm-fixed-effects model, however, important differences emerge. First, the sign on the dividend yield is reversed, suggesting that institutions do in fact prefer companies that pay higher dividends. This result is more consistent both with conventional wisdom and most academic work. Second, the coefficient estimate for the momentum variable is now positive and significant, suggesting that institutional investors are indeed momentum investors, which again is more consistent with academic studies.[15] Third, neither stock volatility nor membership in the S&P 500 index is now significant. Last, the sign of the variable "size squared" is reversed, indicating that institutional ownership rises at an increasing rate as firms become larger.

Thus the view that fund managers take stock positions out of a desire to gain an advantage either by obtaining "inside" information about a firm's prospects or by improving corporate efficiency by better monitoring of corporate managers is not consistent with the types of firms in which they hold stock. If acquiring control were an important objective, we would expect to see institutions taking large ownership positions in smaller companies where they could obtain a much larger voice in the corporate governance process. Further, since such investments would presumably be more long term, stock liquidity (such as turnover) should be much less of a consideration, as would whether a company pays a dividend. Indeed, this is exactly what we find when we examine the determinants of large ownership positions represented by C5: neither the turnover nor the dividends variable has a significantly positive coefficient (see Table 5).

14. The sample includes all CDA firms for which both COMPUSTAT and CRSP data are available.

15. See, for example, Mark Grinblatt and Sheridan Titman, "Momentum Investment Strategies, Portfolio Performance, and Herding: A Study of Mutual Fund Behavior," *American Economic Review* 85 (December 1995), pp. 1088-1103.

Both corporate culture and law combine to discourage private pension funds from owning sizeable blocks of stock, or from adopting an active corporate governance policy. On the cultural side, corporate managers effectively control their own pension funds, and few of them may want to meddle in the affairs of other companies.

To summarize, although both total institutional ownership and ownership concentration have increased significantly during the last fifteen years, this growth has not translated into institutions taking controlling positions in major U.S. companies. It seems premature, therefore, to conclude that the growth of institutional ownership heralds an end to managerial capitalism and the beginning of a new age of more active stockholders. In the next section we discuss reasons why institutional investors have not attempted to hold controlling positions in companies and why they are unlikely to do so in the future as well.

DETERRENTS TO ACTIVE INSTITUTIONAL OWNERSHIP

Most of the increase in institutional ownership that has occurred since 1980 is due to the rapid growth of two types of fund managers: mutual funds and independent advisors, which together account for all of the 17 percentage point increase in total institutional ownership since 1980. Ownership concentration (C5) is also much higher for these two types of fund managers than all other institutional investors. If the growth of institutional investors offers the promise of better corporate governance in the future it will have to come largely from the actions of mutual fund managers and independent advisors (private, defined-benefit pension plans now make-up most of this category). Thus we focus on legal and institutional constraints that prevent mutual funds and private pension fund managers from playing a more active role in the governance of corporations.

Mutual Funds

A number of regulations combine to restrict or at least discourage mutual funds from taking significant ownership positions. First, the "five and ten" rule contained in the Investment Company Act of 1940 is a clear attempt to limit mutual fund ownership. These provisions require that at least 50% of the value of a fund's total assets must satisfy the following two criteria: the value of an equity position can not exceed five percent of the value of the fund's total assets, and the fund cannot hold more than ten percent of the outstanding securities of any company.[16] The ten-percent rule is obviously directed at limiting the ability of mutual funds to take controlling positions in companies, and to ensure that mutual funds do not play a significant role in corporate boardrooms. The effect of the five-percent rule on ownership concentration is subtler. This rule is ostensibly a "diversification" rule, and is usually viewed as an attempt to ensure that mutual funds remain sufficiently diversified to meet unanticipated redemptions without appreciable changes in the net asset value of the fund. However, as a diversification requirement, this rule is not terribly effective, and its intent can be easily circumvented. For example, it does not require a mutual fund to diversify across industries—all of a fund's portfolio can legally be invested in companies in the same businesses or sectors of the economy, with highly correlated returns. Indirectly, the five-percent rule also is an important ownership constraint. It prevents all but the very largest mutual funds from taking sizeable ownership positions in a company's stock, since such positions could violate the rule. The data examined in the prior section support this conclusion.

Section 16(b) of the Securities and Exchange Act of 1934 is another obstacle to mutual funds taking large equity positions. This law requires that a shareholder who owns ten percent or more of a company's stock, or *any* director of a company, must return *any* "short-swing" profits to the company (profits on the sale of stock held for less than six months). Because mutual funds typically trade frequently, if only to meet redemptions, this law effectively makes holding large blocks of stock impractical for mutual funds. Further, the law discourages mutual funds from placing a director on a portfolio company's board of directors, or from even being identified too closely with any director of the company for fear of becoming liable.[17]

16. Investment Company Act of 1940, sec. 4(b)(3); I.R.C. sec. 852(b)(4). If a mutual fund violates these provisions it risks losing its pass-through tax status for federal income tax purposes on its entire portfolio, since the tax law allows only "diversified" funds to pass income through to shareholders. The result would be triple taxation of the fund's earnings, which would destroy the economic viability of the fund. It is not clear whether the "five and ten" rule applies to a mutual fund "family" (such as Fidelity Management) or to each of the fund's portfolios separately. Mutual funds have generally not challenged the SEC on this issue.

17. Bernard Black, "Next Steps in Proxy Reform," *Journal of Corporation Law* 18 (1992), also cites a number of other laws that discourage active institutional involvement, such as Schedule 13D of the Securities and Exchange Act of 1934, the pre-merger notification rules of the Hart-Scott-Rodino Act, state corporate law, corporate antitakover provisions, and the "change of control" provisions commonly contained in corporate contracts, such as employment contracts.

Private Pension Funds

Both corporate culture and law combine to discourage private pension funds from owning sizeable blocks of stock, or from adopting an active corporate governance policy. On the cultural side, corporate managers effectively control their own pension funds, and few of them may want to meddle in the affairs of other companies for fear of provoking a similar reaction on the part of the pension funds controlled by those companies.[18] On the legal side, ERISA (the Employee Retirement Income Security Act) poses significant legal risks to pension fund managers who acquire large blocks of stock or are active in corporate governance. Roe argues that the primary effect of ERISA is to encourage pension fund managers to imitate prevailing practice in order avoid legal liability for imprudent behavior. In particular, ERISA requires a standard of diligence that uses as a benchmark the "conduct of an enterprise of a like character and with like aims."[19] Thus, because the prevailing practice in pension fund management is to hold a diversified portfolio consisting mostly of small ownership positions, a manager who deviates from this practice runs a serious risk of liability in the event that the fund loses a substantial amount of money in any position. Further, to the extent that a pension fund would benefit from taking more concentrated positions in firms, such benefit accrues largely to the fund's beneficiaries and not to the fund managers. There is, therefore, little incentive for fund managers to take concentrated positions in firms; they assume all the risks and the beneficiaries get most of the benefits.

In addition, standard trustee law, which is not part of ERISA, discourages managers from taking block positions because trust law "antinetting" rules typically prevent trustees (or fund managers) from defending against a loss on a block position by pointing to other large gains in the portfolio, or to the general overall sound performance of the portfolio. Under the law, each block position must be evaluated separately as a distinct investment in order the show that the manager did not act irresponsibly. Thus, by employing a portfolio strategy of great diversification and avoiding sizeable block holdings, fund managers can avoid liability for "big" mistakes. Finally, the incentive of pension funds to acquire large blocks of stock in order to obtain a seat on a corporate board is largely negated by ERISA's "prudent expert" standard, which may expose pension fiduciaries (or their agents) to even greater liability than the typical corporate director.[20]

Thus our empirical findings that, since 1980, institutional ownership concentration has increased much less than has total institutional ownership is not surprising given the ownership constraints faced by mutual fund and private defined-benefit pension plans. These institutions account for most of the growth in institutional ownership since 1980, and the U.S. legal structure strongly discourages them from holding sizeable positions in companies. Further, because future growth in institutional ownership is most likely to occur through mutual funds and pension funds, there is unlikely to be a substantial change in the present pattern of corporate governance in the U.S. without significant changes in the legal and institutional structure governing mutual funds and pension funds.

IMPLICATIONS FOR PUBLIC POLICY

If institutional investors are to play a greater role in corporate governance, we will have to increase the incentives of mutual fund and pension fund managers to take larger ownership positions and to be more active in monitoring the performance of corporate managers, and will have to remove or at least moderate the current legal and institutional obstacles that discourage them from pursuing this strategy. Fund managers must also believe that a more pro-active investment strategy will pay off; that is, they must believe that portfolio performance will be enhanced by working with companies over a longer horizon to improve company performance, rather than their following the "Wall Street rule" of simply ridding their portfolios of poorly performing stocks.

There is reason to believe that, if fund managers were able to hold larger ownership positions in companies, a pro-active investment strategy would enhance their performance. In particular, the exist-

18. The Employee Retirement Income Security Act (ERISA) permits the firm's own "officer, employee, agent, or other representative" to run the fund (ERISA, sec. 408(c), 29). Over half of private pensions are managed in-house (see Roe, 1994, cited above, p. 133).

19. See Employee Retirement Income Security Act (ERISA) of 1974. , sec. 404(a), 29 U.S.C. sec 1104(a) (1988).

20. Non-fiduciary corporate directors can use the "business judgment" rule to defend themselves against a lawsuit, whereas fiduciaries are likely to be held to the tighter ERISA prudent expert rule (see Roe, 1994, cited above, pp. 142-3).

The recent growth of money flowing into venture capital firms and hedge funds taking long stock positions provides some evidence of the potential profitability of a more pro-active investment strategy. These funds typically hold relatively large equity positions in companies (albeit usually in smaller companies) and take a more hands-on approach to managing their investments than do mutual funds.

ence of asymmetric information (wherein corporate managers know more about the company than do stockholders) together with the separation of ownership from control stemming from the dispersed ownership structure common to U.S. corporations typically causes a principal-agent problem that is costly for stockholders to overcome. Under this structure it is reasonable to believe that there is some slack in corporate performance that could be eliminated if stockholders had a greater incentive to become informed about company performance and to provide greater monitoring of corporate managers. One low-cost way to capture these inefficiencies is to permit mutual fund and pension fund managers to hold larger ownership positions, which would both enhance their incentive to be active corporate monitors and reduce the free-rider problem inherent in a dispersed ownership structure. Further, by capturing the gains from reducing corporate inefficiencies, fund managers will be able to enhance their portfolio performance, which will benefit themselves and their clients, as well as improving the performance of the overall economy.

The recent growth of money flowing into venture capital firms and hedge funds devoted to holding long stock positions provides some evidence of the potential profitability of a more proactive investment strategy. These funds typically hold relatively large equity positions in companies (albeit usually in smaller companies) and take a more hands-on approach to managing their investments than do mutual funds. Another indication of the potential profitability of this strategy is the recent proliferation of "select" or "focus" mutual funds. These funds typically hold 25 or fewer stocks, and may invest more than ten percent of the fund's assets in a single stock.[21] They may also impose a stiff (two percent) redemption fee to encourage investors to take a longer-term view of performance.

One policy reform, therefore, could be to reduce the legal and institutional obstacles to holding larger equity positions in companies. Mutual fund managers currently face several such obstacles, such as the "five and ten rule." Although this rule is often confused with limiting a fund's riskiness by requiring portfolio diversification, its primary effect, as we have already pointed out, is to restrict large ownership. Thus, a first step should be to eliminate "the five and ten rule." The legal standards of diligence and prudence applicable to mutual funds should instead be based solely on a fund's disclosure documents. Mutual funds are already required to describe their investment philosophies and strategies in their prospectuses and disclosure documents, and these documents would also include an explicit statement about a fund's strategy with respect to its portfolio concentration. The appropriate legal standard should be whether mutual funds adhere to the investment policies and strategies set forth in their disclosure documents.

Managers of open-end mutual funds also may fear holding large equity positions because of liquidity concerns. Open-end mutual funds are required to redeem their shares on a daily basis, and cannot postpone the payment of redemption proceeds for more than seven days after the tender of the shares offered for redemption. Large portfolio positions may be difficult to unload in a hurry without affecting stock prices adversely. Further, open-end mutual funds are required to maintain at least 85% of their portfolios in assets that can be sold in seven days at approximately the prices used in determining net asset value of the fund's shares. Large equity positions may be more difficult to value because of the difficulty of estimating the liquidity effect. These legal requirements, therefore, discourage fund managers from holding large ownership positions in companies.

We believe that this "illiquidity" obstacle to holding large equity positions can be substantially mitigated by permitting open-end mutual funds to redeem their shares on an interval basis of their choosing. At present all open-end mutual funds are required under section 22(e) of the Investment Company Act of 1940 (the "Act") to redeem their shares on a daily basis. An alternative approach would be to allow mutual funds to adopt any redemption policy they wish so long as this policy is fully disclosed to investors. As long as the funds are required to disclose their redemption policies to investors, and are held legally accountable for the valuations that they put on the assets they redeem, investors will be adequately protected. Greater freedom to limit redemption privileges would enable

21. See "Sharp Focus: How 'Select' Mutual Funds Do It," *The Wall Street Journal*, March 5, 1999, p. C1, col. 3; and "Montgomery Gets 'Focused' With Funds," *The Wall Street Journal*, April 11, 2000, p. C27, col. 1.

mutual funds to hold less liquid (*i.e.*, larger) ownership positions in companies, and to pursue less liquid portfolio strategies generally. In particular, fund managers could hold larger blocks of stock without fear of having to liquidate those positions to meet unanticipated redemptions, and they could plan to hold these blocks for longer time periods. Thus freed from the threat of having to redeem their shares on a moment's notice, some mutual funds could be expected to take a longer-term perspective on corporate performance in the hopes of achieving superior portfolio performance through a more proactive strategy.

The legal mechanism (or loophole) for permitting greater freedom in funds' redemption policies already exists, and the SEC could expand this. In October 1998, under section 6(c) of the Act, the SEC granted Emerging Markets Growth Fund, Inc. ("EMGF") an exemption from section 22(e) and rule 22c-1 of the Act.[22] Section 22(e) requires an open-end fund to permit its shareholders to redeem shares on a daily basis and to make payments on redemption requests within seven days following tender to the fund. Rule 22c-1 effectively requires an open-end fund to calculate its Net Asset Values (NAV) each day and to price its shares for sale or redemption on a daily basis. EMGF was a closed-end mutual fund that held primarily equity securities of issuers located in developing countries, which were generally not very liquid. It proposed to convert to a registered open-end mutual fund and to redeem its shares on a monthly rather than daily basis.

EMGF's application had several features that are important for interpreting the scope of the SEC's approval of its application. First, EMGF proposed to limit all new investors to "qualified purchasers" within the meaning of section 2(a)(51) of the Act and the rules and SEC interpretive positions under the Act. Section 2(a)(51) generally defines qualified purchasers as persons who own $5 million of investments and institutions that own or manage on a discretionary basis $25 million of investments. Second, EMGF proposed that at least 85% of its assets must either mature by the next Redemption Payment Date or be capable of being sold between the Redemption Request Deadline and the Redemption Payment Date at approximately the price used in computing its NAV. Third, EMGF proposed that its redemption policy be stated on the cover of its prospectus and in any marketing materials and that it would not hold itself as a "mutual fund," but would instead hold itself out to be an open-end "interval" fund.

Thus the SEC's approval of EMGF's application is conditioned on a mutual fund adhering to a "qualified purchaser" standard and on its not being able to market itself as an open-end mutual fund. This obviously severely restricts the scope of the SEC permitted exemption from the daily redemption requirement under section 22(e) to the same small segment of the investor population that is able to avail themselves of hedge funds. Nonetheless, the EMGF order clearly carves out a legal precedent for the SEC under section 6(c) of the Act to exempt open-end mutual funds from having to redeem daily. The SEC could consider expanding the scope of this exemption to a broader segment of the investor population, and permit so-called interval funds to hold themselves out as open-end mutual funds, so long as a fund's redemption policies are clearly stated in a fund's prospectus and marketing materials.

Even if the legal impediments to mutual funds taking large ownership positions are reduced, there is still the problem of fund manager incentives. Under the current "flat fee" structure used by most mutual funds (and by many other institutional fund management companies), fund managers do not have a great incentive to take unusual risks, such as those associated with holding a less diversified portfolio or making big bets on a particular company by holding a large ownership position in that company.[23] The compensation of most mutual fund managers depends largely on the amount of assets under management, and there is no guarantee that investment flows into the fund will increase substantially if a fund manager outperforms her peers. Although there is some evidence that investment

22. Securities and Exchange Commission, Release No. 23481, October 7, 1998. Section 6(c) permits the SEC to exempt any person or transaction from any provision of the Act, if such exemption is necessary or appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policies of the Act.

23. The Investment Advisors Act of 1940 does not permit the use of asymmetrical "incentive fee" contracts—where money managers (or advisors) receive a base fee plus a bonus for surpassing some benchmark return, but do not receive less if performance falls short of that benchmark. However, an amendment to the 1940 Act does permit performance-based fees if management compensation is computed symmetrically around some chosen benchmark return, where the fees decrease when managers underperform in the same way that they increase when managers outperform. Few mutual funds, however, have adopted this type of "fulcrum" fee structure.

Even if the legal impediments to mutual funds taking large ownership positions are reduced, there is still the problem of fund manager incentives. Under the current "flat fee" structure used by most mutual funds, fund managers do not have a great incentive to take unusual risks, such as those associated with making big bets on a particular company by holding a large ownership position.

flows do respond positively to superior mutual fund performance, it seems unlikely that fund managers would nevertheless be willing to take large risks on the chance of this happening, since underperforming could mean the loss of their jobs.[24]

More specifically, a fund manager cannot expect to outperform by a wide margin without making some big bets, and big bets cannot be expected to pay off every year. At best they pay off on the average and, when they do lose, they typically lose a lot. Fund managers are unlikely to want to take such risks in today's financial environment, in which investors and financial consultants have become increasingly intolerant of returns below a specified industry benchmark. Beating the benchmark by only a small amount is acceptable, while falling behind by a large amount is a death sentence—investment flows may turn negative and fund managers may lose their jobs. Thus, the compensation structure in the mutual fund industry encourages fund managers to stay with the "herd" and to eschew taking big portfolio risks or deviating very much from what other fund managers are doing.

Not surprisingly, mutual fund managers wishing to pursue more risky strategies are increasingly moving to hedge funds, where the incentive compensation structure provides a greater payoff for superior managers.[25] Hedge funds, which have grown significantly over the past ten years, are to a large extent a regulatory creation developed to take advantage of the gaps in the fund management marketplace created by legal restraints on mutual funds. Unlike mutual funds, hedge funds can adopt whatever redemption policies they wish (most permit only periodic redemptions, such as quarterly or even once each year or less frequently), and are not encumbered by diversification, liquidity, ownership, and disclosure requirements. Hedge funds also typically employ asymmetrical incentive fee structures, which reward managers handsomely for superior performance (usually 20% of profits above a specified hurdle rate).

Mutual funds could be given greater freedom to experiment with the use of incentive fees to encourage fund managers to take large ownership positions and to be willing to hold these positions for a longer period of time. In particular, incentive fees could be structured in a way that rewards fund managers for successfully identifying undervalued companies and working with corporate managers to improve corporate performance over a longer time period than is now fashionable in the fund management industry. The evidence from hedge funds is consistent with this view. In a recent study, one of the authors of this paper examined the relationship between hedge fund performance and the incentive fee structure used by a hedge fund, using a sample of approximately 1,000 hedge funds over a period of ten years. Hedge fund performance (risk-adjusted) was found to be markedly better when fund managers were paid a higher incentive fee.[26]

Finally, the accepted rationale for restricting what open-end mutual funds can do is "investor protection." Hedge fund investors are limited to "qualified purchasers": individual investors with at least $5 million of investments and institutions that own or manage on a discretionary basis at least $25 million of investments. These investors are presumably sophisticated and well informed. In contrast, many mutual funds investors have relatively little wealth and are arguably less sophisticated, and therefore may need to be protected by regulations restricting the amount of risk that mutual funds can take. While for some investors there may be truth to this argument, the effect of current mutual fund regulations is to exclude virtually all mutual fund investors from participating in pro-active investment strategies that may yield superior returns. If government protection of small and unsophisticated mutual fund investors were deemed necessary, there is still substantial scope to relax the current restrictions on mutual funds. For example, investors with a net worth of $1 million arguably do not need to be protected from the risks associated with a fund taking, say, large ownership positions in ten companies (such individuals would generally be permitted to invest in illiquid private equity investments, for example). Indeed, it may be sufficient simply to

24. See, for example, Erik R. Sirri and Peter Tufano, "Costly Search and Mutual Fund Flows," Working Paper, Harvard Business School, 1999; Ajay Khorana, "Top Management Turnover: An Empirical Investigation of Mutual Fund Managers." *Journal of Financial Economics* 40 (1996), pp. 403-427; and Judith Chevalier and Glenn Ellison, "Career Concerns of Mutual Fund Managers," Working Paper No. 6394, National Bureau of Economic Research, February 1998.

25. "Hedge Funds' Heat Generates Allure for Mutual-Fund Firms," *The Wall Street Journal*, August 7, 2000, p. R1, col 1.

26. See Franklin R. Edwards, and Mustafa O. Caglayan. "An Analysis of Hedge Fund Performance: Excess Returns, Common Risk Factors, and Manager Skill," Working Paper, Columbia Business School, August 2000. See also Sanjiv Ranjan Das and Rangarajan K. Sundaram, "Fee Speech: Signaling and the Regulation of Mutual Fund Fees," Working Paper No. CLB-98-020, Center of Law and Business, New York University, April 1999.

require all mutual funds to clearly disclose to investors their holdings, strategies, past performance, redemption policy, fees, and governance and management structure. Thus there is ample scope for the SEC to free open-end mutual funds from the legal restrictions that currently discourage them from taking larger ownership positions in companies and from pursuing more pro-active investment strategies.

CONCLUSION

Despite the very substantial growth of institutional ownership of U.S. corporations in the past 20 years, there is little evidence that institutional investors have acquired the kind of concentrated ownership positions required to be able to play a dominant role in the corporate governance process. Institutional ownership remains widely dispersed among firms and institutions. The key reason for this is that there exist significant legal obstacles that discourage institutional investors both from taking large block positions and from exercising large ownership positions to control corporate managers. In particular, much of the growth of institutional ownership since 1980 has been accounted for by the growth of mutual funds and private pension funds, but there continue to be strong deterrents to these institutions using large ownership positions to influence corporate managers.

To encourage mutual funds to take a more activist corporate governance role, we recommend that current legal restrictions on mutual funds be relaxed so that mutual funds have a greater incentive to hold large ownership positions in companies and to use those positions to more effectively monitor corporate managers. In particular, the "five and ten" portfolio rules applicable to mutual funds could be repealed and replaced with a standard of prudence and diligence more in keeping with portfolio theory; mutual funds could be given greater freedom to adopt redemption policies that would be more conducive to them holding larger ownership positions; and institutional investors could be permitted to employ a variety of incentive fee structures to encourage fund managers to pursue more pro-active investment strategies. The prospect of actively involving institutional fund managers in the corporate governance process in a constructive way is probably our best hope for improving corporate governance in the U.S.

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