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The Role of Corporate Governance in Meeting or Beating Analysts' Expectations

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THE ROLE OF CORPORATE GOVERNANCE IN MEETING OR BEATING ANALYSTS' EXPECTATIONS

By

Angela Banita Andrews

A DISSERTATION

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ABSTRACT

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This study provides empirical evidence on whether there is an association between corporate governance mechanisms and meeting or beating analysts' expectations. In the short run, the market may reward managers for meeting or beating analysts' expectations, but this may be detrimental to long run shareholder value to the extent that meeting or beating analysts' expectations is achieved purely through earnings management. Consistent with the premise that firms with strong corporate governance mechanisms emphasize long run shareholder value, I find a negative association between the strength of corporate governance and the propensity of firms to meet or beat analysts' expectations. In addition, I find that while firms with weak corporate governance mechanisms use earnings management to meet or beat analysts' expectations, firms with strong corporate governance mechanisms achieve the same result by guiding analysts' expectations.

I would
Felicia,

I would like to dedicate this dissertation to my family: Walter, Elaine, Joyce, Patrick, Felicia, Ishmael, Israel and India.

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Chapter 1 - Introduction

One role of corporate governance is to minimize incentive problems between management and the providers of capital arising from the separation of ownership and control (Watts and Zimmerman 1986). Corporate governance mechanisms, which include boards of directors and the presence of institutional investors, mitigate the ability of managers to behave in their own self interests. Corporate governance mechanisms have been shown to mitigate behavior such as earnings management and accounting fraud (Beasley 1996; Chtourou et al. 2001; Chung et al. 2002; Dechow et al. 1996; Farber 2003; Klein 2002; Peasnell et al. 2000). The purpose of this paper is to examine whether the disciplining effect of these governance mechanisms extends to the context of meeting or beating analysts' expectations (hereinafter referred to as MBE).

1.1 Motivation

Analysts' expectations, as a performance benchmark, have taken on increased significance in the last several years. Empirical evidence suggests that managers' propensity to achieve particular thresholds has shifted over time. Currently avoiding negative earnings surprises is the most important threshold (Brown and Caylor 2003). However, the valuation literature provides mixed support for the shift in managers' propensity to avoid negative earnings surprises. While short run market premiums and increased earnings multiples accrue to firms that consistently MBE, these valuation benefits subsequently disappear when firms that previously met expectations fail to do so (Barth et al. 1999; Bartov et al. 2002). Related to this argument there is evidence of a negative stock price response to a break in a string of earnings increases (Ke and Petroni 2003; Ke et al. 2003; Skinner and Sloan 2002). Additionally, managers and public

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accountants have expressed concern that the "short term earnings game" is played to the detriment of overall firm value. Short run targets, specifically MBE, could be met by making business decisions that have a negative impact on a firm's long run value (Favaro and Rotz 2004; PricewaterhouseCoopers 2002).

1.2 Overview of Hypotheses

Since the short run benefits of MBE may result in long run costs to the firm, it is unclear whether MBE is in the best interest of shareholders. The premise of this paper is that corporate governance mechanisms provide incentives for managers to maximize long run firm value. Examining the association between corporate governance mechanisms and whether a firm MBE may shed light on whether MBE is truly in the interest of shareholders. My first hypothesis predicts that concerns about long run costs motivate firms with strong corporate governance mechanisms to avoid playing the MBE game.

Additionally, I examine earnings management and expectations management, two mechanisms that are used to MBE (Matsumoto 2002). I define expectations management as the use of voluntary disclosures to convey information about the underlying performance of the firm such that the market participants adjust their forecasts to reflect expected future performance. Prior literature suggests that corporate governance mechanisms constrain the ability of managers to manage earnings upward (Chtourou et al. 2001; Chung et al. 2002; Klein 2002; Peasnell et al. 2000). The corporate governance literature, however, has not established a relation between corporate governance mechanisms and expectations management. The literature, however, does suggest that firms with strong corporate governance mechanisms are more likely to provide increased voluntary disclosure through management earnings forecasts. In addition to increased

frequency, these forecasts are less biased than those of firms with weak corporate governance mechanisms (Ajinkya et al. 2003). Accordingly, my second hypothesis states that firms with strong (weak) corporate governance mechanisms are predicted to use expectations management and/or earnings management in order to MBE (Ajinkya et al. 2003; Chtourou et al. 2001; Chung et al. 2002; Klein 2002; Matsumoto 2002; Peasnell et al. 2000).

1.3 Overview of Research Design

I test these hypotheses using a sample of 4,865 firm year observations from the period 1997-2001. Three measures of strong corporate governance are used: the presence of a majority of outsiders on the board of directors, the presence of an institutional investor with long term incentives/preferences and board size. The size and composition of the board of directors are important governance mechanisms because boards of directors have the right to hire, fire and compensate management. I hypothesize that a board composed of a majority of independent directors is an indicator of strong corporate governance. The corporate governance literature is inconclusive on whether larger or smaller boards are better monitors (Chtourou et al. 2001; Core et al. 1999; Peasnell et al. 2001). As such, no directional hypothesis is set forth for board size. Institutional investors are considered governance mechanisms because of their potential to influence management through share ownership and indirectly by trading shares (Gillian and Starks 2003). Shleifer and Vishny (1986) suggest that only shareholders with significant holdings have an incentive to monitor management. In order to allow monitoring incentives to vary, I use the percentage of shares held by the top five institutional

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investors as a proxy for institutional investors with long term incentives/preferences (Gillian and Starks 2003).

1.4 Overview of Results

Supporting my first hypothesis, I find that as the concentration of shares held by the top five institutional investors increases firms are less likely to MBE. This is consistent with firms that have strong corporate governance mechanisms being more concerned with long run costs such as those resulting from a break in a string of earnings increases (Ke and Petroni 2003; Ke et al. 2003). Supporting my second hypothesis, I find that as the percentage of shares held by the top five institutional investors increases the firm is more likely to use expectations management and less likely to use earnings management. The results are insignificant when corporate governance is measured using board size and composition.

1.5 Contribution to Literature

This study contributes to the literature in several ways. First, this paper provides support for managers' and public accountants' concerns that focusing on MBE may not ultimately lead to increased shareholder value (Favaro and Rotz 2004; PricewaterhouseCoopers 2002). The results suggest that firms with strong corporate governance mechanisms are more concerned with long run consequences rather than short term valuation increases, and thus are less likely to play the meet or beat game.

Second, this paper suggests that there are different incentives to monitor based on the preferences/incentives of institutional investors. Using the percentage of institutional investment as a proxy assumes that all institutions have the same incentives. By using ownership concentration it is possible to differentially examine the incentives of

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institutional ownership. The results of this study suggest that concentrated institutional ownership has a different monitoring effect than institutional ownership in general[1]. This finding complements Gillian and Starks (2003) who find that concentration of institutional ownership is associated with lower levels of executive compensation.

1.6 Organization of the Dissertation

The paper proceeds as follows: related literature is presented in section two; hypotheses are formulated in section three; the research design and descriptive statistics are set forth in section four; results are presented in section five; conclusions and directions for future research are presented in section six.

[1]Bushee and Noe (2000) suggest that improvement in the disclosure process is one way to attract institutional investors. Additionally, tailored road show presentations specifically targeted to a certain type of institutional investor is another way to attract institutional investment.

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Chapter 2 - Related Literature

The valuation and corporate governance literature that are used to motivate the hypotheses in section three will be discussed in detail. The review begins with a discussion of the benefits of meeting or beating expectations, including higher returns and market premiums. Secondly, literature relating to the mechanisms used to meet or beat expectations will be discussed. Thirdly, the corporate governance literature that focuses on mitigating the ability of firms to manage earnings will be discussed. Finally, the literature that focuses on expectations management will be discussed.

2.1 The Valuation Implications of Meeting or Beating Earnings Benchmarks

The valuation literature begins with Barth et al. (1999) who use a price earnings model to examine whether the earnings multiple for firms that had a pattern of increasing earnings lasting five years or longer is higher than for firms with no such pattern. Barth et al. (1999) find that the incremental earnings multiple for firms with increasing earnings, compared to firms without this pattern of increases, is significantly larger for firms with at least five years of increasing earnings after controlling for growth and risk. Additional analysis examines the earnings multiple when a firm with a pattern of earnings increases experiences an earnings decrease. The authors find that the incremental earnings multiple decreases and after two years of decreased earnings the earnings multiple is eliminated and insignificantly different from zero.

Bartov et al. (2002) use an event study methodology to examine the market premium surrounding quarterly earnings after controlling for earnings forecast error for

firms that meet or beat expectations. Specifically, the authors examine whether the premium is different for firms that meet rather than beat expectations. They also examine whether the premium for beating is different from that for failing to meet expectations. Bartov et al. (2002) focus on earnings forecasts for the current quarter made after the release of the previous quarter's earnings forecasts in an effort to eliminate contamination by other news. After forming portfolios based on forecast error size, Bartov et al. (2002) find that firms that beat expectations had the highest cumulative abnormal return after controlling for the magnitude of the forecast error. This supports their contention that the premium is higher for firms that beat rather than meet expectations. Further Bartov et al. (2002) find that the average cumulative abnormal return, across all error groups, is 3.2% higher for firms that beat expectations compared to those that fail to meet expectations. This supports the authors' hypothesis that the premium, in the form of the cumulative abnormal return, for beating is different than that for failing to meet expectations. Bartov et al. (2002) also examine the relationship between meeting or beating expectations and future performance and find that the ability of a firm to meet or beat expectations is informative with respect to future performance, after controlling for forecast error.

Kasznik and McNichols (2002) examine whether the market rewards firms that meet expectations in the current period after controlling for the information in current year earnings. This is tested by examining whether analysts' predictions of subsequent year earnings are affected by whether the firm met or beat expectations in prior years. Kasznik and McNichols (2002) find that the abnormal annual returns are significantly higher for firms that meet or beat expectations. The authors then attempt to ascertain

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whether the return is higher because of higher expected future earnings or whether it represents a premium which is incremental to expected future earnings. Kasznik and McNichols (2002) conclude that firms that meet or beat expectations have a higher value assigned to them by the market and the market premium increases in value as the firm consistently meets expectations. Further, the premium appears to be persistent as long as thirty six months into the future.

Finally, Dopuch et al. (2003) extend the literature by examining whether there is a credibility premium attached to the ability of a firm to beat both the analysts' forecast as well as the earnings of the comparable prior period, a time series based benchmark. As such, there should be a premium for exceeding both benchmarks in addition to exceeding either benchmark separately. Using quarterly data and examining the cumulative abnormal returns surrounding the release of the forecasts, the authors find that firms that met or beat both analysts' and time series forecasts received an abnormal return of 4.5%. Firms that only met or beat analysts' forecasts received an abnormal return of 2.5% and those that met or beat time series forecasts received an abnormal return of 3.3%. The results suggest that time series forecasts provide incremental explanatory power to meeting or beating analysts' forecasts. In addition, the results suggest that the two benchmarks are complements rather than substitutes. Time series forecasts are used to assess the credibility of analysts' forecasts and as such firms that exceed both forecasts are rewarded with a credibility premium.

The papers in this section provide evidence that there are valuation benefits that accrue to firms that meet or beat expectations. These valuations benefits include an

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earnings multiple that increases as a pattern of earnings increases continues. If there is a reversal of fortune, the earning multiple is completely eliminated after two years of earnings declines. Another valuation benefit accrues to firms that beat rather than meet expectations in the form of a higher cumulative abnormal return. In addition, a higher market premium exists for firms that meet or beat expectations. This higher market premium continues to increase as the firm consistently meets expectations. Finally, in addition to a premium for meeting or beating analysts' expectations a credibility premium exists for firms that meet both times series forecasts as well as analysts' forecasts.

Another stream of literature that will be discussed focuses on the consequences of a break in a string of consecutive earnings increases. Ke et al. (2003) examine the trading behavior of insiders in the quarters prior to a break in a string of consecutive earnings increases. Ke et al. (2003) first establish a negative relationship between the stock price response and a break in a string of consecutive earnings surprises that becomes more negative the longer the break. After this relationship is established, the authors examine the behavior of insiders leading up to the break in earnings. Ke et al. (2003) find that in the third through eighth quarters prior to the break, insiders make significantly more stock sales. Ke and Petroni (2003) examine the trading behavior of institutional investors in the quarters leading up to a break in a string of consecutive earnings increases. Ke and Petroni (2003) find evidence that similar to insiders, transient institutional investors also sell their stock prior to a break in earnings increases but the sales occur closer to the break. Further, the sales are triggered by breaks that lead to the largest stock price

declines. The largest stock price declines are caused by breaks that are longer. Those of growth firms show breaks with larger declines in earnings and breaks that are preceded by longer strings of consecutive earnings increases. Both of these papers show that the firm is affected in an adverse manner when a string of consecutive earnings increases comes to an end.

Skinner and Sloan (2002) also address the consequences of a break in a string of earnings increases. This paper focuses on the abnormal return surrounding earnings surprises for growth stocks compared to all other stocks. The regression analysis allows a differential response for good and bad news earnings. The results indicate that for growth firms the average realized return is larger in magnitude for negative earnings surprises than for positive earnings surprises. Skinner and Sloan (2002) conclude that this asymmetric response is due to overly optimistic expectations for growth stock which, when not met, lead to price declines.

The costs to the firm of an earnings decline include a sell off of shares by insiders and institutions. Further, growth stocks appear to be affected by an asymmetric price response when a firm reports bad earnings news. The smaller return for a negative earnings surprise should lead firms to avoid such surprises. The mechanisms used to avoid these negative earnings surprises will be discussed in the next section.

2.2 Mechanisms for Avoiding a Negative Earnings Surprise

The mechanisms used by firms to meet or beat expectations are also pertinent to this analysis. Matsumoto (2002) examines management incentives to avoid a negative earnings surprise. The author also examines the mechanisms firms use to avoid a

negative earnings surprise including managing expectations downward and earnings upward. Matsumoto (2002) finds that there is a positive relationship between the probability that a firm meets or exceeds the analysts' consensus forecast and institutional ownership, reliance on implicit claims, growth prospects and membership in an industry where earnings are more value relevant. There is also a negative relationship between the probability that a firm meets or beats analysts' consensus forecasts and loss firms.

In the second analysis, Matsumoto (2002) examines the mechanisms firms use to meet or exceed expectations. The ability of firms to manage earnings upward, conditional on meeting or beating expectations, is addressed first. The Jones and modified Jones models are used to develop a proxy for discretionary accruals. A logit model is then used to examine the relationship between positive abnormal accruals and the proxies that represent managers' incentives to avoid a negative earnings surprise. The probability of positive abnormal accruals is positively related to institutional ownership and long term growth. A negative relationship exists between positive abnormal accruals and loss firms.

The issue of expectations management is then addressed. A method similar to the Jones and modified Jones models is used to develop a measure of forecast guidance. The method involves comparing the expected forecast, which is based on prior earnings changes and returns during the period, to the consensus analyst forecast. Again, the author uses a logit model to examine the relationship between the probability of a unexpected negative forecast and managers' incentives to avoid a negative earnings surprise. The probability of an unexpected negative forecast is positively related to

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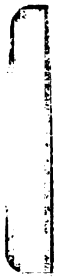
institutional ownership, long term growth and the firm's reliance on implicit claims. A negative relationship was found between the probability of a negative earnings surprise and loss firms. Based on the analyses, Matsumoto (2002) concludes that firms manage earnings upward and guide expectations downward to avoid negative earnings surprises.

Dechow et al. (2003) also examine the ability of firms to avoid a negative outcome by focusing on the "kink" in the earnings distribution and whether earnings management provides a complete explanation. The kink, or discontinuity at zero, occurs because there are too few firms reporting small losses and too many firms reporting small gains. Specifically, the authors test whether small profit firms have higher discretionary accruals than small loss firms and the population at large by comparing them with all other firms in the sample. Dechow et al. (2003) find a significant difference between the discretionary accruals of small profit firms and those of all other firms in the sample. The authors, however, fail to find a significant difference between the discretionary accruals of small profit and small loss firms. In the absence of a significant difference in discretionary accruals between small profit and loss firms, Dechow et al. (2003) conclude that the kink can not be explained completely by firms using earnings management to avoid reporting a small loss. The kink can not be explained completely by earnings management but this does not completely rule out earnings management as a mechanism to avoid a negative earnings surprise.

Finally, Rowchowdhury (2003) examines the manipulation of real activities that affect both accruals and cash flow from operations to meet or exceed certain thresholds. Rowchowdhury (2003) examines deviations from expected cash flow from operations

given a firm's sales level for three types of manipulations of real activities. The three real activities include: accelerating the timing of sales or generating additional unsustainable sales through increased price discounts or more lenient credit terms, decreasing discretionary expenses and reporting a lower cost of goods sold by increasing production. In order to test for this deviation, firm-years in the interval just right of zero (defined by Burgstahler and Dichev (1997)), are classified as suspect since in this interval firms are suspected of managing earnings to report income marginally above zero. These firm-years are then compared to the rest of the sample. Suspect firm year observations exhibit unusually low cash flow from operations, unusually low discretionary expenses and unusually high production costs for a given level of sales. Rowchowdhury (2003) concludes that the results are consistent with managers offering price discounts to boost sales and engaging in overproduction to reduce reported cost of goods sold in order to avoid losses. The results also suggest that managers reduce discretionary expense to boost earnings above zero.

The valuation literature enumerates several benefits for meeting or beating analysts' expectations. These benefits make the use of earnings and expectations management as mechanisms to avoid negative earnings surprises more compelling. Now that the mechanisms for avoiding negative earnings surprises have been discussed, the corporate governance mechanisms that are used to mitigate earnings management will be presented.



2.3 Corporate Governance and Earnings Management

In addition to the literature related to meeting or exceeding expectations, the corporate governance literature that focuses on earnings management is essential to the analysis and will be discussed. Klein (2000) examines corporate governance mechanisms and earnings management. The author predicts a negative relationship between earnings management and board independence and the presence of a blockholder. The author also tests the relationship between earnings management and CEO shareholdings. Board independence is measured by the percentage of outsiders on the audit committee and the board, indicator variables are used if the board or audit committee is dominated by independent directors and the audit committee is either totally independent of management or dominated by a majority of outside directors. The absolute value of abnormal accruals is used to proxy for earnings management. The results of a multivariate analysis show that boards and audit committees comprised of a majority of outsiders are negatively related to the absolute value of adjusted abnormal accruals. Klein (2000) concludes that boards and audit committees structured to be independent of management are best able to perform their independent oversight functions.

Another paper that examines the relationship between earnings management and board monitoring is Peasnell et al. (2000). This paper, however, focuses on income increasing earnings management around the threshold of zero earnings and zero changes in earnings. Peasnell et al. (2000) also examine income decreasing earnings management when earnings exceed zero and last period's earnings by a large margin. The authors predict a negative relationship between earnings management and the proportion of

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outside directors on the board. The authors also predict a negative relationship between the existence of an audit committee and earnings management which is more pronounced when managerial ownership is low. In order to test these relationships abnormal accruals are used as a proxy for earnings management. A negative relationship is found between earnings management and the proportion of outsiders on the board when earnings fall below zero or prior year's earnings. When earnings exceeded zero or last period's earnings by a large margin, no relationship was found between earnings management and the proportion of outsiders on the board. There was no significant relationship between earnings management and the existence of an audit committee when earnings either fell below or exceeded a threshold. Based on the results, Peasnell et al. (2000) conclude that the presence of outsiders seems to mitigate earnings management around certain thresholds.

Chtourou et al. (2001) examine the relationship between earnings management and board characteristics by using two sub-samples of firms, one with high levels of discretionary accruals and one with low levels of discretionary accruals. This paper differs from other papers in the cited literature because it not only focuses on board independence but also examines the competence and activeness of the audit committee. The hypotheses are based on recommendations from a variety of groups including the Blue Ribbon Commission, SEC and stock exchanges. Chtourou et al. (2001) hypothesize a negative relationship between earnings management and an independent audit committee and board, a financially competent and active audit committee and outside director ownership. No prediction is given for the relationship between earnings

management and board size. Board independence is measured by the inclusion of independent directors on the board, separation of the roles of chair and CEO and the presence of an independent nomination committee. Activity by the audit committee is measured by the presence of a formal written charter where oversight responsibilities are codified and the number of meetings of the audit committee in a given year. Financial competence is measured by the average non-executive director's tenure and the number of outside directorships of non-executive directors. Peasnell et al. (2001) also predict a negative relationship between earnings management and the presence of a certified public accountant, CPA, or a certified financial accountant, CFA, on the audit committee. Abnormal accruals are used to proxy for earnings management. The results of the analysis indicate a negative relationship between earnings management and board size, financial competence, percentage of independent directors, presence of either a CPA or CFA on the audit committee, presence of a written charter that spells out the responsibilities of the audit committee and meetings more than twice per year. Peasnell et al. (2001) conclude that the results support the effectiveness of the reforms called for by the SEC, stock exchanges and the Blue Ribbon Commission.

Chung et al. (2001) focus on the relationship between institutional investors and earnings management and predict a negative relationship between the two. Discretionary accruals are used to proxy for earnings management and the paper focuses on both income increasing and decreasing discretionary accruals. The analysis focuses on two situations where management has the incentive to manage earnings. The first situation exists when firms have poor current performance but good future prospects. The second

situation exists when firms have good current performance but poor future prospects. Each year the median of institutional investment is determined, and a dummy variable is used to represent firms with institutional investment above the median. Chung et al. (2001) predict that this group of investors has the incentive to monitor management. The results indicate that large institutional shareholdings deter both income increasing and decreasing discretionary accruals. The results provide evidence that institutional investors do mitigate the ability of managers to behave opportunistically in the case of earnings management.

Finally, Mohan et al. (1999) address the relationship between institutional investors and earnings management. Using absolute discretionary accruals as a proxy for earnings management, the authors find a negative relationship between institutional investors and earnings management. Mohan et al. (1999) conclude that the sophistication of institutional investors allows them to see through earnings management. Mohan et al. (1999) build on this result by examining whether institutional investors are overly focused on current earnings to the detriment of future earnings. In order to test this relationship five quintiles are formed based on institutional holdings and a ratio is formed that captures the extent to which prices lead accounting earnings. Mohan et al. (1999) find that there is a positive relationship between the level of institutional holdings and the extent to which prices lead earnings. Mohan et al. (1999) conclude that institutional investors do not fixate on current period earnings and look beyond the current period to assess firm value.

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Institutional investors as well as outsiders seem to have a role to play in mitigating the ability of firms to manage earnings. Additionally, a negative relationship has been established between earnings management and a higher proportion of outsiders on the board of directors. Additionally, a negative relationship has also been established between earnings management and the proportion of shareholdings of institutional investors. Further, Mohan et al. (1999) provide empirical evidence that does not support the managerial myopia hypothesis. Institutional investors appear not to fixate on current earnings and take a long term view when assessing firm value. There is also evidence that audit committees and board competence also reduce the ability of the firm to manage earnings. The next section of the paper discusses expectations management.

2.4 Corporate Governance and Expectations Management

Expectations management is one of two mechanisms firms use to meet or beat analysts' expectations (Matsumoto 2002). Expectations management occurs when firms communicate with analysts' to dampen their forecasts and bring them more in line with the company's expectations (Boni and Womack 2003). Ajinkya et al. (2003) examine how corporate governance mechanisms affect the disclosure process. Specifically the authors examine the relationship between governance mechanisms (including the proportion of the board consisting of outsiders and the percentage of shares held by institutions) and properties of management forecasts. Ajinkya et al. (2003) hypothesize a positive relationship between corporate governance mechanisms and the occurrence, frequency, specificity and accuracy of the forecasts. The authors also hypothesize a positive relationship between the conservativeness of the forecast and the presence of corporate governance mechanisms. The results indicate a positive relationship between

corporate governance mechanisms and occurrence, frequency and accuracy of the forecasts. There is also a positive relationship between institutional investors and specificity of the forecasts.

Finally, the presence of institutional investors and the proportion of outsiders on the board results in the release of less optimistically biased forecasts. The analysis provides support for the argument that corporate governance mechanisms improve the disclosure process. Specifically, frequency and occurrence of forecasts are improved when corporate governance mechanisms are in place. This suggests that firms are communicating with the market more often and keeping the markets expectations in line with those of management.

Kasznik and Lev (1995) examine management's discretionary disclosures during the sixty day interval leading up to the announcement of a large earnings surprise. The authors find that the likelihood of issuing a warning increases with the size of the earnings surprise, the existence of an earlier prospective disclosure made by management, a firm's membership in a high technology industry and firm size. In addition, firms with larger impending earnings surprises issued more quantitative and earnings-related warnings. Kasznik and Lev (1995) conclude that the firms with larger earnings surprises, particularly disappointments, attempt to narrow the expectations gap by issuing a warning. Managers appear less concerned with narrowing positive expectation gaps than with avoiding large earnings disappointments.

Skinner (1997) addresses discretionary disclosures but focuses on those surrounding stockholder lawsuits. The author specifically focuses on whether managers

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can reduce stockholder litigation costs by disclosing adverse earnings news early. Using a sample of firms that were the subject of lawsuits attributable to earnings related information releases and a matched sample of firms that were not the subject of lawsuits; the author concludes that lower litigation costs in the form of smaller litigation settlements result from timely disclosure of earnings problems.

Soffer et al. (2000) also examine the strategy of preannouncing tentative earnings shortly before the formal release of earnings. The amount of information a manager preannounces affects the degree of surprise and is a way of managing market expectations. Soffer et al. (2000) find that firms with positive news at the preannouncement date release only some of their news. On the other hand, firms with negative news at the preannouncement date release all of their news. The results suggest that managers strategically select preannouncements to avoid negative earnings surprises. This conclusion is consistent with Kasznik and Lev (1995) who find that firms with larger earnings surprises, particularly with disappointments, attempt to narrow the expectations gap by making voluntary disclosures.

Richardson et al. (2001) address expectations management in the context of equity issuance and insider trading incentives. The authors examine the process of managers "walking down" analysts' forecasts to beatable targets. The motivation for this "walk down" is the possible issuance of additional company securities or the sale of securities by insiders after the earnings announcement. The metric used to measure whether expectations management occurred is whether between the beginning and end of the forecast period analysts' forecasts switch from optimism to pessimism. Richardson et

al. (2001) find that forecast pessimism prior to an earnings announcement is more common for firms that are about to issue new equity. Forecast pessimism is also more common when the insiders are net sellers of the firm's stock in the period immediately following an earnings announcement suggesting that managers opportunistically guide analysts' forecasts down.

Cotter et al. (2000) also investigate expectations management but focus on analysts' reaction to explicit management earnings guidance. Specifically, the paper attempts to determine if analysts regurgitate information provided by management or if analysts make their own assessment about the company based on the management earnings forecast and other company information. Using a sample of firms that issued quarterly management earnings forecasts Cotter et al. (2000) first address the question of whether management attempts to lead analysts. Based on the directional bias in management earnings forecasts the authors conclude that managers do indeed issue pessimistic guidance. Based on this result, the authors investigate how analysts react to management's guidance. Cotter et al. (2000) find that analysts quickly react to management's forecast with revisions. Those revisions are independent of management and not just a regurgitation of management's forecast. However, although analysts appear to behave independently, the end result is that their forecasts shift from optimism to slight pessimism in response to bad news management guidance and from pessimism to slight optimism in response to good news management guidance. The shift to pessimism in the face of bad news (albeit less than management anticipated) may not eliminate the firm's chances to beat expectations. It is unclear whether the shift to

pessimism, in the face of bad news, although less than management anticipated is enough for the firm to beat expectations.

There is evidence to suggest that firms use management earnings forecasts opportunistically in the context of equity issuance or insider stock sales. Further, firms use management guidance to bring analysts expectations in line with management expectations. However, empirical evidence suggests that analysts may revise their forecasts but fall short of revising to the extent suggested by management guidance.

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Chapter 3 - Hypotheses Development

3.1 Hypothesis One

The existing literature documents a positive relationship between the strength of a firm's corporate governance mechanisms and both the quality and the quantity of its voluntary disclosures. Ajinkya et al. (2003) find that the probability of occurrence and frequency of management forecasts are positively related to the percentage of outsiders on the board. Ajinkya et al. (2003) also find that forecasts issued by firms with strong corporate governance mechanisms were more accurate and less optimistically biased. The monitoring provided by corporate governance mechanisms is concluded to constrain voluntary disclosure decisions. This monitoring effect should extrapolate to other disclosure processes within the organization where there are incentives[2] for management to focus on objectives that are contrary to the maximization of shareholder value. In this setting, this includes focusing on the valuation benefits of meeting or beating analysts' expectations in the short run which may be to the detriment of long run shareholder value.

A survey of chief financial officers conducted by Graham et al. (2004) supports the contention that focusing on meeting or beating analysts' expectations in the short run may be to the detriment of long run shareholder value. Managers surveyed by Graham et al. (2004) suggest that due to the severe market reaction caused by missing an earnings

[2]Core et al (1999) document a setting where management has an incentive to behave opportunistically but the presence of corporate governance mechanisms mitigates this ability. The paper finds that CEOs earn greater compensation when governance structures are less effective. Specifically, CEO compensation is higher when the CEO is also the board chair, the board is larger and a greater percentage of the board is composed of outside directors who are either appointed by the CEO or considered gray directors. CEO compensation is also higher when outside directors are older and serve on more than three other boards.

target, firms are willing to sacrifice economic value in order to meet a short run earnings target. Managers admit that they would take real economic action such as delaying maintenance and advertising expenditure and even give up positive net present value projects to meet earnings benchmarks. In response to this short run focus, firms such as Coca Cola and Gillette have discontinued the issuance of earnings estimates. Managers at Coca Cola felt that short term guidance prevented a more meaningful focus on the strategic initiatives that the company was taking to build its business and succeed over the long term. Gillette echoed this sentiment by suggesting that focusing on earnings estimates distracted management from long term goals (Kueppers and Weaver 2003).

Short run valuation benefits in the form of higher stock prices and market premiums accrue to firms that MBE. Kasznik and McNichols (2002) find that firms that meet expectations are rewarded with a higher stock price after controlling analysts' expectations of future earnings. However, in the long run, the market penalizes firms that previously met expectations but subsequently fail to do so. Similarly, Barth et al. (1999) find that firms which meet expectations receive a higher return than their peers who fail to meet expectations. However, the earnings multiple decreases when a firm that previously exhibited a pattern of increasing earnings subsequently experiences an earnings decrease. Finally, Bartov et al. (2002) find larger earnings multiples accrue to firms exhibiting a pattern of increasing earnings. However, the future performance of firms that used earnings or expectations management was inferior to that of firms that did not use either of these mechanisms. Firms that managed earnings or expectations, however, still fared better than firms that failed to meet or beat their earnings

expectations. The valuation benefits suggest meeting or beating expectations is advantageous to the firm in the short run but meeting or beating expectations may have some long run negative ramifications when a firm that met or exceeded expectations in the past subsequently fails to do so.

Additional empirical evidence that supports the long run costs associated with failing to meet or beat analysts' expectations is provided by Ke et al. (2003), who establish a negative relationship between the stock price response and a break in a string of consecutive earnings increases. Similarly, Skinner and Sloan (2002) find that negative earnings surprises for growth firms are penalized more than positive earnings surprises are rewarded. Collectively, these papers support the contention that there are costs associated with an earnings break. Further, these papers are consistent with anecdotal evidence in the financial press that detail the consequences associated with failing to meet or beat analysts' expectations[3]. Additionally, this research provides preliminary support for the arguments of managers and public accountants that playing the earnings game may erode long run firm value (Favaro and Rotz 2004; PricewaterhouseCoopers 2002).[4] Consistent with practitioners' arguments that meeting or beating analysts' expectations forces managers to focus on short run performance, Roychowdhury (2003)

[3] For example, on May 15, 2003, when Target missed its first quarter earnings target by one cent, shares of the stock fell in early morning trading (Reuters 2003). On December 22, 2002, when Tupperware warned that its annual earnings would fall short, the stock lost 14% of its value (CNNMoney 2002).

[4] Favaro and Rotz (2004) suggest that a focus on short term targets, specifically MBE, stands in the way of building the capabilities and making the investments required to increase a company's longer term value. Reducing the level of research and development activities, pulling back from marketing investments and delaying projects with long term payoffs are moves to cut costs significantly and ratchet up earnings in the near term. Over time they rob a business of growth drivers and can actually destroy value. PricewaterhouseCoopers (2002, p. 76) argue that erosion in long run value occurs when companies meet or beat expectations by making business decisions that provide a short run earnings boost at the expense of lower future cash flows.

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finds that firms that report small annual profits exhibit unusually low cash flow from operations and unusually high production costs. These suggest that managers seek to avoid losses by offering price discounts to boost sales and engaging in overproduction to reduce reported costs of goods sold.

Although the short term stock price run up may not result in an increase in the long run value of the firm, it does provide managers with opportunities to enhance their personal wealth at the expense of shareholders. Richardson et al. (2001) find firms that opportunistically "walk analysts down" to beatable forecasts are net issuers of equity. Further, the managers are net sellers of stock from their own personal accounts. Aboody and Kasznik (2000) find that CEOs preannounce bad news to lower the strike price of newly granted options. These opportunistic voluntary disclosers ultimately maximize stock option compensation. Matsunaga and Park (2001) find that CEOs are penalized with a smaller bonus which shrinks as their firms continue to miss earnings benchmarks. Finally, CEO career concerns provide additional incentives to meet or beat expectations. Puffer and Weintrop (1991) find that CEO turnover is more likely when reported annual earnings per share fall short of expectations.

The premise of this paper is that corporate governance mechanisms exist to ensure that long run value is maximized and may provide one way to differentiate between firms that play the earnings game and those that do not. Meeting or beating analysts' expectations does not appear to provide long run value, but the short run stock price run up presents self interested managers with incentives to maximize personal wealth at the expense of shareholders. This leads to my first hypothesis:

H_1: Firms that fail to meet or beat analysts' expectations have stronger corporate governance mechanisms than firms that meet or beat analysts' expectations

3.2 Hypothesis Two

Matsumoto (2002) presents evidence that firms meet or exceed analysts' expectations by using both earnings management and expectations management. Earnings management occurs when managers use their accounting discretion to MBE although the underlying firm performance is not consistent with market expectations. Firms manage earnings upward by increasing discretionary accruals to a level that results in a reported earnings number that exceeds analysts' forecasts. Expectations management occurs when managers, through voluntary disclosures, convey information about underlying firm performance such that market participants adjust their forecasts to reflect managers' predictions about expected firm performance.

Corporate governance mechanisms have been shown to constrain a firm's ability to manage earnings (Klein 2002; Peasnell et al. 2000). The corporate governance literature suggests that the presence of a majority of outsiders on the board of directors, small board size and the presence of institutional investors mitigate earnings management. Peasnell et al. (2000) find that in a sample of United Kingdom firms the presence of outsiders reduces the likelihood of income-increasing accounting choices. Klein (2002) also examines this relationship and finds income increasing accounting choices vary negatively with board independence, as measured by boards and/or audit committees composed of a majority of independent directors.

Chtourou et al. (2001) find that firms with low levels of earnings management had smaller boards that were composed of experienced independent board members. Chung et al. (2002) examine earnings management and find that the presence of institutional investors discourages managers from behaving opportunistically. Bushee (1998) and Bange and DeBondt (1998) examine the manipulation of research and development expenditures and find that the presence of institutional investors with a long term investment horizon reduces the level of earnings management.

Prior literature has also established an indirect relationship between corporate governance mechanisms and expectations management. One way firms inform the market of their revised estimates is through the release of a management earnings forecast. These voluntary releases to the market are considered a part of the disclosure process. Ajinkya et al. (2003) examine the disclosure process, specifically focusing on management earnings forecasts and conclude that institutional ownership and the proportion of outside directors have a favorable effect on the likelihood of forecast occurrence as well as the frequency of issuance. One would expect the positive relationship that exists between corporate governance and disclosure to manifest itself in the form of expectations management. This would suggest that firms MBE by keeping analysts abreast of earnings news in a timely manner. As a result, analysts' expectations are more in line with the actual results of the firm.

Corporate governance mechanisms have been shown to mitigate the ability of a firm to manage earnings. Therefore firms with strong corporate governance mechanisms are unlikely to use earnings management to meet earnings targets. In contrast, firms with

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strong corporate governance mechanisms that MBE are more likely to manage expectations so that market expectations are consistent with underlying firm performance[5]. Based on incentives provided by corporate governance mechanisms the following hypothesis is proposed:

H_2: *Firms with strong corporate governance mechanisms that meet or beat analysts' expectations are more apt to do so by managing expectations while firms with weak corporate governance mechanisms that meet or beat analysts' expectations are more apt to do so by managing earnings*

[5] In addition, prior literature suggests benefits from a transparent disclosure policy. Botosan (1997) provides direct evidence of a relationship between disclosure level and cost of equity capital. Lang and Lundholm (1996) provide evidence that firms with more informative disclosure policies have a larger analyst following, more accurate analyst earnings forecasts, less dispersion among individual analyst forecasts and less volatility in forecast revisions. An exception is Bushee and Noe (2000) who find that transient investors are attracted to increased disclosure, these investors exacerbate a firm's stock return volatility with their short term investment horizon and aggressive trading strategies.

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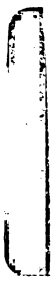
Chapter 4 - Research Design

4.1 Sample Selection

The initial sample consists of 10,256 firm year observations from the I/B/E/S database of analysts' forecasts from 1997-2001. To ensure consistency, analysts' expectations and actual earnings are both obtained from the I/B/E/S database (Bhojraj et al. 2003). Firm year observations are classified as meeting or exceeding expectations (MBE=1) if reported earnings met or exceeded the outstanding consensus forecast at the earnings announcement. Banks, insurance companies and other financial services firms, (SIC 6000-6999) are excluded, as are utilities (SIC 4800-4999) and other quasi regulated industries (SIC 4000-4499 and 8000 and above). All other financial data are obtained from the Compustat database.

The corporate governance and institutional holding data are obtained from the Compact Disclosure database. This database takes financial data and text from stockholders and Form 10-K reports, registration and proxy statements and other sources for all current and new companies registered with the SEC and transfers it into Excel format. Financial statements plus quarterly statements are provided with financial footnotes, and the full text of the president's letter and management discussions. Also included are lists of subsidiaries, major officers and board members and their salaries, 5% individual and 10% institutional holders, ranges of earnings forecasts from advisory services, and lists of additional SEC filings and exhibits. The database is updated monthly and from this source 48, 035 firm year observations from 1997-2001 were obtained. The final sample consists of 4,865 firm year observations. The dramatic drop



in firm-year observations is mainly due to analysts' forecasts not being available for the firm year observations from the I/B/E/S database.

4.2 Model Specification – Hypothesis One

In order to perform the analysis for hypothesis one, a logit regression, as shown in equation one, is used to test the probability that a firm MBE[6]:

$$Prob(MBE=1) = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + \beta_7 VREARN + \beta_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon \quad (1)$$

where:

Prob(MBE=1) = dummy variable, taking on the value 1 if the firm met or beat expectations and 0 otherwise;

Corporate Governance Variables:

%OUT = percentage of outsiders on the board of directors;
TOTAL = total number of directors on the board;
TOP5 = percentage of institutional shares held by top five institutions;

Control Variables:

%INST = percentage of institutional holdings;
UNCFE = absolute value of the difference between the first consensus forecast and actual earnings scaled by price;
LITRISK = dummy variable, taking on the value 1 if the firm is in a high risk industry and 0 otherwise;
VREARN = dummy variable, taking on the value of 1 if in prior year had loss before extraordinary item;
GROWTH = market capitalization at beginning of the year divided by beginning book value;

[6] The analysis is conducted with time dummies to control for time period specific effects.

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SIZE	=	logarithm of the market value of equity at the end of the year;
ICLAIM	=	factor composed of the individual variables: DUR: a dummy variable taking on the value of 1 if the firm is in the durable goods industry. R&D: annual research and development expenditures scaled by total assets. LABOR is defined as one minus the ratio of total gross property, plant and equipment to total assets;
ξ	=	error term.

This model is an extension of that used in Matsumoto (2002), and incorporates three corporate governance variables. First, I consider the size and composition of the board of directors as proxies for board governance. Second, I consider the concentration of a firm's institutional holdings because Shleifer and Vishny (1986) suggest that only shareholders with significant holdings have an incentive to monitor management.

I briefly discuss each of the three measures used to operationalize corporate governance. The first measure is the percentage of outsiders on the board of directors, %OUT. Ajinkya et al. (2003) examine the relationship between properties of management earnings forecasts and corporate governance mechanisms including the percentage of outside directors. Ajinkya et al. (2003) conclude that the percentage of outside directors on the board is positively associated with the occurrence and accuracy of forecasts and negatively associated with optimistic bias in the forecasts. The corporate governance literature also suggests that outside directors mitigate the incidence of fraud. Dechow et al. (1996) use a sample of firms who were investigated by the Securities and Exchange Commission for violations of Generally Accepted Accounting Principles. Dechow et al. (1996) conclude that the firms investigated were less likely to have a board of directors dominated by outsiders and less likely to have an external blockholder

monitoring management. Beasley (1996) also uses a sample of firms that were investigated by the Securities and Exchange Commission for financial statement fraud. Beasley (1996) concludes that the fraud firms had boards with significantly lower percentages of outside members than a matched sample of non-fraud firms. Finally, Farber (2003) finds that fraud firms work to improve their corporate governance mechanisms by increasing the outside director percentage and the market responds positively when there are large improvements in their corporate governance mechanisms. Overall, I expect a negative relationship between %OUT and MBE.

The second measure of corporate governance is the number of directors on the board. Core et al. (1999) find that the board is less effective at monitoring when the size of the board is larger. Using a sample of publicly traded firms they find that a one member increase in the size of the board is associated with a $30,601 increase in total CEO compensation. A smaller board may form a more cohesive group and not be distracted by factions that may form if there were more board members. However, Chtourou et al. (2001) find that a larger board is associated with less earnings management, but only for income decreasing accounting choices. A larger board may therefore provide a broader base of expertise since there are more directors present with diverse backgrounds. No directional hypothesis between board size and MBE is set forth since the literature supports both small and large board size as corporate governance mechanisms.

Corporate governance is also operationalized with the presence of institutional investors who have long term incentives/preferences. Two proxies for the presence of

institutional investors will be used in this analysis. The first is institutional concentration, which is measured as the proportion of institutional ownership accounted for by the top five institutional investors. The second is the Herfindahl index[7], an alternative institutional concentration measure. The two institutional concentration measures are motivated by Hartzell and Starks (2003) who find that institutional ownership concentration is negatively related to the level of executive compensation and positively related to the performance sensitivity of managerial compensation. Overall, I expect a negative relationship between institutional investors with long term incentives/preferences and MBE.

4.3 Control Variables

The percentage of institutional holdings is used as a control variable (Hartzell and Starks 2003). This allows the level of total institutional holdings to vary separately from the percentage of shares held by the top five institutional investors. Additional variables are used to control for factors that may be related to a firm's ability to MBE including uncertainty in the information environment, litigation risk, value relevance of earnings, growth, size and reliance on implicit claims with stakeholders. Initial forecast error, UNCFE, captures the uncertainty in the information environment. It is measured as the absolute value of the first consensus forecast minus actual earnings scaled by price. Matsumoto (2002) finds a negative relationship between the initial forecast error and the probability that a firm MBE.

[7] The Herfindahl-Hirschman index uses the share ownership of all institutions; the index is calculated as the sum of the squared institutional ownership.

Shareholder litigation can be precipitated by a sharp price decline, and certain industries are more volatile and are thus more vulnerable to the actions of shareholders. Inclusion in a high risk industry, LITRISK, is used to proxy for litigation risk. High risk industries include: biotechnology (SIC 2833-2836), computers (SIC 3570-3577 & 7370-7374), electronics (SIC 3600-3674) and retail (SIC 5200-5961). The delineation is consistent with prior research (Ali and Kallapur 2001; Bolliger and Kast 2003; Francis et al. 1994; Matsumoto 2002; Soffer et al. 2000). Matsumoto (2002) finds a positive relationship between MBE and existence in a high risk industry.

Value relevance of earnings, VREARN, is represented by an indicator variable if a loss occurred in the prior year (loss before extraordinary items). The inclusion of the value relevance of earnings is based on Hayn (1995) who finds a significant difference between the return earnings relation for loss firms. Matsumoto (2002) finds a negative relationship between the probability of MBE and the value relevance of earnings

Long term growth, GROWTH, represents future opportunities available to the firm. The average realized negative return surrounding a negative earnings response is larger in magnitude than the average realized positive return surrounding a positive earnings response (Skinner and Sloan 2002). High growth firms would therefore have a greater incentive to MBE. Consistent with Bolliger and Kast (2003) market to book ratio proxies for the growth prospects of the firm. It is measured as the market capitalization of the firm divided by book value, both at the beginning of the year.

SIZE, is measured by the logarithmic value of the market value of equity. Matsumoto (2002) finds a positive relationship between the probability of avoiding a negative earnings surprise and size.

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Finally, as in both Matsumoto (2002) and Bolliger and Kast (2003), reliance on implicit claims with stakeholders, ICLAIM, is measured with proxies developed by Bowen et al. (1995): DUR, R&D and LABOR. DUR is membership in a durable goods industry (SIC codes 150-179, 245, 250-259, 283, 301 and 324-399). R&D represents research intensity and is annual research and development expenditures scaled by total assets. Finally labor intensity, LABOR, is defined as one minus the ratio of total gross property, plant and equipment to total assets. A positive relationship was found between the probability of MBE and reliance on implicit claims (Matsumoto 2002).

4.4 Model Specification - Hypothesis Two

To test hypothesis two, I limit the sample to those firms that meet or exceed analysts' expectations. In addition, I need proxies for earnings management and expectations management. The cross sectional Jones model (1991) is used to determine discretionary accruals, which serve as a proxy for earnings management. A similar cross sectional analysis is used to determine the expected change in earnings. This is used to identify firms that engaged in expectations management (see below for details). Once these two proxies are determined, a multinomial logit regression of the two mechanisms on the percentage of outsiders, board size and the presence of institutional investors with long term incentives/preferences is conducted.

Performance-matched discretionary accruals are used to proxy for the degree of earnings management. Kothari et al. (2001) find that performance matching provides a well-specified and powerful test. The test is considered well-specified because the null hypothesis is rejected at the nominal significance level when it is true. The test is considered powerful because a false null hypothesis is rejected with high probability.

The cross sectional Modified Jones model (1991) is used to determine total accruals. If there are a minimum of eight firms in a particular industry, the following equation is estimated for each two digit SIC year grouping:

$$TOTAL\_ACCRUALS = \alpha + \beta_1(\Delta SALES - \Delta REC) + \beta_2 PPE + \varepsilon_1 \quad (2)$$

where:

TOTAL_ACCRUALS	= difference between operating cash flows and income before extraordinary items;
Δ SALES	= difference between current and prior year sales;
Δ REC	= difference between current and prior year accounts receivables;
PPE	= end of year property, plant and equipment balance.

Total Accruals, TOTAL_ACCRUALS, is measured as the difference between operating cash flows and income before extraordinary items from the statement of cash flows. Change in sales, Δ SALES, represents the difference in sales from the previous year. Change in account receivables, Δ REC, represents the change in accounts receivable from the prior year. Property, plant and equipment, PPE, is the end of the year balance in the property, plant and equipment account. All variables are scaled by prior year total assets. The fitted values from equation (2) are used to determine nondiscretionary accruals. Finally, discretionary accruals are measured as the difference between total accruals from equation (2) and the fitted values. In this analysis, only those firms that use discretionary accruals to increase earnings are of interest. As such, firm year observations with positive values of discretionary accruals are classified as earnings managers.

After determining firm year observations with positive values of discretionary accruals, the expected change in earnings is calculated and used to identify firms that engaged in expectations management. The methodology used is based on Bolliger and Kast (2003), who adapt the Matsumoto (2002) methodology for use with yearly data. Expectations management is defined as the difference between the expected earnings per share based on a model of prior earnings and stock price changes and the last analyst consensus earnings forecast released by analysts prior to the earnings announcement date. If the expected earning per share is smaller than the consensus forecast then expectations management is assumed to have occurred and analysts may have been walked down to a beatable forecast.

The first step is to determine the yearly change in earnings, which is modeled as a function of changes in earnings and returns cumulated over the current year for each firm in a given industry, j, during year t.

$$\frac{\Delta EPS_{ijt}}{P_{itj-1}} = \alpha_{jt} + \beta_{1jt} * \frac{\Delta EPS_{ijt-1}}{P_{ijt-2}} + B_{2jt} * CUMRET_{ijt} + \varepsilon_{ijt} \qquad (3)$$

where:

ΔEPS_{ijt}	=	earnings per share for firm i in two digit SIC code j in year t, less earnings per share from the prior year;
P_{ijt}	=	price per share for firm i in two digit SIC code j at the end of year t;
$CUMRET_{ijt}$	=	cumulative daily excess return for firm i in two digit SIC code j during year t; returns are cumulated from three days after year t-1 earnings announcement to 20 days before year t earnings announcement.

This model is estimated for each industry using all firms in that year that have the same two digit SIC code. In each year there must be a minimum of eight firms in a particular

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industry. The parameter estimates are then used to determine the expected change in earnings per share, (E[ΔEPS]):

$$E[\Delta EPS_{ijt}] = [\hat{\alpha}_{jt-1} + \hat{\beta}_{1jt-1} * \frac{\Delta EPS_{ijt-1}}{P_{ijt-2}} + \hat{\beta}_{2jt-1} * CUMRET] * P_{ijt-1} \quad (4)$$

The expected change in earnings per share, (E[ΔEPS]), is added to the prior year's earnings to obtain an estimate of earnings expectations for the current year that represents underlying firm performance based on past earnings changes, (E [FEPS]):

$$E[FEPS_{ijt}] = EPS_{ijt-1} + E[\Delta EPS_{ijt}] \quad (5)$$

Finally, the unexpected earnings forecast, UEF, is computed as the difference between the last consensus forecast released by analysts prior to the earnings announcement date (FEPS) and the expected analyst forecast from equation (5):

$$UEF_{ijt} = FEPS_{ijt} - E[FEPS_{ijt}] \quad (6)$$

In this analysis, only those firms that use expectations management to meet or beat analysts' expectations are of interest. As such, firm year observations with negative unexpected earnings forecasts are classified as expectations managers.

Equation (7) is a test of hypothesis two. This analysis focuses only on firms that met or exceeded analysts' expectations by managing expectations or managing earnings. For completeness, however, firms that manage both earnings and expectations or abstain from managing either are included in the analysis. These firms make up 907 firm year observations. Table 1 provides a description of the sample selection procedure.

Table 1
Formation of Final Sample for Hypothesis Two

Panel A: Description of sample selection procedure

Firms used to test H1	3,185
Firms excluded because no discretionary accrual data	(997)
Firms excluded because no unexpected earnings forecasts	(750)
Firm year observations	1,438
Firms that failed to meet or beat expectations	(531)
	907

Panel B: Composition of sample based on mechanism used to meet or beat analysts' expectations

		Earnings Management		
		Positive	Negative	
Expectations Management	Positive	283	226	
	Negative	254	144	
				907

A multinomial logit analysis that takes into consideration the four potential outcomes is performed. Firms with negative unexpected earnings forecasts are classified as expectations managers and the firm year observation is coded: MANAGE=1. Firms with positive discretionary accruals are classified as earnings managers and the firm year

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observation is coded: MANAGE=2. Firms with both positive discretionary accruals and negative unexpected earnings forecasts are classified as both earnings and expectations managers and the firm year is coded: MANAGE=3. Firm with negative discretionary accruals and positive unexpected earnings forecast are classified as neither earnings nor expectations managers and the firm year observation is coded: MANAGE=0. The probability of each outcome is calculated against the base case of managing earnings. The following logit analysis is estimated for 907 firm year observations:

$$P(MANAGE=1) = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 ICLAIM + B_7 LITRISK + \beta_8 VREARN + \beta_9 GROWTH + \beta_{10} SIZE + \varepsilon \quad (7)$$

where:

Prob(MANAGE=1) = categorical variable, taking on the value 0 if the firm manages neither earnings nor expectations, 1 if the firm manages expectations, 2 if the firm manages earnings and 3 if the firm manages both earnings and expectations;

Corporate Governance Variables:

%OUT = percentage of outsiders on the board of directors;
TOTAL = total number of directors on the board;
TOP5 = percentage of institutional shares held by top five institutions;

Control Variables:

%INST = percentage of institutional holdings;
UNCFE = absolute value of the difference between the first consensus forecast and actual earnings scaled by price;
LITRISK = dummy variable, taking on the value 1 if the firm is in a high risk industry and 0 otherwise;
VREARN = dummy variable, taking on the value of 1 if in prior year had loss before extraordinary item;

GROWTH = market capitalization at beginning of the year divided beginning book value;

SIZE = logarithm of the market value of equity at the end of the year;

ICLAIM = factor composed of the individual variables: DUR: a dummy variable taking on the value of 1 if the firm is in the durable goods industry. R&D: annual research and development expenditures scaled by total assets. LABOR is defined as one minus the ratio of total gross property, plant and equipment to total assets;

ξ = error term.

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Chapter 5 – Results

5.1 Descriptive Statistics

Table 2 reports descriptive statistics for the total sample. Firms met or exceeded expectations in approximately 60% of the firm years in the sample compared to 65% reported by Matsumoto (2002) and Bolliger and Kast (2003). Firms in the durable goods industry represented 42% of the firm years in the sample which is the same as that reported by Bolliger and Kast (2003) and the 45% reported by Matsumoto (2002). Highly litigious industries represented 39% of the firm years in the sample compared to 37% reported by Matsumoto (2002) and 35% reported by Bolliger and Kast (2003). Sample firms had a mean market value of equity of $3.96 billion and in 25% of the firm years there was a loss in the prior year. Additionally, institutions owned on average 43% of the stock outstanding compared to the 45% reported by Matsumoto (2002). On average, boards in the sample are composed of eight members which is the same as that reported by Peasnell et al. (2000). The average board is composed of 72 % outside board members compared to the 71.3% reported by Ajinkya et al. (2003).

Sum

Table 2
Summary Statistics for Dependent Variable, Independent Variables and Control Variables for 4,865 firm year observations for period 1997-2001

Variable[a, b]	N	Mean	Standard Deviation	1st Quartile	Median	3rd Quartile
MBE	4,865	0.60	0.49	0.00	1.00	1.00
%OUT	4,717	0.72	0.16	0.62	0.75	0.83
TOTAL	4,865	8.00	3.00	6.00	8.00	10.00
TOP5	4,865	0.58	0.25	0.37	0.54	0.82
%INST	4,820	0.44	0.27	0.20	0.44	0.66
UNCFE	4,750	0.16	2.13	0.00	0.01	0.05
LITRISK	4,865	0.39	0.49	0.00	0.00	1.00
VREARN	4,865	0.25	0.43	0.00	0.00	1.00
GROWTH	4,865	4.20	26.52	1.11	2.07	4.04
SIZE[c]	4,858	3,706	16,836	82	305	1,268
DUR	4,865	0.42	0.49	0.00	0.00	1.00
R&D	3,367	0.09	0.18	0.01	0.05	0.12
LABOR	4,802	0.52	0.35	0.33	0.60	0.78
ICLAIM	3,363	0.00	1.00	-0.54	0.09	0.56

[a] Prob(MBE=1) = dummy variable, taking on the value 1 if the firm met or beat expectations and 0 otherwise;
%OUT = percentage of outsiders on the board of directors;
TOP5 = percentage of institutional shares held by top five institutions;
TOTAL = total number of directors on the board;
%INST = percentage of institutional holdings;
UNCFE = absolute value of the difference between the first consensus forecast and actual earnings scaled by price;
LITRISK = dummy variable, taking on the value 1 if the firm is in a high risk industry and 0 otherwise;
VREARN = dummy variable, taking on the value of 1 if in prior year had loss before extraordinary item;
GROWTH = market capitalization at beginning of the year divided by beginning book value;
SIZE = logarithm of the market value of equity;
ICLAIM = factor composed of the individual variables: DUR: a dummy variable taking on the value of 1 if the firm is in the durable goods industry. R&D: annual research and development expenditures scaled by total assets. LABOR is defined as one minus the ratio of total gross property, plant and equipment to total assets;

[b] Statistics in this table are presented as actual values while logarithmic values are used in the analysis.

[c] Size is presented in millions.

Table 3 reports Pearson (Spearman) correlations of MBE and the independent variables in equation 1. The correlations between MBE and the three governance variables are significant. Consistent with hypothesis 1, the correlation between MBE and the proportion of institutional shares held by the top five institutions is negative and significant. Also consistent with hypothesis 1, the correlation between MBE and the percentage of outsiders on the board is negative and significant. However, the correlation between MBE and board size is positive and significant. With respect to the control variables, RD, DUR, LABOR, are also positively and significantly correlated. Factor analysis is used to combine these three variables into one factor, ICLAIM. This factor is used in the analysis singly and the individual variables are used collectively in separate logit analyses[8].

5.2 Regression Analysis - Hypothesis One

The results of the logit analysis used to test hypothesis One appear in Table 4. Columns 2-3 present the results when the individual implicit claim variables are used. The analysis is repeated in Columns 4-5 where the construct implicit claim, ICLAIM, replaces the three individual variables. In the first analysis, TOP5 ($p<.05$) and TOTAL ($p<.05$) are significantly negative. This result suggests that as the shares held by the top five institutional investors increase the firm is less likely to MBE, which is consistent with hypothesis one. The results also suggest that as board size increases the firm is less

[8] Principal components factor analysis is used to reduce the three variables to a single construct, ICLAIM. One construct results from retaining factors with an eigenvalue greater than one. Since all eigenvalues were greater than one this indicates that DUR, RD and Labor proxy for a single construct. The final communality estimates for DUR, Labor and RD are .32, .47 and .40 for the single construct ICLAIM.

likely to MBE. There is mixed evidence in the corporate governance literature about the influence of board size. The result is consistent with the literature that suggests larger boards provide a broader base of expertise since there are more directors present with diverse backgrounds (Chtourou et al. 2001). The coefficient on percentage of outside directors is insignificant. This may be due to the lack of variability throughout the sample years. The control variables in the analysis have the same signs although varying levels of significance relative to those reported by Matsumoto (2002) and Bolliger and Kast (2003).

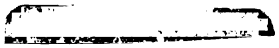

Table 3
Dependent Variable, Independent Variables and Control Variables

Table 3

Correlation Matrix for Dependent Variable, Independent Variables and Control Variables

	MBE		%OUT		TOTAL		TOP5		%INST		UNCFE		LITRISK	
MBE	1.00		-0.04	*	0.02		-0.25	**	0.20	**	-0.07	**	0.04	*
%OUT	-0.04	*	1.00		-0.20	**	0.20	**	-0.20	**	0.01		0.02	
TOTAL	0.03	*	-0.30	**	1.00		-0.31	**	-0.19	**	-0.18	**	-0.15	**
TOP5	-0.25	**	0.21	**	-0.25	**	1.00		-0.69	**	0.09	**	-0.01	
%INST	0.22	**	-0.21	**	0.11	**	-0.70	**	1.00		-0.08	**	-0.02	
UNCFE	-0.30	**	0.05	*	-0.04	*	0.47	**	-0.37	**	1.00		-0.01	
LITRISK	0.03	*	0.04	*	-0.12	**	-0.01		-0.02		-0.04	*	1.00	
VREARN	-0.11	**	-0.01		-0.18	**	0.24	**	-0.22	**	0.30	**	0.14	**
GROWTH	0.01		-0.01		0.00		0.01		-0.01		-0.01		0.00	
SIZE	0.24	**	0.13	**	0.29	**	-0.68	**	0.55	**	-0.66	**	0.00	
DUR	-0.01		-0.03	*	-0.06	**	0.00		0.03	*	0.03	*	-0.15	**
RD	-0.04	*	-0.02		-0.14	**	0.13	**	-0.15	**	0.19	*	-0.18	**
LABOR	0.03	*	0.09	**	-0.18	**	0.01		-0.01		-4.00	*	0.17	**
ICLAIM	-0.02		0.04	*	-0.24	**	0.12	**	-0.12	**	0.15	**	0.17	**

* Significant at $p<0.05$

**Significant at $p<0.01$

Pearson correlations above and Spearman correlations below diagonal

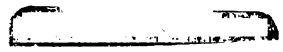

Table 3 (cont'd)
Independent Variables and Control Variables

Table 3 (cont'd)

Correlation Matrix for Dependent Variable, Independent Variables and Control Variables

	VREARN		GROWTH		SIZE		DUR		RD		LABOR		ICLAIM	
MBE	-0.10	**	0.03	*	0.16	**	-0.01		-0.07	**	0.04	*	-0.03	
%OUT	-0.03		0.00		-0.07	**	-0.03	*	-0.04	*	0.03	*	-0.01	
TOTAL	-0.19	**	0.02		0.33	**	-0.07	**	0.29	**	-0.24	**	-0.33	**
TOP5	0.25	**	-0.01		-0.46	**	0.01		0.16	**	0.01		0.12	**
%INST	-0.22	**	0.00		0.37	**	0.03	*	-0.17	**	0.00		-0.12	**
UNCFE	0.07	**	0.00		-0.06	**	0.01		0.11	**	0.01		0.09	**
LITRISK	0.14	**	0.02		0.06	**	-0.15	**	0.13	**	0.16	**	0.14	**
VREARN	1.00		0.00		-0.17	**	-0.02		0.35	**	0.09	**	0.35	**
GROWTH	-0.01		1.00		0.01		0.02		-0.01		0.00		-0.01	
SIZE	-0.31	**	0.01		1.00		0.01		-0.17	**	-0.02		-0.17	**
DUR	-0.02		0.00		-0.01	**	1.00		0.00		0.09	**	0.17	**
RD	0.40	**	-0.02		-0.12	**	0.15	**	1.00		0.09	**	0.72	**
LABOR	0.15	**	-0.02		0.02		0.03	*	0.32	**	1.00		0.74	**
ICLAIM	0.38	**	-0.04	*	-0.09	**	0.17	**	0.71	**	0.82	**	1.00	

* Significant at $p<0.05$

**Significant at $p<0.01$

Pearson correlations above and Spearman correlations below diagonal

5.3 Regression Analysis - Hypothesis Two

The results of the multinomial logit analysis used to test hypothesis Two appear in Table 5. Columns 2-3 present the results when the firm manages earnings compared to the base case of managing earnings. The coefficient on the concentration of the top five shareholders variable, TOP5 ($p<.05$) is positive and significant. The coefficient on the board size variable, TOTAL ($p<.05$) is negative and significant. The results suggest that as the number of shares held by the top five institutional investors increases the firm is more likely to manage expectations downward rather than manage earnings upward. Further, firms that manage expectations have smaller boards than firms in the sample that manage earnings. This result is consistent with the stream of literature that finds smaller boards are more cohesive and more effective at monitoring (Core et al. 1999).

Table 4
Logit Analysis of the Probability of Meeting or Beating Analysts' Expectations and Corporate Governance Mechanisms
(all variables winsorized at .01 and .99 percentile)

$$\Pr ob(MBE=1) = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + \beta_7 VREARN + B_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon$$

Independent Variable[a]	Predicted Sign	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept		-0.21	0.72	-0.18	0.74	-0.33	0.47
Corporate Governance Mechanisms							
%OUT	-	-0.11	0.67	-0.08	0.75	0.02	0.91
TOTAL	?	-0.05	0.01	-0.04	0.02	-0.04	0.01
TOP5	-	-1.08	0.00	-1.10	0.00	-0.86	0.00
Control Variables							
%INST	+	0.50	0.04	0.48	0.05	0.62	0.00
UNCFE	-	-1.14	0.00	-1.17	0.00	-1.12	0.00
LITRISK	+	0.14	0.14	0.21	0.02	0.19	0.01
VREARN	-	-0.12	0.28	-0.11	0.31	-0.07	0.39
GROWTH	+	0.01	0.08	0.01	0.09	0.01	0.03
SIZE	+	0.25	0.00	0.25	0.00	0.23	0.00
DUR	+	-0.22	0.02				
RD	+	0.07	0.86				
LABOR	+	0.30	0.05				
ICLAIM	+			0.06	0.30		
N=			3185		3185		4569
Log Likelihood=			-1937		-1941.7		-2818
p-value=			<.01		<.01		<.01

[a] Refer to Table 1 for variable definitions.

Table 5
Logit Analysis of the Association between Corporate Governance Mechanisms and the Probability of Managing Expectations versus Managing Earnings

$$P(MANAGE = 1)^{a} = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon$$

	Manage Expectations		Manage Neither		Manage Both	
Independent Variableb	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
INTERCEPT	-1.26	.22	-1.87	.10	-0.87	.39
Corporate Governance Mechanisms						
%OUT	-0.57	.35	-.59	.39	-0.49	.39
TOTAL	-0.13	.00	-0.07	.13	-0.08	.05
TOP5	2.21	.00	1.55	.06	-0.71	.06
Control Variables						
%INST	-0.12	.82	0.17	.77	-0.77	.10
UNCFE	10.70	.00	8.70	.01	9.69	.00
LITRISK	0.56	.01	0.66	.00	-0.11	.55
VREARN	0.31	.21	0.62	.02	-0.46	.08
GROWTH	0.02	.16	0.02	.17	0.02	.11
SIZE	0.13	.15	-0.11	.10	0.33	.00
N=		907				
Log Likelihood=		-1142.03				
p-value=		<.05				

[a] MANAGE is a categorical variable equal to 0 if a firm manages neither earnings nor expectations, 1 if a firm manages expectations, 2 if a firm manages earnings and 3 if a firm manages both.

[b] Refer to Table 1 for variable definitions.

5.4 Summary

As discussed above, the results suggest that the holdings of the top five institutional investors limit the ability of the firm to manage earnings upward which is consistent with prior corporate governance literature (Chtourou et al. 2001; Chung et al. 2001; Klein 2002; Peasnell et al. 2000). The results also suggest that the holdings of the top five institutional investors are associated with a firm that manages expectations. This result is consistent with the expectations management literature, which finds that firms walk analysts down to beatable forecasts (Cotter et al. 2000; Richardson et al. 2001).

Chapter 6 - Conclusions and Future Research Opportunities

This chapter presents conclusions related to the results of the multivariate analyses of Chapter 6. The conclusions are followed by suggestions for further developing this study. Finally, limitations are discussed.

6.1 Conclusion

This paper examines the relationship between corporate governance mechanisms and MBE. I document that firms with strong corporate governance mechanisms are less likely to MBE. This suggests that firms with strong corporate governance are more concerned about long run costs such as those resulting from a break in a string of earnings increases. This also suggests that firms with strong corporate governance mechanisms may judge corporate managers on the basis of long term reported earnings and thus have less of a need to play the earnings game (Wahal and McConnell 1999).

For firms that choose to MBE, this paper also examines the relationship between corporate governance mechanisms, earnings management and expectations management. These are two mechanisms firms use to MBE (Matsumoto 2002). I find that corporate governance mechanisms mitigate the ability of firms to manage earnings upward. In this setting, the concentration of shares held by the top five institutions is the mechanism that appears to have the most impact. This result is consistent with prior corporate governance literature which finds a negative relationship between earnings management and corporate governance mechanisms. Finally, it appears that expectations management is used by firms with strong corporate governance mechanisms. These firms keep the market informed and this ultimately leads to alignment between management's

expectations and those of the market at the end of the reporting period (Cotter et al. 2000).

6.2 Future Research

Additional research that I plan to conduct includes examining the valuation differences associated with the level of a firm's corporate governance mechanisms. In addition, examining the magnitude of long run costs such as a break in a string of earnings increases would provide evidence that firms with strong corporate governance mechanisms are more interested in managing the costs associated with such a break instead of focusing on MBE in the short run.

6.3 Limitations

There are several limitations to this study. First is the quality of the corporate governance data. This data originated from the Compact Disclosure database which transfers into Excel format financial data and text from stockholders and Form 10-K reports, registration and proxy statements and other sources for all current and new companies registered with the SEC. Also included are lists of subsidiaries, major officers and board members and their salaries, 5% individual and 10% institutional holders. Although the database lists the names of board members and their ages it does not provide additional information about those board members. Information that could have provided richer analyses includes whether the board member is a financial expert, what board committees he/she serves on or whether he/she serves on additional boards. The present limited information allowed only the basic governance variables to be used in the analyses.

An additional limitation is the measurement error that is a result of using the Jones model to obtain a proxy for earnings management (in this case the level of discretionary accruals). The use of performance matched discretionary accruals in the analysis should have mitigated the level of measurement error. The same limitation holds for the use of a Jones-like model to obtain a proxy for expectations management, which in this case is the level of unexpected portion of the earnings forecast.

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APPENDICES

Appendix A - Descriptive Statistics

This appendix presents a detailed analysis of the descriptive statistics presented in Table 1 of Chapter 5. Table A.1 examines the descriptive statistics for firms that meet or beat analysts' expectations. Table A.2 examines the descriptive statistics for firms that fail to meet or beat analysts' expectations. Table A.3 examines differences between the sets of statistics in Tables A.1 and A.2. From Table A.3 there appears to be very little variation in the percentage of outsiders on the board. The two groups of firms also appear to have the same total number of individuals on the board of directors. However, significance tests show that the difference in means is statistically significant at less than the .05 level. The final corporate governance variable, percentage of shares held by the top five institutional investors appears to be larger in the sample of firms that fail to meet or beat analysts' expectations. As shown in Table A.3, the difference in means is statistically significant at less than the .01 level. The percentage of shares held by institutions appears to be larger for the sample of firms that meet or beat analysts' expectations. The means are statistically significant at less than the .01 level as shown in Table A.3. The means of uncertainty of forecast error as well as value relevance of earnings appear to be larger for firms that fail to meet or beat analysts' expectations. The differences in means are statistically significant. Litigation risk, growth and size appear to be smaller for firms that fail to meet or beat analysts' expectations. Again, the differences in means are statistically significant. Firms that fail to meet or beat analysts' expectations have larger research and development expenditures and are less labor intensive. Both of these variables are statistically significant at less than the .01 level. Finally, total assets are not statistically significant.

Table A.1
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for firms that meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	2,925	1.00	0.00	1.00
%OUT	2,849	0.73	0.16	0.75
TOTAL	2,925	8.19	2.95	8.00
TOP5	2,925	0.53	0.24	0.47
%INST	2,908	0.49	0.26	0.51
UNCFE	2,919	0.05	0.46	0.01
LITRISK	2,925	0.41	0.49	0.00
VREARN	2,925	0.22	0.41	0.00
GROWTH	2,925	5.02	32.00	2.10
SIZE[b]	2,922	635.00	610.72	476.00
DUR	2,925	0.40	0.49	0.00
R&D	2,045	0.09	0.14	0.05
LABOR	2,042	0.53	0.35	0.61
ICLAIM	2,042	(0.04)	0.91	0.07
TOTAL ASSETS	2,912	2,163.96	7,902.88	345.68

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.2

Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for firms that fail to meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	1,940	0.00	0.00	0.00
%OUT	1,868	0.72	0.16	0.75
TOTAL	1,940	8.00	3.16	7.00
TOP5	1,940	0.67	0.25	0.68
%INST	1,912	0.36	0.26	0.34
UNCFE	1,831	0.35	3.38	0.03
LITRISK	1,940	0.37	0.48	0.00
VREARN	1,940	0.31	0.46	0.00
GROWTH	1,940	3.08	13.90	2.02
SIZE[b]	1,936	428.59	539.43	262.50
DUR	1,940	0.42	0.49	0.00
R&D	1,322	0.12	0.23	0.05
LABOR	1,909	0.50	0.36	0.59
ICLAIM	1,321	0.03	1.12	0.13
TOTAL ASSETS	1,916	1,856.88	6,990.58	179.13

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.

[b]Size is presented in millions.

Table A.3
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables

	Firms that meet or beat analysts' expectations		Firms that fail to meet or beat analysts' expectations	
Variable	N	Mean	N	Mean
MBE[a]	2,925	1.00	1,940	0.00
%OUT	2,849	0.73	1,868	0.72
TOTAL[b]	2,925	8.19	1,940	8.00
TOP5[b,c]	2,925	0.53	1,940	0.67
%INST[b,c]	2,908	0.49	1,912	0.36
UNCFE[b,c]	2,919	0.05	1,831	0.35
LITRISK[b,c]	2,925	0.41	1,940	0.37
VREARN[b,c]	2,925	0.22	1,940	0.31
GROWTH[b,c]	2,925	5.02	1,940	3.08
SIZE[b,c]	2,922	635.00	1,936	428.59
DUR	2,925	0.40	1,940	0.42
R&D[b,c]	2,045	0.09	1,322	0.12
LABOR[b,c]	2,042	0.53	1,909	0.50
ICLAIM	2,042	(0.04)	1,321	0.03
TOTAL ASSETS	2,912	2,163.96	1,916	1,856.88

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis. Size is presented in millions.
[b]Statistically significant at less than the .05 level
[c]Statistically significant at less than the .01 level

Table A.4 provides descriptive statistics for the sample by year. In panels A-E, there appears to be very little variation in the percentage of outsiders on the board. The mean percentage ranges from 71% in 1997 to 74% in 1998. In the remaining three years the percentage remains stable at 72%. This lack of variation may explain the lack of significance in the analyses. In addition there appears to be very little variation in the board size variable. The mean variable ranges from 7.64 in 1997 to 8.43 in 1998. In the remaining three years the variable remains fairly stable at 8.22 in 1999, 8.16 in 2000 and 8.14 in 2001. Unlike the other two corporate governance variables there is significant variation by year in mean percentage of shares held by the top five institutional investors. The mean ranges from 50% in 1999 to 63% in 1997. The mean percentage of shares held by institutional investors also varies throughout the years in the sample. The mean ranges from 42% in 1997 to 51% in 2001. In the remaining years of the sample the mean remains fairly stable at 43% in 1998 and 1999 and 44% in 2000. The mean of uncertainty of forecast error shows variation when the sample is presented by year. The mean ranges from .07 in 1999 to .27 in 1997. Litigation risk also varies throughout the years in the sample. The mean ranges from .36 in 1999 to .42 in 2000. The mean value relevance of earnings varies from a low of .20 in 1998 to .29 in 2001. The mean of growth ranges from a low of 3.97 in 1998 to a high of 4.98 in 1997. The mean size of firms in the sample varies from a low of 499.11 in 2001 to 678.61 in 1999. The mean number of firms in a durable goods industry remains fairly stable throughout the sample. The mean ranges from .39 in 1999 to .43 in 2001. The mean level of research and development expenditures ranges from .08 in 1999 and 2000 to .12 in 1997. Mean labor

intensity .50 in 1998 to .53 in 2001. Finally, mean total assets vary from 1,551.86 in 1997 to 2439.06 in 2000.

Table A.4
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables by year

Panel A: Annual period 1997

Variable	N	Mean	Standard Deviation	Median
MBE[a]	1,064	0.59	0.49	1.00
%OUT	1,033	0.71	0.16	0.75
TOTAL	1,064	7.64	3.12	7.00
TOP5	1,064	0.63	0.23	0.59
%INST	1,055	0.42	0.26	0.41
UNCFE	1,051	0.27	4.03	0.01
LITRISK	1,064	0.39	0.49	0.00
VREARN	1,064	0.25	0.43	0.00
GROWTH	1,064	4.98	48.00	2.07
SIZE[b]	1,063	512.79	471.44	381.25
DUR	1,064	0.42	0.49	0.00
R&D	763	0.12	0.19	0.06
LABOR	1,051	0.54	0.32	0.61
ICLAIM	761	0.07	1.01	0.08
TOTAL ASSETS	1,056	1,551.86	9,832.04	161.76

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.4 (cont'd).
Panel B: Annual period 1998

Variable	N	Mean	Standard Deviation	Median
MBE[a]	1,046	0.57	0.50	1.00
%OUT	1,021	0.74	0.16	0.78
TOTAL	1,046	8.43	3.18	8.00
TOP5	1,046	0.62	0.24	0.59
%INST	1,037	0.43	0.26	0.44
UNCFE	1,026	0.14	1.12	0.01
LITRISK	1,046	0.40	0.49	0.00
VREARN	1,046	0.20	0.40	0.00
GROWTH	1,046	3.97	18.65	2.17
SIZE[b]	1,045	515.22	553.29	357.81
DUR	1,046	0.42	0.49	0.00
R&D	716	0.12	0.27	0.05
LABOR	1,032	0.50	0.36	0.58
ICLAIM	716	0.02	1.20	0.06
TOTAL ASSETS	1,038	1,714.50	5,680.67	231.94

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.4 (cont'd).
Panel C: Annual period 1999

Variable	N	Mean	Standard Deviation	Median
MBE[a]	1,254	0.65	0.48	1.00
%OUT	1,217	0.72	0.16	0.75
TOTAL	1,254	8.22	3.00	8.00
TOP5	1,254	0.50	0.27	0.42
%INST	1,242	0.43	0.27	0.44
UNCFE	1,221	0.07	0.43	0.01
LITRISK	1,254	0.36	0.48	0.00
VREARN	1,254	0.26	0.44	0.00
GROWTH	1,254	3.84	15.93	2.00
SIZE[b]	1,250	678.61	798.80	450.78
DUR	1,254	0.39	0.49	0.00
R&D	825	0.08	0.13	0.04
LABOR	1,236	0.51	0.37	0.60
ICLAIM	824	(0.09)	0.91	0.02
TOTAL ASSETS	1,245	2,304.68	7,400.33	351.94

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.4 (cont'd).
Panel D: Annual period 2000

Variable	N	Mean	Standard Deviation	Median
MBE[a]	852	0.60	0.49	1.00
%OUT	826	0.72	0.16	0.75
TOTAL	852	8.16	3.04	8.00
TOP5	852	0.62	0.25	0.58
%INST	843	0.44	0.27	0.44
UNCFE	821	0.23	1.80	0.02
LITRISK	852	0.42	0.49	0.00
VREARN	852	0.27	0.45	0.00
GROWTH	852	4.46	10.98	2.01
SIZE[b]	851	505.07	494.99	346.88
DUR	852	0.40	0.49	0.00
R&D	600	0.08	0.10	0.05
LABOR	842	0.53	0.34	0.62
ICLAIM	600	(0.05)	0.89	0.13
TOTAL ASSETS	845	2,439.06	6,953.33	350.80

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.4 (cont'd).
Panel E: Annual period 2001

Variable	N	Mean	Standard Deviation	Median
MBE[a]	649	0.58	0.49	1.00
%OUT	620	0.72	0.18	0.75
TOTAL	649	8.14	2.57	8.00
TOP5	649	0.56	0.24	0.49
%INST	643	0.51	0.27	0.54
UNCFE	631	0.16	0.78	0.02
LITRISK	649	0.40	0.49	0.00
VREARN	649	0.29	0.45	0.00
GROWTH	649	4.02	16.97	2.21
SIZE[b]	649	499.11	420.45	392.25
DUR	649	0.43	0.50	0.00
R&D	463	0.09	0.12	0.06
LABOR	641	0.52	0.35	0.61
ICLAIM	462	0.01	0.88	0.20
TOTAL ASSETS	644	2,345.48	6,884.08	370.98

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Tables A.5 through A.9 provide descriptive statistics by year separately for firms that meet or beat analysts' expectations and those firms that fail to do so. These tables provide for a more in-depth analysis of the individual variables. Consistent with Table A.3, there appears to be very little variation in the mean percentage of outsiders on the board when the sample is broken down by sample year. In 1999, there is the same mean percentage of outside directors on boards that met or beat analysts' expectations and boards that failed to do so. The mean board size variable shows a small amount of variation based on whether the firm meets or beats analysts' expectations or fails to do so. For firms that met or beat analysts' expectations the mean ranges from a low of 7.72 in 1997 to a high of 8.39 in 2001. For firms that failed to meet or beat analysts' expectations the mean ranges from a low of 7.79 in 2001 to a high of 8.47 in 1998.

The mean percentage of shares held by the top five institutional investors shows variation based on whether the firm meets or beats analysts' expectations or fails to do so. For firms that met or beat analysts' expectations the mean ranges from a low of 45% in 1999 to a high of 58% in both 1997 and 1998. For firms that failed to meet or beat analysts' expectations the mean ranges from a low of 60% in 1999 to a high of 72% in 2000. There appears to be no overlap in the ranges based on whether a firm met or beat analysts' expectations or failed to do so. The mean percentage of shares held by institutional investors also shows variation based on whether the firm meets or beats analysts' expectations or fails to do so. For firms that met or beat analysts' expectations the mean ranges from a low of 46% in 1997 to a high of 56% in 2001. For firms that failed to meet or beat analysts' expectations the mean ranges from a low of 35% in the first four years of the sample to a high of 45% in 2001.

Table A.5
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for sample year 1997

Panel A: Firms that met or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	626	1.00	0.00	1.00
%OUT	609	0.71	0.16	0.75
TOTAL	626	7.72	3.06	7.00
TOP5	626	0.58	0.22	0.54
%INST	623	0.46	0.25	0.48
UNCFE	623	0.03	0.10	0.01
LITRISK	626	0.39	0.49	0.00
VREARN	626	0.20	0.40	0.00
GROWTH	626	6.19	62.36	2.12
SIZE[b]	626	572.28	429.41	475.00
DUR	626	0.41	0.49	0.00
R&D	448	0.10	0.16	0.05
LABOR	619	0.55	0.32	0.62
ICLAIM	446	0.01	0.93	0.06
TOTAL ASSETS	624	1,674.97	11,845.99	195.20

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.5 (cont'd).
Panel B: Firms that fail to meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	438	0.00	0.00	0.00
%OUT	424	0.72	0.15	0.75
TOTAL	438	7.54	3.20	7.00
TOP5	438	0.70	0.23	0.74
%INST	432	0.35	0.25	0.33
UNCFE	428	0.61	6.30	0.03
LITRISK	438	0.39	0.49	0.00
VREARN	438	0.33	0.47	0.00
GROWTH	438	3.25	6.04	1.98
SIZE[b]	437	427.57	514.47	254.68
DUR	438	0.43	0.50	0.00
R&D	315	0.14	0.22	0.07
LABOR	432	0.52	0.33	0.58
ICLAIM	315	0.15	1.12	0.15
TOTAL ASSETS	432	1,374.04	5,807.98	109.31

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.6
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for sample year 1998

Panel A: Firms that met or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	596	1.00	0.00	1.00
%OUT	589	0.75	0.16	0.78
TOTAL	596	8.39	3.05	8.00
TOP5	596	0.58	0.23	0.53
%INST	592	0.48	0.26	0.50
UNCFE	596	0.07	0.46	0.01
LITRISK	596	0.45	0.50	0.00
VREARN	596	0.18	0.39	0.00
GROWTH	596	4.86	20.99	2.17
SIZE[b]	596	594.79	614.80	433.01
DUR	596	0.39	0.49	0.00
R&D	415	0.10	0.19	0.05
LABOR	588	0.52	0.35	0.58
ICLAIM	415	(0.03)	0.96	(0.00)
TOTAL ASSETS	592	1,639.32	5,061.88	267.64

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.6 (cont'd).
Panel B: Firms that fail to meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	450	0.00	0.00	0.00
%OUT	432	0.74	0.15	0.78
TOTAL	450	8.47	3.35	8.00
TOP5	450	0.68	0.24	0.68
%INST	445	0.36	0.25	0.33
UNCFE	430	0.23	1.63	0.02
LITRISK	450	0.35	0.48	0.00
VREARN	450	0.23	0.42	0.00
GROWTH	450	2.79	14.95	2.16
SIZE[b]	449	409.61	437.94	270.31
DUR	450	0.46	0.50	0.00
R&D	301	0.14	0.36	0.04
LABOR	444	0.47	0.38	0.57
ICLAIM	301	0.08	1.48	0.11
TOTAL ASSETS	446	1,814.29	6,415.08	158.95

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.7
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for sample year 1999

Panel A: Firms that meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	815	1.00	0.00	1.00
%OUT	792	0.72	0.16	0.75
TOTAL	815	8.24	2.78	8.00
TOP5	815	0.45	0.25	0.38
%INST	809	0.48	0.26	0.50
UNCFE	813	0.03	0.10	0.01
LITRISK	815	0.39	0.49	0.00
VREARN	815	0.24	0.43	0.00
GROWTH	815	4.54	15.19	2.02
SIZE[b]	813	754.32	799.13	534.38
DUR	815	0.39	0.49	0.00
R&D	547	0.08	0.13	0.04
LABOR	805	0.51	0.36	0.60
ICLAIM	546	(0.10)	0.91	0.02
TOTAL ASSETS	811	2,146.78	5,676.23	450.12

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.7 (cont'd).
Panel B: Firms that fail to meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	439	0.00	0.00	0.00
%OUT	425	0.72	0.17	0.75
TOTAL	439	8.17	3.38	8.00
TOP5	439	0.60	0.28	0.56
%INST	433	0.35	0.26	0.30
UNCFE	408	0.15	0.72	0.03
LITRISK	439	0.31	0.46	0.00
VREARN	439	0.29	0.45	0.00
GROWTH	439	2.53	17.17	1.97
SIZE[b]	437	8,190.63	779.75	306.25
DUR	439	0.39	0.49	0.00
R&D	278	0.09	0.13	0.04
LABOR	431	0.50	0.39	0.62
ICLAIM	278	(0.07)	0.91	0.05
TOTAL ASSETS	434	2,599.73	9,845.41	213.98

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.8
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for sample year 2000

Panel A: Firms that meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	509	1.00	0.00	1.00
%OUT	497	0.73	0.16	0.75
TOTAL	509	8.29	3.10	8.00
TOP5	509	0.55	0.23	0.50
%INST	506	0.49	0.26	0.53
UNCFE	508	0.09	0.93	0.01
LITRISK	509	0.43	0.50	0.00
VREARN	509	0.21	0.41	0.00
GROWTH	509	4.37	12.18	2.04
SIZE[b]	508	610.55	525.28	464.06
DUR	509	0.43	0.50	0.00
R&D	360	0.07	0.09	0.05
LABOR	505	0.55	0.34	0.64
ICLAIM	360	(0.03)	0.86	0.17
TOTAL ASSETS	507	2,909.93	7,804.31	495.68

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.8 (cont'd).
Panel B: Firms that fail to meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	343	0.00	0.00	0.00
%OUT	329	0.72	0.16	0.75
TOTAL	343	7.97	2.96	8.00
TOP5	343	0.72	0.23	0.73
%INST	337	0.35	0.26	0.31
UNCFE	313	0.47	2.66	0.04
LITRISK	343	0.42	0.49	0.00
VREARN	343	0.37	0.48	0.00
GROWTH	343	4.59	8.93	1.99
SIZE[b]	343	348.85	398.64	200.00
DUR	343	0.36	0.48	0.00
R&D	240	0.09	0.12	0.05
LABOR	337	0.50	0.35	0.61
ICLAIM	240	(0.09)	0.94	0.09
TOTAL ASSETS	338	1,732.75	5,366.76	240.06

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.9
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for sample year 2001

Panel A: Firms that meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	379	1.00	0.00	1.00
%OUT	362	0.71	0.17	0.75
TOTAL	379	8.39	2.62	8.00
TOP5	379	0.51	0.22	0.44
%INST	378	0.56	0.26	0.59
UNCFE	379	0.08	0.34	0.02
LITRISK	379	0.41	0.49	0.00
VREARN	379	0.25	0.43	0.00
GROWTH	379	5.25	14.90	2.25
SIZE[b]	379	579.41	443.69	450.00
DUR	379	0.40	0.49	0.00
R&D	275	0.08	0.10	0.05
LABOR	376	0.53	0.36	0.62
ICLAIM	275	(0.02)	0.85	0.19
TOTAL ASSETS	378	2,829.15	7,562.67	537.00

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table A.9 (cont'd)
Panel B: Firms that fail to meet or beat analysts' expectations

Variable	N	Mean	Standard Deviation	Median
MBE[a]	270	0.00	0.00	0.00
%OUT	258	0.72	0.17	0.78
TOTAL	270	7.79	2.47	7.00
TOP5	270	0.64	0.25	0.61
%INST	265	0.45	0.28	0.44
UNCFE	252	0.29	1.15	0.03
LITRISK	270	0.39	0.49	0.00
VREARN	270	0.35	0.48	0.00
GROWTH	270	2.29	19.40	2.09
SIZE[b]	270	386.39	356.88	284.75
DUR	270	0.48	0.50	0.00
R&D	188	0.11	0.15	0.06
LABOR	265	0.52	0.34	0.59
ICLAIM	187	0.04	0.94	0.21
TOTAL ASSETS	266	1,658.14	5,728.41	216.44

[a]MBE is a dichotomous variable equal to 1 if a firm's actual earnings meet or exceed the analysts' consensus forecast outstanding at the earnings announcement and 0 otherwise. Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Appendix B – Supplementary Analyses for Hypothesis One

This appendix presents supplementary analyses for the results presented in Table 4 of Chapter 5. Tables B.1 provides results without winsorized variables. The results in Table 4 show continuous variables winsorized at the .01 percentile. Table B.2 provides results when continuous variables are winsorized at the .10 percentile. The results are consistent with those presented in Table 4 of Chapter 5. Both TOP5 ($p<.05$) and TOTAL ($p<.05$) are significantly negative. This suggests that as the shares held by the top five institutional investors increase the firm is less likely to MBE, which is consistent with Hypothesis One. The results also suggest that as board size increases the firm is less likely to MBE. There is mixed evidence in the corporate governance literature about the influence of board size. The result is consistent with the literature that suggests larger boards provide a broader base of expertise. The percentage of outsiders on the average board remains insignificant. The lack of results may be due to the lack of variability throughout the sample years as shown in appendix A.

Table B.1
Logit Analysis of the Probability of Meeting or Beating Analysts' Expectations
and Corporate Governance Mechanisms

$$\Pr ob(MBE = 1) = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon$$

Independent Variable	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Intercept	-0.21	0.72	-0.18	0.74	-0.33	0.47
Corporate Governance Mechanisms						
%OUT	-0.11	0.67	-0.08	0.75	0.02	0.91
TOTAL	-0.05	0.01	-0.04	0.02	-0.04	0.01
TOP5	-1.08	0.00	-1.10	0.00	-0.86	0.00
Control Variables						
%INST	0.50	0.04	0.48	0.05	0.62	0.00
UNCFE	-1.14	0.00	-1.17	0.00	-1.12	0.00
LITRISK	0.14	0.14	0.21	0.02	0.19	0.01
VREARN	-0.12	0.28	-0.11	0.31	-0.07	0.39
GROWTH	0.01	0.08	0.01	0.09	0.01	0.03
SIZE	0.25	0.00	0.25	0.00	0.23	0.00
DUR	-0.22	0.02				
RD	0.07	0.86				
LABOR	0.30	0.05				
ICLAIM			0.06	0.30		
N=		3185		3185		4569
Log Likelihood=		-1937.87		-1941		-2818
p-value=		<.01		<.01		<.01

Table B.2
Logit Analysis of the Probability of Meeting or Beating Analysts' Expectations and Corporate Governance Mechanisms (all variables winsorized at 10% and 90% percentiles)

$$\Pr ob(MBE = 1) = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon$$

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	0.52	0.45	0.60	0.37	0.53	0.35
Corporate Governance Mechanisms						
%OUT	0.08	0.80	0.11	0.73	0.20	0.45
TOTAL	-0.04	0.08	-0.04	0.08	-0.05	0.01
TOP5	-0.88	0.00	-0.91	0.00	-0.69	0.01
Control Variables						
%INST	0.59	0.02	0.56	0.03	0.69	0.00
UNCFE	-9.25	0.00	-9.32	0.00	-9.18	0.00
LITRISK	0.13	0.15	0.21	0.01	0.19	0.01
VREARN	-0.08	0.49	-0.04	0.71	-0.01	0.95
GROWTH	0.04	0.03	0.04	0.03	0.03	0.06
SIZE	0.11	0.18	0.10	0.21	0.09	0.19
DUR	-0.20	0.03				
RD	0.78	0.27				
LABOR	0.22	0.23				
ICLAIM			0.07	0.29		
N=		3185		3185		4569
Log Likelihood=		-1914.55		-1917		-2782
p-value=		<.01		<.01		<.01

Table B.3 provides the regression analysis by year for unwinsorized variables. The corporate governance variables except 2001 are mostly insignificant. As shown in panel E, in 2001, the percentage of shares held by the top five investors is significantly negative. Again, this supports the original contention that as these investors increase

their stake in the company the firm has a smaller probability of meeting or beating analysts' expectations[9].

Table B.3
Logit Analysis of the Probability of Meeting or Beating Analysts' Expectations and Corporate Governance Mechanisms by year

Panel A: Annual period 1997

$$\Pr ob(MBE = 1) = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon$$

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	-0.10	0.93	-0.22	0.84	0.46	0.63
Corporate Governance Mechanisms						
%OUT	-0.45	0.38	-0.39	0.44	-0.37	0.38
TOTAL	-0.02	0.55	-0.02	0.45	-0.02	0.41
TOP5	-0.75	0.20	-0.68	0.25	-0.85	0.08
Control Variables						
%INST	0.39	0.40	0.42	0.35	0.34	0.38
UNCFE	-1.40	0.05	-1.45	0.04	-2.42	0.01
LITRISK	-0.13	0.43	-0.12	0.47	-0.09	0.49
VREARN	0.00	0.99	-0.05	0.78	-0.19	0.25
GROWTH	0.01	0.42	0.01	0.45	0.01	0.35
SIZE	0.23	0.10	0.25	0.08	0.16	0.18
DUR	-0.09	0.58				
RD	-0.62	0.21				
LABOR	0.27	0.32				
ICLAIM			-0.01	0.88		
N=		726		726		1013
pseudo R^2=		0.0749		0.0726		0.0818

[9] The results remain unchanged when continuous variables are winsorized at the .01 and .10 level.

Table B.3 (cont'd).
Panel B: Annual period 1998

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	-1.13	0.32	-1.05	0.35	-1.57	0.07
Corporate Governance Mechanisms						
%OUT	0.07	0.89	0.05	0.91	-0.08	0.85
TOTAL	-0.07	0.03	-0.07	0.03	-0.07	0.01
TOP5	-0.17	0.77	-0.27	0.64	0.10	0.83
Control Variables						
%INST	1.17	0.01	1.20	0.01	1.30	0.00
UNCFE	-1.14	0.16	-1.30	0.14	-0.10	0.43
LITRISK	0.29	0.10	0.42	0.01	0.36	0.01
VREARN	0.33	0.16	0.37	0.11	0.20	0.29
GROWTH	0.01	0.20	0.01	0.21	0.01	0.29
SIZE	0.26	0.05	0.24	0.07	0.30	0.00
DUR	-0.41	0.02				
RD	-0.07	0.89				
LABOR	0.38	0.21				
ICLAIM			0.00	0.97		
N=		685		685		992
pseudo R^2=		0.0908		0.084		0.0588

Table B.3 (cont'd).
Panel C: Annual period 1999

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	-0.48	0.64	-0.55	0.59	-0.44	0.59
Corporate Governance Mechanisms						
%OUT	0.10	0.84	0.07	0.89	0.12	0.77
TOTAL	-0.05	0.14	-0.04	0.17	-0.02	0.41
TOP5	-0.77	0.10	-0.74	0.11	-0.55	0.13
Control Variables						
%INST	0.83	0.06	0.86	0.05	0.90	0.01
UNCFE	-1.65	0.23	-1.50	0.22	-2.12	0.09
LITRISK	0.29	0.11	0.31	0.06	0.29	0.04
VREARN	-0.34	0.08	-0.28	0.14	-0.05	0.74
GROWTH	0.01	0.19	0.01	0.22	0.01	0.13
SIZE	0.26	0.03	0.26	0.03	0.18	0.09
DUR	0.02	0.91				
RD	1.06	0.20				
LABOR	-0.24	0.38				
ICLAIM			0.00	0.98		
N=		781		781		1175
pseudo R^2=		0.0868		0.0845		0.0732

Table B.3 (cont'd).
Panel D: Annual period 2000

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	-0.72	0.57	-0.27	0.83	-0.54	0.59
Corporate Governance Mechanisms						
%OUT	-0.06	0.92	0.01	0.99	0.44	0.37
TOTAL	-0.04	0.26	-0.03	0.31	-0.04	0.08
TOP5	-1.04	0.12	-1.07	0.10	-1.06	0.06
Control Variables						
%INST	-0.03	0.95	-0.04	0.93	0.37	0.40
UNCFE	-0.95	0.17	-0.99	0.15	-0.04	0.58
LITRISK	0.05	0.82	0.11	0.58	0.11	0.47
VREARN	-0.47	0.06	-0.50	0.04	-0.41	0.03
GROWTH	0.00	0.88	0.00	0.82	0.00	0.53
SIZE	0.35	0.02	0.34	0.02	0.30	0.01
DUR	-0.11	0.58				
RD	-0.21	0.87				
LABOR	0.85	0.01				
ICLAIM			0.25	0.05		
N=		563		563		789
pseudo R^2=		0.1192		0.1162		0.083

Table B.3 (cont'd).
Panel E: Annual period 2001

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	1.94	0.18	1.39	0.32	0.70	0.55
Corporate Governance Mechanisms						
%OUT	-0.98	0.11	-0.89	0.15	-0.24	0.62
TOTAL	0.01	0.79	0.03	0.56	0.01	0.73
TOP5	-2.12	0.00	-1.97	0.01	-1.70	0.01
Control Variables						
%INST	-0.35	0.53	-0.29	0.58	-0.22	0.64
UNCFE	-0.15	0.59	-0.14	0.62	-0.27	0.45
LITRISK	0.10	0.69	0.29	0.17	0.24	0.19
VREARN	-0.25	0.34	-0.16	0.53	-0.08	0.69
GROWTH	0.01	0.04	0.01	0.08	0.02	0.03
SIZE	0.07	0.66	0.10	0.57	0.13	0.38
DUR	-0.60	0.01				
RD	-0.88	0.47				
LABOR	0.72	0.05				
ICLAIM			0.06	0.64		
N=		430		430		600
pseudo R^2=		0.0833		0.0658		0.0602

Table B.4 provides the regression analysis when the absolute value of the amount by which a firm meets or beats analysts' forecasts or fails to do so is used as the dependent variable. The absolute difference is larger for firms with a larger percentage of shares held by the top five investors. This supports the original contention that as these investors increase their stake in the company the firm has a smaller probability of meeting or beating analysts' expectations[10].

[10] The results remain unchanged when continuous variables are winsorized at the .01 and .10 level.

Table B.4
Multiple Regression Analysis between Meeting or Beating Analysts' Expectations and Corporate Governance Mechanisms

$$ABS\ (MBE\ ) = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP\ 5 + \beta_4\ \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9\ SIZE + \beta_{10} ICLAIM + \varepsilon$$

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	0.17	0.23	0.13	0.34	-2.29	0.00
Corporate Governance Mechanisms						
%OUT	0.06	0.32	0.06	0.31	0.40	0.07
TOTAL	0.00	0.73	0.00	0.64	-0.01	0.02
TOP5	0.01	0.93	0.00	0.97	0.72	0.00
Control Variables						
%INST	-0.22	0.00	-0.22	0.00	-0.23	0.02
UNCFE	0.42	0.00	0.42	0.00	1.39	0.00
LITRISK	-0.01	0.82	0.00	0.97	0.02	0.80
VREARN	0.10	0.00	0.10	0.00	-0.11	0.33
GROWTH	0.00	0.53	0.00	0.52	0.00	0.48
SIZE	0.01	0.71	0.01	0.57	0.32	0.00
DUR	-0.03	0.31				
RD	-0.16	0.03				
LABOR	0.00	0.99				
ICLAIM			-0.03	0.06		
N=		3185		3185		4569
R^2=		0.1923		0.193		0.6342

Table B.5 provides the regression analysis when the absolute value of the amount by which a firm meets or beats analysts' forecasts or fails to do so is used as the dependent variable. This table presents the analysis by year. In Panel B for 1998 the percentage of shares held by the top five investors is positive and significant. This supports the original contention that as these investors increase their stake in the company, the firm has a smaller probability of meeting or beating analysts' expectations. In the remaining four years the corporate governance mechanisms are insignificant[11].

[11] The results remain unchanged when continuous variables are winsorized at the .01 and .10 level.

Table B.5
Multiple Regression Analysis between Meeting or Beating Analysts' Expectations and Corporate Governance Mechanisms by year

Panel A: Annual period 1997

$$ABS\ (MBE\ ) = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP\ 5 + \beta_4\ \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9\ SIZE + \beta_{10} ICLAIM + \varepsilon$$

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	0.68	0.20	0.68	0.20	-4.04	0.06
Corporate Governance Mechanisms						
%OUT	-0.23	0.45	-0.23	0.45	0.55	0.35
TOTAL	0.00	0.52	0.00	0.55	-0.02	0.09
TOP5	0.03	0.78	0.04	0.72	1.07	0.03
Control Variables						
%INST	-0.13	0.06	-0.12	0.07	-0.11	0.50
UNCFE	0.15	0.01	0.16	0.01	1.29	0.00
LITRISK	-0.02	0.62	-0.02	0.53	0.04	0.52
VREARN	0.11	0.03	0.10	0.02	0.13	0.25
GROWTH	0.00	0.22	0.00	0.45	0.00	0.26
SIZE	-0.07	0.17	-0.07	0.16	0.54	0.03
DUR	0.03	0.51				
RD	-0.05	0.69				
LABOR	0.02	0.61				
ICLAIM			0.00	0.88		
N=		726		726		1013
R^2=		0.2621		0.262		0.8857

Table B.5 (cont'd).
Panel B: Annual period 1998

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	-0.19	0.24	-0.19	0.23	-5.75	0.00
Corporate Governance Mechanisms						
%OUT	-0.07	0.23	-0.09	0.15	0.05	0.86
TOTAL	0.00	0.21	0.00	0.45	-0.04	0.02
TOP5	0.24	0.01	0.26	0.00	1.65	0.04
Control Variables						
%INST	-0.11	0.07	-0.11	0.08	0.03	0.91
UNCFE	0.46	0.00	0.42	0.00	4.58	0.00
LITRISK	-0.01	0.69	-0.02	0.25	-0.06	0.60
VREARN	0.08	0.01	0.07	0.02	-0.19	0.18
GROWTH	0.00	0.97	0.00	0.80	0.00	0.27
SIZE	0.03	0.15	0.04	0.11	0.84	0.00
DUR	0.02	0.52				
RD	-0.21	0.04				
LABOR	0.02	0.66				
ICLAIM			-0.03	0.07		
N=		685		685		992
R^2=		0.3198		0.3077		0.8805

Table B.5 (cont'd).
Panel C: Annual period 1999

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	-0.71	0.02	-0.78	0.01	-1.03	0.01
Corporate Governance Mechanisms						
%OUT	0.14	0.45	0.16	0.41	0.19	0.34
TOTAL	0.00	0.65	0.00	0.74	-0.01	0.34
TOP5	0.09	0.57	0.07	0.68	0.22	0.19
Control Variables						
%INST	-0.17	0.16	-0.20	0.15	-0.32	0.16
UNCFE	1.90	0.04	1.79	0.04	1.81	0.00
LITRISK	-0.04	0.53	-0.02	0.70	-0.09	0.16
VREARN	0.14	0.04	0.11	0.02	0.06	0.45
GROWTH	0.00	0.10	0.00	0.12	0.00	0.42
SIZE	0.12	0.01	0.12	0.00	0.18	0.03
DUR	-0.09	0.10				
RD	-0.56	0.21				
LABOR	0.07	0.44				
ICLAIM			-0.03	0.07		
N=		781		781		1175
R^2=		0.2281		0.2153		0.3291

Table B.5 (cont'd).
Panel D: Annual period 2000

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	-0.59	0.01	-0.51	0.02	-0.78	0.00
Corporate Governance Mechanisms						
%OUT	0.26	0.11	0.21	0.11	0.16	0.11
TOTAL	0.01	0.43	0.01	0.49	0.00	0.92
TOP5	0.05	0.75	0.05	0.78	0.25	0.15
Control Variables						
%INST	-0.34	0.02	-0.38	0.05	-0.34	0.03
UNCFE	0.62	0.00	0.63	0.00	0.55	0.00
LITRISK	-0.03	0.45	-0.01	0.70	0.02	0.60
VREARN	0.01	0.92	0.10	0.08	0.10	0.15
GROWTH	0.00	0.32	0.00	0.34	0.00	0.28
SIZE	0.09	0.01	0.09	0.01	0.12	0.00
DUR	-0.02	0.70				
RD	2.05	0.33				
LABOR	-0.19	0.09				
ICLAIM			0.04	0.61		
N=		563		563		789
R^2=		0.757		0.7437		0.6743

Table B.5 (cont'd).
Panel E: Annual period 2001

Independent Variable	Coefficient	p-value	Coefficient	p- value	Coefficient	p-value
Intercept	-0.27	0.36	-0.39	0.24	-0.46	0.11
Corporate Governance Mechanisms						
%OUT	0.17	0.14	0.17	0.15	0.13	0.21
TOTAL	-0.01	0.21	-0.01	0.18	-0.01	0.41
TOP5	0.12	0.59	0.15	0.46	0.23	0.13
Control Variables						
%INST	-0.17	0.30	-0.14	0.34	-0.06	0.63
UNCFE	0.57	0.07	0.57	0.07	0.54	0.06
LITRISK	0.01	0.79	0.00	0.93	-0.03	0.30
VREARN	0.11	0.03	0.09	0.04	0.14	0.00
GROWTH	0.00	0.42	0.00	0.43	0.00	0.37
SIZE	0.06	0.28	0.07	0.27	0.06	0.21
DUR	-0.01	0.79				
RD	-0.53	0.21				
LABOR	0.00	0.99				
ICLAIM			-0.03	0.15		
N=		430		430		600
R^2=		0.3183		0.3142		0.2942

Appendix C - Descriptive Statistics for Hypothesis Two

This appendix presents descriptive statistics for the data used in Table 5 of Chapter 5. Table C.1 provides descriptive statistics for firms that managed earnings upward and managed expectations downward. Panel A presents the total sample while Panels B and C divide the sample into firms that met or beat analysts' expectations and those that failed to do so. From Panel B, the mean percentage of shares held by the top five institutional investors for firms that met or beat analysts' expectations is .48. From Panel C, the mean percentage of shares held by the top five institutional investors for firms that failed to meet or beat analysts' expectations is .57. The difference between the two is statistically significant. Further, the only other variable that is statistically different between the two samples is total assets.

Table C.1
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for firms that managed earnings upward (positive discretionary accruals) and managed expectations downward (negative unexpected earnings forecast)

Panel A: Total Sample

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	428	0.73	0.15	0.75
TOTAL	428	8.14	2.37	8.00
TOP5	428	0.51	0.21	0.45
%INST	428	0.52	0.23	0.55
UNCFE	427	0.04	0.10	0.01
LITRISK	428	0.36	0.48	0.00
VREARN	428	0.11	0.32	0.00
GROWTH	428	6.79	76.13	2.16
SIZE[b]	428	599.52	409.27	510.94
DUR	428	0.54	0.50	1.00
R&D	428	0.05	0.07	0.02
LABOR	428	0.51	0.29	0.57
ICLAIM	337	(0.31)	0.75	(0.38)
TOTAL ASSETS	428	1,782.24	4,798.34	356.27

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table C.1 (cont'd).
Panel B: Firms that met or exceeded analysts' expectations

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	283	0.73	0.15	0.75
TOTAL	283	8.29	2.43	8.00
TOP5	283	0.48	0.19	0.43
%INST	283	0.54	0.23	0.56
UNCFE	283	0.03	0.06	0.01
LITRISK	283	0.39	0.49	0.00
VREARN	283	0.12	0.32	0.00
GROWTH	283	9.36	92.57	2.13
SIZE[b]	283	650.73	422.10	571.88
DUR	283	0.51	0.50	1.00
R&D	283	0.05	0.07	0.02
LABOR	283	0.51	0.30	0.58
ICLAIM	224	(0.27)	0.74	(0.31)
TOTAL ASSETS	283	2,190.43	5,524.68	432.68
DISCRETIONARY ACCRUALS	283	0.05	0.06	0.03
UNEXPECTED EARNINGS FORECAST	283	(0.89)	1.29	(0.51)

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table C.1 (cont'd).

Panel C: Firms that failed to meet or beat analysts' expectations

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	145	0.73	0.15	0.75
TOTAL	145	7.86	2.23	8.00
TOP5	145	0.57	0.22	0.54
%INST	145	0.50	0.24	0.52
UNCFE	144	0.06	0.15	0.02
LITRISK	145	0.32	0.47	0.00
VREARN	145	0.11	0.31	0.00
GROWTH	145	1.77	19.16	2.23
SIZE[b]	145	499.58	364.10	385.93
DUR	145	0.59	0.49	1.00
R&D	145	0.05	0.07	0.03
LABOR	145	0.50	0.26	0.55
ICLAIM	113	(0.04)	0.77	(0.46)
TOTAL ASSETS	145	985.56	2,744.77	301.40
DISCRETIONARY ACCRUALS	145	0.05	0.05	0.04
UNEXPECTED EARNINGS FORECAST	145	(0.94)	1.69	(0.59)

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.

[b]Size is presented in millions.

Table C.2 provides descriptive statistics for firms that failed to manage earnings upward but managed expectations downward. Panel A presents the total sample while Panels B and C divide the sample into firms that met or beat analysts' expectations and those that failed to do so. From Panel B, the mean percentage of shares held by the top five institutional investors for firms that met or beat analysts' expectations is .61. From Panel C, the mean percentage of shares held by the top five institutional investors for firms that failed to meet or beat analysts' expectations is .67. The difference between the two is statistically significant. Further, the only other variable that is statistically different between the two samples is total assets.

Table C.2
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for firms that failed to manage earnings upward (negative discretionary accruals) and managed expectations downward (negative unexpected earnings forecast)

Panel A: Total Sample

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	373	0.72	0.16	0.75
TOTAL	373	7.23	2.76	7.00
TOP5	373	0.63	0.23	0.61
%INST	372	0.43	0.25	0.42
UNCFE	371	0.09	0.18	0.02
LITRISK	373	0.48	0.50	0.00
VREARN	373	0.34	0.47	0.00
GROWTH	373	3.40	16.30	1.94
SIZE[b]	373	404.22	414.59	268.75
DUR	373	0.50	0.50	0.00
R&D	373	0.14	0.24	0.07
LABOR	373	0.59	0.34	0.69
ICLAIM	300	0.21	1.12	0.01
TOTAL ASSETS	373	922.32	4,226.61	109.65

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table C.2 (cont'd).
Panel B: Firms that met or beat analysts' expectations

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	226	0.72	0.16	0.75
TOTAL	226	7.16	2.60	7.00
TOP5	226	0.61	0.23	0.57
%INST	225	0.46	0.26	0.44
UNCFE	224	0.07	0.14	0.02
LITRISK	226	0.51	0.50	1.00
VREARN	226	0.32	0.47	0.00
GROWTH	226	4,144.00	6.25	2.00
SIZE[b]	226	456.13	463.72	289.84
DUR	226	0.48	0.50	0.00
R&D	226	0.13	0.21	0.08
LABOR	226	0.61	0.33	0.71
ICLAIM	184	0.23	1.09	0.06
TOTAL ASSETS	226	1,267.75	5,347.83	121.93
DISCRETIONARY ACCRUALS	226	(0.11)	0.28	(0.04)
UNEXPECTED EARNINGS FORECAST	226	(0.91)	1.41	(0.47)

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table C.2 (cont'd).

Panel C: Firms that failed to meet or beat analysts' expectations

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	147	0.73	0.16	0.78
TOTAL	147	7.33	2.99	7.00
TOP5	147	0.67	0.23	0.67
%INST	147	0.40	0.23	0.38
UNCFE	147	0.12	0.23	0.05
LITRISK	147	0.43	0.50	0.00
VREARN	147	0.37	0.48	0.00
GROWTH	147	2.25	24.79	1.85
SIZE[b]	147	324.41	309.79	206.25
DUR	147	0.52	0.50	1.00
R&D	147	0.15	0.27	0.06
LABOR	147	0.57	0.35	0.67
ICLAIM	116	0.17	1.18	(0.11)
TOTAL ASSETS	147	391.26	986.95	90.93
DISCRETIONARY ACCRUALS	147	(0.12)	0.32	(0.05)
UNEXPECTED EARNINGS FORECAST	147	(0.80)	1.66	(0.34)

[a] Statistics in this table are presented as actual values while logarithmic values are used in the analysis.

[b]Size is presented in millions.

Table C.3 provides descriptive statistics for firms that failed to manage earnings upward and failed to manage expectations downward. Panel A presents the total sample while Panels B and C divide the sample into firms that met or beat analysts' expectations and those that failed to do so. From Panel B, the mean percentage of shares held by the top five institutional investors for firms that met or beat analysts' expectations is .55. From Panel C, the mean percentage of shares held by the top five institutional investors for firms that failed to meet or beat analysts' expectations is .71. The difference between the two is statistically significant. Further, the only other variable that is statistically different between the two samples is total assets.

Table C.3
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for firms that failed to manage earnings upward (negative discretionary accruals) and failed to manage expectations downward (positive unexpected earnings forecast)

Panel A: Total Sample

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	267	0.71	0.16	0.75
TOTAL	267	7.40	2.40	7.00
TOP5	267	0.63	0.24	0.62
%INST	267	0.45	0.28	0.45
UNCFE	266	0.18	0.66	0.02
LITRISK	267	0.54	0.50	1.00
VREARN	267	0.43	0.50	0.00
GROWTH	267	3.87	10.77	2.01
SIZE[b]	267	455.04	459.40	334.75
DUR	267	0.47	0.50	0.00
R&D	267	0.15	0.33	0.08
LABOR	267	0.64	0.27	0.71
ICLAIM	225	0.33	1.18	0.27
TOTAL ASSETS	267	439.56	1,087.21	119.59

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table C.3 (cont'd).

Panel B: Firms that met or exceeded analysts' expectations

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	144	0.72	0.16	0.75
TOTAL	144	7.62	2.57	7.00
TOP5	144	0.55	0.22	0.50
%INST	144	0.51	0.27	0.53
UNCFE	143	0.04	0.12	0.01
LITRISK	144	0.54	0.50	1.00
VREARN	144	0.33	0.47	0.00
GROWTH	144	4.18	13.00	2.20
SIZE[b]	144	589.16	522.79	478.13
DUR	144	0.44	0.50	0.00
R&D	144	0.11	0.12	0.07
LABOR	144	0.67	0.25	0.75
ICLAIM	124	0.30	0.83	0.27
TOTAL ASSETS	144	569.03	1,366.27	188.21
DISCRETIONARY ACCRUALS	144	(0.08)	0.11	(0.04)
UNEXPECTED EARNINGS FORECAST	144	0.78	1.28	0.40

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.

[b]Size is presented in millions.

Table C.3 (cont'd).
Panel C: Firms that fail to meet or exceed analysts' expectations

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	123	0.70	0.16	0.71
TOTAL	123	7.16	2.16	7.00
TOP5	123	0.71	0.23	0.78
%INST	123	0.37	0.27	0.31
UNCFE	123	0.34	0.94	0.05
LITRISK	123	0.53	0.50	1.00
VREARN	123	0.55	0.50	1.00
GROWTH	123	3.50	7.40	1.86
SIZE[b]	123	298.03	306.11	176.55
DUR	123	0.50	0.50	1.00
R&D	123	0.19	0.46	0.08
LABOR	123	0.60	0.28	0.67
ICLAIM	101	0.37	1.51	0.27
TOTAL ASSETS	123	287.98	588.43	74.69
DISCRETIONARY ACCRUALS	123	(0.14)	0.54	(0.06)
UNEXPECTED EARNINGS FORECAST	123	1.10	4.44	0.42

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

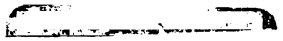

Table C.4 provides descriptive statistics for firms that managed earnings upward and failed to manage expectations downward. Panel A presents the total sample while Panels B and C divide the sample into firms that met or beat analysts' expectations and those that failed to do so. From Panel B, the mean percentage of shares held by the top five institutional investors for firms that met or beat analysts' expectations is .48. From Panel C, the mean percentage of shares held by the top five institutional investors for firms that failed to meet or beat analysts' expectations is .62. The difference between the two is statistically significant. Further, the differences between total assets and discretionary accruals between the two samples is statistically significant.

Table C.4
Descriptive statistics for the Dependent Variable, Independent Variables and Control Variables for firms that managed earnings upward (positive discretionary accruals) and failed to manage expectations downward (positive unexpected earnings forecast)

Panel A: Total Sample

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	370	0.74	0.15	0.75
TOTAL	370	8.41	3.38	8.00
TOP5	370	0.53	0.23	0.46
%INST	370	0.52	0.24	0.56
UNCFE	370	0.06	0.33	0.01
LITRISK	370	0.35	0.48	0.00
VREARN	370	0.17	0.38	0.00
GROWTH	370	3.58	6.32	2.04
SIZE[b]	370	619.16	475.62	516.40
DUR	370	0.34	0.47	0.00
R&D	370	0.04	0.07	0.00
LABOR	370	0.46	0.32	0.51
ICLAIM	215	(0.21)	0.89	(0.23)
TOTAL ASSETS	370	1,275.64	3,832.55	287.76

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.
[b]Size is presented in millions.

Table C.4 (cont'd).

Panel B: Firms that met or beat analysts' expectations

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	254	0.74	0.15	0.77
TOTAL	254	8.43	3.40	8.00
TOP5	254	0.48	0.21	0.42
%INST	254	0.56	0.24	0.59
UNCFE	254	0.01	0.03	0.00
LITRISK	254	0.37	0.48	0.00
VREARN	254	0.16	0.36	0.00
GROWTH	254	3.18	4.83	1.95
SIZE[b]	254	699.22	484.33	614.06
DUR	254	0.37	0.48	0.00
R&D	254	0.04	0.08	0.00
LABOR	254	0.47	0.31	0.52
ICLAIM	144	(0.22)	0.95	(0.18)
TOTAL ASSETS	254	1,186.63	3,758.24	321.88
DISCRETIONARY ACCRUALS	254	0.06	0.05	0.04
UNEXPECTED EARNINGS FORECAST	254	0.60	0.79	0.32

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.

[b]Size is presented in millions.

Table C.4 (cont'd).

Panel C: Firms that failed to meet or beat analysts' expectations

Variable[a]	N	Mean	Standard Deviation	Median
%OUT	116	0.73	0.14	0.75
TOTAL	116	8.37	3.35	8.00
TOP5	116	0.62	0.24	0.59
%INST	116	0.44	0.23	0.46
UNCFE	116	0.17	0.58	0.02
LITRISK	116	0.32	0.47	0.00
VREARN	116	0.20	0.40	0.00
GROWTH	116	4.44	8.71	2.16
SIZE[b]	116	443.86	405.74	306.25
DUR	116	0.28	0.45	0.00
R&D	116	0.03	0.06	0.00
LABOR	116	0.44	0.33	0.49
ICLAIM	71	0.44	0.33	0.49
TOTAL ASSETS	116	1,470.54	4,000.16	178.59
DISCRETIONARY ACCRUALS	116	0.05	0.05	0.03
UNEXPECTED EARNINGS FORECAST	116	0.64	1.27	0.30

[a]Statistics in this table are presented as actual values while logarithmic values are used in the analysis.

[b]Size is presented in millions.

Appendix D – Supplementary Analyses for Hypothesis Two

This appendix presents supplementary analyses for the results presented in Table 5 of Chapter 5. Table D.1 provides results for a regression that includes the corporate governance variables without control variables. The coefficients are consistent with those in Table 5 of Chapter 5. The percentage of outsiders on the board continues to remain insignificant[12].

Table D.1
Logit Analysis of the Association between Corporate Governance Mechanisms and the Probability of Managing Expectations versus Managing Earnings without Control Variables

$$P(MANAGE = 1)^{a} = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon$$

	Manage Expectations		Manage Neither		Manage Both	
Independent Variable[b]	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
INTERCEPT	0.18	0.76	-0.16	0.81	0.75	0.16
Corporate Governance Mechanisms						
%OUT	-0.66	0.27	-0.55	0.41	-0.57	0.30
TOTAL	-0.14	0.00	-0.08	0.04	-0.01	0.61
TOP5	2.27	0.00	1.26	0.01	-0.20	0.63
N=		907.00				
Log Likelihood=		-1,192.7				
p-value=		<.05				

[a] MANAGE is a categorical variable equal to 0 if a firm manages neither earnings nor expectations, 1 if a firm manages expectations, 2 if a firm manages earnings and 3 if a firm manages both.

[b] Refer to Table 1 for variable definitions.

[12] The results remain unchanged when continuous variables are winsorized at the .01 and .10 level.

Table D.2 provides results for a regression that includes the corporate governance variables with only the control variable for percentage of institutional holders. The coefficients are consistent with those in Table 5 of Chapter 5. The percentage of outsiders on the board continues to remain insignificant[13].

Table D.2
Logit Analysis of the Association between Corporate Governance Mechanisms and the Probability of Managing Expectations versus Managing Earnings with Percentage of Institutional Holders as Control Variable

$$P(MANAGE = 1)^{a} = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon$$

	Manage Expectations		Manage Neither		Manage Both	
Independent Variable[b]	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
INTERCEPT	0.59	0.46	-0.07	0.93	1.53	0.03
Corporate Governance Mechanisms						
%OUT	-0.60	0.32	-0.56	0.41	-0.57	0.30
TOTAL	-0.14	0.00	-0.08	0.04	-0.02	0.43
TOP5	1.92	0.00	1.21	0.07	-0.79	0.15
Control Variables						
%INST	-0.47	0.35	-0.08	0.88	-0.79	0.09
N=		906.00				
Log Likelihood=		-1190				
p-value=		<.05				

[a] MANAGE is a categorical variable equal to 0 if a firm manages neither earnings nor expectations, 1 if a firm manages expectations, 2 if a firm manages earnings and 3 if a firm manages both.
[b] Refer to Table 1 for variable definitions.

Table D.3 provides results for a regression that includes the corporate governance variables with all of the control variables including the three individual variables for

[13] The results remain unchanged when continuous variables are winsorized at the .01 and .10 level.

reliance on implicit claims. The coefficients are consistent with those in Table 5 of Chapter 5. The percentage of outsiders on the board continues to remain insignificant. In addition, the coefficient on board size becomes insignificant[14].

Table D.3
Logit Analysis of the Association between Corporate Governance Mechanisms and the Probability of Managing Expectations versus Managing Earnings with all Individual Control Variables

$$P(MANAGE = 1)^{a} = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon$$

	Manage Expectations		Manage Neither		Manage Both	
Independent Variable[b]	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
INTERCEPT	-2.80	0.01	-3.84	0.00	-1.42	0.12
Corporate Governance Mechanisms						
%OUT	-0.73	0.25	-0.78	0.27	-0.49	0.39
TOTAL	-0.06	0.18	0.01	0.88	-0.07	0.06
TOP5	2.47	0.00	1.75	0.04	0.57	0.40
Control Variables						
%INST	0.29	0.60	0.50	0.41	-0.68	0.16
UNCFE	10.90	0.00	9.18	0.00	10.03	0.00
LITRISK	0.42	0.05	0.48	0.05	-0.08	0.70
VREARN	-0.12	0.66	0.21	0.47	-0.56	0.04
GROWTH	0.02	0.08	0.02	0.09	0.02	0.06
SIZE	0.09	0.35	0.07	0.52	0.31	0.00
RD	5.39	0.00	4.72	0.00	1.48	0.32
DUR	0.48	0.02	0.33	0.15	0.50	0.01
LABOR	1.06	0.00	2.10	0.00	0.23	0.42
N=		903.00				
Log Likelihood=		-1102.5				
p-value=		0.00				

[a] MANAGE is a categorical variable equal to 0 if a firm manages neither earnings nor expectations, 1 if a firm manages expectations, 2 if a firm manages earnings and 3 if a firm manages both.

[b] Refer to Table 1 for variable definitions.

[14] The results remain unchanged when continuous variables are winsorized at the .01 and .10 level.

Table D.4 provides results for a regression that includes the corporate governance variables with all of the control variables including reliance on implicit claims. The coefficients are consistent with those in Table 5 of Chapter 5. The percentage of outsiders on the board continues to remain insignificant[15].

[15] The results remain unchanged when continuous variables are winsorized at the .01 and .10 level.

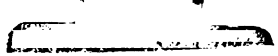

Table D.4
Logit Analysis of the Association between Corporate Governance Mechanisms and the Probability of Managing Expectations versus Managing Earnings with the Factor Reliance on Implicit Claims

$$P(MANAGE = 1)^{a} = \beta_0 + \beta_1 \%OUT + \beta_2 TOTAL + \beta_3 TOP5 + \beta_4 \%INST + \beta_5 UNCFE + \beta_6 LITRISK + B_7 VREARN + \beta_8 GROWTH + \beta_9 SIZE + \beta_{10} ICLAIM + \varepsilon$$

	Manage Expectations		Manage Neither		Manage Both	
Independent Variable[b]	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
INTERCEPT	0.06	0.95	-0.37	0.78	1.63	0.13
Corporate Governance Mechanisms						
%OUT	-1.19	0.13	-1.48	0.07	-1.32	0.07
TOTAL	-0.11	0.03	-0.03	0.57	-0.08	0.05
TOP5	2.19	0.01	1.52	0.12	-0.71	0.40
Control Variables						
%INST	-0.21	0.74	0.38	0.58	-0.98	0.08
UNCFE	7.81	0.01	5.81	0.08	6.54	0.05
LITRISK	0.04	0.87	0.18	0.50	-0.26	0.27
VREARN	0.08	0.78	0.30	0.31	-0.89	0.01
GROWTH	0.02	0.33	0.01	0.75	0.02	0.27
SIZE	0.09	0.42	0.03	0.78	0.21	0.02
RD						
DUR						
LABOR						
ICLAIM	0.42	0.00	0.58	0.00	-0.01	0.95
N=		673.00				
Log Likelihood=		-830.4				
p-value=		<.05				

[a] MANAGE is a categorical variable equal to 0 if a firm manages neither earnings nor expectations, 1 if a firm manages expectations, 2 if a firm manages earnings and 3 if a firm manages both.

[b] Refer to Table 1 for variable definitions.

Appendix E – Additional Supplementary Analyses for Hypothesis Two

This appendix presents supplementary analyses regarding whether a firm has a strategy of managing earnings and/or expectations. Each table represents the number of years a firm is in the sample. For each firm, y, represents whether a firm had a negative value for the unexpected earnings forecast for the expectations management variable and thus would be classified as a firm that managed expectations. Y also represents a firm with positive discretionary accruals and as such is classified as a firm that managed earnings.

Panel A of Table E.1 examines firms that appear in the sample two years. The table shows that a significant number of firms manage expectations rather than earnings. Panel A also shows that 11% of the firms that are in the sample twice appear to manage both earnings and expectations.

Table E.1
Sequence of meeting expectations using earnings management or expectations management

Panel A: Firms appear in the sample two years

N	Expectations Management	Earnings Management	Percentage Of Total
14	nn	nn	6.7
11	nn	yn	5.3
19	nn	yy	9.6
14	ny	nn	6.7
4	ny	ny	1.4
9	ny	yn	4.3
23	ny	yy	11.1
17	yn	nn	8.2
8	yn	ny	3.8
8	yn	yn	3.8
12	yn	yy	5.8
28	yy	nn	13.5
9	yy	ny	4.3
10	yy	yn	4.8
23	yy	yy	11.1

Panel B of Table E.1 examines firms that appear in the sample three years. With these firms it is more difficult to see a discernible pattern in the use of expectations management and/or earnings management. Only two firms in the sample managed expectations in all three years while not managing earnings. Five firms in the sample managed earnings in all three years while not managing expectations.

Table E.1 (cont'd)
Panel B: Firms appear in the sample three years

N	Expectations Management	Earnings Management	Percentage Of Total
1	nnn	nnn	1.6
1	nnn	nyn	1.6
5	nnn	yyy	8.1
1	nny	nny	1.6
1	nny	yny	1.6
5	nny	yyy	8.1
1	nyn	nny	1.6
1	nyn	nyy	1.6
1	nyn	yyn	1.6
1	nyn	yyy	1.6
1	nyy	nyn	1.6
2	nyy	ynn	3.2
3	nyy	yyy	4.8
1	ynn	nnn	1.6
3	ynn	nny	4.8
1	ynn	nyn	1.6
3	ynn	nyy	4.8
1	ynn	yyy	1.6
2	yny	nnn	3.2
1	yny	nyn	1.6
2	yny	yyy	3.2
2	yyn	nnn	3.2
1	yyn	nny	1.6
1	yyn	nyy	1.6
3	yyn	yyn	4.8
1	yyn	yyy	1.6
2	yyy	nnn	3.2
1	yyy	nyn	1.6
2	yyy	nyy	3.2
2	yyy	ynn	3.2
2	yyy	yny	3.2
2	yyy	yyn	3.2
5	yyy	yyy	8.1

Panel C of Table E.1 examines firms that appear in the sample four years. There appears to be no pattern in terms of firms that consistently use one method versus another. With these firms it is more difficult to see a discernible pattern in the use of expectations management and/or earnings management. Only one firm in the sample managed expectations in all four years while not managing earnings. Two firms in the sample managed expectations and earnings in all four years they appeared in the sample.

Table E.1 (cont'd)
Panel C: Firms in the sample four years

N	Expectations Management	Earnings Management	Percentage of Total
1	nnnn	ynyy	2.3
1	nnny	nnnn	2.3
1	nnny	nyyn	2.3
1	nnny	yynn	2.3
1	nnny	yyyy	2.3
1	nnyn	yyyn	2.3
1	nnyy	yyny	2.3
1	nynn	nnnn	2.3
1	nynn	ynyy	2.3
1	nyny	nyyn	2.3
1	nyny	yyyn	2.3
1	nyyn	ynyn	2.3
1	nyyn	ynyy	2.3
1	nyyn	yynn	2.3
1	nyyn	yyyy	2.3
1	nyyy	ynny	2.3
2	ynnn	nnnn	4.7
1	ynny	nnyn	2.3
1	ynny	nyny	2.3
2	ynny	nyyn	4.7
1	ynny	yynn	2.3
2	ynny	yyny	4.7
1	ynny	yyyn	2.3

Table E.1 (cont'd)
Panel C: (cont'd) Firms in the sample four years

1	ynyy	nnnn	2.3
1	ynyy	nnyn	2.3
1	ynyy	yynn	2.3
1	ynyy	yyyy	2.3
1	yynn	nnyy	2.3
1	yynn	nyyn	2.3
2	yyyn	yyyn	4.7
1	yyyy	nnnn	2.3
1	yyyy	ynnn	2.3
1	yyyy	ynny	2.3
2	yyyy	yyyy	4.7

Panel D of Table E.1 examines firms that appear in the sample five years. There appears to be no pattern in terms of firms that consistently use one method versus another. Because of the length of the string it is difficult to see a pattern in the use of expectations management and/or earnings management. Only one firm in the sample managed expectations in all five years while not managing earnings. One firm in the sample managed expectations and earnings in all five years they appeared in the sample.

Table E.1 (cont'd)
Panel D: Firms appear in the sample five years

N	Expectations Management	Earnings Management	Percentage of Total
1	nnnnn	yyyyy	2.3
2	nnnny	nyynn	4.7
1	nnnny	ynyyy	2.3
1	nnnny	yyyyy	2.3
1	nnnyn	nnynn	2.3
1	nnnyn	nyynn	2.3
1	nnnyy	nynny	2.3

Table E.1 (cont'd)
Panel D: (cont'd) Firms in the sample five years

1	nnnyy	nyyny	2.3
1	nnnyy	ynyyy	2.3
1	nnnyy	yyynn	2.3
1	nnnyy	yyyyy	2.3
1	nnynn	yyyny	2.3
1	nnyny	nnynn	2.3
1	nnyny	yyyyy	2.3
1	nnyyy	yyyyy	2.3
1	nynny	yyyny	2.3
1	nyynn	ynnnn	2.3
1	nyyny	ynnyy	2.3
1	nyyny	yynnn	2.3
1	nyyyn	ynnyy	2.3
1	ynnnn	yyynn	2.3
1	ynnnn	yyyyy	2.3
1	ynnny	yyyyn	2.3
1	ynnyy	nynnn	2.3
1	ynnyy	yyynn	2.3
1	ynnyy	yyyyy	2.3
1	ynyyn	ynynn	2.3
1	ynyyn	yyyyy	2.3
1	yynny	ynyyn	2.3
1	yynyn	yyynn	2.3
1	yyynn	yynnn	2.3
1	yyynn	yyyny	2.3
1	yyyny	ynnny	2.3
1	yyyny	ynyyy	2.3
1	yyyny	yyynn	2.3
1	yyyny	yyyny	2.3
2	yyyyn	ynnyn	4.7
1	yyyyn	ynyyn	2.3
1	yyyyn	yyyyn	2.3
1	yyyyn	yyyyy	2.3
1	yyyyy	yyyyy	2.3

Appendix F – Valuation Supplementary Analyses

This appendix presents supplementary analyses concerning the market reaction associated with a strategy of meeting or beating analysts' expectations.

Introduction

Meeting or beating analysts' expectations has taken on increased significance in the last several years. Empirical evidence suggests that managers' propensity to achieve particular thresholds has shifted over time and currently, avoiding negative earnings surprises is the most important threshold (Brown and Caylor 2003). However, the valuation literature provides mixed support for the shift in managers' propensity to avoid negative earnings surprises. While short run market premiums and increased earnings multiples accrue to firms that consistently meet or beat analysts' expectations, these valuation benefits subsequently disappear when firms that previously met expectations fail to do so (Barth et al. 1999; Bartov et al. 2002). Related to this argument there is evidence of a negative stock price response to a break in a string of earnings increases (Ke and Petroni 2003; Ke et al. 2003; Skinner and Sloan 2002).

Additionally, managers and public accountants have expressed concern that the "short term earnings game" is played to the detriment of overall firm value. Short run targets, specifically meeting or beating analysts' expectations could be met by making business decisions that have a negative impact on a firm's long run value (Favaro and Rotz 2004; PricewaterhouseCoopers 2002; Rowchowdhury 2003). Nortel is an example of a company that destroyed value by making acquisitions and over investing in an effort to satisfy analysts' growth expectations. As a result of the acquisitions and

overinvestment, there was a significant reduction in firm value. According to Fuller and Jensen (2001) this kind of damage can be stopped if managers can just say no to the pressure to fulfill unrealistic market expectations.

Since the benefits of playing the "short term earnings game" may result in long run costs to the firm, it is unclear whether this phenomenon is in the best interest of shareholders. The premise of this paper is that corporate governance mechanisms provide incentives for managers to maximize long run firm value and as such forego the market premium associated with meeting or beating analysts' expectations in the short run. Examining the association between corporate governance mechanisms and the market premium surrounding a firm that either meets or beats analysts' expectations or fails to do so may shed light on whether corporate governance mechanisms influence a firm's decision to forego playing the meet or beat game in the short run. Jensen (2004) suggests that corporate governance in the form of good control systems and monitoring are necessary to stop the destruction of part or all of the core value of a firm due to managers promising results they may not be able to deliver. The purpose of this paper is to determine if investors are more interested in long run shareholder value and less focused on market premiums that accrue in the short run. Rajgopal et al. (1999) find that institutional investors look beyond current earnings compared to individual investors, in this context, this would suggest a smaller market premium for firms with a sophisticated investor base.

I test these hypotheses using a sample of 1,729 firm year observations from the period 1997-2001. I use one measure of the shareholder base, the presence of an institutional investor with long term incentives/preferences. Rajgopal et al. (1999) find

that the absolute value of discretionary accruals declines with institutional ownership. This result is attributed to institutional investors being better informed than individual investors. In order to allow monitoring incentives to vary, I use the percentage of shares held by the top five institutional investors as a proxy for institutional investors with long term incentives/preferences (Gillian and Starks 2003).

Hypothesis Development

There has been a move by many firms to change the type of guidance provided to the market. Coca-Cola and Gillette are just two examples of companies that have stopped providing earnings estimates to the market. The change was a result of too much focus on short term guidance which distracted management from long term goals. In February 2003, Mattel joined the list of firms that decided against providing earnings estimates in the hopes that the change would refocus management on long term shareholder value rather than meeting short term expectations (Kueppers and Weaver 2003). A survey by Deloitte and Touche found that 22 percent of partners had clients that reduced the amount, or changed the type of information provided to the public. An additional 20 percent of partners had clients that were debating the issue (Kueppers and Weaver 2003). Although this survey focuses on clients of only one public accounting firm the sentiment is echoed by managers and public accountants who suggest that focusing on playing the earnings game may erode long run firm value (Favaro and Rotz 2004; PricewaterhouseCoopers 2002).[16]

[16]Favaro and Rotz (2004) suggest that a focus on short term targets, specifically MBE, stands in the way of building the capabilities and making the investments required to increase a company's longer term value. Reducing the level of research and development activities, pulling back from marketing investments and delaying projects with long term payoffs are moves to cut costs significantly and ratchet up earnings in the

There is empirical evidence to suggest that playing the earnings game has real costs to the firm. Consistent with the sentiments expressed by managers and public accountants that meeting or beating analysts' expectations forces managers to focus on short run performance, Roychowdhury (2003) finds that firms that report small annual profits exhibit unusually low cash flow from operations and unusually high production costs. This suggests that managers may avoid losses by offering price discounts to boost sales and engaging in overproduction to reduce reported costs of goods sold.

Additional empirical evidence that supports the long run costs associated with failing to meet or beat analysts' expectations is provided by Ke et al. (2003), who establish a negative relationship between the stock- price response and a break in a string of consecutive earnings increases. Similarly, Skinner and Sloan (2002) find that negative earnings surprises for growth firms are penalized more than positive earnings surprises. Collectively, these papers support the contention that there are costs associated with an earnings break. Further, these papers are consistent with anecdotal evidence in the financial press that detail the consequences associated with failing to meet or beat analysts' expectations[17]. The costs that accrue to the firm in the form of negative market responses and real costs associated with directing resources away from long run projects provide support for the reasons given by firms who decide to move away from providing earning guidance to the market.

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near term. Over time they rob a business of growth drivers and can actually destroy value in the long run. PricewaterhouseCoopers (2002, p. 76) argue that erosion in long run value occurs when companies meet or beat expectations by making business decisions that provide a short run earnings boost at the expense of lower future cash flows.

[17] For example, on May 15, 2003, when Target missed its first quarter earnings target by one cent, shares of the stock fell in early morning trading (Reuters 2003). On December 22, 2002, when Tupperware warned that its annual earnings would fall short, the stock lost 14% of its value (CNNMoney 2002).

Although there are costs associated with meeting or beating analysts' expectations this does not explain why the majority of firms continue to focus on meeting analysts' expectations in the short run. However, empirical research provides evidence of short run valuation benefits in the form of higher stock prices and market premiums that accrue to firms that meet or beat analysts' expectations. Kasznik and McNichols (2002) find that firms that meet expectations are rewarded with a higher stock price after controlling for analysts' expectations of future earnings. However, in the long run, the market penalizes firms that previously met expectations and subsequently fail to do so. Similarly, Barth et al. (1999) find that firms which meet expectations receive a higher return than their peers who fail to meet expectations. However, the earnings multiple decreases when a firm that previously exhibited a pattern of increasing earnings subsequently experiences an earnings decrease. Finally, Bartov et al. (2002) find larger earnings multiples accrue to firms exhibiting a pattern of increasing earnings. However, the future performance of firms that used earnings or expectations management was inferior to that of firms that did not use either of these mechanisms. Firms that managed earnings or expectations, however, still fared better than firms that failed to meet or beat their earnings expectations. The valuation benefits suggest meeting or beating expectations is advantageous to the firm in the short run but meeting or beating expectations may have some long run negative ramifications when a firm that met or exceeded expectations in the past subsequently fails to do so.

Rajgopal et al. (1999) examine the relationship between institutional ownership and discretionary accruals. The paper finds that institutional investors are sophisticated investors who are less likely to be fooled by earnings management. Because of a

sophisticated investor base, there is less incentive for this type of behavior and a strong negative relationship exists between the absolute value of discretionary accruals and institutional ownership. The paper also examines the stock market response to earnings. Specifically, the focus is on whether institutional investors are overly focused on current earnings. The paper finds that stock prices reflect a relatively greater proportion of the information in future period earnings when institutional ownership is high. This is consistent with institutional investors as sophisticated investors who look beyond current earnings in assessing firm value. In the context of meeting or beating analysts' expectations, I would expect sophisticated investors to understand the meet or beat game and assign a valuation premium accordingly. Specifically, if a premium exists, I would expect it to be smaller for firms with strong corporate governance mechanisms. This leads to the following hypothesis:

> ***H_1**: If a premium exists, the premium to meeting or beating analysts' expectations is smaller for firms with strong corporate governance mechanisms than for firms with weak corporate governance mechanisms*

Sample Selection

The initial sample consists of 4,865 firm year observations from the I/B/E/S database of analysts' forecasts from 1997-2001. To ensure consistency, analysts' expectations and actual earnings are both obtained from the I/B/E/S database (Bhojraj et al. 2003). Firm year observations are classified as meeting or exceeding expectations (MBE=1) if reported earnings meet or exceed the outstanding consensus forecast at the earnings announcement in both the current and previous year. Banks, insurance companies and other financial services firms, (SIC 6000-6999) are excluded, as are

utilities (SIC 4800-4999) and other quasi regulated industries (SIC 4000-4499 and 8000 and above). All other financial data is obtained from the Compustat database.

Three criteria are set forth for the analysts' forecasts to ensure that each firm year observation is based on an initial analyst forecast and a revision that occurs later (Bartov et al. 2002):

(1) There are at least two individual earnings forecasts for the year, which are at least twenty trading days apart.

(2) The release date of the earliest forecast occurs at least three trading days after the release of the previous year's earnings.

(3) The release of the latest forecast precedes the earnings release by at least three days.

The corporate governance and institutional holding data is obtained from the Compact Disclosure database. This database takes financial data and text from stockholders and Form 10-K reports, registration and proxy statements and other sources for all current and new companies registered with the SEC and transfers it into Excel format. Financial statements plus quarterly statements are provided with financial footnotes, and the full text of the president's letter and management discussion. Also included are lists of subsidiaries, major officers and board members and their salaries, 5% individual and 10% institutional holders, ranges of earnings forecasts from advisory services, and lists of additional SEC filings and exhibits.

The final sample after the above criteria are implemented includes 1, 729 firm year observations. The impact of the three criteria on the sample size is set forth in Table F.1.

Table F.1
Formation of the Final Sample for Hypothesis Two

Initial Sample	4,865
Firms excluded because there are not two individual forecasts twenty days apart	(1,000)
Firms excluded because the release date of the earliest forecast doesn't occur at least three days after the release of the previous year's earnings	(1,825)
Firms excluded because the release date of the latest forecast doesn't precede the earnings release by at least three days	(250)
Firms that appeared in sample one year	(200)
	1,590

Model Specification

To test whether the corporate governance mechanisms influence the premium to meet or beat expectations the following regression is estimated:

$$CAR = \beta_0 + \beta_1 ERROR + \beta_2 SURP + \beta_3 MBE + \beta_4 TOP5 + \beta_5 MBE * SURP + \beta_6 TOP5 * SURP$$

CAR is the cumulative abnormal return over the period beginning two days following the date of the earliest analyst forecast and ending one day after the release of the year's 10K. ERROR is the forecast error for the year and is the difference between actual earnings and the earliest analyst forecast, deflated by the beginning of year stock price. SURP is the difference between actual earnings and the latest analyst forecast, deflated by the

beginning of year stock price. By including both the surprise and error, the incremental abnormal return is measured. MBE is an indicator variable taking on the value 1 if the firm met or beat expectations in the current and previous year and 0 otherwise. Additionally, TOP5 represents the percentage of shares held by the top five institutions. Hypothesis one states that the market premium, if it exists, will be smaller for firms with a larger percentage of shares held by the top five institutional investors. This suggests that β_4 and β_6 will be negative and significant which is consistent with a smaller market premium.

Results

The results of hypothesis one are presented in Table F.2. Terms β_4 and β_6 are both negative. Term β_6 is significant while β_4 is marginally significant. This is partial support for Hypothesis One. The market appears not to reward firms that manage to meet or beat expectations with an additional premium when corporate governance mechanisms are strong. This is consistent with the results of Rajgopal et al. (1999) who find that institutional investors are sophisticated investors who look beyond current earnings in assessing firm value.

Table F.2
Regression of Cumulative Abnormal Return on percentage of shares held by the top five institutional investors and other determinants of the cumulative abnormal return

$$CAR = \beta_0 + \beta_1 ERROR + \beta_2 SURP + \beta_3 MBE + \beta_4 TOP5 + \beta_5 MBE * SURP + \beta_6 TOP5 * SURP$$

(p-values are in parentheses)

B_0	B_1	B_2	B_3	B_4	B_5	B_6	R^2(%)
0.125	0.309	0.929	0.074	-0.191	-0.302	-1.10	1.23
(0.06)	(0.03)	(0.16)	(0.06)	(0.04)	(0.04)	(0.13)	

CAR is the cumulative abnormal return over the period beginning two days following the date of the earliest analyst forecast and ending one day after the release of the year's results;
ERROR is the forecast error for the year and is the difference between actual earnings and the earliest analyst forecast deflated by the beginning of year stock price;
SURPRISE is the difference between actual earnings and the latest analyst forecast deflated by beginning of year stock price;
MBE is an indicator variable taking on the value 1 if the firm met or beat expectations in the current and previous year and 0 otherwise;
TOP5 represents the percentage of shares held by the top five institutional investors.

Table F.3 presents the results of a regression of cumulative abnormal returns on the percentage of shares held by the top five institutional investors and other determinants of the cumulative abnormal return. The results are presented based on quintiles of the level of earnings management. The coefficients of interest are β_4 and β_6. From Table F.3 neither coefficient is significant in any of the quintiles.

Table F.3

Regression of Cumulative Abnormal Return on percentage of shares held by the top five institutional investors and other determinants of the cumulative abnormal return by quintile of level of earnings management as measured by the value of discretionary accruals

$$CAR = \beta_0 + \beta_1 ERROR + \beta_2 SURP + \beta_3 MBE + \beta_4 TOP5 + \beta_5 MBE * SURP + \beta_6 TOP5 * SURP$$

(p-values are in parentheses)

Quintile	B_0	B_1	B_2	B_3	B_4	B_5	B_6
	0.010	0.802	5.95	0.366	-0.108	-10.33	-5.57
One	(.74)	(.05)	(.65)	(.07)	(.78)	(.05)	(.68)
	0.011	2.59	8.69	0.027	0.112	-33.82	-10.22
Two	(.96)	(.01)	(.57)	(.10)	(.78)	(.11)	(.50)
	0.220	-0.320	1.04	-0.132	-0.487	9.14	-6.49
Three	(.37)	(.63)	(.96)	(.45)	(.21)	(.59)	(.78)
	0.123	-1.11	20.80	-0.304	0.010	19.11	-25.23
Four	(.46)	(.23)	(.11)	(.03)	(.97)	(.21)	(.46)
	0.037	1.69	5.01	-0.096	0.209	13.77	8.43
Five	(.84)	(.34)	(.86)	(.45)	(.49)	(.39)	(.80)

CAR is the cumulative abnormal return over the period beginning two days following the date of the earliest analyst forecast and ending one day after the release of the year's results;
ERROR is the forecast error for the year and is the difference between actual earnings and the earliest analyst forecast deflated by the beginning of year stock price;
SURPRISE is the difference between actual earnings and the latest analyst forecast deflated by beginning of year stock price;
MBE is an indicator variable taking on the value 1 if the firm met or beat expectations in the current and previous year and 0 otherwise;
TOP5 represents the percentage of shares held by the top five institutional investors.

Table F.4 presents the results of a regression of cumulative abnormal returns on the percentage of shares held by the top five institutional investors and other determinants of the cumulative abnormal return. The results are presented based on quintiles of the level of expectations management. The coefficients of interest are β_4 and β_6. From Table F.4, β_4 is significant in the fourth quintile and β_6 is significant in both the first and fourth quintiles.

Table F.4
Regression of Cumulative Abnormal Return on percentage of shares held by the top five institutional investors and other determinants of the cumulative abnormal return by quintile of level of expectations management as measured by the value of unexpected earnings forecast

$$CAR = \beta_0 + \beta_1 ERROR + \beta_2 SURP + \beta_3 MBE + \beta_4 TOP5 + \beta_5 MBE * SURP + \beta_6 TOP5 * SURP$$

(p-values are in parentheses)

Quintile	B_0	B_1	B_2	B_3	B_4	B_5	B_6
One	-0.100 (.68)	-1.51 (.18)	78.9 (.00)	0.158 (.45)	0.106 (.75)	-20.38 (.12)	-84.10 (.01)
Two	-0.115 (.60)	0.648 (.16)	5.94 (.66)	-0.186 (.34)	0.397 (.22)	25.4 (.20)	-7.78 (.64)
Three	-0.173 (.40)	0.166 (.88)	-0.158 (.99)	0.171 (.29)	0.219 (.47)	-0.153 (.29)	17.58 (.99)
Four	0.502 (.01)	0.839 (.11)	-28.42 (.02)	-0.063 (.63)	-0.784 (.01)	20.97 (.12)	28.74 (.02)
Five	-0.010 (.71)	0.373 (.48)	21.06 (.16)	0.084 (.60)	0.233 (.58)	-8.83 (.08)	-20.03 (.19)

CAR is the cumulative abnormal return over the period beginning two days following the date of the earliest analyst forecast and ending one day after the release of the year's results;
ERROR is the forecast error for the year and is the difference between actual earnings and the earliest analyst forecast deflated by the beginning of year stock price;
SURPRISE is the difference between actual earnings and the latest analyst forecast deflated by beginning of year stock price;
MBE is an indicator variable taking on the value 1 if the firm met or beat expectations in the current and previous year and 0 otherwise;
TOP5 represents the percentage of shares held by the top five institutional investors.