The Effect of Earnings Characteristics on Firms' Discretionary Disclosure Decisions

by

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This study examines whether firms expand accounting disclosures in response to perceived market undervaluation. Using a signaling theory framework, this paper predicts that managers will use discretionary accounting disclosures to align the market's expectations about future earnings performance with their own. More specifically, this study predicts that the market undervalues positive (negative) abnormal earnings firms when the persistence of the abnormal earnings is higher (lower) than market expectations. Therefore, these firms will signal this information to the market by expanding their accounting disclosures. Furthermore, positive and negative abnormal growth firms are expected to seek different types of disclosures to correct the perceived undervaluation. In order to accurately specify the relationships between the earnings characteristics and management's disclosure decisions, it is necessary to evaluate these two categories separately.

The underlying motivation for this study comes from the observation that prior research does not identify the theoretical determinants of management's accounting disclosure decisions. The primary contribution is that this study uses a signaling theory framework to explain why managers expand accounting disclosures and provides empirical tests of the predicted determinants. The findings demonstrated a significant relationship between the persistence of the earnings components with firms' changes in discretionary

disclosures. The change in abnormal earnings were not significantly related to the changes in firms' disclosure changes. However, the firms who increased their discretionary disclosures had significantly larger earnings components relative to the firms who decreased their discretionary disclosures. Therefore, this study concludes that management's response in disclosure changes does not occur contemporaneously with changes in the earnings components. This would imply that either (1) management can not make quick changes in its disclosure policy, or (2) management does not change its discretionary disclosures until after it observes the market's undervaluation. These findings do conclude that characteristics of the firms earnings are significantly associated with changes in their disclosure policies. Therefore, any analysis of the benefits to expanded disclosures should also consider the economic characteristics of the reported earnings when isolating the benefits attributed to expanded discretionary accounting disclosures.

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Chapter 1

Introduction

Accounting research has devoted considerable effort to identify the incentives for and consequences of discretionary accounting disclosures (Lang and Lundholm 1996, Healy, Palepu and Sweeney 1995, Skinner 1994, Lang and Lundholm 1993, Ajinkya and Gift 1984, Penman 1980, and Pastena and Ronen 1979). With the development of the *Financial Analysts Federation's Corporate Information Committee* (CIC) evaluation of corporate disclosure levels, accounting researchers have obtained a more objective measure of a firm's discretionary disclosure policy.[1] While recent research (Lang and Lundholm 1996, Healy et al. 1995) has examined benefits associated with expanded accounting disclosures, these studies have not considered the economic determinants associated with management's discretionary disclosure decision.

There are two general frameworks that have been employed in prior studies. The first framework argues that the market does not like large surprises with information, and that managers will be punished in the event of information shocks (Skinner 1994, Ajinkya and Gift 1984). Firms are more likely to increase the production and dissemination of

[1] Generally accepted accounting principles require a minimum level of firm disclosures. The stated objective of the CIC is to encourage improved disclosure practices by public corporations. The ratings provided by the CIC are based on the strengths and weaknesses of the disclosures in the annual reports, other published materials, and investor relations programs. As disclosures above the minimum mandated by GAAP can be considered discretionary, then the CIC evaluations capture the entire discretionary disclosure policy of the firm.

information if the market will be shocked by forthcoming information. This has been applied with one particular category of discretionary disclosures, management earnings forecasts. The second framework focuses on the directional impact of the forthcoming information (Healy et al. 1995, Penman 1980). These studies propose that management increases information production and dissemination only when the firm's value will be enhanced by the information. This has been examined with both management forecasts and the entire disclosure policy. These studies have not resolved the questions as to the costs and benefits associated with changes in disclosure policy.

The measure of firm performance that is focal to many of the discretionary disclosure studies is earnings or net income. Capital markets research has considered earnings to be a summary measure of firm performance that is utilized by the financial markets (Sloan 1996, Dechow 1994). In the discretionary disclosure context, management earnings forecasts have been compared to analysts' forecasts or actual results (Penman 1980, Ajinkya and Gift 1984, and Skinner 1994) in testing for a good news or bad news bias. The properties of earnings forecasts have been evaluated cross-sectionally (Lang and Lundholm 1996, Healy et al. 1995). And the relationship of earnings to returns has also been tested (Healy et al. 1995, Lang and Lundholm 1993). While all of these studies have used the summary measure earnings in their analysis, none of the studies have examined the information content possessed by the reported earnings.

Healy et al. (1995) decomposed reported earnings into required and unexpected components in their analysis of the earnings to returns relationship, and their study found that the market capitalized the unexpected component at different rates during the pre-

and post-disclosure change periods. This led to their conclusion that the expansion of discretionary disclosures reduced the information asymmetry, resulting in a higher capitalization rate. Sloan (1996) finds that the cash and accrual components of reported earnings possess differing information as to future firm performance, as evidenced by the different levels of persistence associated with the cash and accrual earnings components. His study also found that the market failed to utilize these differences in pricing the firm's securities. Because Healy et al. (1995) did not control for the differing information associated with the earnings components, many of their conclusions could be due to the properties of firms' current earnings. Therefore, it is important to determine if firms' disclosure decisions are associated with characteristics of their current earnings.

1.1 Purpose of the Study

The purpose of this study is to identify economic determinants of firms' discretionary disclosure decisions. Previous research (Healy et al. 1995, Verrecchia 1983) proposes that managers have incentive to expand discretionary disclosures when the firm is undervalued by the market. This study identifies characteristics of current earnings which would cause the firms to be undervalued by the market. This study also tests for an association between changes in firms' disclosure rankings and the persistence and changes in earnings components.

This study also adds to the body of research on the persistence of reported earnings. Sloan (1996) finds that the cash and accrual components of earnings contain different information about future performance. This study extends Sloan (1996) by (1)

separating firms into positive and negative abnormal earnings categories, and (2) separating firms based on their changes in discretionary accounting disclosures. This provides a finer specification of the information contained in reported earnings.

1.2 Importance of the Study

The identification of the theoretical determinants of firms' discretionary disclosure changes is important from a positive accounting perspective, as discretionary disclosures are part of management's accounting policy choice set (Watts and Zimmerman 1986). Mandating accounting disclosures has been an issue considered in previous research (Penman 1980, Healy et al. 1995). Furthermore, Healy et al. (1995, p. 26) concluded that:

> "...there are a number of benefits to companies that decide to expand disclosure.... These findings suggest that there is some merit to conclusions by the AICPA Special Committee on Financial Reporting that there are benefits to increased disclosure. However, our findings suggest that at least some firms are able to realize the benefits of expanded disclosure in the absence of *rules that mandate such disclosures*." (emphasis added)

Positive accounting theory argues that firms' discretionary disclosures are a conscious maximizing decision made by informed individuals (Watts and Zimmerman 1986). Consequently, variation in discretionary accounting disclosures is a response to a variation in firm circumstances. This variation is argued to be determined by characteristics of firms' reported earnings. This is important from a public policy perspective. If firms' disclosure choices are associated with company-specific

characteristics, then the net benefits due to mandatory disclosures will not be the same across all firms due to cost-benefit differences (Ettredge et al. 1994).

1.3 Research Methodology

This study uses t-statistics and ordinary least squares estimation to examine the relationship between changes in firms' disclosures and the persistence and the change in magnitude of abnormal earnings. The proxy for firms' financial disclosures are obtained from the rankings of firms' disclosure evaluations in the CIC annual reports (AIMR). The firms included in the CIC reports for 1982-1993 provide the potential sample firms for this study. Firms from the highest, middle, and lowest two deciles for changes in relative disclosure ranks are evaluated.

Earnings are defined as net income before extraordinary items, scaled by average total assets. Earnings are then decomposed into required and abnormal components using three different models: (1) industry adjusted earnings, (2) accrual earnings, and (3) random walk earnings. The firms are then partitioned into positive and negative abnormal earnings categories for the study of the association of the earnings characteristics with changes in firms' disclosure rankings.

1.4 Results

The results of this study provide evidence that earnings characteristics are strongly associated with firms' discretionary disclosure decisions. Support was found for the association between the persistence of earnings components and the disclosure change

decision. No support was found for the change in abnormal earnings variable. However, there was evidence that disclosure increase firms had significantly larger earnings components. The interaction of persistence and the change in abnormal earnings was inconclusive. However, there were significant differences between positive and negative abnormal earnings firms.

1.5 Limitations and Suggestions for Future Research

The firms examined in this study are relatively large firms with considerable analyst following. This limits the generalizability of this study's findings. This study also does not evaluate the impact of proprietary costs on the discretionary disclosure decision (Darrough and Stoughton 1990). Future studies could examine the theoretical determinants of proprietary costs, and how changes in discretionary disclosures impact the persistence of the earnings components.

1.6 Organization of the Study

The remainder of this study is organized as follows. Chapter 2 presents the literature review relevant to this study. Chapter 3 organizes the theoretical framework and develops the proposed hypotheses. The research methodology and variable measurements are identified in Chapter 4. Chapter 5 discusses the empirical findings, and lastly Chapter 6 provides a summary and conclusions about this study.

CHAPTER 2

Literature Review

Most studies examining the relationship between earnings and the extent of firms' discretionary accounting disclosures focus on two primary areas. The first area considers the incentives for managers to provide discretionary disclosures. The second area considers the benefits associated with expanded discretionary accounting disclosures. This chapter reviews the prior research in these two areas and identifies the implications of these studies.

2.1 Incentives for Expanded Accounting Disclosures

Several studies that have examined variations in accounting disclosures have considered the circumstances associated with the information they contained and the market's potential reaction. The information considered in the majority of these studies is management's forecasts of earnings. The research question that each of these studies addressed was why do managers alter the timing and production of accounting disclosures.

Pastena and Ronen (1979) was one of the first studies to examine the patterns of management's disclosures and the importance of the information type in the disclosure

decision.[2] Whether or not management's private information would ultimately be revealed was found to be a significant factor in management's disclosure decision. Management's forecasts of earnings was one type of disclosure considered in their study. However, Pastena and Ronen's (1979) classifications were somewhat vague as to the classification of earnings forecasts, so their framework was not utilized in subsequent studies.[3]

The seminal article evaluating management earnings forecasts was Penman (1980). While his study considered the information content of voluntary earnings forecasts, a second aim of his study was the examination of the full disclosure issue. The primary interest of the full disclosure issue was the claim that voluntary management forecasts are made only by firms which are doing relatively well. Penman's results did show a directional bias towards "good news" announcements.

While Penman's results showed a bias towards favorable disclosures, subsequent studies provided empirical results contradicting the good news bias. Ajinkya and Gift (1984) tested the expectations adjustment hypothesis. Their study emphasized the symbiotic relationship between the firms' managers and the financial analysts who follow those firms. Therefore, managers have incentives to voluntarily use direct disclosures when the market's expectations, as represented by the financial analysts' expectations, are

[2] In Pastena and Ronen's (1979) second hypothesis, the authors proposed that there will be a greater tendency to disclose soft positive information (relative to hard positive information) and hard negative information (relative to soft negative information). Soft information was defined as information for which either there is a low probability of imminent disclosure by sources uncontrollable by management or as the result of an audit. Hard information was defined as the complement of soft information.
[3] Management earnings forecasts were viewed as discretionary or soft information in a general classification of managerial announcements. However, the authors also noted that earnings forecasts made near the end of the period could be viewed as hard since the information about the period's results would be soon made available through the earnings announcement.

not in accordance with management's proprietary beliefs.[4] Because financial analysts do not like large earnings surprises, direct disclosures such as earnings forecasts will be directly related to the degree of surprise in the information, and not to the degree of favorability of the information.[5]

Skinner (1994) examined earnings disclosures by expanding the set of disclosures to include both quantitative and qualitative disclosures. There are two important findings associated with this study. The first important finding is that firms with favorable news tended to use quantitative disclosures, while firms with unfavorable news tended to use qualitative disclosures. This would suggest that the type of news is an important factor in the firm's disclosure policy. The second finding is that the market's response to bad news is over twice as large as that for good news. These findings highlight the importance of examining good news and bad news firms separately.

The empirical studies considered in this section were predominantly concerned with one particular type of discretionary disclosure, management earnings forecasts. Because of the specific nature of the disclosures examined, the informational properties were focused on the disclosure event (Skinner 1994, Ajinkya and Gift 1984, Penman 1980). These disclosures were not intended to provide more detailed information about

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[4] Ajinkya and Gift (1984) categorized disclosures as direct or indirect. Indirect disclosures represent the release of private information through the financial analysts. This limits management's exposure to legal repercussions from inaccurate forecasts made directly to the public. Furthermore, by assisting financial analysts in their quest for private information, managers can enhance their reputation within the financial analyst community, leading to greater visibility of the firm's stock.

[5] Lys and Soo (1995) examine the competitive aspects of forecast accuracy as the number of analysts increase. The underlying assumption is that the accuracy of the analyst's earnings forecasts is one way that he can signal his relative superiority to other analysts. Branson et al. (1995) found that the

current earnings, but instead were meant to alter the timing that private information about current earnings reached the market.

2.2 Benefits to Expanded Accounting Disclosures

Recent research has attempted to focus on the entire disclosure activities of the firm, using financial analysts' rankings of firms' disclosure activities in the CIC annual reports (Lang and Lundholm 1996, Healy et al. 1995, Lang and Lundholm 1993). The analysts evaluations cover a comprehensive set of both quantitative and qualitative aspects of firms' disclosures that are relevant for investment decision making. Because industry analysts are considered the primary users of firms' disclosures, they should be considered good judges of the adequacy of the firms' disclosure practices.

One of the primary benefits that has been purported in previous research is a reduced cost of capital due to a reduction in information asymmetry (Lang and Lundholm 1996, Healy et al. 1995). This has been indirectly shown through increased analyst following, improved earnings forecast properties, increased institutional ownership, and lower relative bid-ask spreads. Using both lead and lag analyst following, Lang and Lundholm (1996) find support for the contention that disclosure policy changes cause changes in the number of analysts following a firm. The earnings forecast properties identified were a lower dispersion and a greater accuracy of analysts forecasts for those firms with expanded disclosures. The only finding which received partial support was the

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predictability of earnings was a significant determinant of which firms analysts chose to follow, supporting the forecast accuracy contention.

relative bid-ask spreads, as the reduction was due largely to an increase in the stock prices. All other findings strongly supported the indirect test that expanded disclosures reduced the firms' cost of capital.

The second benefit from expanded disclosures that have been tested empirically is the correction of undervaluation (Healy et al. 1995). This correction benefits shareholders by increasing the firm's ability to raise new capital, and it benefits management by increasing the value of any stock-based compensation. Healy et al. (1995) found that for firms with expanded disclosures, there were significant differences in new security offerings and realized stock option gains, subsequent to the periods prior to the change in discretionary disclosure rankings.

There are concerns with these empirical tests that were not present with the studies identified in Section 2.1. The discretionary disclosures in Section 2.1 were not intended to provide detailed information about reported earnings, while the information associated with the disclosures measured with the CIC reports must be considered jointly with the information contained in the reported earnings. In addition, the disclosures evaluated in the CIC reports extends beyond the current period's performance.[6] In determining the benefits due to the informational properties of the expanded discretionary disclosures, it is important to identify if there are informational properties of earnings that are strongly associated with firms' discretionary disclosure policies.

[6] The CIC reports cite satisfactory disclosures in the annual reports to include written commentary that explains why important events took place and provides insight into the future. Therefore, the disclosures are not simply a recitation of historical facts, but they also communicate the strategies and philosophies of management.

Sloan (1996) discussed the importance of the differential information associated with the components of reported earnings. His findings suggest that, in accordance with texts on financial statement analysis, the cash portion of earnings had a higher degree of persistence into future periods relative to the accrual portion. Because disclosures such as segment information, supplementary data, and written commentary are designed to provide additional information about the predictive ability of reported earnings, it would seem reasonable to expect the properties of reported earnings to be associated with firms' disclosure decisions.

2.3 Implications of Prior Research

Healy et al. (1995) provides empirical evidence on the benefits of expanded accounting disclosures. They further conclude that the changes in firms' disclosure rankings were a contributing factor in the change of investors' capitalization rate of earnings growth. This leads to their statement that there is merit to conclusions by the AICPA Special Committee on Financial Reporting that there are benefits to expanded discretionary disclosures. However, Healy et al. did not consider the economic determinants associated with management's discretionary disclosure policy. Without this consideration, it would appear that a mandatory requirement of discretionary disclosures would be an optimal solution.[7] Furthermore, Healy et al. (1995) concludes that some

[7] The AICPA Special Committee on Financial Reporting's charge was to recommend the type and extent of information desired by stakeholders. If firms receive private benefits from expanded discretionary disclosures, then management should have incentive to expand disclosures. Furthermore, if the expanded

firms are able to realize these benefits in the absence of rules that mandate such disclosures. By identifying economic determinants of management's discretionary disclosure policy, the costs of mandating disclosures can be better assessed.

The issue of a mandatory versus voluntary disclosure system was addressed in Penman's (1980) motivation for his seminal article. Accounting data provided in financial statements are subject to governance by disclosure rules enacted by governmental agencies and the accounting profession. While the disclosure rules were restricted to historical data, there were proposals under consideration to expand the regulations to predictive data, such as management earnings forecasts. While Penman found a bias towards favorable news for those firms which made voluntary earnings forecasts, his conclusions did not warrant that a mandatory disclosure rule would be desirable. In fact, he concludes (pp. 158-159):

> "… the fact that some information is not supplied is not necessarily inconsistent with an optimal allocation of resources to information production.… One cannot reach a conclusion about the efficiency of an observed lack of full disclosure without an assessment of the costs and benefits of additional disclosure."

The conclusions of Penman (1980) would indicate that a greater investigation of the economic determinants of accounting disclosure policy is warranted. Healy et al. (1995) found benefits to management that occurred when firms expanded their discretionary disclosures. However, Healy et al. did not consider if there were properties

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disclosures are providing stakeholders with more relevant and useful information, then an increase in discretionary disclosures should be *pareto optimal*.