EVIDENCE ON THE RELATION BETWEEN CORPORATE GOVERNANCE CHARACTERISTICS AND THE QUALITY OF FINANCIAL REPORTING

An active and effective board of directors, responsible financial management, skeptical and independent auditors, and attentive regulatory authorities all have responsibilities to safeguard those who invest in public corporations. Effective corporate governance of the financial reporting process is an important tool for enabling companies and their auditors to fulfill those responsibilities.

-- Arthur Levitt, Chairman Securities and Exchange Commission

I. INTRODUCTION

Despite the prominent attention recently given to the role of corporate governance in the performance and management of U.S. firms, little to no research has been conducted investigating its relation to the quality of corporate financial reporting. Nonetheless, there are numerous examples in the authoritative, academic and popular literature which either presume or assert that such a relation exists.

Over the past two decades a number of prominent participants in the debates surrounding professional standards and financial reporting and auditing practices have increased the attention given to the role of corporate governance procedures in the development of credible financial statement information. Examples include the National Commission on Fraudulent Financial Reporting (Treadway Commission), the Public Oversight Board of the SEC Practice Section of the AICPA, the AICPA Auditing Standards Board, the Committee of Sponsoring Organizations (COSO) of the Treadway Commission, and in the United Kingdom, the Cadbury Committee Report on Financial Aspects of Corporate Governance. Implicit in all of their recommendations is the assertion that the credibility of financial statement information is related to specific institutional features of corporate governance.

This paper presents the first empirical evidence that such a relation exists. Specifically, significant correlations are found between two different measures of financial reporting quality and the composition of the firms' boards of directors, in particular the subset of directors serving on the audit committee. The two financial reporting quality measures employed in the study are (1) analysts' published evaluations of corporate disclosure practices and (2) the existence of an SEC Accounting and Auditing Enforcement Release against the firm or its auditors.

The results demonstrate that higher analyst ratings of financial reporting quality are associated with firms with lower percentages of directors, particularly audit committee members, who are either relatives of officers or have some business relationship with the firm (so-called "grey" area outside directors). Weaker relations were established for the percentage of stock beneficially owned by officers and directors and members of the audit committee. There is no significant relation between the analyst ratings and the percentage of directors who are employees of the firm (insiders) or are officers of a second entity whose board includes an officer of the sample firm (interlocking directorates).

Multiple regression results demonstrate that after controlling for the presence of insiders and "grey" area outside directors on the audit committee, the makeup of non-audit committee board members provides no incremental explanatory power of analysts' financial reporting quality ratings. Finally, significant explanatory factors behind the level of independence of the audit committee include the presence of a board nominating or corporate governance committee and the percentage of stock owned by institutions and other major shareholders.

With respect to SEC Accounting and Auditing Enforcement Releases (AAERs), the results demonstrate that firms violating SEC reporting standards have a significantly higher

percentage of insiders and "grey" area directors on their audit committee (or entire board in the absence of an audit committee) than firms in an industry/size matched control sample. Audit committees also own a significantly greater percentage of stock in SEC AAER firms than in the control sample. However, there was no significant difference for ownership interests of all officers and directors taken as a group. While preliminary, the SEC AAER sample results support the AIMR sample findings that the composition and share ownership characteristics of the audit committee are the dominant corporate governance features useful in explaining cross-sectional differences in financial reporting quality.

The remainder of this paper is organized as follows. The following section provides institutional background on the alleged role of corporate governance in financial reporting.

Section III develops specific testable hypotheses. Section IV describes the data and methodology. Test results are presented in Section V, followed by a summary and discussion of the implications of the results.

II. INSTITUTIONAL BACKGROUND AND MOTIVATION

The concern over the relation between corporate governance and financial reporting has been elevated to such a level that external auditors are now required to consider these institutional features in the conduct of their annual examinations. Under the provisions of the recently enacted SAS No. 78, Consideration of Internal Control in a Financial Statement Audit, auditors must obtain an understanding of how the "control environment" affects the overall risk of material error in the financial statements (AICPA, 1995). Significant control environment factors were explicitly expanded to include typical corporate governance characteristics such as the entity's organizational structure and the composition and function of the board of directors and its

committees, particularly the audit committee.

Much of the historical influence behind the adoption of these provisions into the professional auditing standards came from the Report of the National Commission on Fraudulent Financial Reporting, commonly known as the Treadway Commission.² The Treadway Commission report, issued in 1987, made a number of recommendations to the accounting profession and to management and the boards of directors of public companies. The commission argued that public companies have the initial and final responsibility for credible financial reporting and, hence, the greatest opportunity for improvement lies within the company itself. Thus, the initial recommendations were directed at the management and boards of public companies. These included (1) establishing the appropriate tone and overall control environment in which financial reporting occurs and (2) maximizing the effectiveness of the functions within the company that are critical to the integrity of financial reporting, including the audit committee of the board of directors.

The Treadway Commission went on to specifically recommend an SEC requirement that all public companies establish audit committees composed *solely* of "independent directors." As described below, this recommendation has never been adopted by the SEC or any of the U.S. listing exchanges. The primary result of this study confirms that the quality of financial statement reporting is significantly related to the level of independence of the audit committee.

Contemporaneous with the Treadway Commission report, the AICPA Commission on Auditors' Responsibilities, or Cohen Commission, made similar but somewhat weaker assertions about the role of corporate governance in financial reporting. In contrast to the Treadway Commission, it explicitly declined to make recommendations requiring independent audit

committees or regulating the size and composition of the board itself, concluding only that:

The important point is that the auditor should have direct access to a significant number of board members who are not part of management. Outside members of the board of directors are in a unique position to represent the shareholders' interest, to monitor the performance of management, to provide adequate support to the independent auditor, and to make changes within the organization. (Commission on Auditors' Responsibilities, 1978, p. 106)

The contrast between the Treadway and Cohen Commissions' positions on requirements for independent audit committees suggests a testable hypothesis on the strength of correlations between the quality of financial reporting and the makeup of both the audit committee and non-audit committee members of the board of directors.

Ten years after the releases of the Treadway and Cohen Commission reports the Auditing Standards Board issued SAS No. 55, Consideration of the Internal Control Structure in a Financial Statement Audit (AICPA, 1988). This standard adopted many of the Treadway Commission recommendations for the public accounting profession by expanding and more explicitly defining the elements of a firm's internal control structure and increasing the auditor's responsibility for understanding them. SAS No. 55 introduced the element of the "control environment" to the firm's control structure. This includes typical corporate governance characteristics such as "the functioning of the board of directors and its committees, particularly the audit committee." Prior to the issuance of this statement the auditor's duty for understanding the control structure was limited to specific accounting control procedures. Hence, SAS No. 55 placed into the authoritative auditing literature the implied assertion that corporate governance characteristics, in particular the makeup of the board of directors and its audit committee, are expected to have a significant relation with the quality of financial reporting practices.

Following the Treadway Commission report, the Committee of Sponsoring Organizations

of the Treadway Commission (COSO) was formed to provide more explicit guidance in operationalizing the initial recommendations. Not surprisingly, 13 years after the original Treadway report, COSO reiterates the initial recommendations regarding the importance of establishing a "tone at the top" for credible financial reporting, including a strong and independent audit committee. In late 1995, SAS No. 78 was issued as an amendment to SAS 55 in an effort to include many of the definitions and guidance from the COSO report. Specifically, SAS 78 recognizes that "an entity's control consciousness is influenced significantly by the entity's board of directors or audit committee. Attributes include the board or audit committee's independence from management..." (AICPA, 1995). This study is the first to examine whether measures of the independence of the board, particularly the audit committee, are correlated with financial reporting quality.

Concern over the role of corporate governance practices in financial reporting remains unabated nearly 20 years after the issuance of the Treadway and Cohen Commission reports. In September 1994, the Public Oversight Board (POB) of the AICPA SEC practice division concluded that stronger, more accountable boards will strengthen the position of the auditor and recommended an even greater role for the audit committee in reviewing the accounting reporting and disclosure choices made by management — including those within the range of acceptable practice under GAAP. Additionally, the POB recommended enhancing the independence of the entire board of directors to strengthen the corporate governance function over financial reporting. In the United Kingdom, the Code of Best Practice (Cadbury Report, 1992) recommends that all firms should have both a nominations, or corporate governance committee, and an audit committee, with the later composed *entirely* of independent directors. Among the more radical

recently espoused public postures is the recommendation that boards of directors be composed completely of outside, non-employee directors, with the exception of the firm's CEO -- who should not be the board's chair (Firstenberg and Malkiel, 1994).

The major U.S. stock exchanges differ with respect to their listing requirements on board of director and audit committee composition. Since 1978 the New York Stock Exchange has required firms to maintain an audit committee comprised solely of directors independent from management and free from any relationship that, in the opinion of the board would interfere with the exercise of independent judgment. Hence, NYSE requirements exclude officers and other employees from serving on the audit committee. However, former officers, some relatives and "outside" directors with significant business relations with the firm or its management are permissible so long as, in the opinion of the board, they can operate independently.

Weaker regulations are imposed on firms listed on the National Association of Securities

Dealers Automated Quotation System (NASDAQ). NASDAQ requires the existence of an audit

committee but permits employees and officers to serve on it, as long as a majority of the members

are independent. The weakest regulations are imposed by the American Stock Exchange which

recommends but does not require the existence of an audit committee.

III. HYPOTHESIS DEVELOPMENT

This paper tests a set of specific hypotheses implicit in many of the arguments, recommendations and regulations discussed in the preceding section. Specifically, this paper presents a set of empirical findings on the relation between two measures of the quality of firms' financial reporting practices and the composition of the sample firms' boards of directors and audit committees. Detailed descriptions of each of the two financial reporting quality measures

are provided in Section IV.

Financial reporting quality is posited to vary significantly with the composition of the board of directors and, in particular, its audit committee. Members of the board of directors can be classified into one of three categories (Baysinger and Butler, 1985):

- Type I: Officers and employees of the firm (insiders).
- Type II: "Grey" area directors who are not insiders but are:
 - A. Relatives of officers or employees of the firm, or
 - B. Employees of a firm with material business transactions with the sample firm, or

Former employees of the firm, or

Individuals with a significant business relationship with the firm or one of its executive officers, including paid consultants and counsel to the firm, or

- C. Employees of a firm whose board of directors has a member an executive officer of the sample firm (interlocking directorate).
- Type III: Independent outside directors (all those not included in one of the two preceding classifications).

The classification of directors into Type I (insiders) and Type III (independent outside directors) is, perhaps, an obvious distinction. However, the inclusion of Type II or so-called "grey" area directors is deserving of additional comment.

"Grey" area directors are not employees of the firm and, hence, are properly classified as "outside directors" in a pure insider/outsider dichotomy. However, they possess additional characteristics which call into question the actual level of independence they bring to the monitoring of management's financial reporting decisions. Indeed, many of the grey area characteristics would violate AICPA standards of auditor independence under Rule 101 of the

ethics standards.3

Prior research has shown that the presence of grey area directors is significantly related to several key operational characteristics of the firm. Weisbach (1988) found that the likelihood of CEO replacement following a period of relatively poor corporate performance was greater with higher levels of independent outside directors on the board. Kosnick (1990) documented that demands for "greenmail" payments were more likely to meet resistance with a greater proportion of independent outside directors. Newman and Wright (1995) extend this work by considering the makeup of a committee of the board of directors. They document that both the level and pay for performance characteristics of CEO compensation are related to the presence of "grey" area directors on the compensation committee.

The classification of board members in this manner leads to the following hypotheses tested in this paper (stated in the alternative form):

- H₁: Quality measures of the firm's financial reporting practices are negatively correlated with the percentage of directors who are Type I, insiders.
- H₂: Quality measures of the firm's financial reporting practices are negatively correlated with the percentage of directors who are Type II, "grey" area directors.

Many of the arguments discussed in the preceding section place particular significance on the role of the audit committee in monitoring the financial reporting practices of the firm.

Vicknair, Hickman, and Carnes (1993) present evidence that a significant proportion of audit committee members in NYSE firms are "grey" area directors. They speculate, but present no evidence, that this is detrimental to the financial reporting practices of these firms. To test the explicit role of the audit committee in the corporate governance determinants of financial

reporting quality, the following hypotheses are tested:

- H₃: Quality measures of the firm's financial reporting practices are negatively correlated with the percentage of directors serving on the audit committee who are either Type I, insiders or Type II, "grey" area directors.
- H₄: Quality measures of the firm's financial reporting practices are negatively correlated with the number of audit committee meetings held during the fiscal year.

In addition to the varying degrees of independence represented by the classification of directors according to the Type I, II and III groupings described above, a direct financial interest in the firm may weaken the independence of directors as well. Moreover, board members with higher levels of shareholdings may be associated with greater levels of participation in the operations of the firm as they fulfill their board duties. Acting in a managerial or decision-making capacity is, of course, a violation of the presumption of independence, even in the absence of a material financial interest. This suggests the following two hypotheses:

- H₅: Quality measures of the firm's financial reporting practices are negatively correlated with the percentage share ownership by the firm's officers and directors.
- H₆: Quality measures of the firm's financial reporting practices are negatively correlated with the percentage share ownership by the audit committee members.

IV. SAMPLE SELECTION AND DATA DESCRIPTION

Measures of Financial Reporting Quality

Two measures of financial reporting quality are employed by this study. The first is provided by independent analysts' perceptions of corporate disclosures and reporting practices as published in the Reports of the Association for Investment Management and Research Corporate Information Committee (AIMR Reports). These ratings have been used by Lang and Lundholm

(1993) and others as a proxy for the quality of corporate financial reporting and disclosure.

The annual AIMR Reports contain ratings by financial analysts of industry-specific samples of public companies' financial reporting practices. The analysts evaluate the annual report to shareholders (40-50 percent of the aggregate rating), quarterly and other published information (30-40 percent) and other aspects of investor relations, including accessibility of management to analysts (20-30 percent). Firms in approximately 20 industries are included in the survey, with each industry evaluated by independent panels of financial analysts. Rating panels range in size from 3 to over 30 and average about 10 analysts per industry.

A second measure of financial reporting quality is provided through the use of Securities and Exchange Commission Accounting and Auditing Enforcement Releases (AAERs). The presence of an SEC enforcement action against the firm or its auditor is, at a minimum, indicative of poor monitoring of the financial reporting process by the board and/or its audit committee. The improprieties cited by the SEC in these enforcement actions range from negligent behavior to outright fraud.

Numerous studies have used SEC AAER samples to investigate the causes and effects of negligent and fraudulent financial reporting. Feroz, Park and Pastena (1991) find that 80% of these firms are subsequently sued by their shareholders and that the two-day abnormal return at the time of the disclosure of the accounting impropriety is -13%. Dechow, Sloan and Sweeney (1995) document similar shareholder costs of accounting improprieties from both loss in market value and liquidity. They also show that misleading reporting is associated with a set of contracting variables including the existence of bonus plans and the existence and slack in accounting-based debt covenants. Beneish (1995) generates a fraudulent financial reporting

prediction model using typical measures of financial performance such as gross margin percentages, sales growth, and accruals. Finally, Livingstone (1996) documents that top managers and financial officers are more likely to be dismissed in the years following SEC AAERs than in other years.

Sample Selection

Samples for the first set of tests presented in this paper (AIMR samples) were drawn from the 1988/89 (hereinafter 1989) and 1992/93 (1993) AIMR Reports. The 1989 AIMR sample was selected from the seven largest non-financial industries surveyed in the AIMR Report. Since all of the data on board of director and audit committee membership must be hand collected from proxy statements, only those U.S. firms in the top and bottom quartiles of the analyst ratings were selected for inclusion in the sample in an effort to increase the power of the tests. In order to investigate the potential for changes in the levels and relationships of the variables over time, sample firms from the top and bottom quartiles of the 1993 report were included from the same seven industries to provide the 1993 sample. This procedure resulted in 82 (69) AIMR sample firms from 1993 (1989).

Proxy statements from 1993 and 1989 were used to identify the Type I, II or III classification of each member of the sample firms' boards of directors. These were also used to identify the size and composition of the audit committee, the percentage of shares beneficially owned by officers and directors as a group, audit committee members, and individuals or entities owning in excess of 5% of the outstanding stock. Proxies were also used to determine whether the firm had a nominating or corporate governance committee and the number of times the audit committee met in the preceding fiscal year.

The sample for the second set of tests (AAER sample) was drawn from the 82 most recent SEC AAERs (Numbers 660-741). These AAERs include 27 duplicate actions against firms and their auditors for the same financial reporting impropriety. Excluding these results in 55 unique firms cited by the SEC. Three additional firms were deleted due to incomplete information in the AAER on the date of the accounting violation. For each of the remaining 52 firms a single sample year was identified from the AAER -- using the midpoint of the violation period if it spanned more than one fiscal year.

Ward's Business Directory of Public and Private U.S. Firms was used to identify a control sample of public companies matched on both industry (4-digit SIC code) and size (sales revenue). A lack of an adequate control firm from Ward's Directory deleted an additional 16 sample firms. Finally, two firms were deleted due to the inability to obtain relevant proxy/10-k data on the sample firm. This process resulted in a set of 34 matched-pair observations of SEC AAER and control firms.

Descriptive Statistics

The distribution of sample firms by industry is provided in Table 1. Table 2 provides descriptive statistics on the key variables used in the AIMR sample tests. Of particular note are the percentages for insiders and "grey" area directors on the boards and audit committees. On average 23.7% (21.3%) of audit committee members possess a Type I or II independence impairing characteristic in 1989 (1993). This is somewhat less than the 32% level cited by Vicknair, Hickman and Carnes (1993) in their survey of 100 NYSE firms. The percentage of board members who are Type I, insiders, is of a similar magnitude -- 27.8% and 25.2% in 1989 and 1993, respectively. However, as measured by either the standard deviation or range, the

cross-sectional variation of Type I and II audit committee members is substantially greater than that for Type I, insider, board members.

The percentages of interlocking directorate relationships on the audit committee and relatives on the boards and audit committees are relatively low (means below 5% and medians of 0% in all cases). This indicates that the power of tests of significance of the correlation of these variables relative to financial reporting quality will be low.

V. RESULTS

AIMR Sample Test Results

Table 3 contains the results of a series of univariate tests of hypotheses H_1 and H_2 concerning the relation of the composition of the entire board of directors to the analyst financial reporting quality ratings. For each of the two years 1989 and 1993, sample firms are split between those in the top and bottom quartiles of analyst ratings. Tests were conducted for significant differences in the means of a variety of variables describing the composition of the boards.

Column 1 demonstrates that in both years there were no significant differences in the percentage of insiders on the boards of directors of high and low quality financial reporting firms. Hence, there is no support for Hypothesis 1 that the number of insiders on the board is negatively correlated with analyst disclosure ratings. This suggests that relations between corporate governance characteristics and financial reporting quality, if they exist, are more subtle than crude measures such as the insider/outsider split of the board of directors.

Columns 2 through 4 of Table 3 present test results for Hypothesis 2 regarding the relation of the presence of "grey" area directors on the board and financial reporting quality.

Tests for significant differences between reporting types are first conducted individually for each of the three types of "grey" area directors described in Section II. The results in column 2 provide no evidence of a relation between the existence of interlocking directorates and financial reporting quality. In 1989 there is a significant difference (p = .019) with respect to the percentage of directors who are relatives of the firm's officers, but no significant result was obtained for 1993. It should be noted that the low incidence of this type of "grey" area director (less than 1.5% for all sample firms in both years per Table 2) results in a relatively low level of power for this test.

In both years a significant difference was obtained regarding the percentage of outside directors with some business relationship with the firm. Directors in this category are not employees of the firm, and hence are not classified as Type I, insiders, in an insider/outsider dichotomy. However, they have some prior or existing business relationship with the firm as either (1) former employees, including retirees, (2) employees of a firm having a material business relation with the sample firm disclosed in the proxy statement, or (3) individuals with significant personal business transactions with the sample firm (e.g., consulting arrangements). Low financial reporting quality firms have approximately a 50% higher incidence of this type of "grey" area director (19% versus 13% for low and high quality firms, respectively) in both sample years.

These differences were significant at the p = .051 (p = .040) level for 1989 (1993).

Columns 5 and 6 of Table 3 aggregate the director classifications tested individually in the first four columns. In 1989 only a significant result was obtained (p = .046) for "any form of a potentially independence impairing relationship with the firm" (Type I, insider, and Type II, "grey" area combined). Slightly stronger results were obtained after excluding interlocking

directorates for which no significant finding was obtained individually.

The final column of Table 3 considers the influence of only the "grey" area directors by testing for significant differences in the percentage of outside directors who have one or more of the Type II characteristics. Here a significant result was obtained in both years. Thus, while the insider/outsider split itself may have no explanatory power (column 1) the level of independence of the outsiders appears to be a significant factor in financial reporting quality.

The results of Table 3 testing the influence of the composition of the entire board of directors on financial reporting quality can be summarized as follows. There is no indication that either the insider/outsider board composition or percentage of outside directors with interlocking directorates is influential in financial reporting decisions. There is, however, some relatively strong support for concluding that there is a statistically significant relation between the number of "grey" area directors on the board -- particularly those with business relationships with the firm.

Table 4 presents tests of Hypotheses 3 and 4 regarding the composition and activities of the audit committee and is constructed in the same manner as Table 3 which analyzed the entire board of directors. In general, the audit committee results are somewhat stronger than those for the entire board. The only characteristic which failed to produce any significant finding was the interlocking directorate. A significant difference (p = .036) was found for officers, employees and relatives in 1989 but not in 1993. Here the power of the test is much weaker than for the entire board, since the percentage of such individuals serving on the audit committee is quite low for all firms (Table 2). Again, the most significant finding was the difference in percentage of audit committee members who are "outside" directors but have some business relationship with the

firm. Here a significant result was obtained in both 1989 (p = .05) and 1993 (p = .004).

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The final column of Table 4 presents the results of a test of Hypothesis 4 that there is a positive relation between audit committee effort, as proxied by the number of meetings held during the fiscal year, and the quality of financial disclosure. While on average the audit committees for firms with high financial reporting quality met more often than their counterparts in the lower quartile, the differences were not statististically significant.

Table 5 presents the results of the tests of Hypotheses 5 and 6 regarding the association of financial reporting quality and stock ownership of the board and its audit committee. The results demonstrate only weak support for these two hypotheses. In 1993, but not 1989, there was a statistically significant relation (p = .074) between the percentage of stock beneficially owned by all officers and directors and the level of analyst disclosure ratings. A weakly significant relation was obtained for both years (1989, p = .083; 1993, p = .098) with respect to stock owned by the members of the audit committee.

To summarize the results presented in Tables 3 through 5, the percentage of audit committee members with Type I, insider, or Type II, "grey" area independence impairments is the single most highly correlated variable with the level of analyst disclosure ratings. Somewhat weaker relations were established for the percentage of shares beneficially owned by audit committee members and the percentage of all "outside" board members with a "grey" area independence concern. Of course, some of the outside directors serve on the audit committee. Multiple regression analyses reported in Table 6 will address whether the composition of non-audit committee outside directors is incrementally useful in explaining cross-sectional differences in financial reporting quality. Finally, there was no indication of a relation between financial

reporting quality and the insider/outsider split of the board or the percentage of either outside board members or audit committee members in an interlocking directorate relationship.

Table 6 presents the results of multiple regression analyses further investigating the significance of the variables identified in the univariate analysis as likely corporate governance determinants of financial reporting quality. Specifically, the following regression model was estimated for each of the two sample years:

 $SCORE_i = \alpha + \sum \beta_i IND_{ii} + \gamma_0 SIZE_i + \gamma_1 ACSHR\%_i + \gamma_2 OSBDIND\%_i + \gamma_3 ACIND\%_i + \varepsilon_i$

where:

 $SCORE_i$ = AIMR Report analysts' rating of financial reporting quality for the *i*th firm.

 IND_{ji} = Dummy variable to control for industry members. $IND_{ji} = 1$ if the *i*th firm is in the *j*th industry and 0 otherwise.

 $SIZE_i$ = Total assets of the firm at the beginning of the fiscal year.

ACSHR%_i = Percentage of shares beneficially owned by members of the audit committee.

OSBDIND%_i = Percentage of non-audit committee, outside (non-employee) members of the board of directors with a Type II, "grey" area independence impairing characteristic.

ACIND%_i = Percentage of audit committee members with a Type I, insider, or Type II, "grey" area independence impairing characteristic.

Firm size and industry were found to be significant determinants of the AIMR analyst ratings in Lang and Lundholm (1993). Hence, IND_j and SIZE are included as control variables for the regressions reported here. The coefficients on these variable were statistically significant, but are not reported in Table 6, since they do not represent a test of one of this paper's hypotheses.

In both 1989 and 1993 the only statistically significant relationship is a negative correlation between the AIMR analysts' scores and the percentage of insiders and "grey" area directors serving on the audit committee, ACIND%. In particular, after controlling for the makeup of the audit committee through ACIND%, the composition of the remaining outside directors, OSBDIND%, provides no incremental explanatory power for the analysts' scores. This is indicative of the dominance of the makeup of the audit committee relative to any influence from the composition of remaining outside board members as determinants of the quality of financial reporting practices.

Table 7 presents the results of a second regression model similar to that employed in Table 6, but with the *change* in AIMR ratings from 1989 to 1993, $\triangle SCORE_i$, replacing $SCORE_i$ as the dependent variable. Here the intent is to examine what role corporate governance characteristics play in the improvement (deterioration) of financial reporting practices over time. Again, only the makeup of the audit committee, $ACIND\%_i$, is a significant explanatory variable in this regression (p = .006).

Table 8 presents the results of a regression analysis into the determinants of the makeup of the audit committee. Since the percentage of audit committee members with an independence impairing relationship, ACIND%, appears to be the dominant corporate governance factor in relation to the quality of financial reporting practices, it is important to understand more precisely the factors which drive its own cross-sectional variation. Two such factors are considered in the Table 8 regression model.

The first potential determinant of audit committee makeup is the percentage of shares owned by shareholders with at least a 5% interest in the firm. One primary function of the audit

committee is to serve as a monitoring device to mitigate the problems of asymmetric information between the managers of the firm and its shareholders. Institutions and other shareholders with major investments in the firm may have alternative sources of information other than the public financial statements. Hence, the demand for credible, independent audit committees is less when ownership is concentrated among institutions and entities with high stakeholder percentages.

Therefore, a positive correlation is predicted between ACIND% and OWNSHIP, the percentage of shares owned by individuals and entities with at least a 5% stake in the firm.

It has been argued that a nominating or corporate governance committee is a useful device for improving the quality of outside directors on the board and its committees. Hence, a negative correlation is predicted between the quality of the audit committee as measured by ACIND% and a dummy variable, NOMCMT, which is given a value of 1 for firms disclosing the existence of a corporate governance or nominating committee and 0 otherwise.

The regression results reported in Table 8 indicate support for both of these posited explanatory factors in the makeup of the audit committee, particularly ownership by major shareholders. *OWNSHP* takes on some level of statistical significance in both years (1989, p = .028; 1993, p = .060) and *NOMCMT* is significant in 1993 only (p = .054). The difference in results for *NOMCMT* between the two test years may be attributable to the increase in the prevalence of nominating committees over the five year period. The percentage of sample firms with nominating committees increased from 54% in 1989 to 65% by 1993.

AAER Sample Test Results

Table 9 contains the results of a series of univariate tests of Hypotheses 3, 5 and 6 using the SEC AAER matched-pairs sample.¹⁰

There is no significant difference in the level of share ownership of all officers and directors between the experimental and control groups (Hypothesis 3). However, consistent with the findings for the AIMR sample reported above, the results for Hypotheses 5 and 6 confirm a significant relation between the makeup of the audit committee and financial reporting practices.

On average, AAER firms had audit committees which owned over twice as much stock (21% of the outstanding shares) as their matched-pair control group counterparts (9%). This difference is significant at the p=.008 level (one-tail). Of equal statistical significance is the difference in Type I and II director composition of the audit committees. On average, a majority (57%) of the audit committee members for the SEC AAER firms were either insiders or "grey" area directors. This compares with only 39% for the matching control firms, with the difference significant at the p=.002 level.

While preliminary, the AAER sample results are supportive of the AIMR results reported above. In general, the finding of a significant relation between audit committee composition and financial reporting practices appears robust across the two measures of financial reporting quality.

VI. SUMMARY AND IMPLICATIONS

This paper presents the first direct evidence of the relation between corporate governance characteristics and financial reporting practices. The most significant findings are the negative correlations between the presence of insiders and so-called "grey" area directors on the audit committee and two measures of the quality of financial reporting practices -- (1) AIMR independent analyst evaluations and (2) the propensity for negligent or fraudulent financial reporting as evidenced by an SEC Accounting and Auditing Enforcement Release.

With respect to the AIMR sample findings, the presence of insiders and "grey" area

directors on the audit committee is the dominant corporate governance factor associated with the analyst ratings of financial reporting quality. No other variable consistently exhibits significant incremental explanatory power of analyst ratings, after controlling for the composition of the audit committee. Additional factors considered were share ownership of officers, directors and audit committee members; the "grey" area composition of non-audit committee outside directors; and the insider/outsider composition of the entire board. Confirming evidence of the relation between audit committee composition and financial reporting quality was obtained using a sample of firms with recent SEC Accounting and Auditing Enforcement Releases for negligent or fraudulent financial reporting.

"Grey" area directors are not employees of the firm and hence are classified as "insiders" by an insider/outsider director dichotomy. However, they do possess at least one independence impairing characteristic such as a family relationship with an officer of the corporation or a business relationship with the firm. The percentage of insiders and "grey" area directors on the audit committee is significantly related to the percentage of stock owned by major shareholders and institutions. One interpretation of this finding centers on the role of the audit committee as a monitoring device to mitigate the problems of asymmetric information between the shareholders and managers of the firm. Institutions and other shareholders with major investments may have alternative sources of information other than the public financial statements. The demand for credible, independent audit committees is less when ownership is concentrated among institutions and entities with high stakeholder percentages.

It should be noted that the results do not establish a causal link between the makeup of the audit committee and financial reporting quality. Indeed, both may simply be indicative of the

overall "tone at the top" for credible, informative financial reporting practices. Nonetheless, these findings suggest that it is not without due cause that the SEC, the AICPA Public Oversight Board and others are increasingly expressing concern over the role of corporate governance in the financial reporting process. It would appear that the greatest improvement from additional regulation might lie in further restricting the use of insiders and "grey" area directors on the audit committee. At a minimum, the SEC may wish to consider requiring a report from the audit committee including a disclosure of all potential independence-impairing relations with the firm and its officers. A similar proxy disclosure requirement was recently instituted by the SEC for compensation committee reports. Similarly, effective for years ending after June 30, 1993, all firms listed on the London Stock Exchange (including over 150 U.S. firms) are required to state publicly in their annual report to shareholders whether they comply with the Code of Best Practice (Cabury Committee, 1992). The Code of Best Practice requires an audit committee with at least two of its three members independent of management and free from any business or other relationship which could materially interfere with their independent judgment.

Additional research could extend the results presented here to other measures of corporate financial reporting quality including discretionary accruals and accounting policy choices and to choices regarding the identity, tenure, fees and scope of services of the external auditors. Finally, additional insight into the determinants of the composition audit committees is necessary.

Significant factors may include the complexity of the company's operations and accounting practices.

ENDNOTES

- For a recent discussion of concerns over the presence of relatives and other less than fully independent "outside" directors on boards of public companies, see Dobrzynski (New York Times, February 1, 1996). Several of the firms cited in this expose are included in the various samples employed in this study.
- This commission was established in 1985 by the joint sponsorship of the AICPA, the American Accounting Association, the Financial Executives Institute, the Institute of Internal Auditors and the National Association of Accountants. Its major objectives were to identify the causal factors of fraudulent financial reporting and to make recommendations to the profession to reduce its incidence.
- Of course, audit committee members serve other functions in their capacity as board members in addition to their role as monitors of the financial reporting process. Hence, if the number of board members is constrained, efficient allocation of board "slots" may inhibit opportunities for minimizing conflicts of interest on the audit committee. These cost and benefit tradeoffs are beyond the scope of this study, which presents the initial evidence on potential "costs" from inferior financial reporting through the inclusion of audit committee members with independence impairing characteristics.
- For the vast majority of sample firms, the proxy statement is used to disclose the relevant information on officer and director composition required by Items 10 through 13 of the 10-k. For those firms which did not incorporate this disclosure in their 10-k through reference to the proxy statement, the 10-k itself was used as the data source.
- Consistent with SEC disclosure practices, stock ownership included both shares beneficially owned by the individual and stock options exerciseable within 60 days. In the event of more than one class of stock, the percentage reflects the percentage of overall voting rights controlled by the individual.
- There were no instances of a single firm being cited for more than one independent reporting error.
- Many of the AAER companies are relatively small OTC firms not contained on the Compustat database. Hence, a larger matched-pair sample is obtainable using the Ward's Directory to identify control firms.
 - Note that the sum for the individual characteristics (employee, relative, business relationship and interlocking directorate) does not equal the percentage for "any of the above" since some directors have more than one independence impairing attribute (e.g., relatives with significant business transactions with the sample firm).

- Other regression results, not reported here, included the other plausible explanatory variables found to be insignificant in the univariate analyses of Tables 3 through 5 (e.g., insider/outsider makeup of the board, number of audit committee meetings, etc.). The results consistently demonstrate that ACIND% is a significant explanatory variable while other variables included in the regression are not.
- A number of sample and control firms did not have an audit committee, stating that the functions normally carried out by this group were met by the board as a whole. In these circumstances the share ownership and composition variables were defined as if the entire board of directors was acting in the capacity of the audit committee.

(2) 「大きないからいられると言うと言葉を表現を見せるというできるができない。



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TABLE 1
INDUSTRY MAKEUP OF SAMPLE

Panel A: AIMR Sample

Industry	1993 <u>Sample</u>	1989 <u>Sample</u>	Percentage Overlap
Paper and Forest Products	10	10	50%
Machinery	8	8	62
Retail Trade	15	15	53
Chemicals	8	8	25
Specialty Chemicals	8	10	30
Health Care	10	8	62
Software and Data Services	<u>23</u>	<u>10</u>	<u>30</u>
Total Sample	82	69	45%

TABLE 1 (CONTINUED)

INDUSTRY MAKEUP OF SAMPLE

Panel B: AAER Sample

Industr	,	Number of
(2-digit SI	(C) <u>Description</u>	<u>Firms</u>
17	Construction	1
22	Textile Mills	1
27	Printing and Publishing	1
28	Chemicals	1
31	Leather Products	1
35	Industrial, Commerical and	3
	Computer Equipment	
36	Electrical Equipment	1
39	Miscellaneous Manufacturing	1
48	Communications	1
49	Utilities and Sanitary Services	2
56	Apparel and Accessory Stores	1
57	Home Furniture and Equipment	1
59	Miscellaneous Retail	2
63	Insurance Carriers	3
65	Real Estate	3
• 67	Holding and Other Investment Office	
72	Personal Services	1
73	Business Services	2
75	Auto Repair and Services	1
80	Health Services	1
87	Engineering, Accounting, and	1
	Management Services	
		34

TABLE 2

DESCRIPTIVE STATISTICS -- AIMR SAMPLES

			,		
		İ	Standard		
	Mean	Median	Deviation	Maximum	Minimu
Panel A (1989 Sample) n =69:					
Total Assets (in millions)	3646	1742	9049	74991	42
AIMR Score (scale of 0 to 1)	.730	.730	.146	.963	.472
Size of Board of Directors	11.6	12	3.3	19	4
Size of Audit Committee	4.1	4	1.3	7	2
Percentage of Directors:					
Employee of Firm (insider)	27.8	26.7	12.3	57.1	6.7
Relative of Employees	1.3	. 0	3.7	21.4	0.0
Business Relationship	16.3	15.4	15.3	66.7	0.0
Interlocking Directorate	3.0	0.0	5.2	23.1	0.0
Percentage of Audit Committee:					
Employee of Firm	0.6	0.0	4.8	40.0	0.0
Relative of Employee	1.0	0.0	5.6	33.3	0.0
Business Relationship	18.7	14.3	23.2	100.0	0.0
Interlocking Directorate	3.9	0.0	9.3	40.0	0.0
Any of the Above	23.7	20.0	26.5	100.0	0.0
Percentage of Stock Owned By:	1				
Officers and Directors	10.4	2.7	15.4	73.4	0.1
Audit Committee	0.9	0.0	2.3	12.7	0.0
Entities Owning Over 5%	19.4	10.4	22.4	96.7	0.0
Number of Audit Committee	3.0	3.0	1.1	6.0	1.0
Meetings					3

TABLE 2 (CONTINUED)

DESCRIPTIVE STATISTICS -- AIMR SAMPLES

				Standard		
imum	e .	Mean	Median	Deviation	Maximum	Minimum
	Panel B (1993 Sample) n =82:					
12	Total Assets (in millions)	3715	2256	4477	25360	43
72	AIMR Score (scale of 0 to 1)	.723	.738	.141	.965	.400
4	Size of Board of Directors	10.3	11.0	3.1	18.0	4.0
2	Size of Audit Committee	3.9	4.0	1.3	7.0	2.0
	Percentage of Directors:					
.7	Employee of Firm (insider)	25.2	24.0	12.1	62.5	8.3
1.0	Relative of Employees	1.2	0.0	4.0	21.4	0.0
.0	Business Relationship	16.4	12.5	15.1	57.1	0.0
.0	Interlocking Directorate	2.5	0.0	5.0	21.4	0.0
	Percentage of Audit Committee:					
.0	Employee of Firm	1.3	0.0	7.1	50.0	0.0
.0	Relative of Employee	0.0	0.0	0.0	0.0	0.0
.0	Business Relationship	17.0	0.0	20.7	80.0	0.0
.0	Interlocking Directorate	3.3	0.0	9.1	50.0	0.0
.0	Any of the Above	21.3	20.0	21.0	80.0	0.0
	Percentage of Stock Owned By:					
.1	Officers and Directors	8.5	2.8	14.0	80.6	0.2
.0	Audit Committee	1.4	0.0	3.9	20.7	0.0
.0	Entities Owning Over 5%	19.7	15.5	18.8	83.1	0.0
.0	Number of Audit Committee Meetings	3.2	3.0	1.3	7.0	1.0

32 **TABLE 3**

THE RELATION BETWEEN FINANCIAL STATEMENT DISCLOSURE RATINGS AND BOARD OF DIRECTOR CHARACTERISTICS

		Percents	Percentage of Board of Directors Comprised of:	Olrectors Comb			Percentage of
	Officers and Employees	Interlocking	Relatives of Officers	Business Relationship	All Forms of Relationship	All Forms of Relationship (Excluding Interlocking	Outside Directors Who Are Relatives or Have Business Relationship
Panel A (1989 Results):	(cronsin)				•		
Mean for Top Quartile Disclosure Rating	26.9	3.3	0.4	13.4	43.5	40.7	22.9
Mean for Bottom Quartile Disclosure Rating	28.6	2.7	2.2	19.2	51.5	50.0	33.3
t-statistic	56	.41	-2.08	-1.63	-1.67	-2.01	-1.92
one-tail p-value	*	*	.019	.051	.046	.022	.027
Panel B (1993 Results):							
Mean for Top Quartile Disclosure Rating	25.4	3.3	1.2	13.5	41.6	39.2	18.0
Mean for Bottom Quartile Disclosure Rating	25.0	1.7	1.3	19.3	45.1	44.2	25.8
t-statistic	.16	1.44	05	-1.75	66	-1.38	-11 <u>7</u> 1
one-tail p-value	*	*	*	.040		084	
* Results not significant at the $p = .10$ level.	le p = .10 level.		. *		· · · · · · · · · · · · · · · · · · ·		

* Results not significant at the p = .10 level.

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TABLE 4

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THE RELATION BETWEEN FINANCIAL STATEMENT DISCLOSURE RATINGS AND AUDIT COMMITTEE CHARACTERISTICS

		ercentage of Au	Percentage of Audit Committee Comprised of:	Comprised of:		
	Officers, Employees and	Interlocking	Business	All Forms of	All Forms of Relationship (Excluding	Number of Audit Committee
?	Relatives	Directorate	Relationship	Relationshin	Directorates	During Veer
Panel A (1989 Results):						During 1 car
Mean for Top Quartile Disclosure Rating	0.0	4.1	14.2	18.2	14.1	3.15
Mean for Bottom Quartile Disclosure Rating	3.0	3.7	23.1	29.0	26.6	2.94
t-statistic	-1.80	1.80	-1.64	-1.76	-2.16	.83
one-tail p-value	.036	*	.050	.040	.015	*
Panel B (1993 Results):						
Mean for Top Quartile Disclosure Rating	2.0	3.7	11.2	16.9	13.2	3.39
Mean for Bottom Quartile Disclosure Rating	9.0	2.9	22.8	25.8	23.4	3.02
t-statistic	.91	.38	-2.63	-1.95	-2.27	1.22
one-tail p-value	*	*	.004	.026	.012	*

* Results not significant at the p = .10 level.

TABLE 5

THE RELATION BETWEEN DISCLOSURE RATINGS
AND SHARE OWNERSHIP CHARACTERISTICS

	Percentage of	Stock Owned By:
	All Officers and Directors as a Group	Audit Committee Members
Panel A (1989 Results):		
Mean for Top Quartile Disclosure Rating	7.75	.11
Mean for Bottom Quartile Disclosure Rating	12.97	.29
t-statistic	-1.448	-1.384
one-tail p-value	074	.083
Panel B (1993 Results):		
Mean for Top Quartile Disclosure Rating	9.32	.42
Mean for Bottom Quartile Disclosure Rating	7.76	.76
t-statistic	.501	-1.295
one-tail p-value	*	.098

^{*} Results not significant at the p = .10 level.

REGRESSION ANALYSIS OF THE RELATION BETWEEN DISCLOSURE RATINGS AND BOARD AND AUDIT COMMITTEE CHARACTERISTICS

Model: $SCORE_i = \alpha + \sum \beta_j IND_{ji} + \gamma_0 SIZE_i + \gamma_1 ACSHR\%_i + \gamma_2 OSBDIND\%_i + \gamma_3 ACIND\%_i + \varepsilon_i$

	γ1	γ ₂	γ3	
Predicted Sign:	-	-	-	Multiple R ²
Panel A (1989 Results):				
Coefficient	539	.007	091	46.2
t-statistic	889	.111	-1.667	
one-tail p-value	*	*	.050	
Panel B (1993 Results):				
Coefficient	.296	002	179	28.6
t-statistic	.697	042	-2.173	
one-tail p-value	*	*	.017	

^{*} Results not significant at the p = .10 level.

Variable Definitions:

 $SCORE_i$ = AIMR Report analysts' rating of financial reporting quality for the *i*th firm.

 IND_{ji} = Dummy variable to control for industry members. $IND_{ji} = 1$ if the *i*th firm is in the *j*th industry and 0 otherwise.

 $SIZE_i$ = Total assets of the firm at the beginning of the fiscal year.

ACSHR%_i = Percentage of shares beneficially owned by members of the audit committee.

 $OSBDIND\%_i$ = Percentage of non-audit committee, outside (non-employee) members of the board of directors with a Type II, "grey" area independence impairing characteristic.

ACIND%₁ = Percentage of audit committee members with a Type I, insider, or Type II, "grey" area independence impairing characteristic.

TABLE 7

REGRESSION ANALYSIS OF THE RELATION BETWEEN THE CHANGE IN DISCLOSURE RATINGS
AND BOARD AND AUDIT COMMITTEE CHARACTERISTICS

 $\text{Model: } \Delta SCORE_i = \alpha + \Sigma \ \beta_j \ IND_{ji} + \gamma_0 \ SIZE_i + \gamma_1 \ ACSHR\%_i + \gamma_2 \ OSBDIND\% \ + \gamma_3 \ ACIND\%_i + \epsilon_i \ A$

	γι	γ ₂	γ ₃	
Predicted Sign:	-	-	-	Multiple R ²
Coefficient	.481	005	178	28.1
t-statistic	.698	170	-2.653	
one-tail p-value	*	*	.006	

^{*} Results not significant at the p = .10 level.

Variable Definitions:

SCORE_i = Change in the AIMR Report analysts' rating of financial reporting quality between

1993 and 1989 for the ith firm.

 IND_{ji} = Dummy variable to control for industry members. $IND_{ji} = 1$ if the *i*th firm is in the *j*th industry and 0 otherwise.

 $SIZE_i$ = Total assets of the firm at the beginning of the fiscal year.

ACSHR%_i = Percentage of shares beneficially owned by members of the audit committee.

OSBDIND%_i = Percentage of non-audit committee, outside (non-employee) members of the board of directors with a Type II, "grey" area independence impairing characteristic.

ACIND%; = Percentage of audit committee members with a Type I, insider, or Type II, "grey" area independence impairing characteristic.

TABLE 8

REGRESSION ANALYSIS OF THE DETERMINANTS OF AUDIT COMMITTEE MEMBERSHIP

Model: $ACIND\%_i = \alpha + \gamma_1 \text{ OWNSHIP}_i + \gamma_2 \text{ NOMCMT}_i + \varepsilon_i$

	γ1	γ ₂	
Predicted Sign:	+	-	Multiple R ²
Panel A (1989 Results):			
Coefficient	.287	014	3.5
t-statistic	1.943	212	
one-tail p-value	.028	*	
Panel B (1993 Results):			
Coefficient	.206	083	7.5
t-statistic	1.575	-1.622	
one-tail p-value	.060	.054	

^{*} Results not significant at the p = .10 level.

Variable Definitions:

ifth ACIND%

= Percentage of audit committee members with a Type I, insider, or Type II, "grey" area independence impairing characteristic.

OWNSHIP,

= Percentage of shares beneficially owned by individuals or entities owning at least 5% of the outstanding stock.

NOMCMT,

= Dummy variable set to one if the ith firm has a nominating or corporate governance committee of the board and zero otherwise.

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TABLE 9

THE ASSOCIATION BETWEEN SEC ENFORCEMENT ACTIONS AND BOARD CHARACTERISTICS

	SEC AAER Firms	Matched Control Firms	Difference
Mean Officer/Director Ownership Percentage t-statistic one-tail p-value	34.4%	32.3%	2.1% .381 *
Mean Audit Committee Ownership Percentage t-statistic one-tail p-value	21.5%	9.3%	12.2% 2.429 .008
Mean Audit Committee Insider/'Grey' Area Director Percentage t-statistic one-tail p-value	57.2%	38.6%	18.7% 2.828 .002

^{*} Results not significant at the p = .10 level.