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Table of Contents

THE EFFECT OF FINANCIAL INSTITUTION OBJECTIVES ON EQUITY TURNOVER	1
Vaughn S. Armstrong, Utah Valley State College Norman Gardner, Utah Valley State College	
LOCKHEED/MARTIN MARIETTA: A VIEW OF CORPORATE CONSOLIDATION	3
William Brent, Howard University	
ACTIVITY-BASED COSTING, TOTAL QUALITY MANAGEMENT AND BUSINESS PROCESS REENGINEERING: THEIR SEPARATE AND CONCURRENT ASSOCIATION WITH IMPROVEMENT IN FINANCIAL PERFORMANCE	5
Douglass Cagwin, Lander University Katherine J. Barker, SUNY Fredonia	
UNEXPECTED CHANGES IN QUARTERLY FINANCIAL-STATEMENT LINE ITEMS AND THEIR RELATIONSHIP TO STOCK PRICES	7
Thomas Carnes, Western Carolina University	
ANALYST'S FINANCIAL FORECAST ACCURACY AND CORPORATE TRANSPARENCY	9
Hsiang-tsai Chiang, Feng Chia University, Taiwan	
BOARD STRUCTURE AND THE PERFORMANCE OF IRISH PUBLIC COMPANIES	15
Nicole Cramer, University College Cork, Ireland Vincent O'Connell, University College Cork, Ireland	
WEAK ANALYSTS' STRATEGY OF FORECAST RELEASE TIMING	19
Do-Jin Jung, West Texas A&M University	
PREDICTIVE ABILITY OF THE VALUATION ALLOWANCE ACCOUNT FOR FUTURE EARNINGS/CASH FLOWS	23
Do-Jin Jung, West Texas A&M University Darlene Pulliam, West Texas A&M University	
PREDICTING TENANT RENEWAL: WEAK LINK IN THE INCOME APPROACH	29
G. Farrell Gean, Pepperdine University	

IS AUDITOR SWITCHING ASSOCIATED WITH DELAYED ACCOUNTING RECOGNITION OF BAD NEWS?	31
Michael M. Grayson, Jackson State University Michael S. Luehlhing, Louisiana Tech University	
IMPACT OF LEVERAGE ON RETURN OF EQUITY	33
Mohammed Ashraful Haque, Texas A&M University – Texarkana	
STOCK MARKET EFFICIENCY AND THE 9/11 TERRORIST ATTACK	35
Marshall D. Henderson, Longwood University Frank Bacon, Longwood University	
ESOP FIRM PERFORMANCE PRE- AND POST- MARKET PEAK: EVIDENCE FROM RECENT YEARS	41
Steven Henry, Sam Houston State University Joseph Kavanaugh, Sam Houston State University Robert Stretcher, Sam Houston State University Darla Chisholm, University of Houston	
SOX ON TRIAL: COMPLAINT FOR INJUNCTIVE AND OTHER RELIEF	43
Gary G. Johnson, Southeast Missouri State University Mary Virginia Moore Johnson, Southeast Missouri State University	
THE USE OF SIMPLE CHARTING TO ANALYZE GOLD AND SILVER PRICES	49
Ronald C. Kettering, Columbus State University	
EFFECTS OF MARKET NOISE IN THE ADR MARKET	53
DeQing Diane Li, University of Maryland-Eastern Shore Jongdae Jin, University of Maryland Eastern Shore	
FOREIGN TERRORIST ORGANIZATIONS AND THEIR USE OF THE GLOBAL FINANCIAL STRUCTURE	57
Matthew J. Lopez, Sam Houston State University Robert Stretcher, Sam Houston State University	
AN EMPIRICAL TEST OF AN IPO PERFORMANCE PREDICTION MODEL	59
John Miller, Sam Houston State University Robert Stretcher, Sam Houston State University	
BANKERS' PERCEPTIONS OF STOCK DIVIDENDS	61
George O. Gamble, University of Houston Mary F. Geddie, University of Houston Thomas R. Noland, University of Houston Cynthia Tollerson, University of Houston	

IS THE IRISH CORPORATE GOVERNANCE REGIEME TOO DEMANDING?	63
Vincent O’Connell, University College Cork, Ireland Paul O’Sullivan, Letterkenny Institute of Technology, Ireland	
THE Q TEST: A USEFUL TOOL FOR DETERMINATION OF THE QUALITY OF EARNINGS	65
Robert L. Putman, University of Tennessee at Martin Richard B. Griffin, University of Tennessee at Martin Ronald W. Kilgore, University of Tennessee at Martin	
IMPLEMENTING ABC FOR THE SMALL SERVICE PROVIDER	71
Martha L. Sale, Sam Houston State University	
ESTIMATING THE MAGNITUDE OF THE PROPORTIONAL DEVIATION OF STOCK VALUES FROM THE CALCULATED INTRINSIC VALUE: EMPIRICAL EVIDENCE	77
Robert Stretcher, Sam Houston State University M. Douglas Berg, Sam Houston State University	
Authors’ Index	79

THE EFFECT OF FINANCIAL INSTITUTION OBJECTIVES ON EQUITY TURNOVER

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ABSTRACT

We examine the share and dollar turnover on the New York Stock Exchange and on NASDAQ and find that investor objectives affect their contribution to stock turnover. We control for transactions costs and information (previously identified as factors affecting turnover) to determine how different investment objectives of financial institutions affect turnover. We find that although all financial institutions have relatively low transactions costs and broad access to information, some institutions' holdings are associated with increased stock turnover while others' reduce turnover. We also find evidence that institutions' effect on turnover differs across different types of stocks, indicating that objectives may differ over different types of investments

LOCKHEED/MARTIN MARIETTA: A VIEW OF CORPORATE CONSOLIDATION

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CASE DESCRIPTION

The primary subject matter of this case concerns the consolidation of two aerospace defense firms. The merger and acquisition among defense contractors continues to be a vital instrument for restructuring and reshaping the nation's space and air defense environment. Analysts of the consolidation offered debate on such issues as the resulting size of the combined firm, its market impact on other competitors, and its dominance within the government contracting sector. The stock market both enjoyed and rewarded both firms following the release of the merger details. The issue of the valuation of the merger both to the firms individually and collectively is the focus of this case study. Synergistic effects created by the merger that affected their capital structures, costs of capital, and financial operations are explored in detail throughout this case for the case evaluator and student. What were the financial effects, the synergy, and, more importantly, was the consolidation a beneficial action for the two defense giants? The case has a difficulty level of five, appropriate for first year graduate level. The case has both current and historical applicability for MBA students concentrating in corporate finance, international financial management, or multinational corporate relations and serves as a pedagogically sound tool for the study of applied corporate valuation and merger, acquisition activity between corporate entities and their relative effect on public equity investors. The case is designed to be taught in five class hours and is expected to require 6-8 hours of outside preparation by students.

CASE SYNOPSIS

This case affords students an opportunity -- from both a strategic and financial point of view -- to evaluate the consolidation of two aerospace defense firms who basically changed the face of national defense in terms of conglomerate structures. The merger and acquisition activities among defense contractors continue to be vital instruments for restructuring and reshaping the nation's space and air defense environment. The student is tasked with the determination of the pre-merger and post-merger value created by the consolidation/merger and the extent of the financial impact of this consolidation of equals within the defense, aerospace industries. Analysis of the firms' changing costs of capital, capital structures, and price-to-earnings are used by the student to evaluate the corporate effect of the merger. The knowledge gained by working on this case can be utilized in the analysis of other industries where merger/acquisition activities occur almost daily. The firms used in this study are currently active, but all data elements and statements were derived from public financial statements, financial systems (compustat and CRSP), and other public sources. No private or insider information was provided or extracted from either firm for use in this case.

ACTIVITY-BASED COSTING, TOTAL QUALITY MANAGEMENT AND BUSINESS PROCESS REENGINEERING: THEIR SEPARATE AND CONCURRENT ASSOCIATION WITH IMPROVEMENT IN FINANCIAL PERFORMANCE

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ABSTRACT

This study examines whether use of the strategic business initiatives activity-based costing (ABC), total quality management (TQM), and business process reengineering (BPR), are associated with improvement in financial performance. Top executives of 305 firms operating in the motor carrier industry furnished information regarding use of the initiatives. Dependent variable information is obtained from financial statement data filed with the U.S. government. Multiple regression analysis is used to identify the improvement in ROA associated with the use of each initiative, and concurrent use of two initiatives.

A simple effect for use of TQM and BPR is confirmed. Context-specific benefits obtained from concurrent use of ABC with BPR and TQM are identified. It appears that ABC functions as an enabler of other improvement initiatives since its use provides the information necessary to optimize the effectiveness of TQM and BPR. The positive findings regarding ABC are of particular interest to practicing and academic accountants because they are often the primary proponents and administrators of ABC, and there has been little empirical evidence of ABC efficacy.

UNEXPECTED CHANGES IN QUARTERLY FINANCIAL-STATEMENT LINE ITEMS AND THEIR RELATIONSHIP TO STOCK PRICES

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ABSTRACT

This study examines the value-relevance of six quarterly financial-statement line items (accounts receivable, inventory, current liabilities, gross margin, SGA expense, and depreciation expense) and finds the size of deviations from one-step-ahead predicted values of the six items is associated with abnormal stock returns. With the exception of inventory, results are consistent with the theory that transitory changes in line items introduce greater noise into the earnings number. Consistent with Jiambalvo, Noreen and Shevlin (1997), inventory changes are viewed as positive leading indicators of firm value. Both unsophisticated models (random walk and random walk with drift) and more complex models (Box-Jenkins ARIMA and vector autoregressive models) are developed for the line items. Overall findings are generally insensitive to the degree of sophistication of the expectation model employed.

ANALYST'S FINANCIAL FORECAST ACCURACY AND CORPORATE TRANSPARENCY

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ABSTRACT

The purpose of this study is to find out that whether more corporate transparency leads to more accurate forecast or not. The results indicated that analyst's forecast accuracy does significant related to corporate transparency. The more corporate transparency will enable analyst produce more accurate forecast. Moreover, the results revealed that the most Taiwanese high-tech corporate were not transparent as expected. Since accurate forecast will facilitate investment decision quality, company should devote to the improvement of transparency in order to attract investment. On the other hand, the government official and legislative body should reconsider the integrity of the laws and regulations of the requirement of disclosure in order to promote transparency.

INTRODUCTION

The analysts' forecast has been the major basis of investment decision for both institute and individual investors because analyst possess of more professional knowledge about analysis and industry. The qualities of the forecast, which represent on the accuracy of the forecast, indeed, become the major concern of the investors. The analyst's forecast was based on the information provided by corporation. Therefore, this study examines the relationship between analyst's forecast accuracy and corporate transparency. The purpose of this study is to find out that whether the more corporate transparency leads to more accurate forecast.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Analyst's Forecast

Analysts' forecast was widely empirically tested in prior researches. Some evidence in the United States indicates that financial analysts' forecast of earnings are biased and fail to incorporate fully the earnings-relevant information (Mendenhall, 1991; Ali et al., 1992; Francis & Philbrick, 1993; Elgers & Lo, 1994; Elliott, Philbrick and Wiedman, 1995). Consequently, researchers often conclude that analysts' forecast are suboptimal or irrational. Prior researches do empirically test the quality of analysts' forecast. However, besides analysts themselves, there are still an important factor that will affect the quality, which is the information that analyst relied on to perform forecast. Therefore, this study would like to test that whether more precise (or less noisy) and transparent information will makes forecast more accurate or not in Taiwanese high-tech companies.

Analyst's Forecast Accuracy and Corporate Transparency

Analyst possesses more professional knowledge than common investors. Their professional knowledge includes professional skill of data collection and analysis. Moreover, they have more understandings about particular industry or company. Prior researches indicated that analyst's forecasts were more accurate than the forecasts derivates from statistical or mathematical models (Brown et. al, 1987; Lobo, 1991). Therefore, analysts' forecast attracts investor's attention and become the anchor of investment decisions. Prior researches revealed that company size, the situation of security market will influence the accuracy of analyst's forecast. Undoubtedly, the above factors were important in the degree of accuracy, however, one another important determinant is the

basis of the forecast. The analysts based on the information provided by the company to perform their forecast. Therefore, the quality of the information provided will affect the quality of forecast which based on the information.

Earnings forecasts receive a great deal of attention from the financial community (Schipper, 1991), and earnings-based numbers are important in equity valuation models and management plans (Murphy, 1999).

Lobo et al. (1998) indicated that there is a positive relationship between analysts' forecast accuracy and less precise information. It indicated that the more precise the information will lead to more accurate forecast. This study hypothesized that there is positive relationship between corporate transparency and forecast accuracy.

Corporate Transparency and Signaling Theory

The theory base of this study was signaling theory. Spence (1973) stated that if information asymmetry exists between a company's managers and investors, the company can provide information to the investor in order to eliminate the asymmetry. In other words, if information asymmetry exists, there is no way for the investor to understand the real situation of the company's operations. Prior research indicated that investors relied on the information sent out from the company to make investment decisions (Leland and Pyle, 1977; Ross, 1977; Bhattacharya, 1979; Ambarish, John and Williams, 1987; Poitevin, 1990; Ravid and Sarig, 1991).

Research Hypothesis

According to the literature review, this study develops the following null hypothesis:

H0: There is positive relationship between corporate transparency and analyst's forecast accuracy of earnings-per-share (EPS).

METHODOLOGY

Sample Selection and Data Collection

The sample companies used in this research were Taiwanese listed high-tech companies in 2000-2002. This research adopts the Standard & Poors' (2002) "Transparency and Disclosure" criteria to measure the information transparency of selected companies. Standard & Poors' divided transparency into three categories: transparency of ownership structure and investor relations(HT); financial transparency(FT); information disclosure of board and management structure and process(MT). There are 98 criteria; and one point was awarded when company meets one criterion. Company's annual reports were used in Standard and Poors' research. However, in investor's point of view, corporate information should be able to be retrieved not only from annual report but also from any publicized sources such as company's web site and related government or research entities. Therefore, this study adopts Standard & Poors' criteria and gathers information from any publicized resources including annual report, Taiwanese Security Exchange Committee, and Taiwan Economic Journal databases in order to get more comprehensive transparency information.

The number of Taiwanese listed high-tech companies is 246, after elimination of some data-missing companies, the samples used in this study is 225 companies. Due to the lapping effect between information and analyst's forecast, the 2001-2003 data used in the computation of EPS forecast accuracy.

Definition of Variables

Independent Variables

1. Transparency of ownership structure and investor relations (HT): Total scores of the transparency evaluation in this category.
2. Financial transparency and information disclosure (FT): Total scores of the transparency evaluation in this category.
3. Board and management structure and process (MT): Total scores of the transparency evaluation in this category.

Dependent Variable

The dependent variable in study was EPS. EPS is the indicator of stockholder's profitability, it revealed the profit of each invested share. The smaller the difference indicates the higher accuracy of the forecast (Dreman & Berry, 1995). Positive and negative difference between forecasted and actual figures were treated as forecast bias, therefore, absolute value was used in the computation of bias. The dependent variable was defined as follows, the lower the EPSFB indicates the higher forecast accuracy:

Earnings-per-share forecast bias (EPSFB):

$$\text{EPSFB} = (\text{forecasted EPS} - \text{actual EPS}) / \text{actual EPS}$$

Control Variable

Prior research indicated that company size will affect forecast accuracy (Brown, Richardson & Schwager, 1987; Kross, Ro & Schroeder, 1990). This study used logarithm of total market value of company's stock to eliminate the effect of company size on the empirical results.

The Prediction Model

In this study, an Ordinary Least Square (OLS) model was used as a multivariate test to investigate the affect of each independent and dependent variable. In equation form, the model can be expressed as follows:

$$\text{EPSFB}_{t+1} = \alpha_1 \text{HT}_t + \alpha_2 \text{FT}_t + \alpha_3 \text{MT}_t + \alpha_4 \text{SIZE}_t + \varepsilon$$

Test of Appropriateness of Regression Model

Test of the Existence of Multicollinearity

This study used variance inflation factor (VIF) to test the existence of multicollinearity. The result indicated that there is no existence of multicollinearity because the VIF value of all independent variables was less than 10.

Table 1 Multicollinearity Test (VIF)

Variable	VIF value
HT	1.069
FT	1.370
MT	1.341
SIZE	1.480

Variable definition:

HT: Transparency of ownership structure and investor relations

FT: Financial transparency and information disclosure

MT: Board and management structure and process

RESULTS AND ANALYSIS

From Table 2, the F value of the regression model is greater than its critical value and the p value is 0.000. This result indicates that this regression model is valid and the null hypothesis was rejected. The empirical result indicated that there is a negative relationship between corporate transparency and forecast bias.

Table 2 indicated that there was a negative but not significant relationship between HT and EPS forecast bias. From sample results we found that the difference of HT score between sample companies is not obvious. The reason may be that companies only disclose information of ownership structure and investor relations that required by government and related authorities. The relationship direction between HT and EPS forecast bias was negative as expected, which indicated that when the company disclose more information on ownership structure and investor relations, the forecast bias will become lower and indeed the forecast accuracy will be higher.

Table 2 revealed that there was significant negative relationship between FT and forecast bias. The relationship direction between FT and EPS forecast bias was negative as expected, which indicated that when the company disclose more information on financial transparency and information disclosure, the forecast bias will become lower and indeed the forecast accuracy will be higher. The result was in conformity with Signaling Theory, company that signaled more information to outsiders will eliminate information asymmetry.

There was positive but not significant relationship between MT and EPS forecast bias. From sample result we found that MT was the most in-transparent part in company's disclosure. Company management might thought that in the past experience investors and creditors do not care about the information of board and management structure and process, or there might be some reason that company do not disclose.

Table 2 Regression Results

Dependent variable	t	EPSFB
(Constant)	-5.052 (0.171)	
HT	-0.033 (0.504)	
FT	-0.297 (0.000)	***
MT	0.021 (0.470)	
SIZE	-2.018 (0.000)	***
Adj-R ²	t 0.290	
F value	10.479	
P value	(0.000)	***

1. Variable definition:
HT: Transparency of ownership structure and investor relations
FT: Financial transparency and information disclosure
MT: Board and management structure and process
2. ***: significant under confidence level 0.05

CONCLUSION

The purpose of this study was to examine the relationship between corporate transparency and analysts' forecast accuracy. The major result indicated from this study was that on average corporate transparency does have a significant relationship with forecast accuracy. The relationship direction between corporate transparency and EPS forecast bias was negative as expected, which indicated that when the company disclose more information, the forecast bias will become lower and indeed the forecast accuracy will be higher. Therefore, we suggest that company can devoted them in improving their corporate structure in order to improve their performance, and outsiders can rely on the transparency information provided by the company to make their decisions. Another important finding of this study is that the overall transparency degree of Taiwanese high-tech companies was still low. The law and regulations about corporate transparency and disclosure should be modified in order to achieve more transparency.

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BOARD STRUCTURE AND THE PERFORMANCE OF IRISH PUBLIC COMPANIES

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ABSTRACT

The aim of this study is to investigate whether or not board structure has an influence on the performance of Irish Public Companies. In particular, this study explores whether the performance of the sample of Irish companies is affected by the size of the board, the proportion of outside directors, the separation of the positions of CEO and Chairperson and the appointment of a non-executive director as Chairperson. In order to test for robustness, alternative measures of performance are used: a proxy for Tobin's Q, return on assets and stock market returns. The findings provide some evidence for an association between board structure and performance although the results are sensitive to the exact measure of performance chosen. The present work describes the background to the empirical analysis.

INTRODUCTION

The influence of corporate governance issues on corporate performance has been widely discussed in the literature. Boards of directors, which are elected by shareholders to act on their behalf, play an important role in corporate governance. The board selects the management and represents the link between shareholders and managers. Due to the separation of ownership and control the monitoring role of the board of directors is an important component of corporate governance. In effect, the board is viewed as the primary means for shareholders to exercise control on top management.

Numerous governance mechanisms are supposed to help to align the interests of shareholders and management. External governance mechanisms include the market for corporate control, which is presumed to discipline management. Internal governance mechanisms comprise, among others, pay-for-performance, debt policies, board composition, and leadership structure of the board. Implementation of these mechanisms is supposed to reduce managerial inefficiencies and to improve firm performance. The present work focuses on four issues: board size, the percentage of non-executive directors on the board, the leadership structure and whether the position of chairman is held by a non-executive director. These internal mechanisms are, at least in theory, designed to lead to more effective monitoring by the board and align the incentives of managers with the interests of shareholders.

Previous literature concerning firm performance and board structure focuses on the US and UK. This study refers to previous literature and examines the relationship between firm performance and board structure of Irish ples. Since the UK and the Irish governance systems are both market-based and the Irish stock exchange follows the codes on corporate governance set in the UK, the findings in the UK are expected to apply also in Ireland.

THEORETICAL DEVELOPMENT

Agency problems arise when senior managers have incentives to pursue their own interest at the expense of the interest of shareholders. According to Vafeas and Theodorou (1998), the

relationship between shareholders and managers may lead to three problems. First, managers may tend to invest cash flows instead of paying dividends, even when the investment opportunities do not appear to be profitable. Second, the conflict may result in a risk aversion problem since managers are presumed to be more risk-averse than shareholders. Managers cannot easily diversify risk away through their portfolio selection because they offer their human capital to the company. In contrast, investors are likely to diversify their portfolio across the securities of many firms (Fama, 1980). Third, Vafeas and Theodorou (1998) emphasise that managers may behave more myopically than shareholders in making investment decisions, because of pressure to generate profits in the short run.

In order to resolve the agency problems described above, monitoring by the board of directors and pay-for-performance have been developed as internal governance mechanisms. Moreover, the market for corporate control and corporate debt are presumed to align management's incentives with shareholder interests. The board of directors as an internal governance mechanism is supposed to help to discipline top management and to limit managerial inefficiencies in a company (Hermalin and Weisbach, 1998). Since shareholders want managers to behave in their best interest, the former want to ensure that management engages in activities that maximize shareholder value. In order to fulfil this responsibility, the board performs important decision control tasks and possesses the legal authority to hire, fire and compensate top management (Borokhovich, Parrino, and Trapani, 1996). This gives boards the ability to mitigate any incentive conflicts between managers and shareholders. It is often argued that the association between shareholder and board incentives differs with the composition of the board. An additional consideration is suggested by Fama (1980) who states that the board should not be dominated by security holders. On the one hand, diffused ownership leads to an optimal allocation of risk bearing. On the other hand, security holders are usually diversified across the securities of numerous firms and are therefore not overly interested in a particular company.

CODES OF GOVERNANCE: THE IRISH EXPERIENCE

Recommendations concerning the control functions of the board of a company are included in national codes of corporate governance. As noted earlier, the Irish stock exchange follows the codes on corporate governance set in the UK. The most important codes are the Hampel Code, the Greenbury Code and the Cadbury Code. The Code of Best Practice ("the Combined Code") has been formulated by the Committee on Corporate Governance and has been adopted by the Irish Stock Exchange. This Combined Code sets out principles of corporate governance concerning the following issues: directors' appointment, directors' remuneration, relations with shareholders and accountability and audit. The implementation of monitoring mechanisms, proposed by this code, is supposed to improve corporate governance. The code emphasizes the role of non-executive directors as independent monitors of top management decisions and activities. The code recommends that the board should include a balance of executive and non-executive directors and should comprise independent non-executives in order to ensure that the board is not dominated by one individual. Hence, non-executives should comprise not less than one third of the board and there should be a minimum of three non-executive directors on the board (Short, Keasey, Wright, and Hull, 1999). Moreover, the Code of Best Practice recommends that the roles of chairman and CEO should be split. If companies combine these roles, they should justify their decision. Additionally, a senior non-executive director should be identified, to whom concerns can be conveyed. The Irish Stock Exchange requires Irish registered companies to include statements of compliance with the Combined Code and, in particular, firms have to explain any areas of non-compliance.

PRIOR LITERATURE

In general, prior literature in this area of research may be classified into two broad strands. The first strand focuses on the issue of endogenizing board structure. For example, Hermalin and Weisbach (1998) consider the questions of director choice and director function simultaneously. They emphasize that on the one hand boards are chosen through a process, which is partially controlled by the CEO, and on the other hand the board has to monitor the CEO. In their model, board effectiveness is a function of its independence and they endogenously derive the monitoring intensity achieved by the board of directors. In contrast, the second major strand of the literature takes the current board structure as a given and investigates how this structure actually influences firm performance. For example, Klein (1998) examines the link between board composition, in particular inside and outside directors' membership on board committees, and firm performance for firms listed on the S&P 500. Yermack (1996) investigates the impact of board size on firm value in a sample of 452 large U.S industrial corporations between 1984 and 1991. He applies time-series analyses as well as cross-sectional analyses. He finds an inverse relation between the market value of a firm, as represented by Tobin's Q, and the size of the board of directors. The inverse relationship persists after controlling for firm size, industry membership, ownership structure, growth opportunities, and alternative corporate governance structures. One explanation for the negative association could be that companies adjust board size due to poor past performance. However, additional tests do not provide evidence for this assumption. Yermack also shows that financial ratios, such as return on assets and return on sales, are negatively correlated to board size. These results are consistent with Jensen (1993), who has criticised the performance of companies with large board sizes. He argues that the benefits resulting from larger board size may be outweighed by the incremental cost of the potentially poorer communication and decision-making processes resulting from large groups. Finally, Agrawal and Knoeber (1996) examine the relationship between different mechanisms to control agency problems and firm performance. They use a sample of 400 large U.S. firms and consider several mechanisms to control agency problems: shareholdings of insiders, shareholdings of large blockholders, institutional shareholdings, use of debt, representation of outside directors on the board, use of the external labour market for managers, and the market for corporate control. These authors are among the first to consider the empirical importance of the interdependence among the various control mechanisms. They conclude that, while greater managerial ownership is positively related to performance, the use of debt, corporate control activities and representation of insiders on the board are negatively associated with Tobin's Q.

CONCLUSION

The discussion presented above highlights some of the key problems and issues in relation to the influence of board structure on firm performance. However, to date, it is noteworthy that the preponderance of the empirical work on this issue is based on US (and to a lesser extent) UK data. Clearly, there is a need for more international comparative work using data from other countries.

Building on the studies outlined above, we find that, in the Irish market, while there is some evidence for an association between aspects of board structure (such as the proportion of outside directors, the separation of the roles of CEO and Chairperson and the appointment of a non-executive director as Chairperson), the findings are extremely sensitive to the choice of performance measures utilised (specifically, in this study, Tobin's Q, return on assets and stock return).

While the present work focuses on the relationship between board structure and performance in the Irish context, it is our belief that additional studies, particularly in those countries currently developing new modes of governance (e.g., the transitional economies of the former Eastern Block) could add much to our understanding of the rather complex issues involved. In this sense, our

papers both echoes and responds to the call in Bushman and Smith's (2001) review for increased research in the field of international corporate governance.

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WEAK ANALYSTS' STRATEGY OF FORECAST RELEASE TIMING

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INTRODUCTION

Understanding analysts' behavior is important because analysts' earnings forecasts are critical to investment decision-making models. If forecasts are affected by analysts' behavior, they can become biased and can lead to suboptimal investment decisions (Cote and Sanders, 1997). This study investigates weak analysts' behavior of announcing their earnings forecasts before strong analysts' forecast disclosures. Furthermore, this study provides an explanation why weak analysts do so, giving up utilizing strong analysts' forecast information.

HYPOTHESIS

Analysts are concerned about providing accurate earnings forecasts. Therefore, weak analysts are likely to follow strong analysts in order to have advantages in collecting and processing information that is released by strong analysts. However, analysts' primary objective is not to issue the most accurate earnings forecasts in a multi-task environment (Chandra 2001) because the value of information is created by not only accuracy but also timeliness. This gives analysts an incentive to release information before other analysts in order to capture trading volume for their brokerage firms. Forecasters who highly valued their reputation among their peers are more likely to engage in herding behavior (Cote and Sanders, 1997). On the other hand, weak analysts who have low reputation are not subjected to forecasts of their peers including strong analysts. Weak analysts who choose preannouncements before strong analysts' forecast disclosures desire to maximize the value of their forecasts by timely providing information, instead of sacrificing improvement in accuracy of their forecasts. This study defines leading (following) weak analysts as weak analysts who announce their earnings forecast before (after) strong analysts' forecast disclosures and hypothesizes the following.

H1: The number of leading weak analysts is greater than the number of following weak analysts.

Leading weak analysts' incentive to announce their forecasts before strong analysts' forecast disclosures is to capture trading volume for their brokerage firms by providing timely information to the market. Therefore, it is expected that the market's responses of stock returns to leading weak analysts' forecasts is greater than following weak analysts' forecasts.

H2: Leading weak analysts' abnormal returns per forecast revision is greater than following weak analysts' abnormal returns per forecast revision.

The market's responses to following weak analysts' earnings forecasts are expected not to be significant because most of important earnings information is already delivered by leading weak analysts and strong analysts. Thus, weak analysts desire to announce their forecasts before strong analysts' forecast disclosures if their forecasts are accurate as much as strong analysts' forecasts. That is, leading weak analysts choose a strategy to provide more timely forecasts than do strong

analysts because their earnings forecasts are expected to be accurate as much as strong analysts' forecasts.

H3: Leading weak analysts' forecast errors are not different from strong analysts' forecast errors.

On the other hand, if weak analysts' earnings forecasts are not expected to be accurate as much as strong analysts' forecasts, these weak analysts will announce their forecasts after strong analysts' forecast disclosures to improve their forecast accuracy because providing inaccurate forecasts to the market causes serious penalty, such as removing from the market. In other words, following weak analysts choose a strategy to provide more accurate forecasts than do strong analysts even though their forecasts lose timeliness.

H4: Following weak analysts' forecast errors are smaller than strong analysts' forecast errors.

EMPIRICAL ANALYSES

The procedure of sample selection is as follows. First, the best analysts of 374 are collected from the Institutional Investor the 2000 All-America Research Team. Second, the Institution Investor provides ranking from the first to the fourth. This study defines only the first analysts of 78 among the best analysts of 374 as strong analysts. Third, Zacks provides 38 strong analysts' earnings forecasts for 339 firms. Fourth, actual earnings and reported date of 85 firms, which belong to S&P 500, are collected from Research Insight. Finally, since the list of All-American Research Team is disclosed in October, annual earnings forecasts of 1,102 for 83 firms announced after October are selected as a final sample. The forecasts of 1,102 are each analyst's final earnings forecasts.

The variables of forecast revision, unexpected earnings, and abnormal returns are required to test whether leading weak analysts' abnormal returns per forecast revision is significantly greater than following weak analysts (Hypothesis H2). First, forecast revision is measured by the difference between each analyst's final earnings forecasts and the previous earnings forecasts.

$$FR_{i,j,t} = EF_{i,j,t} - EF_{i,j,t-1}$$

where $FR_{i,j,t}$: analyst i 's final earnings forecast revision for a firm j at t

$EF_{i,j,t}$: analyst i 's final earnings forecasts for a firm j at t

$EF_{i,j,t-1}$: analyst i 's earnings forecasts for a firm j at $t-1$

Second, unexpected earnings are the difference between actual earnings and final earnings forecasts. Final Earnings Forecasts mean earnings forecasts announced at date closest to the reported date of actual earnings. Zacks provides earnings per share from continuing operations, before extraordinary and non recurring items. Therefore, earnings per share basic from operations are collected as actual earnings from the research insight, because the item reflects an earnings per share figure which excludes the effect of all nonrecurring events such as extraordinary items, discontinued operations, and special items.

$$UE_{j,t} = AE_{j,t} - EF_{j,f}$$

where $UE_{j,t}$: unexpected earnings for a firm j at t

$AE_{j,t}$: actual earnings for a firm j reported at t

$EF_{j,f}$: (an analyst's) earnings forecasts announced at date closest to a firm j 's reported date

Third, abnormal returns follow the CAPM model. That is, abnormal returns are measured by the difference between actual returns and expected returns. The expected returns are the market's actual returns adjusted by a firm's (annual) beta, which is provided by the Research Insight.

$$AR_{j,t} = RE_{j,t} - \beta_{i,t} MR_{j,f}$$

where $AR_{j,t}$: abnormal return for a firm j at t

$RE_{j,t}$: actual return for a firm j at t

$\beta_{j,y}$: annual beta for a firm j at y ($y = 2000$ or 2001 year)

MR_t : actual market return at t

Analysts' (absolute) forecast errors need to test whether following weak analysts' forecast errors are significantly less than leading weak analysts (Hypothesis H3). Forecast errors are measured by the difference actual earnings and earnings forecasts and scaled by the actual earnings. While forecast revision, unexpected earnings, and abnormal returns have sign, forecast errors are measured by absolute value.

$$AFE_{i,j,t} = \text{abs} [(AE_{j,t} - EF_{i,j,t}) / AE_{j,t}]$$

where $AFE_{i,j,t}$: analyst i 's absolute forecast errors for a firm j at t

abs: absolute value

$AE_{j,t}$: actual earnings for a firm j reported at t

$EF_{i,j,t}$: analyst i 's final earnings forecasts for a firm j at t

The first empirical result shows that 58.1% of weak analysts announce their final forecasts before the disclosure of strong analysts' final forecasts. This result supports that weak analysts are likely to announce their earnings forecasts before strong analysts' forecast disclosures (Hypothesis H1). The market's responses of abnormal stock returns to leading weak analysts' forecasts revisions (3.010 cents) are greater than following weak analysts' forecast revisions (2.555 cents), consistent with Hypothesis H2. These results imply that leading weak analysts' forecasts are more informative than are following weak analysts' forecasts and provide an explanation for weak analysts' anomalous behavior of announcing their forecasts before strong analysts' forecast disclosures. After controlling for firm effect, leading weak analysts' absolute forecast errors (42.02% of actual earnings) is not significantly different from strong analysts' forecast errors (38.29% of actual earnings), supporting Hypothesis H3. On the other hand, following weak analysts' absolute forecast errors (35.09% of actual earnings) are significantly smaller than strong analysts' absolute forecast errors (Hypothesis H4).

Overall, these empirical results imply that weak analysts are likely to announce their earnings forecasts before strong analysts' forecast disclosures when their earnings forecasts are expected to be accurate as much as strong analysts' forecasts in order to maximize the value of their forecasts by providing timely information to the market; however, weak analysts whose earnings forecasts

are not expected to be accurate as much as strong analysts' forecasts announce their forecasts after strong analysts' forecast disclosures in order to incorporate strong analysts' forecast information.

CONCLUSION

This study provides evidence that weak analysts are likely to announce their earnings forecasts before strong analysts' forecast disclosures because the market more greatly responds to leading weak analysts' earnings forecasts than following weak analysts' forecasts. These results imply that analysts consider timeliness as well as forecast accuracy when they choose forecast release timing, consistent with the theory that the value of information depends on both quality and timeliness. Furthermore, this study presents weak analysts' strategies of forecast release timing; they choose pre- (post-) announcements before (after) strong analysts' forecast disclosures when their earnings forecasts are (not) expected to be accurate as much as strong analysts' forecasts.

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PREDICTIVE ABILITY OF THE VALUATION ALLOWANCE ACCOUNT FOR FUTURE EARNINGS/CASH FLOWS

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INTRODUCTION

The valuation allowance for deferred tax assets is an estimate of the portion of deferred tax assets that is not realizable because of insufficient future taxable income. The valuation allowance account might contain forward-looking information on the management's estimates of a firm's future income. This study finds that a change in the valuation allowance provides incremental information beyond publicly available information in predicting one- and two-year-ahead income and cash flows. The predictive ability of the valuation allowance suggests that recognition of forward-looking information in financial statements has the potential to make these statements more informative.

HYPOTHESIS DEVELOPMENT

SFAS 109 requires companies to determine whether a valuation allowance is needed to reduce deferred tax assets to an amount more likely than not to be realized. Once a valuation allowance is established, it can be changed in subsequent periods if there are changes in circumstances that alter expectations about future taxable income expected to be available to realize a tax benefit. As a result, a change in the valuation allowance for deferred tax assets should result from a change in the manager's judgment about the existence of sufficient taxable income to utilize the related deferred tax assets in future years. If a manager changes the valuation allowance in response to information on future income without bias (i.e., a manager increases or decreases the valuation allowance only in response to negative or positive information on future income), the change in the valuation allowance would likely contain information useful in predicting future income (or cash flows).

H1: Changes in the valuation allowance for deferred tax assets are negatively associated with future income (or cash flows).

Prior findings (e.g., Behn et al. 1998; Visvanathan 1998; Miller and Skinner 1998; Burgstahler et al. 2002; Schrand and Wong 2003; Frank and Rego 2003) imply that changes in the valuation allowance for deferred tax assets in part reflect publicly available information such as deferred tax assets (or liabilities) and prior earnings. If managers use private forward-looking information about future income, as well as public information provided in other accounts in determining the valuation allowance, then, in addition to publicly available information, changes in the valuation allowance will contain information that is useful in predicting future income (or cash flows).

H2: Changes in the valuation allowance for deferred tax assets are negatively associated with future income (or cash flows) after controlling for other publicly available information.

RESEARCH DESIGN

This study estimates following regression models to examine the predictive ability of changes in the valuation allowance for deferred tax assets:

$$E_{t+i} = \alpha_0 + \alpha_1 \Delta VA_t + \alpha_2 EBVA_t + \varepsilon_t \quad (1)$$

$$CF_{t+i} = \beta_0 + \beta_1 \Delta VA_t + \beta_2 EBVA_t + \beta_3 CF_t + \varepsilon_t \quad (2)$$

where,

E_{t+i} = income from continuing operations in year t+i

CF_{t+i} = cash flows from operations in year t+i

ΔVA_t = changes in the valuation allowance from year t-1 to t

$EBVA_t$ = income from continuing operations before changes in the valuation allowance in year t

* Each variable is scaled by the beginning market value of equity at year t.

If managers change the valuation allowance for deferred tax assets in response to information on future income (cash flows) that is not reflected in $EBVA_t$ (and CF_t), α_1 (β_1) will be negative. In order to test whether changes in the valuation allowance for deferred tax assets contain incremental information about future income beyond publicly available information, this study controls for the components of changes in the valuation allowance that is predictable from other financial statement variables. Consistent with prior studies (e.g., Burgstahler et al. 2002; Frank and Rego 2003), this study adopts such publicly available financial statement variables as changes in deferred tax assets and liabilities, earnings in each of the prior two years and changes in the market value of equity.

$$E_{t+1} = \alpha_0 + \alpha_1 \Delta VA_t + \alpha_2 EBVA_t + \alpha_3 \Delta DTA_t + \alpha_4 \Delta DTL_t + \alpha_5 E_{t-1} + \alpha_6 E_{t-2} + \alpha_7 \Delta MVE_t + \varepsilon_t \quad (3)$$

$$CF_{t+1} = \beta_0 + \beta_1 \Delta VA_t + \beta_2 EBVA_t + \beta_3 CF_t + \beta_4 \Delta DTA_t + \beta_5 \Delta DTL_t + \beta_6 E_{t-1} + \beta_7 E_{t-2} + \beta_8 \Delta MVE_t + \varepsilon_t \quad (4)$$

where,

E_{t+i} = income from continuing operations in year t+i

CF_{t+i} = cash flows from operations in year t+i

ΔVA_t = changes in the valuation allowance from year t-1 to t

$EBVA_t$ = income from continuing operations before changes in the valuation allowance in year t

ΔDTA_t = changes in deferred tax assets from year t-1 to t

ΔDTL_t = changes in deferred tax liabilities from year t-1 to t

ΔMVE_t = changes in market value of equity from year t-1 to t

* Each variable is scaled by the beginning market value of equity.

In models (3) and (4), a negative α_1 (β_1) supports the hypothesis that changes in the valuation allowance contain useful information (e.g., the manager's private information) beyond publicly available information in predicting future income.

EMPIRICAL ANALYSIS

This study draws 243 firm-years from a search for news releases from 1994 to 2002 in the PR Newswire file in LEXIS/NEXIS using the keywords “valuation allowance.” A majority (74.9%) of the 243 announcements are for 1999-2002, and nearly three-quarters of the announcements pertain to firms in the manufacturing (51.03%) and service industries (21.4%). The average sample firms in this study are smaller than the Compustat firms and incurred losses over the sample period. In order to investigate information content of the valuation allowance for deferred tax assets on future income (cash flows), this study tests regression models (1) and (2). Table 1 presents the estimation results. VAT that is partially a function of the manager’s judgment about future income is negatively associated with one- and two-year-ahead income, respectively, after controlling for EBVA_t. Like the association of the valuation allowance with future income, changes in the valuation allowance are negatively associated with one- and two-year-ahead cash flows. However, inclusion of current cash flows (CF_t) in the regression seriously undermines the predictive ability of the valuation allowance for future cash flows. These associations imply that changes in the valuation allowance provide incremental information beyond EBVA_t (and marginally CF_t) in predicting one- and two-year ahead income (cash flows).

Table 1. Predictive Ability of the Valuation Allowance for Deferred Tax Assets

$$\text{Regression Model (1): } E_{t+i} = \alpha_0 + \alpha_1 ? VA_t + \alpha_2 EBVA_t + \varepsilon_t$$

$$\text{Regression Model (2): } CF_{t+i} = \beta_0 + \beta_1 ? VA_t + \beta_2 EBVA_t + \beta_3 CF_t + \varepsilon_t$$

Dependent Variable	Sample Number	F value	Adj. R ²	Coefficient (t value)				
				Constant	? VA _t	EBVA _t	CF _t	
E _{t+1}	165	29.784 ⁺⁺⁺	.149	.014	(.599)		.330 ^{***} (5.457)	
		27.291 ⁺⁺⁺	.243	.026	(1.181)	-379 ^{***} (-4.596)	.302 ^{***} (5.259)	
E _{t+2}	102	4.982 ⁺⁺	.038	.056 [*]	(1.430)		.352 ^{**} (2.232)	
		4.484 ⁺⁺	.065	.061 [*]	(1.595)	-274 ^{**} (-1.961)	.332 ^{**} (2.130)	
CF _{t+1}	150	37.240 ⁺⁺⁺	.327	.204 ^{***}	(4.577)	-872 ^{***} (-5.054)	.730 ^{***} (5.929)	
	150	79.477 ⁺⁺⁺	.612	.027	(.728)	-230 [*] (-1.594)	.493 ^{***} (5.128)	1.129 ^{***} (10.448)
CF _{t+2}	121	15.487 ⁺⁺⁺	.194	.216 ^{***}	(6.179)	-595 ^{***} (-4.273)	.421 ^{***} (2.577)	
	121	54.456 ⁺⁺⁺	.572	.090 ^{***}	(3.188)	-.086 (-.761)	.254 ^{**} (2.111)	.835 ^{***} (10.251)

Table 2 presents the estimation results of the regression models (3) and (4). After controlling for the public information and EBVA_t, changes in the valuation allowance are still negatively associated with one- and two-year-ahead income (cash flows). These results imply that changes in the valuation allowance contain useful information that may not be delivered by publicly available information to the market in predicting future income.

Table 2. Incremental Predictive Ability of the Valuation Allowance for Deferred Tax Assets

Regression Model (3): $E_{t+i} = \alpha_0 + \alpha_1 \Delta VA_t + \alpha_2 EBVA_t + \alpha_3 \Delta DTA_t + \alpha_4 \Delta DTL_t + \alpha_5 E_{t-1} + \alpha_6 E_{t-2} + \alpha_7 \Delta MVE_t + \varepsilon_t$
 Regression Model (4): $CF_{t+i} = \beta_0 + \beta_1 \Delta VA_t + \beta_2 EBVA_t + \beta_3 CF_t + \beta_4 \Delta DTA_t + \beta_5 \Delta DTL_t + \beta_6 E_{t-1} + \beta_7 E_{t-2} + \beta_8 \Delta MVE_t + \varepsilon_t$

D.V.	Sample	Adj R ²	Coefficient (t value)								
			Cons't	ΔVA_t	EBVA _t	CF _t	ΔDTA_t	ΔDTL_t	E _{t-1}	E _{t-2}	ΔMVE_t
E _{t+1}	142	.311	.004 (.157)	-.213** (-1.906)	.298*** (4.494)		-.136 (-1.295)	-1.379*** (-2.578)	.106* (1.251)	-.200* (-1.456)	.035** (2.225)
E _{t+2}	90	.170	.095** (2.155)	-.452** (-2.169)	.529*** (2.632)		-.116 (-.698)	-1.999*** (-2.366)	-.666*** (-2.844)	.082 (.399)	-.011 (-.433)
CF _{t+1}	131	.385	.215*** (4.174)	-.600*** (-2.666)	.845*** (6.171)		-.240 (-1.138)	-2.676*** (-2.479)	-.206 (-1.217)	-.484** (-1.699)	.015 (.470)
	130	.641	.025 (.554)	-.075 (-.409)	.605*** (5.538)	1.087*** (9.113)	-.077 (-.474)	-1.417** (-1.653)	-.043 (-.329)	-.540*** (-2.430)	-.025 (-1.002)
CF _{t+2}	109	.194	.232*** (5.850)	-.429*** (-2.485)	.465*** (2.567)		-.110 (-.690)	-1.267** (-1.594)	-.138 (-.966)	-.377** (-1.893)	-.009 (-.352)
	106	.659	.079*** (2.669)	-.049 (-.403)	.393*** (3.104)	.868*** (11.052)	.068 (.634)	-.174 (-.317)	-.089 (-.948)	-.312** (-2.272)	-.040*** (-2.378)

Variable Definition:

E_{t+i} = income from continuing operations in year t+iCF_{t+i} = cash flows from operations in year t+i ΔVA_t = changes in the valuation allowance from year t-1 to tEBVA_t = income from continuing operations before changes in the valuation allowance in year t ΔDTA_t = changes in deferred tax assets from year t-1 to t ΔDTL_t = changes in deferred tax liabilities from year t-1 to t ΔMVE_t = changes in market value of equity from year t-1 to t

Each variable is scaled by the beginning market value of equity.

***, **, + indicate significance at the .01, .05, and .10 levels, respectively for two-tailed tests.

***, **, * indicate significance at the .01, .05, and .10 levels, respectively for one-tailed tests.

CONCLUSION

This study provides evidence of incremental predictive ability of the valuation allowance for deferred tax assets. Changes in the valuation allowance are associated with future income and cash flows after controlling for publicly available information. These results imply that managers, on average, change the valuation allowance in response to information on future income, following SFAS 109. However, the explanatory power of changes in the valuation allowance is limited to a two-year horizon. It should be kept in mind that the sample for these tests contains a large number of firm-years with incentives to manage earnings. Managers' opportunistic manipulation of the valuation allowance in these years significantly weakens the predictive ability of the valuation allowance for future income and cash flows.

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PREDICTING TENANT RENEWAL: WEAK LINK IN THE INCOME APPROACH

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ABSTRACT

Office vacancy rates have been increasing over the past three years all across the globe. There is evidence that this trend is coming to an end. The paper presents some specific office vacancy rates for the Los Angeles County markets for 2003 compared to 1993. Understanding that office rental properties are classified into A, B, and C quality is critical to proper interpretation of office vacancy rates. Evidence suggests that there has been a shift by tenants to move from Class C and Class B buildings to Class A space in these California markets.

This "flight to quality" movement by office tenants aggravates an already existing problem for real estate appraisers who use the discounted cash flow approach to establish a market value for an office building. Class C and B office buildings have tenants who are more likely to not renew their existing leases. How do the valuation experts predict the likelihood of lease renewal and its corresponding effect on estimated future cash flows?

Fifty real estate appraisers of Class C and B office properties were interviewed in person or by phone to ask how they addressed the issue of predicting lease renewal and the impact this would have on the estimated cash flows beyond the renewal date. Results of this empirical investigation are discussed.

IS AUDITOR SWITCHING ASSOCIATED WITH DELAYED ACCOUNTING RECOGNITION OF BAD NEWS?

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ABSTRACT

We study the association between auditor switching and the delayed accounting recognition of bad news about net income. Using a nonparametric sign test and a test of proportions, we analyze 305 auditor switches which occurred during the event period 1976 to 1994, a period which predated a significant increase in the number of financial-statement restatements (General Accounting Office 2002). The results (null hypothesis rejected at $z > 5$ for each test) suggest that some association exists between the fact of auditor switching (whether reported as resignation or dismissal) and the occurrence of decreases in net income from the year preceding the auditor switch ($t-1$) to the year following the auditor switch ($t+1$).

Keywords: auditor switching, bad news, submartingale, nonparametric tests

Data Availability: Data are available to Compustat subscribers. For other matters, please contact the first author.

IMPACT OF LEVERAGE ON RETURN OF EQUITY

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ABSTRACT

In Financial Management one of the most common ratios is the asset to equity ratio. This ratio can be used to project and predict the return on equity for a levered firm compared to an unlevered firm. In the past this ratio is not known to have been used to make such predictions.

INTRODUCTION

In Financial Management the concept of ratio analysis is common. Therefore, often we look at the ratio of asset to equity. However, this ratio is not known to have been used to project and compare the return on equity of a levered firm and unlevered firm. Currently the asset to equity ratio is used in the Dupont system as follows:

$$ROE = \frac{\text{asset}}{\text{equity}} \times \frac{\text{sales}}{\text{assets}} \times \frac{NI}{\text{sales}}$$

This simply predicts the return on equity. The purpose of this paper is to show that the asset to equity ratio which is called the leverage multiplier can be used to predict changes in return on equity of a levered and unlevered firm given a change in EBIT.

Example:

Let us assume we have two identical firms – A and B. Both firms have the following debt and equity.

Firm A			Firm B	
Total asset	\$400,000		Total asset	\$400,000
Debt	300,000	@ 8%	Debt	0
Equity	100,000		equity	400,000
EBIT	200,000		EBIT	200,000
Tax Rate	40%		Tax Rate	40%
Firm A Leverage Multiplier			$\frac{400,000}{100,000} = 4$	

Both firm A and B are identical except their debt. Firm A is levered and Firm B is unlevered. Let us see what their return on equity is.

Firm A		Firm B	
EBIT	\$200,000	EBIT	\$200,000
Interest	<u>24,000</u>	Interest	<u>0</u>
EBT	176,000	EBT	200,000
Tax 40%	<u>70,400</u>	Tax 40%	<u>80,000</u>
NI	105,600	NI	120,000
ROE	105.6%	ROE	30%

Now let us increase EBIT by \$100,000 to \$300,000. Based on a leverage multiplier of 4 the increase in return on equity of the levered firm will be 4 times as much as the increase of return on equity for the unlevered firm. Let's examine if that happens.

Firm A		Firm B	
EBIT	\$300,000	EBIT	\$300,000
Interest	<u>24,000</u>	Interest	<u>0</u>
EBT	276,000	EBT	300,000
Tax 40%	<u>110,400</u>	Tax 40%	<u>120,000</u>
NI	165,600	NI	180,000
ROE	165.6%	ROE	45%
% of increase in ROE	60%	% of increase in ROE	15%

We can clearly see that return on equity of the levered firm increased by 60 percent which is exactly 4 times the increase in return on equity of 15 percent for the unlevered firm.

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STOCK MARKET EFFICIENCY AND THE 9/11 TERRORIST ATTACK

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RESEARCH PROBLEM

To test the efficiency of a market an event study can be performed. An event should be chosen that has a measurable impact that can be theoretically justified. September 11th can be justified because of the large hit that the insurance companies took afterwards. They were forced to pay out almost 90 billion dollars as a result of the attacks. Life Insurance companies especially had to pay out large sums of money not only for the lives lost at the World Trade Center when the towers collapsed, but also for the lives lost on the actual airplanes. The empirical tests included in this study will prove if the event did generate new and significant information to the market.

Stock prices alone can't be used to judge the value of an event for three reasons. First, price can be influenced by other firm-specific events that will result in a change in the stock price. Second, dollars do not provide a consistent standard. Third, price is also influenced by market-wide factors, so a single event may not be responsible for the entire impact. My event to be observed is September 11th, which was the costliest payout for insurance companies in U.S. history.

PURPOSE OF STUDY

An event study is used to test the efficiency of the stock market by measuring the importance of new information and how fast the market reacts to it. An event is observed, an expectation about the performance is established, actual performance is measured and any differences are tested for significance. The differences are the average excess returns, also called abnormal returns. The signs of the AER's coefficient are unexpected so a two-tailed test is going to be used.

LITERATURE REVIEW

Only when stock prices fully reflect all available information to investors, the markets for the stock are then efficient (Madura, 2003). When markets are inefficient, investors can use whatever information is available to them that has been ignored by others in the market, to reap uncharacteristically high returns (Madura, 2003). Some studies show that statistical tests used to evaluate the efficiency of markets have little power (Summers, 1986). Using a time-series forecasting method in excel just proves that historical data cannot be used alone to predict future stock prices. Looking at what a stock price did yesterday has nothing to do with what it will do tomorrow which agrees with the market efficiency theory. Various factors both politically and economically, can cause a stock volatility to change drastically (Madura, 2003).

In a study by Szweczyk, Tsetsekos, and Zantout (1997) on dividend omissions, the effects of an expected event like a dividend omission can be seen on the cumulative abnormal returns (also called cumulative excess returns). In this case the expected dividend omission allowed investors to sell their stock in the companies prior to the companies announcement at day 0 of a dividend omission. This means that investors knew the event was going to happen prior to the announcement date, and responded as soon as the information became available in a publication like the Wall Street

Journal. Although the company by date 0 had not publicly announced the dividend omission, inside information led to a cumulative abnormal return. It is expected that the CAER's that will be calculated for the 9/11 terrorist attack will not demonstrate this behavior because the event was completely unexpected.

METHODOLOGY

The first step in an event study is to pick an event which can be either expected or unexpected. For this study, a terrorist attack was chosen in order to observe the effects of a totally unexpected event on the stock market.

Second, after the event has been chosen, label the announcement date as Day 0 or September 11th, 2001. The event period will be 60 trading days before and after the announcement.

Third, a companies stock or multiple stocks must be chosen to research. The sample used for this study came from multexinvestor.com by using the web sites "research by industry" function. The stocks did have to meet certain requirements. One, they had to be U.S. Insurance companies. Two, they had to be life insurance companies. After the companies had been chosen the historical adjusted closing price data was downloaded.

Fourth, an estimation period must be identified which is usually 180 days before and after Day 0. The trading day 181 days before 9/11 is actually December 20th, 2000. The trading day 180 days after 9/11 is June 10th, 2002. The estimation period is used to calculate the alphas and betas of various stocks.

Fifth, the expected returns must be formulated. For this study the market-adjusted method along with the risk-adjusted method were used. Both yielded the same results but only the market-adjusted method will be mentioned in this paper. The expected return is equal to alpha plus beta times the return on the market, where alpha represents the speed at which the market reacts, and the return on the market over the pre-event period in this case is the S&P 500 index. As stated previously alpha and beta are obtained for each companies stock by running a regression using the market return as the independent variable, and the companies stock as the dependent variable. The intercept is equal to the alpha value, and the standardized coefficient is equal to the stocks beta.

Sixth, you need to calculate the average excess returns or (AER's). The AER is equal to the sum of the excess return divided by the number of firms in the sample which in this study will be 15.

Seventh, the significance of the AER's must be tested. You can use a regression analysis using the market return as the dependent variable and the AER's as the independent variable to get a p-value to see if indeed the differences are significant. A two-tailed test will be used when testing the significance of the AER's because the results are unexpected.

QUANTITATIVE TESTS AND RESULTS

Sample Selection

The insurance companies retrieved from multexinvestor.com can be seen on the next page in Figure 4. Note that Manulife has the highest market capitalization, followed by Metlife. Beta is calculated by regressing the company's periodic stock returns on corresponding periodic returns of a market index like the S&P 500 in this study. Beta and alpha will be estimated for the 180-day before and after estimation period.

Figure 4

Ticker	Company Name	Market Cap
JP	Jefferson-Pilot Corporation	6,592.67
LNC	Lincoln National Corporation	7,708.20
ANAT	American National Insurance Company	2,783.83
SLF	Sun Life Financial Inc.	18,278.31
NFS	Nationwide Fncl. Sycs.	5,262.50
MFC	Manulife Financial Corporation	37,814.84
DFG	Delphi Financial Group, Inc.	1,290.63
NWLIA	National Western Life Insurance Company	535.246
FFG	FBL Financial Group	742.59
PLFE	Presidential Life Insurance	469.131
AMH	AmerUS Group Inc.	1,634.16
PTA	Penn Treaty American Corporation	68.793
CIA	Citizens, Inc.	208.416
SMAN	Standard Management	24.111
MET	MetLife Incorporated	28,767.92

Calculating Alpha and Beta

The results from the regression analysis to calculate the alphas and the betas for each firm are presented in the table below. To calculate the alphas and the betas, the percent return from each stock is the dependent variable and the percent return on the market is the independent variable in the regression analysis. To output the standardized coefficients or the betas, the box must be selected under megastat. The value for alpha is simply the intercept that is displayed in the regression.

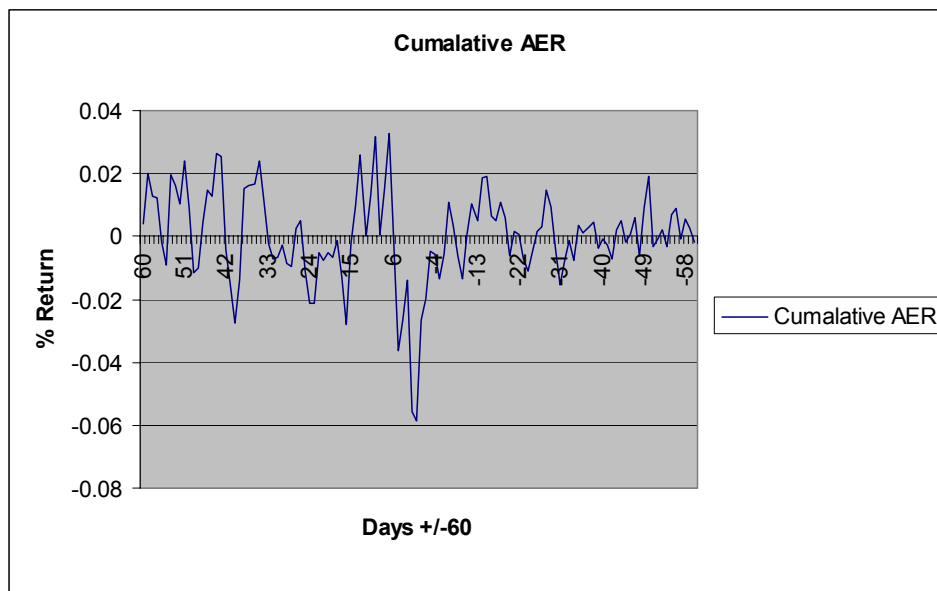
ALPHA AND BETA OF EACH FIRM

	?	?
JP	0.0005	0.568
LNC	0.00045519	0.533
ANAT	0.0016	0.221
SLF	0.00043149	0.322
NFS	0.0007	0.497
MFC	0.0005	0.294
DFG	0.0007	0.284
NWLIA	0.0007	0.263
FFG	0.0016	0.33
PLFE	0.0015	0.287
AMH	0.0008	0.263
PTA	-0.0005	0.166
CIA	0.0017	0.199
SMAN	0.0034	0.049
MET	0.00037679	0.46

Risk-Adjusted Method (market model)

After calculating the expected return which equals alpha plus beta times the return on the market, and subtracting them from the actual returns for each day we get the excess returns. To get the average excess return, we simply take the average of all the insurance companies returns over each day. Graphing the AER's, at day -1 the AER was -0.6824556% , this is actually up from the previous days close at -1.9960466% . Then the trading day after 9/11, notice that the AER's drop to -5.1888675% , demonstrating an efficient response to the new information.

Judging from the cumulative average excess returns it is evident that they actually start decreasing before the actual event occurs. At day -4, the cumulative AER is -0.5481153% , and then at day -1 the cumulative AER is -2.6785022% . The cumulative AER's fall every day from day -4 leading up to the event. Notice that this graph displays similar characteristics to the study on dividend omissions by Szewczyk, Tsetsekos, and Zantout (1997).



Significance Test

Performing a regression analysis it is evident that the AER's are significant because the p-value of $1.39E-07$ is less than $.05$ using a two tailed test. This means from our hypothesis that b_1 cannot equal zero, so we reject the null hypothesis that b_1 equals zero. The event did generate new information to the market and it was significant.

From the descriptive statistics of the AER's, the mean was -0.0026% while the variance is $.0106\%$ and the sample standard deviation is 1.0314% . The minimum value of -5.188868% represents the trading day after 9/11 or day +1.

CONCLUSION

From the regression results it is evident that the 9/11 attack was a significant event because of the p-value of the AER's was less than $.05$. It was significant because it generated new information to the market in the form of costs, that is costs to insurance companies. Life insurance companies especially had to pay out large sums of money because of the 2,917 people that perished

in the attack. Based upon this reasonable explanation for the significant difference in the AER's, the market efficiently responded to the event. The market dropped as a result of the bad information and eventually rebounded afterwards. However, it is important to note the unexpected behavior in the cumulative average excess returns. Why does the graph resemble an expected event like the study on dividend omissions? Is it a coincidence they would randomly plummet leading up to the 9/11 attack? Some investors must have known about the event. Maybe they were some how affiliated with Al Queda? They may have not known the specifics but they knew that there was an imminent threat and thus a possible large loss of life. The evidence points to inside information being released before the actual event occurred, otherwise there would be no decline in the cumulative average excess returns. The evidence is both unexpected and disturbing.

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ESOP FIRM PERFORMANCE PRE- AND POST-MARKET PEAK: EVIDENCE FROM RECENT YEARS

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ABSTRACT

Historically, research on ESOP-based firms indicate that such firms outperform non-ESOP comparison firms. The structural characteristics of ESOP investments provide long-term stability in a firm's investor base. ESOP plans generally impose restrictions on employees' ability to liquidate their positions, thereby fostering an ownership culture. This is one possible explanation for the observed difference in financial performance between ESOP- and non-ESOP firms.

The ownership culture theory suggests that ESOP firms should outperform non-ESOP peers. However, the major studies which support this finding were all performed in the 1990s, a period of dramatically rising markets. This study seeks to determine if the same positive effects for ESOP firms hold in a declining market.

The hypothesized finding that ESOP firms outperform non-ESOP peers in both bull- and bear markets would provide evidence supporting the ownership culture hypothesis.

SOX ON TRIAL: COMPLAINT FOR INJUNCTIVE AND OTHER RELIEF

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ABSTRACT

The first major court test of the Sarbanes-Oxley (SOX) Act of 2002 is in trial in Birmingham, Alabama. The defendant in the case is Healthsouth Corporation's founder and chairman, Richard Scrushy, who has pleaded innocent to all charges. We obtained the Complaint from the SEC website and searched Lexis-Nexis database for articles relating to the case. Motions filed by the defense were obtained from the defendant's website. The focus of our analysis is on SOX Section 906 relating to the certification of financial statements by the CEO and CFO and the criminal penalties for certifying false financials. We discuss the SEC's 58 count complaint, (reduced from 85 counts on defense motion), the defense challenge under the "void-for-vagueness doctrine," (won by the prosecution) and the legal arguments/strategies. We also discuss the implications of the case to the accounting and legal professions. An abiding question in this case is whether the entrepreneurial, risk taking skills necessary to found a company are the same skill set needed to successfully lead the company through public offering and beyond.

INTRODUCTION

The purpose of this paper is to illuminate the accounting, legal and corporate governance issues associated with the first major court test of the Sarbanes-Oxley (SOX) Act of 2002. This is a progress report since the case is in trial at this writing and expected to continue for several months. The defendant in the case is the company's founder and chairman, Richard Scrushy. The company is Healthsouth Corporation. Scrushy has pleaded innocent to all charges. Eighteen Healthsouth executives have been charged in the case; fifteen have pleaded guilty. An abiding question in this case is whether the entrepreneurial, risk taking skills necessary to found a company are the same skill set needed to successfully lead the company through public offering and beyond.

We obtained the Complaint from the SEC website and searched Lexis-Nexis database for articles relating to the case. Motions filed by the defense were obtained from the defendant's website. We discuss the SEC complaint, the defense challenge under the "void-for-vagueness doctrine," and the legal arguments/strategies. We also discuss the implications of the case to the accounting and legal professions.

THE CASE, THE PLAYERS, THE ARGUMENTS

Healthsouth Corporation (HRC) was incorporated in Delaware in 1984 and is headquartered in Birmingham, Alabama. HRC is the nation's largest provider of outpatient surgery, diagnostic and rehabilitative healthcare services. HRC's securities are registered with the SEC pursuant to Section 12 (b) of the Exchange Act. In its highlight year, 2001, HRC reported total revenues of \$4 billion and net income of \$76 million. HRC's stock is listed on the New York Stock Exchange and is actively traded under the symbol HRC. Richard M. Scrushy, age 52, founded HRC and served as its Chairman of the Board from 1994 to 2002; he continues as a board member to the present. He

served as CEO from 1994 until August 27, 2002. On January 6, 2003 he reassumed the position of CEO (Complaint, 2004).

The 58-count criminal indictment contained in Civil Action No. CV-03-J-0615-S - SEC v. Healthsouth Corporation and Richard M. Scrushy covers a wide range of issues, including the charge that Scrushy oversaw a fraud in his “willful” certification of the company’s false financial statements. SOX Section 906 (a) and (b) provide that company officers (CEO) and (CFO) certify that financial statements filed with the SEC fully comply with requirements of the Exchange Act of 1934. Further, Section 906 (c) (1) provides a criminal penalty of \$1,000,000 and 10 years imprisonment for knowingly submitting a certification that does not meet all requirements of the 1934 act. The penalty is increased to a fine of \$5,000,000 and a prison term of 20 years when the officer “willfully certifies” financial statements which misrepresent the financial condition of the company (Complaint, 2004). Most of Scrushy’s alleged misconduct occurred prior to SOX and consequently all but three of the charges against him relate to other criminal statutes. The SOX violations are contained in Counts 48, 49, and 50. Count 48 charges that Scrushy “willfully certified” HRC’s false Form 10-Q for the second quarter of 2002; Count 49 charges that Scrushy “caused” HRC’s CFO and CEO to “willfully” certify Form 10-Q for the third quarter of 2002; and Count 50 charges that in March 2003 Scrushy “attempted to cause” the CFO to “willfully certify” an amended false 10-Q for the third quarter 2002. The term “willfully,” when used in 906 (c) leaves open the possibilities associated with the “Void-for-Vagueness Doctrine.” This doctrine is invoked by defendants when the statute under which charges are brought is so vague and unclear to render a defense to the charges impossible. Specifically, a criminal prosecution would be rendered invalid when the defense can show that the statute: 1. fails to give fair notice of what conduct is forbidden; and 2. encourages arbitrary and discriminatory enforcement (Kolender v. Lawson, 461 U.S. 352, 357 (1983)). Further clarification of this two-part test is found in Village of Hoffman Estates v. Flipside, 455 U.S. 489, 499 (1982). The court declares, “The most important factor affecting the clarity that the Constitution demands of a law is whether it threatens to inhibit the exercise of constitutionally protected rights.” Therefore, in the case of SOX 906, a plaintiff must demonstrate that the law is so lacking in clarity that their constitutional rights are infringed upon. The words and phrases in 906 that are subject to interpretation are “willfully certify” and “fairly presents in all material respects.”

According to the (Salky and Rosman, 2004) Section 906 meets the standards for clarity. The Foundation presents arguments supporting that, “The proscribed conduct (certifying false financial statements) is neither constitutionally protected nor potentially innocent” and “The statute gives fair warning of the forbidden conduct” and “The statute does not invite arbitrary and discriminatory enforcement.” Notwithstanding the legal arguments against a void-for-vagueness motion to dismiss, Scrushy challenged SOX 906 (c) asserting the void-for-vagueness doctrine. His arguments are contained in “Defendant Scrushy’s Motion to Dismiss Counts 48-50 of the Indictment,” filed with the Court on April 5, 2004. Subsequently, the challenge of the wording in SOX Section 906 under the void-for-vagueness doctrine was denied by the District Court. It should be noted that federal prosecutors have already applied SOX successfully in the HRC case, but the much touted penalty sections of the law have not had teeth to this point. Of the fifteen plea agreements, including all five of the former CFOs, only one person has received actual prison time – five months, although not all defendants have been sentenced (Bond, 2005).

Other Lawsuits filed by Scrushy include: “Defendant Scrushy’s Motion to Dismiss or Consolidate Counts of the Indictment as Multiplicitous,” “Opening Brief of Appellant Richard M. Scrushy” (Scrushy’s appeal to the Supreme Court of the State of Delaware in regards to HRC shareholder litigation), and a suit against the Birmingham News filed in December 2004 claiming a series of libelous articles against Mr. Scrushy (Scrushy, 2005).

According to the Complaint, on August 14, 2002, Scrushy knowingly or was reckless in not knowing that he was certifying false financial statements for 2001 in the company’s filing of SEC Form 10-K. In truth, the financial statements filed with this report overstated HRC’s earnings,

identified on HRC's income statement as Income Before Taxes and Minority Interests, by at least 4,700% (SEC Complaint, para. 2). SEC Commission Order No. 4-460 requires sworn certification of company financial statements pursuant to Exchange Act of 1934 Section 21 (a) (1) as amended by SOX, 2002 (Complaint, 2004). In summary, prosecutors claim that Scrusby orchestrated a six-year, \$2.64 billion accounting scheme which included conspiracy, money laundering, obstruction of justice, and perjury, in addition to the violation of SOX Section 906 (Complaint, 2004). Perhaps borrowing from the so-called "dummy" defense asserted successfully by CEO Walter Forbes in the Cendant Corporation case and by Bernard Ebbers in his \$11 billion WorldCom trial, Scrusby's defense attorney claims "The former respiratory therapist with no accounting background simply got duped" by a conspiracy among his five CFOs (Bond, 2005). Not in dispute in the case is whether a fraud occurred. A Price WaterhouseCoopers forensic accounting team investigated HRC's accounting and reporting practices from 1996-2002 and determined that earnings were overstated during that period by \$2.7 billion (Farrell, 2005). The only issue to be decided is whether Scrusby orchestrated the fraud or was misled by his financial team. The fraud was perpetrated by making false entries in the accounting system. Accountants primarily used an estimated contra revenue account, referred to as the "Contractual Adjustment" account and/or a reduction of recorded expenses to increase profits. Correspondingly, false entries were made in the balance sheet accounts. A fictitious fixed asset was set up at each HRC facility. This account was titled "AP Summary." To cover the fraud, false documents were created.

The case is being tried in District Court with the Honorable Karen Bowdre presiding. The prosecution team is led by Alice H. Martin, U. S. Attorney for the Northern District of Alabama. Scrusby's constant influence and overseer in developing the defense strategy is Mr. Donald Watkins, a Birmingham attorney, banker and entrepreneur. Currently, the lead attorney at trial is Jim Parkman. Parkman is assisted primarily by Mr. Art Leach, a former U. S. Attorney and others, including Scrusby's son-in-law, Martin Adams (Mollenkamp, 2005).

Scrusby was subpoenaed in February 2003 to appear before the SEC. He testified with aid of counsel, Bill Clark, a Birmingham criminal attorney. When other HRC executives were questioned they implicated Scrusby as the leader of the fraud. In March, the court moved to freeze Scrusby's assets, estimated to be \$250 million (Mollenkamp, 2005). Upon appeal and further testimony, the freeze was lifted by Judge Inge Johnson in May 2003. Scrusby was removed as board chairman following the government's suit against him in March 2003; he remains on the board. It is estimated that by the end of 2004, Scrusby had spent over \$20 million on his defense (Woolner, 2005).

In late January 2004, eighteen jurors were selected; eleven are African American; ten are male (Walton and Tomberlin, 2005). According to some court watchers the race issue may be more powerful than the evidence. Scrusby has courted African American religious figures, but did not have any African Americans on his executive team at HRC. Nonetheless, in one news report, a black law student from Birmingham is quoted as saying that "blacks are less likely to own stock and tend to be "more forgiving" of those accused of fraud," implying that Scrusby may be motivated to have as many African American jurors as possible decide his fate.

STRATEGY OR HAPPENSTANCE: RELIGION AND RACE

According to a Bloomberg News reporter, "The pews behind Scrusby some days resemble an 'amen corner.'" The reporter notes that "Scrusby family members sit with pastors and congregants from nondenominational, African-American churches, who bring Bibles and prayers....." to the courtroom. According to news reports, Scrusby and his wife Leslie joined a predominately African American church, Guiding Light, in early 2003 (Woolner, 2005).

When the federal probe began, Scrusby turned to Richard Arrington, Birmingham's first black mayor for advice. While mayor, Arrington had been investigated for corruption but never

charged. Many in the community believed then and continue to believe that Arrington was targeted because of his race. The mayor recommended his attorney in that case, Donald Watkins, who is also African American, to Scrushy (Mollenkamp, 2005).

Scrushy's personal website states, "Born in 1952 in Selma, Alabama – a town known as the birthplace of the civil-rights movement – Richard Scrushy is now fighting for his own rights and freedoms in the face of false allegations." His website may be an attempt to compare his plight – unfair and unjust persecution and prosecution - to the freedom fighters of that era. To buttress his argument that he is innocent of all charges and perhaps to influence the jury pool, Scrushy and his wife, Leslie, began a television ministry in early 2003. In the daily 30 minute TV show offered by Guiding Light Ministries, a predominately African American church in Birmingham, the two "discuss current events and God with guests from local ministries." Moreover, Scrushy's foundation has given millions to black causes, religious groups, colleges, and individuals. An African American admirer is quoted as saying, "In the community (assumed to be the African American community), he (Scrushy) is known as a help to people in need of assistance." According to one of Scrushy's principal accusers, former CFO William Owens, when addressing Scrushy's religious practices, he is quoted as saying, "Richard Scrushy may be the best salesman I ever met" (Reeves, 2005).

If convicted on all counts, Scrushy faces fines of \$30 million, forfeiture of his assets assumed to be around \$250 million, and a prison term of 450 years.

IMPLICATIONS OF THIS CASE FOR THE ACCOUNTING AND LEGAL PROFESSIONS

The accounting and legal professions were at the center of the Enron accounting scandal and many of the others in recent years. As principal advisors to company CEOs, lawyers and accountants must make difficult and often quick decisions concerning complex issues on behalf of the company. In other situations, the accountants and attorneys may be involved in the fraud as willing participants. The Scrushy case is a test of the SOX penalty requirements. To this point, executives have escaped the long jail terms. Policing and convicting white collar criminals has been difficult over time. Few executives have actually had to serve long sentences (Coffee, 2004).

The public is watching to see if the remediation measures taken in SOX to deter corporate crime are implement able in our judiciary. Moreover, are accountants too crafty, the accounting rules too vague and/or too complex, and the reporting process too unmonitored to allow convictions and punishments under SOX? Are corporate attorneys too skillful in covering their tracks, too artful in explaining the choices to the CEOs, and too insulated with legal protections to be convicted and punished under SOX? And, is the judicial process too cumbersome, the prosecution and defense attorneys too skillful in using the law to advantage, and the laws (SOX and other statutes) under which the complaints are filed too complex for justice to be served? The evidence so far suggests that the legal hurdles of SOX Section 906 may be too high. In the Cendant case, the "dummy" defense worked with the jury even though the wording in SOX would suggest a "dummy" defense to be a mute argument. Can it work again?

In the final analysis, it may be the accounting and legal professions that are really on trial in this case.

CONCLUSION

In companies where the founder continues as CEO the looming question is always whether the skills and risk perceptions needed to be a successful entrepreneur are the same ones needed to oversee a company as it grows, develops alliances, and assumes responsibility for a large network of shareholders, bondholders, and bankers. A principal characteristic of an entrepreneur is the

willingness to take risks – and often huge risks. Whereas, operating a company requires significant risk averseness. Whether Scrusby was victimized by his own ego to control events by taking risks with the company's financial reports will be decided by the Birmingham jury of 12 currently hearing the prosecution and defense vastly different versions of the facts.

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THE USE OF SIMPLE CHARTING TO ANALYZE GOLD AND SILVER PRICES

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ABSTRACT

Security analysts have used charting techniques over the years to predict price movements. Most of these approaches are based on the premise of gradual price movements. The rapid price movements of various stock sectors, especially gold and silver prices, characterize today's uncertain global political/national security environment. This paper investigates the viability of the use of a simple "no interpretation, rule-based" charting technique, Kagi charting, to analyze gold and silver prices. The charts suggest that the technique is usable with today's rapid price movements. Investors using the technique earned higher returns over the five-year 1999-2004 period than with buy/hold strategies for both metals.

INTRODUCTION

Charting or technical analysis has been used for many years by technicians to analyze securities. The approach is based upon the widely accepted premise that security prices are determined by the supply and demand for those securities. Typically, technical analysts record historical data on charts, study these charts in an effort to find meaningful patterns, and then use these patterns to predict future prices. In other words, technical analysts believe that past patterns of market activity will occur in the future and these patterns can be used for predictive purposes.

There are many different techniques used by professional analysts to identify specific patterns. Regardless of the method, the technician must identify trends and then recognize when one trend comes to an end and prices start in the opposite direction; i.e., distinguish between simple reversals within a trend and real changes in the trend itself. To be proficient, analysts must exhibit considerable expertise with their subjective interpretations of the different charts and patterns; therefore, many small investors either pay for technical advice or use easily to obtain fundamental analysis for decisions.

Today, software and web-based tools for technical analysis is readily available and very easy for the small investor to use. Unfortunately, even though hand plotting of data is no longer needed to construct charts, one must still identify the different figures and patterns. A very simple technique that eliminates much of the guesswork, kagi charting, was revealed by Nison in 1994. Although kagi charts were reportedly used in the 1800s by the Japanese, the technique is relatively new to technical analysts in the United States. As with all technical approaches, kagi charts assume that price changes occur gradually so that trend changes can be identified. Such is not the case of markets today with our uncertain global political/national security environment. Rapid price movements are characteristic of many stock sectors as well as gold and silver prices. The objective of this paper is to investigate the viability of the use of kagi charts with today's rapid-price movements of the gold and silver markets.

KAGI CHARTING

Kagi charts display a series of connecting vertical lines where the thickness and direction of the lines are dependent on the underlying security's price action. If closing prices continue to move in the direction of the prior vertical kagi line, that line is extended. Once the closing price

reverses by a pre-determined amount, a new kagi line is drawn in the next column in the opposite direction. When closing prices penetrate the prior column's high or low, the thickness of the Kagi line changes. A summary of Nison's (1994) step-by-step instructions for building a kagi chart is follows:

Step 1--Choose a reversal amount (\$ or %). The reversal amount is the minimum price increment by which the market must reverse its prior move to draw a new kagi line in the next column.

Step 2--Draw the first line. Compare the second session's closing price to the base price and use the following rules:

1. If the second session's closing price is higher than the starting price by the reversal amount or more, draw a thick vertical (yang) line from the base price up to the second session's closing price.
2. If the second session's closing price is lower than the starting price by the reversal amount or more, draw a thin vertical (yin) line from the base price down to the second session's price.
3. If the difference in price between the first and second session is less than the reversal amount, no line is drawn.

Step 3--Draw the remaining lines. The rules for the second and all following kagi lines are as follows:

1. If the market continues in the same direction as the prior kagi line, that line is extended in the same direction, no matter how small the move.
2. If the market changes direction by the reversal amount, draw a short horizontal line to the next column, and then draw a vertical line to the new price.
3. If the market moves in the opposite direction of the preceding kagi line by less than the reversal amount, no line is drawn.
4. If a thin yin line exceeds the prior high, it becomes a thick yang line at the point where the previous high is exceeded.
5. If a thick line breaks a previous low, the line becomes a thin line at the price where the low is penetrated.

There are many kagi trading techniques according to Nison (1994): record sessions, shoulder and waist patterns, the length of yin and yang lines, three Buddha patterns, multilevel breaks, double windows, and combining kagi charts and candlestick charts. Identifying and using most of these kagi techniques takes the expertise of a seasoned technical analyst, however. Non-professionals can use kagi charting by following only the basic kagi buy and sell signals used in this study: BUY when the kagi line changes from thin to thick and SELL when the kagi line converts from thick to thin. A kagi line becomes thick when the prior high is exceeded, and changes to thin when price breaks through the prior low.

METHODOLOGY

To determine if the method as previously described can be easily used with both gold and silver, which are characterized at present as rapid price movers, daily price data were collected for 1999-2004 for both metals for comparison purposes in the same manner in which gold was used earlier to illustrate the method. Four reversal increments from 1-percent to 4-percent were used to observe both metals after constructing the charts. Higher reversal increments were tested, but not reported since the charts suggested only a single buy/sell. Gold's starting base price was \$259.50 and silver's was \$5.14.

Percentages instead of dollar amounts were used since percentage reversal amounts remove the perceived drawback often encountered by technical analysts of arithmetic scaling. It was expected that the percentage reversals would provide far less signals to sell and buy due to the wider

filter, especially as prices increase. In addition, the price difference between gold and silver would make comparisons difficult.

ANALYSIS

The charts were analyzed over the defined 5-year period for the different reversal percentage increments. All charts are available from the author, but are not included due to space and publication guideline limitations. Table 1 summarizes the number of buy/sell signals and percentage return exhibited by the charts for all figures.

Reversal %	Gold Prices		Silver Prices	
	Buy/Sells	Return %	Buy/Sells	Return %
1	23	111.5	31	98.8
2	14	84.2	14	52.9
3	6	65.6	10	65.4
4	3	61.4	9	51.4
Buy/Hold	n/a	58.1	n/a	30.9

The price charts suggest that investors enter/exit the gold market from 3 to 23 times and the silver market from 9 to 31 times over the time period for the different reversal amounts. The buy/sells for both gold and silver were far fewer than was expected during the time period. As the reversal percents were increased, the suggested sells and buys decreased to a single sell and buy for each as soon as the reversal amount reached 5-percent for gold and 7-percent for silver.

Percentage returns for all reversal percentages were better than a sole buy/hold over the 5-year upward-price movements for both metals. A single buy/hold strategy resulted in a 58.1 percent-unrealized return for gold and a 30.9 percent-unrealized return for silver. Using the simple Kagi technique described, returns increased significantly to over 111 percent for gold and almost a 100 percent return for silver.

CONCLUSION

The study was very interesting. Kagi charting is very simple and appears to be a usable technique for the non-professional technical analyst. The results of the study were unexpected in that the sell and buy signals in all cases were fewer than expected. As one listens to the huge daily price movements for most stocks and metals, it was expected that there would be an inordinate number of signals to sell and buy when a narrow reversal amount was used. This was not the case. The daily price closing data used evidently allowed sufficient time for the often large daily price movements to smooth. In addition, the general movement of both metals, especially gold, has been steadily upward and the use of the kagi charts encourages investors to use the technique in lieu of a buy/hold strategy.

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EFFECTS OF MARKET NOISE IN THE ADR MARKET

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1. INTRODUCTION

Fischer Black (1986) suggests that noise is as influential as information in financial markets. Investors who trade on noise are willing to trade even though it is better for them not to trade. They do so because they think the noise on which they base their trading is information.

From existing literature, we can identify three possible effects of noise on securities trading. First, market noise leads to the existence of noise trader risk. De Long et al. (1990) develop a noise trader risk model which argues that when investment decisions are made based on market noise, the decisions are irrational and unpredictable because they are led by investor sentiment in general. Hence, noise traders become a source of risk in the financial markets. Second, the existence of noise in capital markets provides an opportunity for informed institutional investors to exploit their information advantage. Barclay and Warner (1993) show that informed institutional investors are more likely to engage in “stealth trading” strategies in which the institutions spread their trades gradually over time. Third, the irrational behavior of noise traders in a noisy market may cause asset prices to move away from their fundamental values and destabilize the market. On the other hand, rational institutional investors would take positions opposite to those of the noise traders and help stabilize the market despite De Long et al. (1990) predict that institutional investors would fail to totally encounter the irrational activities of noise traders.

We examine the three possible effects of noise in the ADR market. Our results show that ADR return is affected by investor sentiment in the ADR market. ADR return increases (decreases) when investors are irrationally optimistic (pessimistic). We also find that in the low-noise period, ADRs with high institutional ownership exhibit autocorrelation similar to ADRs with low institutional ownership. However, in the high-noise period, ADRs with high institutional ownership exhibit significant higher autocorrelation than ADRs with low institutional ownership. The result implies institutional investors may have engaged in stealth trading to exploit a noisy market. Through a Granger causality regression, we find returns on ADR portfolios with high institutional ownership lead the returns of those with low institutional ownership in the low-noise period, confirming that institutional trades reflect market information that is ultimately incorporated into other securities. Finally, we find that institutional investors help reduce volatility of European ADR returns. However, for ADRs of Asian and South American firms, the magnitude of the stabilizing arbitrage positions taken by institutional investors is insignificant.

2. DATA AND VARIABLES DEFINITIONS

2.1 Data

The sample analyzed in this study contains ADRs from 1995 to 2000. The sample period starts from 1995 because complete information about monthly discounts of closed-end country funds is available from the Standard and Poor's Security Owners' Stock Guide only after 1995. Daily returns of ADRs are obtained from the Center for Research in Security Prices (CRSP) database and converted into monthly returns. The numbers of shares held by institutional investors and shares outstanding are obtained from the Standard and Poor's Security Owners' Stock Guide. The market

equity capitalization is determined by multiplying price with number of outstanding shares of the ADR.

The ADRs are grouped into three portfolios based on their continent of origin: Asia, Europe, and South America. Each continent's ADR portfolio is further divided into two groups, those with high (above the median) institutional ownership and those with low (below the median) institutional ownership.

2.2 Variables Definitions

Following Lee, Shleifer, and Thaler (1991), we use the change in closed-end fund discount (discount) to measure the amount of noise trader risk. For our purpose, we use closed-end country funds. The discount of each closed-end country fund is the difference between the fund's net asset value and its price divided by the net asset value. By grouping all the closed-end country funds in the US into Asian, European, and South American funds, the average change in discount (discount) of the funds in each group serves as a proxy for investor sentiment regarding the investment outlook of the continent. According to Lee, Shleifer, and Thaler (1991), a widening of the discounts implies investors are more pessimistic whereas a narrowing of the discounts implies investors are more optimistic.

In this study, we use the level of closed-end country fund discount as a proxy for market noise. Our reason is that in a noisy market, noise trader risk is high because investor sentiment will change more abruptly in such an environment where there is an abundant supply of stimulus. In a less noisy market, noise trader risk is low because there are less stimulus to cause investor sentiment to shift suddenly. Given that the change in closed-end country fund discount (discount) would be higher (lower) when the level of closed-end fund discount is high (low), it is therefore reasonable to suggest that the level of closed-end country fund discount could serve as a proxy for market noise of the given continent.

3. EFFECTS OF INVESTOR SENTIMENT AND INSTITUTIONAL INVESTORS ON ADR RETURNS

Investing in ADR provides a convenient way for diversifying portfolio risk internationally. As a result, the ADR market has experienced an explosive growth in the last 30 years. In 1970, there were only 18 ADRs traded in the U.S. In the year 2000, the number of listed ADRs had increased to 475. Although the ADR market is dominated by institutional investors, the difficulty of obtaining accurate and complete information from foreign countries suggests that influence of noise can be considerable in this market. First of all, we study the effects of investor sentiment and institutional ownership in the ADRs market. The following regression is performed:

$$R_t = a_0 + a_1 R_{t-1} + a_2 \nabla \text{Discount}_{t-1} + a_3 \nabla \text{Institutional Ownership}_{t-1} + \epsilon_t$$

where R_t is the compounded monthly ADR portfolio return at time t for each continent and R_{t-1} is the ADR portfolio return at time $t-1$. $\nabla \text{Discount}$ is the change in the average discount of close-end country fund from period t to $t-1$ for each continent. If investor sentiment is priced in the ADR market, the coefficient of $\nabla \text{Discount}$ should be negative and significant. Lee, Shleifer, and Thaler (1991) report a significant negative relation between the returns of NYSE stocks and the average $\nabla \text{Discount}$ of a basket of domestic closed-end funds.

$\nabla \text{Institutional Ownership}$ is the change in the ratio of institutional ownership from month t to month $t-1$ for each continent's ADR portfolio. A priori, we expect ADR return to be positively correlated with $\nabla \text{Institutional ownership}$. That is, ADR return would be higher or lower when

institutions increase or decrease their holdings. The R_{t-1} is for controlling the effect for serial correlation in ADR return.

The regression results are consistent with that of Lee, Shleifer, and Thaler (1991). For Asian and South American ADRs, the coefficients of Institutional Ownership are positive and significant, that is, there is a positive relation between changes in institutional ownership and ADR portfolio returns. The coefficient of Institutional Ownership is also positive for Europe, though insignificant. It is possible that the information about European countries is more accessible than that of Asian and South American countries, the role of institutional ownership of European ADRs is therefore less influential. This conjecture is consistent with our earlier observation that the noise levels of the high-noise and low-noise periods are similar for Europe.

In the noise trader risk model of DeLong et al. (1990), they suggest that rational institutional investors may exploit irrational behavior of noise traders by taking positions opposite to those of the noise traders. However, the model also predicts that institutional investors would not be completely successful because the unpredictable noise trading will render the arbitrage activities of institutional investors futile. The significantly negative coefficients of ∇ Discount in Table I support the postulations of the noise trader risk model of DeLong et al. (1990). That is, investor sentiment has a significant effect even in the presence of rational institutional investors. In other words, institutional investors are unable to neutralize the effect of trading led by irrational investor sentiment.

Table I shows that noise trader risk is important even in the presence of institutional investors. It would be of interest to know then if the impacts of investor sentiment and institutional ownership on the ADR return are different in the high-noise and low-noise periods. To study this, we perform the previous regression on high-noise years and low-noise years separately.

Regression results show that investor sentiment is important in determining ADR return in both the high-noise and low-noise periods. However, change in institutional ownership has a significant impact on the returns of Asian and South American ADRs only during the high-noise period. Institutional ownership is not significant at all in the low-noise period. Conceivably, when the market is noisy (such as Asia and South American), the information possessed by institutional investors becomes more important. During low-noise period, the information advantage of institutional investors may be less significant. This is probably why institutional ownership does not play a significant role in the pricing of European ADRs in both the high-noise and low-noise periods because information about European markets is more accurate and readily available to investors.

4. MARKET NOISE AND ADR RETURN AUTOCORRELATION

Afore-mentioned empirical results confirm that noise trader risk is present in the ADR market. If the ADR market is noisy, then the private information of institutional investors would be valuable and it is logical that institutional investors will exploit their informational advantage. One possible way to do so is the use of "stealth trading" strategies in which institutional investors spread their trades gradually over time. According to Barclay and Warner (1993), stealth trading would induce ADR return autocorrelation. While institutional investors may stealth trade frequently in the ADR market, we expect the likelihood to be higher in the high-noise period than the low-noise period. Thus, we expect that in the high-noise period, ADRs with high institutional ownership would exhibit significant higher autocorrelation than ADRs with low institutional ownership. In the low-noise period, we expect ADRs with high institutional ownership to exhibit similar or higher autocorrelation than ADRs with low institutional ownership.

The return autocorrelations of all the individual ADRs in the high-noise and low-noise periods show that in the low-noise period, for both Asia and South America, ADRs with high institutional ownership exhibit autocorrelations similar to ADRs with low institutional ownership.

5. CONCLUSIONS

This study examines the effects of market noise in the American Depository Receipts (ADRs) market. From existing literature, we can identify three possible effects of noise on securities trading. First, market noise leads to the existence of noise trader risk. Second, the existence of noise in capital markets provides an opportunity for informed institutional investors to exploit their information advantage through stealth trading. Third, the irrational behavior of noise traders in a noisy market may cause the market to destabilize, though rational institutional investors would take positions opposite to those of the noise traders and help stabilize the market. We examine the three possible effects of noise in the ADR market. The ADRs market presents an unique environment in which we can examine the above-mentioned effects of noise directly and simultaneously in a noisy environment.

Our results show that the ADR return is affected by investor sentiment (noise trader risk) in the ADR market. ADR return increases (decreases) when investors are irrationally optimistic (pessimistic). We also find that in the low-noise period, ADRs with high institutional ownership exhibit autocorrelation similar to ADRs with low institutional ownership. However, in the high-noise period, ADRs with high institutional ownership exhibit significant higher autocorrelation than ADRs with low institutional ownership. The result implies institutional investors may have engaged in stealth trading.

FOREIGN TERRORIST ORGANIZATIONS AND THEIR USE OF THE GLOBAL FINANCIAL STRUCTURE

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ABSTRACT

Through a fatwa, or religious ruling, Usama Bin Laden and Al Qaeda declared war on the United States and its citizens: "We... [will] kill the Americans and plunder their money wherever and whenever [we] find it." The date was February 23, 1998. A little over three and a half years later, nineteen Al Qaeda terrorists demonstrated their readiness, resourcefulness and determination by launching the most catastrophic attack in U.S. history – the September 11th Terror Attacks on New York, Washington, D.C. and Pennsylvania.

The United States began its global campaign against terrorism by attacking the financial resources of its enemies. Thirteen days after the Terror Attacks, the United States government struck back by identifying and freezing financial assets belonging to both al Qaeda and the Taliban – an effort that would eventually confiscate approximately \$61 million by the end of 2001. This program was expanded in October of the same year to include funding sources for all Foreign Terror Organizations (FTOs) with global reach.

The September 11th Attacks showed that globalization benefits not only legitimate business ventures but international terror activities as well. Indeed, Foreign Terrorist Organizations have become exceedingly expert at exploiting legitimate business ventures and pillaging both corporate and private charitable donations. As the United States begins to identify, freeze and/or confiscate bank accounts and other financial assets used to launder and funnel currency to terrorist operatives, FTOs have begun to utilize the international underground banking system (the hawala) and to engage in organized criminal enterprises – up to and including participation in international drug trafficking and piracy. In addition, various international aid organizations have fallen prey to, and even willingly participated in, global terrorism's illegal enterprises.

Proceeds from these and other criminal activities are employed in a variety of ways, up to and including, procuring small arms, military ordnance and explosives, providing safe houses and transportation for terrorist operatives, acquiring false identification papers or entrance visas, paying off corrupt government officials and purchasing communications or computer equipment.

While the financial war on terror has impeded terrorism's global cash flow, the sophisticated nature of the terrorist's financial network has enabled them to seek out and obtain funding from other sources. Consequently, America and her Allies must adapt their tactics to ensure that global terrorism's financial resources are completely and totally cut off.

This paper presents an assessment of the ability of terrorist organizations to finance their operations, and the ability of authorities to disrupt the global FTO fundraising function.

AN EMPIRICAL TEST OF AN IPO PERFORMANCE PREDICTION MODEL

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ABSTRACT

An earlier study of 563 firms which issued IPOs during 1997 identified and estimated a three-stage algorithm in which basic accounting variables and indices available at the time of the IPO were found to predict mean annual wealth appreciation from buy-and-hold stock ownership for the ensuing three years. Firm size predicted membership in the middle sixth and seventh deciles; sales, receivables turnover, and retained earnings per assets predicted the top quintile; current debt and selling costs predicted the lowest quintile. Since February 2001 market trends have been generally negative. The current paper confirms the earlier model despite negative currents.

BANKERS' PERCEPTIONS OF STOCK DIVIDENDS

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ABSTRACT

The information content of the accounting treatment for a stock dividend remains an unresolved issue in the accounting literature. Several papers have looked at different aspects of stock dividends. Rankine and Stice (1997) investigated accounting rules and the signaling properties of stock dividends. They reported that firms declaring small (20 percent) stock dividends generate significantly higher announcement returns than firms declaring large (25 percent) stock dividends. On the other hand, Crawford, Franz and Lobo (2001) found no evidence of a market reaction to stock dividends upon replicating and extending Rankine and Stice (1997) using a longer time period.

Most research to date has focused on the reaction of stockholders to stock dividends. However, there is no research focusing on the perceptions of another major investment stakeholder group, creditors. The objective of this study is to examine bankers' perceptions of stock dividends. The signaling interpretation of stock dividends is known as the retained earnings hypothesis, and has been the focus of most existing research on stock dividends. This hypothesis suggests that in declaring a stock distribution that reduces retained earnings, managers are signaling their confidence in generating future earnings.

Data were collected from executive level commercial loan officers using a scenario consistent with that reported in the SEC's stop order proceeding involving Monmouth Capital Corporation (MCC). The MCC case was used because it allows us to test the retained earnings hypothesis and because we are interested in whether bankers perceive the information content of stock dividends in the same manner as the SEC. This second issue is important because its policy implications. If one of the major groups of financial statement users does not view stock dividends in the same manner as the SEC, then perhaps the SEC should review its policy regarding stock dividends. The retained earnings hypothesis was used because we are interested in whether bankers perceive stock dividends in the same manner as stockholders.

Our findings are mixed with respect to bankers' perceptions. First, respondents could not agree on whether or not the stock dividends resulted in income to shareholders, or how the dividend should be measured. The lack of concern regarding how a stock dividend should be measured is based on the belief that the method of accounting for stock dividends does not matter if all relevant information is disclosed in the footnotes. Second, respondents are of the opinion that, irrespective of the size, the stock dividend does not change stockholder's interest in net assets nor does it have an impact on company value. Third, for the most part, bankers perceive that there is a difference in the signal sent by management when a small stock dividend is declared versus a large one. This result is consistent with results reported in Rankine and Stice (1997). Fourth, bankers' perceptions are not influenced by years of experience. Fifth, the retained earnings hypothesis is rejected because the stock dividend pattern does not have an impact on the bankers' perceptions of future earnings.

The FASB can benefit from the results of our study. Perhaps, in terms of determining its position on how to account for stock dividends, the FASB will consider the fact that the bankers are

of the opinion that so long as all relevant information is disclosed in the footnotes to the financial statements it does not matter how stock dividends are reported.

IS THE IRISH CORPORATE GOVERNANCE REGIEME TOO DEMANDING?

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ABSTRACT

Both the US (with Sarbanes-Oxley) and the UK (with the revised 'Combined Code') have recently experienced important changes in their corporate governance regulatory environments. In the US, these changes have largely emerged as a response to the well documented corporate scandals of the last number of years. While these developments are broadly welcomed in the corporate community, the new rules have important monetary implications in terms of the vastly increased costs (both in terms of time and money) of compliance. However, in general, most US commentators are agreed that these changes are a necessary (if not sufficient) condition for restoring public faith in corporate governance practices. In Ireland, the government have, over the past number of years, introduced a number of new corporate governance rules and regulations which are generally accepted to be far more stringent and demanding than those required by Sarbanes-Oxley. These new rules have been strongly criticised by the country's business community on the grounds that they will make Ireland less attractive as an investment destination for both transnational corporations and major financial institutions. In this paper, we compare and contrast Irish corporate governance regulatory regimes with those operating in both the US and the UK. In addition, we address the issue of whether or not the somewhat draconian measures which have been introduced in Ireland are actually necessary or even justifiable.

THE Q TEST: A USEFUL TOOL FOR DETERMINATION OF THE QUALITY OF EARNINGS

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ABSTRACT

This paper is grounded on the premise that corporate earnings drive corporate value and consequently stock prices. For example, if a corporation generates better than expected earnings, then corporate value increases and is followed by related stock price increases. Literature is abundant that suggests that better stock investments historically have been those of companies that show better than average earnings. This exerts an unrealistic demand on top company officials to maintain better than expected earnings figures. Such expectations led to the 'earnings management' phenomenon that this country began experiencing in 2001 and then reached epidemic proportions during 2002.

This led to the call for the accounting and finance community to do something to detect the earnings management process early so that investors did not continue to lose their shirts when investing in capital markets.

The authors propose a model identified as the Q Test that attempts to provide a mathematical approach to quality earnings determination. The model is designed along the same lines as Altman's Z Score, which is a widely acclaimed model used to assess companies in various stages of financial distress. The model is tested using financial statements of publicly held companies in which the Q Test is compared to stock price movements of the companies selected.

INTRODUCTION

In marketing the Q Score is a way to measure the familiarity and appeal of a brand, company, or television show. There is evidence that the Q Score is more valuable to marketers than other popularity measurements such as the Nielsen Ratings because Q Scores indicate not only how many people are aware of or watch a product, but also how those people feel about the product. Music uses the Q factor to measure the "quality" of a resonant system. Resonant systems respond to frequencies close to the natural frequency much more strongly than they respond to other frequencies. The authors assert that there is a need for such a measure in accounting that one can use to accurately assess the quality of earnings reported by companies on earnings statements. A mathematical model we identify as the Q Test is proposed in this paper.

EARNINGS MANAGEMENT

Earnings management usually consists of one or a combination of the following: 1) overstatement of revenue, (2) understatement of expenses, and (3) misrepresentation of accruals. Such earnings management practices typically cause long-term disastrous results. Often affected companies' stock prices deteriorate to practically nothing in short periods of time (for example, Enron, WorldCom, and Lucent). The earnings management practice led to a call for the accounting

and finance community to do something to detect the earnings management process early so investors would not lose life savings when investing in capital markets. Many accounting and finance journals have included articles that identified ways of distinguishing quality earnings from those that were managed (Brown, 1999, Branner; 2001, Morgenson; 1999; and Krantz, 2002).

THE DETERMINANTS OF QUALITY EARNINGS

“High quality” EPS (Wayman, 2003) means that the number is a relatively true representation of what the company actually earned (i.e. cash generated). Amernic and Robb (2003) observed that quality earnings converge with reported profits of publicly held companies. It has been suggested (Kamp, 2002) that three elements encompass aspects of quality earnings; clear indication of ongoing costs and revenues, clear indication of performance of the company’s core business, and a direct correlation of cash flow with earnings.

McClure (2004) purports the three characteristics of ‘quality earnings’ as those earnings that are repeatable, controllable, and are efficient cash generators. There are two quality ways to boost earnings: increase sales and cut costs because these are repeatable. Secondly, earnings growth that is the result of economic or societal factors is not really quality growth. Whopping earnings growth in the oil industry could be more from the result of soaring commodity oil and natural gas prices, low inventories, OPEC quotas, and major supply disruptions that are not controllable factors. Finally, quality earnings should generate cash efficiently.

Literature indicates that one of the most important indicators of quality earnings is to compare operating cash flow per share to reported earnings per share. These figures can be found on the cash flow statement and the income statement, respectively. Most literature surveyed by the writers included cash flow from operating activities as an important determinant of quality of earnings reported on the income statement. Additionally, there are recurring themes of continuity of operations and good performance in the company’s core business (operating income) as strong indicators of the quality of reported earnings.

PURPOSE OF THIS STUDY

In 1968, Edward Altman developed a statistical model that had a 95% success rate in predicting bankruptcies (Eidleman, 1995). Altman used eight weighted variables from the balance sheet and the income statement to arrive at a figure he identified as the Z score. Firms with scores less than 1.81 were considered bankrupt; 1.81-2.99 were in the cautious zone; and greater than 3.00 were solid financially. Altman’s model was introduced at a time when the determination of whether an entity was a going concern or not was vitally important for auditors. His model merged active measurements from the income statement with passive measurements from the balance sheet. The writers believe that there is a need in investment circles for a similar test for the quality of earnings reported on income statements and that the test should incorporate cash flow statement data.

The purpose of this research is to propose a model that will be a reliable determinant of the quality of earnings reported by public companies. It is important to remember that quality of earnings is only one factor that affects stock price movements. In some cases quality earnings might not drive increases in stock prices of the company. However, the authors believe that if a company generates quality earnings, its stock prices will not reflect volatility to the extreme that non-quality earnings do.

MODEL DEVELOPMENT

The model proposed consists of variables from the three major financial statements required by generally accepted accounting principles (cash flow statement included). It is stated as follows with variable definitions given in Exhibit A.

$$Q \text{ Test} = 10(\text{CFO}/\text{S}) + (\text{IS}/\text{IAR}) + (\text{CFO}/\text{EBIT}) + (\text{COI}/\text{NI}) + 10(\text{CFO}/\text{TL})$$

Exhibit A Definition of Variables Used			
	Symbol	Description	Financial Statement
	CFO	Cash flow from operating activities	Cash Flow Statement
	S	Sales	Income Statement
	IS	Increase in sales from previous year	Income Statement
	IAR	Increase in accounts receivable	Balance Sheet
	EBIT	Earnings before interest and taxes	Income Statement
	COI	Income from continuing operations	Income Statement
	NI	Net Income	Income Statement
	TL	Total liabilities	Balance Sheet

Some explanations are in order for the above variables. Each variable is calculated in a manner to place equal weight (1/5) on it in the total mix. Cash flow from operating activities (CFO) divided by sales is a commonly used ratio that measures efficiency of cash collections from sales. Ten percent is considered a good return of cash on sales. To equalize the weight of these observations we multiply the result by ten. The same is true for CFO divided by total liabilities. If a company can pay all of its liabilities in 10 years from the current stream of CFO, it is considered healthy. Accordingly, to give equal weight to the measurement one should multiply the calculation by ten. The other three variable measurements are equally weighted by making respective calculations, as one (1) is the target for quality earnings determination for these three ratios.

Annual percentage increases in sales divided by percentage increases in accounts receivable is used to identify the quality of reported revenue. For example, a larger increase in accounts receivable than sales indicates poor quality earnings. In the case of a decline in sales, one must invert the ratio. Thus, if sales decrease and accounts receivable decrease by a lesser amount, the ratio will be less than one because of the inverting process. Cash flow from operating activities divided by earnings before interest and taxes compares convergence of cash provided by operations to reported operating earnings before interest and taxes.

FINDINGS AND DISCUSSION

Financial statements of 12 publicly held companies for their three most recent years of operations were extracted from Microsoft's moneycentral.msn.com web page. Figures from the financial statements were then inserted in the model and Q Tests were calculated for each year. Stock price movement of each of the companies included in the study was observed three months after the close of each company's fiscal year, thereby allowing adequate time between close of the year and earnings announcements. Results are presented in Table 1.

Company	FYE	QT Y-2	QT Y-1	QT Y-0	QT Avg	Price Y-2	Price Y-1	Price Y-0
Microsoft	6	17.02	25.9	16	19.64	21.87	27.8	27.65
EBAY	9	17.7	15.65	16.85	16.73	16.96	32.31	58.17
Nokia	12	17.25	14.13	10.89	14.09	20.74	14.01	20.28
Acxiom	3	11.03	18.32	10.75	13.37	17.49	15.25	24.83
Cisco	7	16.6	10.62	13.6	13.1	11.18	20.93	19.21
Tyco, International	9	22.69	6.69	5.63	11.67	17.08	21.5	35.74
Home Depot	1	12.18	7.88	13.25	11.1	48.61	24.36	37.36
Accredo	6	3.06	20.47	4.81	9.45	31.79	27.99	23.57
Wal-Mart	1	5.68	7.13	13.86	8.89	55.86	56.32	57
Ericsson	12	-0.62	1.43	7.82	2.88	41.8	6.36	27.76
Halliburton	12	4.34	2.12	0.3	2.25	17.07	20.73	30.39
Lucent	9	2.68	1.2	2	1.96	1.26	2.84	3.76

FYE=Month of end of fiscal year; Y-2=First year of series; Y-1=Second year of series; Y-0=Most current year;
Price=Stock price three months after the close of each year
Source: moneycentral.msn.com

Average Q Tests of the companies observed ranged from a low of 1.96 (Lucent) to a high of 19.64 (Microsoft). As can be seen from Exhibit B, the seven companies with the highest average T Tests all showed stock price gains, either over the three year period or from year two to year three. Halliburton and Tyco reflected deteriorating T Tests over the three year period, which indicates poor quality earnings for these two companies. However, both companies posted impressive stock price gains during this time. Halliburton's huge stock price increase in the third quarter 2004 is perhaps more attributable to the war in Iraq than its quality of its earnings. Also, Tyco has rebounded from prior corporate scandal to regain much of its previous loss in value.

Home Depot, Wal-Mart, and Microsoft had T Test scores that moved exactly in the same direction as their stock prices in each year. Each company showed high quality earnings for the third year. Accredo's Q Test increased from 3.06 to 20.47 and then dropped to 4.81. Its stock price declined over 50% during those two years. Lucent, with its very poor quality of earnings experienced nominal gains in its stock price over the three years.

CONCLUSION

The T Test that we propose in this paper should help analysts to discriminate between quality earnings and traditional bottom line earnings. Since earnings are primary stock price drivers and have been the object of various management schemes in recent years, it is important to develop a test such as the one we propose to detect such schemes early. The T Test should be used to determine quality of reported earnings and not as a predictor of overall stock price movement. It is merely a tool that one can use to help in the evaluation of company stock. Other intangible factors such as general market movement, economic trends, and media releases should continue to play important roles in investment strategies along with the T Test analysis.

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IMPLEMENTING ABC FOR THE SMALL SERVICE PROVIDER

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ABSTRACT

Service providers stand to gain advantages from Activity Based Costing (ABC) similar to those manufacturers enjoy, but experts contend ABC is difficult to apply to services. In the current competitive market, the additional information ABC makes possible can allow the small service provider to develop and maintain a competitive advantage that could be the difference between success and failure. This paper examines the current state of ABC as applied to service providers and provides a step-by-step implementation strategy. It suggests how such companies might implement ABC without undue disruption or expense.

INTRODUCTION

Some experts contend that activity based costing (ABC) is difficult to apply to service organizations. Despite the inherent difficulty, service organizations stand to benefit in the same ways as manufacturers from better knowledge of how the services offered consume varying amounts of company resources (Sharman, 2001). The way this knowledge can help managers make better product mix and customer retention decisions is well documented for manufacturers. It is only logical that service providers can benefit from this information in the same way that manufacturers do. On the other hand, unsuccessful implementation of ABC in a service organization can lead to organizational confusion and a considerable amount of wasted resources (Arnaboldi & Lapsley, 2004). Wasted resources are something the small provider can scarcely afford.

EXPERIENCES IN IMPLEMENTATION

The experiences of adopters reveal a common formula for success in implementing ABC in service companies. The factors in this formula include: having a clear focus on the goal of implementing ABC, using a small team to maintain the project's direction, carefully using consultants to ensure that ABC skills are transferred to end users, establishing feedback systems to monitor the flow of data, ensuring that every end user is involved in the implementation of ABC, and having the support of senior management to implement ABC (Booth, 2003).

Banks have benefited from adoption of ABC by identifying which customers and products are profitable (Sharman, 2001). A thirty-six year old American company provides an example of a state of the art implementation of ABC in a different service industry (Ness & Cucuzza, 1995). Safety-Kleen, founded in 1968, is in the business of recycling hazardous waste for different types of industry. Within 15 months of the ABC pilot launch, Safety-Kleen's operations, marketing, and accounting executives had begun to use ABC to make strategic decisions. In addition, within 18 months, the company's five largest units had adopted ABC. Since ABC's introduction into Safety-Kleen's organization, the company has realized more than \$12.7 million in cost savings, cost avoidance, and increased revenues. Also, Safety-Kleen uses ABC information to develop its annual budget and to make strategic decisions about closing units and adding and cutting product lines.

In contrast to these success stories, the United Kingdom's National Health Service (NHS) experienced a multitude of problems in an attempt to adopt activity based costing (Arnaboldi & Lapsley, 2004). Ultimately, the division of NHS spent a decade attempting to implement a full scale

ABC system. In addition the ABC implementation team acknowledged that they had made only modest progress in devising an ABC system. The failure of the implementation of ABC at NHS happened for several reasons. Management did not fully support the ABC initiative, end users did not fully understand why ABC was to be implemented, and furthermore, instead of seeing ABC as a new costing method, the management accountants saw ABC as a costing system that would merely supplement the existing budgetary system. As a result, at the time of writing there was no definite plan as to when ABC would become operational, and the application of ABC was viewed as a frivolous project that had been postponed indefinitely.

These three organizations exemplify the range of results from attempted ABC implementation, and illustrate why it would behoove any service organization contemplating a move to ABC to proceed cautiously.

DATABACK ILLUSTRATION

DataBack is a fictional company based on an actual business that specializes in providing automatic, online data protection services to business customers. Although the name is changed at the wishes of management, the financial information that is included in this paper is based upon the real company's financial data and reflects the results of an actual feasibility study.

This illustration includes data from two hypothetical DataBack customers, Customer A and Customer B. The information that is included for the two customers is based on data from actual customers of the real company on which DataBack is based. The illustration shows the activity involved when the two customers use DataBack's remote backup service for one year. Customer A is a high volume customer for DataBack, and Customer B is an example of a low volume customer.

DataBack provides these two business customers with a safe, efficient alternative to protecting critical business data via tape or diskette. In addition, DataBack's service allows the customers to automatically and securely transmit critical data to secure, offsite servers that are managed by DataBack. DataBack's servers are located in secure, geographically diverse server centers around the US. In the event of fire, security breach, or natural disaster, the customer's crucial business data is protected by DataBack's system. At any time, DataBack's customers can perform an online retrieval of his data.

This illustration examines DataBack's annual cost to provide Customer A and Customer B with backup service under traditional, volume-based costing and activity based costing. DataBack wants to determine whether the company could use activity based costing to more effectively control its overall cost per client.

DataBack charges the clients a monthly rate based upon the amount of compressed backup data that the clients store on DataBack's backup servers. DataBack measures the amount of client data in compressed gigabytes (GBs). DataBack's basic monthly rate for both customers is \$20 per compressed GB per month. DataBack is responsible for supporting and maintaining the customers' backup data on DataBack's servers.

Customer A uses DataBack's product to backup the data from twenty-seven Windows based PCs. Customer A's total compressed data storage on DataBack's servers is 50GBs. Therefore Customer A's monthly rate for backup service is \$1000 (50GBs at \$20 per GB per month). Customer B uses DataBack's service to protect data from one Windows based server. Customer B's total compressed data storage is 7GBs. Therefore Customer B's monthly rate for backup service is \$140 (7GBs at \$20 per GB per month).

Cost of providing and maintaining servers that DataBack uses to hold client backup data are classified as overhead. Also, DataBack estimates a direct labor rate of \$21 per hour. DataBack uses direct labor hours as its cost driver. Based on historical data, DataBack accountants estimate the predetermined overhead rate at \$13.89 per direct labor hour.

Because of its larger amount of data storage and larger number of machines, DataBack estimates that Customer A requires twenty hours per week of support. Because of its smaller amount of data storage and smaller number of machines, DataBack estimates that Customer B requires only four hours per month of support. In addition, DataBack provides estimates of selling and administrative costs for both Customer A and Customer B. The traditional costing results are presented in Table 1.

Cost Category	Customer A	Customer B
Direct Labor at \$21.00 per hour	\$5,040.00	\$1,008.00
Overhead at \$13.89 per Direct Labor Hour	\$3,333.60	\$666.72
Selling and Administrative Expenses	\$500.00	\$50.00
Total Costs	\$8,873.60	\$1,724.72

The first step in the study on implementation of activity based costing is the identification of service activities. This step is more difficult for some organizations than others. If accounting personnel are primarily responsible for this exercise, the accountant must have an intimate knowledge of the business processes to adequately determine the different activities performed in delivery of the companies services. Ideally, a feasibility study for ABC would include members of the accounting team, operations personnel, and managers. It may be necessary for team members to interview operations personnel or personally observe operations to determine the different activities performed. Once activities are being identified, a classification schema for types of activities usually suggests itself. After gaining a good understanding of the different activities performed, the team will be able to determine which activities are performed rarely and which are routine. They will also be able to group similar activities into one type of activity. Initially, however, it is probably better to record activities using a fair amount of detail. It is easier to group like activities later than to try to separate grouped activities into components. Like most companies, DataBack performs myriad other activities in the course of offering their services. The goal of a good ABC system is to provide enough detail to allow for accurate cost estimates without becoming bogged down in minutia. DataBack has determined that it has four primary types of activities that consume the resources of the company.

Technical Support –Each day, DataBack’s technical manager examines client backup logs on DataBack’s servers.

Because customer A backs up twenty-seven computers, DataBack’s technical manager spend more time examining Customer A’s backup logs than Customer B’s backup logs.

Supervision –Because Customer A generates a higher volume of monthly revenue, a DataBack executive spends more time supervising the technical support activities for Customer A than supervising the technical support activities for Customer B.

Invoicing –In order to issue an accurate monthly invoice to each customer, DataBack’s bookkeeper audits the amount of data each client saves on DataBack’s system. Because Customer A backs up twenty-seven separate machines, the bookkeeper’s audit of Customer A’s account takes a longer than the audit for Customer B’s account.

Data Storage –The technical manager makes sure that each of DataBack’s backup servers has enough free space to accommodate individual client backups. Because of its higher volume, Customer A utilizes more of DataBack’s servers than Customer B.

The second step in the implementation of ABC is to identify the cost driver for each activity. In determining cost drivers it is important to try to establish a cause and effect relationship between performing the activity and incurring costs. This is a core difference between traditional and activity based costing. The success of ABC is predicated on an accurate assessment of what is actually causing costs to be incurred. Many of the benefits associated with using ABC to make service and

customer decisions are dependent on this knowledge. The cost drivers for each major activity performed at DataBack are presented in Table 2.

Table 2 Activities and Cost Drivers

Activity	Cost Driver
Technical Support	Hours of technical support
Supervision	Hours supervising technical support.
Invoicing	Hours invoicing the customer
Data Storage	Hours managing customer data on hard drives

After determining the cost driver appropriate for each activity the cost associated with the activity is collected into a cost pool. This is an aspect of ABC costing that must be reviewed often to be sure that both the activities and the estimated cost pools are not in need of revision. Going through the effort of instituting an ABC system, then not revising estimates on a timely basis negates the possible benefits.

After reviewing the costs associated with each cost pool and the activity levels of the cost drivers the DataBack team calculated the rates to be associated with the cost drivers for each major activity as presented in Table 3.

Table 3 Overhead Rates for Each Activity

Activity	Rate
Technical Support	\$20
Supervision	\$34
Invoicing	\$11
Hard Drive Maintenance	\$20

The DataBack team observed the activities involved in providing services for Customer A and Customer B and calculated the cost of providing service to both customers as shown in Table 4.

Table 4 Cost for Providing Services Under Activity Based Costing

Activity	Customer A			Customer B		
	Usage	Cost	Total	Usage	Cost	Total
Technical Support	240	\$20.00	\$4,800.00	48	\$20.00	\$960.00
Supervision	96	\$34.00	\$3,264.00	13	\$34.00	\$408.00
Invoicing	12	\$11.00	\$132.00	3	\$11.00	\$33.00
Hard Drive Maintenance	144	\$20.00	\$2,880.00	48	\$20.00	\$960.00
Direct Labor	240	\$21.00	\$5,040.00	48	\$21.00	\$1,008.00
Total Cost			\$16,116.00			\$3,369.00

Based on this study and prior research, one can conclude that activity based costing could be useful in allowing DataBack to more effectively determine its overall cost per client. Based the results of application of ABC in this study, DataBack's management could assemble a team that would be responsible for expanding the study to determine the cost per client under traditional

costing and ABC for a more extensive sample of customers. The team would then compare the traditional costing data versus the activity based costing data to determine whether ABC could be the correct choice for DataBack. The team would report to DataBack's management with its recommendation.

As the studies in the literature review demonstrate, the success of an ABC team depends on the support from management and support from the company as a whole. DataBack's management should provide its total support to the ABC team, and management should clearly communicate with every segment of the company why the implementation of ABC could be important to the entire organization.

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ESTIMATING THE MAGNITUDE OF THE PROPORTIONAL DEVIATION OF STOCK VALUES FROM THE CALCULATED INTRINSIC VALUE: EMPIRICAL EVIDENCE

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ABSTRACT

This paper documents the degree of deviation of common stock market values from intrinsic values estimated using the constant growth dividend valuation model. The constant growth model is widely accepted as a fundamental building block of valuation, and is taught to virtually all undergraduate business students. It is widely accepted as the method by which investors determine the amount they are willing to bid for a share of common stock, based on expected dividend amounts and growth, and their individual required returns. An earlier study (Stretcher-Berg 2004) used aggregated segment data to show that substantial deviations occur between calculated intrinsic values and actual market values (the MV-IV gap). This paper extends that work, estimating the magnitude of the proportional deviation of stock prices from calculated intrinsic values.

Authors' Index

Armstrong, V.S	1
Bacon, F	35
Barker, K.J	5
Berg, M.D	77
Brent, W	3
Cagwin, D	5
Carnes, T	7
Chiang, H	9
Chisholm, D	41
Cramer, N	15
Gamble, G.O	61
Gardner, N	1
Gean, G.F	29
Geddie, M.F	61
Grayson, M.M	31
Griffin, R.B	65
Haque, M.A	33
Henderson, M.D	35
Henry, S	41
Jin, J	53
Johnson, G.G	43
Johnson, M.V	43
Jung, D.J	19, 23
Kavanaugh, J	41
Kettering, R.C	49
Kilgore, R.W	65
Li, D.D	53
Lopez, M.J	57
Luehlfiging, M.S	31
Miller, J	59
Noland, T.R	61
O'Connell, V	15, 63
O'Sullivan, P	63
Pulliam, D	23
Putman, R.L	65
Sale, M.L	71
Stretcher, R	41, 57, 59, 77
Tollerson, C	61