

# MANAGEMENT EARNINGS FORECASTS AS ANTICIPATORY IMPRESSION

## MANAGEMENT

by

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(Under the Direction of Scott D. Graffin)

### ABSTRACT

The effects of impression management tactics are poorly understood when used in anticipation of events that trigger stakeholder reactions. I examine voluntary firm disclosures - management earnings forecasts - to determine whether they are used as anticipatory impression management tactics. I found that firms are more likely to announce surprise earnings when they disclosed management earnings forecasts in advance of the announcement. Salient stakeholders, such as institutional investors and analysts, influence the likelihood and candor of management earnings forecasts. I compare the effects of management earnings forecasts and the effects of a trigger - surprise earnings - on investor reactions, and test the impact of prior management forecasts on subsequent forecasts. Management earnings forecasts cause more abnormal investor reactions than surprise earnings, and those reactions are influenced by the frequency and accuracy of prior firm forecasts. The antecedents and consequence of management earnings forecasts in this study have interesting implications for impression management theory, managers, stakeholders and public policy.

**INDEX WORDS:** Impression management, anticipatory impression management, management earnings forecasts, earnings surprises, earnings guidance, investor reactions

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## **DEDICATION**

I want to dedicate this manuscript to my wife, Shannon, and my unborn daughter, Morgan. I am incredibly lucky to have you all in my life, and I love you both more than words can express.

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## **CHAPTER 1**

### **INTRODUCTION**

The use of impression management has been well documented at both the individual level and the firm level (Bolino, Kacmar, Turnley & Gilstrap, 1998). Impression management is a means for influencing people's reactions to behaviors, actions and outcomes that may threaten the image of an actor (Tedeschi, 1981). The entire taxonomy of impression management tactics ranges from direct tactics, such as denials and apologies, to indirect tactics, such as scapegoating and distancing (Bolino, Kacmar, Turnley & Gilstrap, 2008). Impression management tactics all share a common, underlying motivation: to reduce (or increase) the impact of bad (good) information on perceptions of some "actor" (Tedeschi, 1981; Bolino et al., 2008).

Organizational impression management studies typically examine the use of impression management tactics after negative occurrences. These firm impression management efforts are used in such contexts as to deflect attention from illegitimate actions (Elsbach & Sutton, 1992), to protect organizational legitimacy (Elsbach, 1994), and to restore legitimacy (Marcus & Goodman, 1991). It is evident that firms actively engage in behaviors intended to manipulate the informational environment such that they promote favorable stakeholder impressions of the firm (Zajac & Westphal, 1995).

However, prior research largely deals with the initial stakeholder reactions to image-threatening triggers and firm efforts to diminish any negative reaction to those triggers. Scholars have only recently studied the use of impression management before stakeholders become aware

of a trigger (cf. Arndt & Bigelow, 2000; Graffin, Carpenter & Boivie, 2011). Anticipatory impression management refers to tactics that are intended to manipulate stakeholder perceptions in advance of the potential revelation of firm-threatening information so as to alter firm-anticipated stakeholder reactions. With few exceptions (e.g. Elsbach, Sutton & Principe, 1998; Arndt & Bigelow, 2000; Cain, Graffin & Lange, Working Paper), the majority of extant impression management studies have focused on reactive impression management. Elsbach, Sutton and Principe (1998) studied the premeditated use of strategic imagery by hospitals during the presentation of patients' bills specifically intended to deter patient complaints, while Arndt and Bigelow (2000) studied hospitals' use of impression management to increase acceptance of new organizational structures. Another study focused on CEO claimed handicapping in investor communications and its affect on firm value, which indicates that managers consider impression management in their disclosure decisions (Siegel & Brockner, 2005). More recent anticipatory impression management research explored firms' use of "strategic noise" as a means to obfuscate market reactions to CEO succession, suggesting that firms engage in calculated efforts to preemptively interfere with stakeholders' abilities to make causal connections between firm actions and firm outcomes (Graffin, Carpenter & Boivie, 2011).

The common underlying assumption in previous impression management studies is that a firm enjoys an informational advantage over its stakeholders during the anticipatory period, or the period before a trigger becomes known, which distinguishes anticipatory impression management from reactive impression management (Graffin et al., 2011). This information asymmetry gives firms the ability to manage external stakeholder's impressions by controlling the way future information is revealed to stakeholders. For example, this control allows firms to manipulate stakeholder perceptions and attitudes towards the firm through framing information

in a self-serving manner (Goffman, 1974), determining the timing of information revelation, or choosing the degree to which complete information is disclosed.

While extant literature examines anticipatory impression management tactics that do not explicitly reveal strategic motivations of the firm, such as obfuscation and imagery, no studies have examined tactics that are explicit, or unabashedly intended to influence stakeholders. When a firm appears forthcoming with the information they volunteer, stakeholders will react differently than they would when they perceive a firm to be reticent with information (Ferrin, Kim, Cooper & Dirks, 2007). Thus, the motivations for and outcomes of anticipatory impression management depend on firm assessments of potential reactions to tactics that exist on some continuum of equivocality. As anticipatory impression management tactics, whether explicit or implicit, are motivated by a firms' desire to allay negative or promote positive reactions (Rosenfeld, Giacalone & Riordan, 1995), their examination allows to compare the antecedents and consequences of different firm actions that share the same basic goal.

In my study, I utilize a voluntary firm performance disclosure – management earnings forecasts – to empirically test my predictions about anticipatory impression management tactics and their outcomes. Management earnings forecasts are public disclosures of expected organizational performance that firms disclose outside of scheduled earnings announcements. Management earnings forecasts may be qualitative suggestions related to the accuracy of outside analysts' forecasts, but are typically quantitative estimates of expected periodic earnings per share, revenues, or some other financial metric expressed as either a specific number (point estimate) or some range of numbers (range estimate). Extant research suggests that organizations may use management earnings forecasts to communicate good news (Verrecchia, 1983) or to influence analysts' forecasts (Ajinkya & Gift, 1984). However, not all publicly traded

organizations engage in public forecasting, which indicates that there may be a lack of consensus about the utility of management earnings forecasts.

In addition to a potential lack of consensus among firms, factions of scholars in finance and accounting disagree on their interpretation of management earnings forecasts' goal. One school of thought, basing their perspective on the efficient markets hypothesis, contends that firms use management earnings forecasts as a means for remedying information asymmetry between the firm and its stakeholders (e.g. Verrecchia, 1983; Ajinkya & Gift, 1984; Diamond & Verrecchia, 1991; Verrecchia, 2001). The other school of thought contends that firms used management earnings forecasts to manipulate stakeholders, and that this manipulation is particularly myopic (e.g. Matsumoto, 2002; Rogers & Stocken, 2005; Zhang & Gimeno, 2010). In this manuscript, I seek to provide empirical evidence of the latter by comparing actual earnings outcomes of groups of firms divided by their forecasting behaviors. Should I find evidence that those forecasts are used in manipulation then management, earnings forecasts may be classified as anticipatory impression management tactics.

I also investigate the impact that stakeholders have on firm decisions to engage in anticipatory impression management. To do this, I will examine the influence that two stakeholder groups – institutional investors and analysts – have on firm forecasting. These stakeholder groups are highly salient to firm operations, and determining their impact on firm forecasting will provide insight into the consideration that firms give external stakeholders when engaging in anticipatory impression management.

This study addresses a major gap in impression management literature by examining outcomes of impression management. Whereas prior studies identify the antecedents or acts of managing impressions, my study empirically tests the outcomes of management earnings

forecasts relative to the alternative, nondisclosure. By comparing the stakeholder reactions to management earnings forecasts and surprise earnings, I can determine how effective forecasts are at manipulating stakeholder reactions. Determining the effectiveness of anticipatory impression management tactics - in this case management earnings forecasts - will allow us to ascertain whether engaging in those tactics is beneficial to the firm. My study also examines contextual factors that may influence the effectiveness of management earnings forecasts. Testing context, such as forecasts that occur prior to a surprise, provides insight into how and when the use of impression management tactics may be most beneficial to firms. Finally, my study empirically tests the provision of management earnings forecasts over time to determine whether a firm's previous impression management efforts impact stakeholder reactions to subsequent forecasts. By testing these relationships, this study will contribute to the study of organizational impression management and by quantifying outcomes of the phenomenon. Finding quantifiable outcomes to management earnings forecasts allows us to better understand why organizations may use anticipatory impression management tactics when facing threats to its image or its relationships with external stakeholders.

## **Research Context**

*"We have two classes of forecasters: Those who don't know – and those who don't know they don't know." John Kenneth Galbraith, from Predicting the Future (Rescher, 1998)*

As unreliable as our ability to tell the future may be, forecasting is an integral part of the economic landscape because investors defer to firm managers' and equities analysts' predictions to inform their decisions to invest in a firm's underlying securities. The most basic purpose of economic forecasting at the firm level is to provide approximations of periodic firm performance. However, investors are split over the importance and productiveness of firms



disclosing periodic earnings forecasts. Arguably the most successful professional investor of all-time, Warren Buffet says of earnings forecasts:

“I think it is both deceptive and dangerous for CEOs to predict growth rates for their companies. They are, of course, frequently egged on to do so by both analysts and their own investor relations departments...too often these predictions lead to trouble” (Chicago Tribune, 2002:3).

Buffett's insight continued with anecdotes of managers making counterproductive operating decisions in order to meet the targets they set for their firm. Despite Buffett's distaste for earnings forecasts, the reality is that many firms continue to make the voluntary decision to disclose earnings forecasts on a regular or semi-regular basis

The main argument for the continuation of public earnings forecasting is that investors want and need more information about companies. Institutional investors claim that they rely upon management earnings forecasts to make informed trading decisions, and that without forecasts, the uncertainty surrounding a firm's performance may present too much risk for serious investment in its securities. If investors shy away from a firm's securities, that firm may face liquidity issues in financial markets and an increased cost of capital (Gelb & Zarowin, 2000). Similarly, securities analysts claim to rely upon management earnings forecasts to temper their earnings estimates and provide reasonable predictions of securities' performance. As these analysts are judged based on the accuracy of their predictions in the relative short-term, they have incentive to cover companies that are forthcoming with material information about their performance (Chen, Matsumoto & Rajgopal, 2011). When a firm stops providing this information, analysts may decide that ongoing coverage of that particular company, particularly without managerial predictions on which to base their own estimates, is a risk to their job-security or firm reputation they are unwilling to take. These factors, alone and together, provide a major reason why firms may continue to disclose periodic economic forecasts. Other reasons

managers give for the continuation of earnings forecasting are that it decreases share price volatility, prevents earnings surprises, and mitigates potential shareholder litigation. Based on the arguments of proponents for earnings forecasts, earnings forecasts are nothing more than management's earnest attempt to remedy the informational asymmetries between the firm and its stakeholders. So what, then, is the 'trouble' with earnings forecasts that Buffett alluded to above?

Opponents of the practice of management earnings forecasts cite several reasons for their opposition to the practice. The main slight on these forecasts is that their periodic nature makes firms engage in short-term earnings management, which opponents of the practice argue is counterproductive to long-term firm performance. When a firm sets an earnings target, be it point, range or qualitative, the implications for missing that target may be highly detrimental to the firm. When a firm misses its own forecasted earnings, investors may lose confidence in management's ability to assess and forecast firm performance. In order to avoid missing these targets, managers may make decisions that are out of line with their long-term firm strategy. These decisions include, but are not limited, to cutting discretionary expenditures at the end of a period approaches or moving economic outlays or gains from the current period to the next as an effort to adjust periodic performance to their forecasted targets. The practice of moving earnings and expenses to subsequent quarters may lead to not only future performance issues, but also legal problems as firms continue to manage earnings based on targets. Buffett cites several instances when he and his employees discovered that once managers "move earnings from one period to another, operating shortfalls that occur thereafter require it to engage in further accounting maneuvers that...can turn fudging into fraud" (Chicago Tribune, 2002: 3). Opponents of the practice of issuing manager earnings forecasts see these forecasts, then, as a way to

manipulate the perceptions of external stakeholders in order to mislead them about firm performance

By studying management earnings forecasts, I examine firms' use of anticipatory impression management tactics. Prior research on anticipatory impression management has typically focuses on the tactic of obfuscation (see Elsbach, Principe & Sutton, 1998; Graffin, Carpenter & Boivie, 2011). Earnings forecasts, like obfuscation, may serve as anticipatory impression management tactics that are more implicit. That is, they may influence stakeholder perceptions prior to a firm decision or outcome without directly informing stakeholders of the decision or outcome. Firms may be implicit in earnings forecasts by providing either purely qualitative forecasts or by providing some range of earnings estimates. However, earnings forecasts also provide a context in which to investigate the use of explicit anticipatory impression management tactics. When a firm voluntarily discloses negative earnings forecasts in advance of earnings announcements, they are pushing out negative information before another entity has a chance to break that negative news. The most explicit form of anticipatory impression management in earnings forecasts is point estimates, which provide a rigid benchmark for the firm's forthcoming earnings announcement. Because of the range of forms that earnings forecasts may take, they serve as an interesting means for the study of anticipatory impression management.

### **Chapter Summary and Outline of the Remaining Chapters**

This chapter introduced the idea that management earnings forecasts may be viewed as anticipatory impression management tactics and that examining the use of earnings forecasts may be predictive of different investor reactions and firm outcomes. Specifically, this research will first examine whether firms use voluntary earnings disclosures to manipulate stakeholder

attitudes and perceptions. Second, this study will test whether key stakeholders influence the decision to engage in anticipatory impression management. Next, this study will investigate the impact that anticipatory impression management has on firm outcomes. Finally, I examine the consequences of repeated anticipatory impression management by determining whether previous forecasting frequency and accuracy affect reactions to future forecasts.

Chapter 2 provides a review of relevant literature. Chapter 3 continues with the theoretical support for this study and specific hypotheses to be tested. Chapter 4 provides a detailed discussion of the sample, variable and estimation procedures employed to test these hypotheses. Chapter 5 contains the results of empirical tests of the hypotheses, as well as tables and figures displaying results. Chapter 6 continues with a discussion of the theoretical, practical and policy implications of this study, a theoretical implications, and limitations of this study. Chapter 7 provides some brief concluding remarks about this dissertation.

## **CHAPTER 2**

### **LITERATURE REVIEW**

Impression management literature asserts that firm leaders attempt to influence stakeholders through the release of information (Bolino et al., 2008). Some information that is coveted by external stakeholders of the firm, specifically analysts and investors, is voluntary financial disclosure provided by firm leaders, including earnings forecasts, which serve as signals to the financial markets of firm performance. Establishing a clear idea of the role earnings forecasts play in firm strategy is essential to providing a foundation for this study of anticipatory impression management.

#### **Impression Management**

Firms, like individuals, seek to build and maintain approval from individuals who may exert some level of influence over them. It is from interactions with these stakeholders that firms gain access to resources necessary, not only to survive, but to develop a competitive advantage (Deephouse & Suchman, 2008). Likewise, damage to social approval may result in the firm's access to resources diminishing to points where competitive advantage and, possibly, firm survival are at risk. Firms are careful to manage stakeholder perceptions of triggers - or events that elicit strong stakeholder reactions - that threaten their social approval (Elsbach, 2006). Organization impression management involves intentional actions designed and carried out to influence the perceptions and attitudes of its stakeholders (Tedeschi, 1981; Elsbach, Sutton & Principe, 1998). Organizations manage impressions because they are concerned with protecting or repairing their image (Mohamed, 1999). Mohamed (1999) provides a taxonomy for

organizational impression management tactics that classifies these tactics as either direct or indirect and either assertive or defensive. In this taxonomy, direct tactics are used to build up external perceptions of the firm, whereas indirect tactics are used to separate or distance the focal firm from associated firms. Additionally, assertive tactics are proactive, such as organizational image enhancement, whereas defensive tactics protect organizations from threatening or damaging situations (Mohamed, 1999). Organizational impression management is distinct from reputation- or image-building in that it focuses on protecting an organization from specific occurrences that may alter stakeholder perceptions, rather than a series of occurrences over a significant amount of time that contribute to a firm's prominence and favorability (Rindova, Williamson, Petkova & Sever, 2005; Washington & Zajac, 2005). When these perception-altering events occur, it is likely that stakeholders will make, or have already made, causal inferences (Kelley & Michela, 1980) and moral judgments (Hamilton, 1980) as to the party responsible for violations of their expectations.

Consequently, organizational leaders seek to manage the inferences and moral judgments of their stakeholders (Elsbach, 1994). Organizational impression management activities have been studied in the contexts of controversial industry-wide events (Elsbach, 1994), executive compensation decisions (Porac, Wade & Pollock, 1999), changes in corporate structure (Arndt & Bigelow, 2000), corporate governance issues (Westphal & Graebner, 2010), and industry spillovers after peer wrongdoing (Zavyalova, Pfarrer, Reger & Shapiro, 2012). Other empirical studies have examined organizational impression management in response to illegitimate firm actions (Elsbach & Sutton, 1992), financial disclosures (Bettman & Weitz, 1983; Salancik & Meindl, 1984), organizational change (Fiss & Zajac, 2006; Gioia & Chittipeddi, 1991), organizational crises (Marcus & Goodman, 1991), and identity threats (Ravasi & Schultz, 2006).

These studies illustrate a wide range of impression management tactics that firm leaders may employ post hoc in an attempt to reshape stakeholder attitudes and perceptions. Thus, implicit in each of these studies is the idea that organizations only take an active role in attempting to shape stakeholder perceptions in response to some negative occurrence (Elsbach, 2006).

***Framing as a tactic for impression management.*** A firm facing image-threatening reactions to occurrences it either caused or is associated with has the ability to control its discourse with its stakeholders. In controlling this discourse, the firm may attempt to shape these stakeholder perceptions through the framing of the occurrence (Goffman, 1974). Firms controlling frames may alter stakeholder perceptions of occurrences by influencing the perceived undesirability of that occurrence (Porac et al., 1999). Firms may also frame the occurrence such that they blur stakeholders' abilities to make causal connections between firm behaviors and negative that occurrence (Lange & Washburn, 2012). By blurring the causal relationships between the firm and the occurrence, the firm influences the attributions that stakeholders make for responsibility for those negative occurrences. Indeed, this obfuscation may make it unclear to stakeholders as to the firm's culpability for the negative occurrence and decrease concurrence over firm responsibility (Pfarrer, Decelles, Smith & Taylor, 2008). Controlling the frame through which these occurrences are viewed allows firms to choose some aspects of a perceived reality and promote self-serving causal interpretations and moral evaluations from stakeholders (Entman, 1993; Goffman, 1974). Most impression management studies in management literature identify tactics used to frame image-threatening events in a positive light. For example, the Porac and colleagues (1999) study found that firms justified executive compensation during SEC disclosures by influencing which peer group the firm was associated with noting executive compensation in that peer group. These leaders sought to frame compensation such that

stakeholders would see institutional conformity as a positive justification for exorbitant salaries. Indeed, firms use framing as a tactic in response to stakeholders' initial assessments and reactions to information, and it is typically used to alter or reinforce stakeholder attributions and perceptions of new information.

***Impression Management and Information Asymmetries.*** Information asymmetry between a firm and its stakeholders allows firms to exploit their informational advantages. A firm may exploit informational advantages by framing information new to its stakeholders in ways that best serve its interests. The opportunity to control the frames through which stakeholders interpret new information, a result of information asymmetries in the anticipatory period, gives managers two strategic advantages. First, firms are in a stronger position to shape stakeholders' frames-of-reference because initial impressions are not yet formed and reactions have not occurred. However, in this context stakeholders know that a firm will publicly announce earnings some time after the end of a period, so voluntary firm financial disclosures may draw increased skepticism from stakeholders because that information was released ahead of regularly scheduled announcements (Clatworthy & Jones, 2001). Indeed, a study of firms that provided private disclosure in the years prior to Regulation FD found that firms that enjoyed greater information asymmetries over analysts and investors – represented as the spread between insider earnings expectations and consensus estimates – were more likely to provide voluntary public disclosures after the regulation passed than firms with fewer informational advantages (Wang, 2007). This indicates that information asymmetry plays a role in decisions to disclose earnings forecasts, but only to the extent that analysts' estimations deviate from internal performance expectations.



The second informational advantage firm leaders enjoy in the anticipatory period pertains to the damage to social evaluations of the firm that negative information may cause. When stakeholders perceive organizational actions and outcomes negatively, they may perceive firm actions and behaviors as the cause of those outcomes. Information asymmetry that exists prior to the disclosure of outcomes allows firms to manipulate this causal attribution. Otherwise, those causal attributions may serve as a cognitive anchor, biasing stakeholders as they interpret future organizational actions (Kahneman & Tversky, 1979). In order to avoid this anchoring, firms may utilize information asymmetries to manipulate stakeholder perceptions such that they will not believe that those future outcomes are not representative of the firm or will lower their expectations of future firm performance (Kahneman & Tversky, 1979).

In sum, firm leaders have informational advantage over stakeholders in the period leading up to earnings announcements in which stakeholders are not yet biased by firm performance. As such, firm leaders' ability to manage stakeholder impressions may be stronger during this period than after earnings announcements.

### **Anticipatory Impression Management**

Anticipatory impression management focuses on shaping and manipulating perceptions prior to an event that may trigger some stakeholder reaction. The small body of management research on anticipatory impression management includes a few notable studies. In a study of hospital billing procedures, Elsbach et al. (1998) examined "anticipatory obfuscation," where hospitals actively attempt to overwhelm patients with organizational images as these patients receive their bills. By promoting these organizational images, hospital administrators used anticipatory impression management to avoid conflict with patients. In a later study, scholars investigated the use of claimed handicapping by CEOs in anticipation of poor future

performance using both an experiment and archival analyses. Claimed handicapping had an adverse effect on firm value, but a positive affect on CEO compensation (Siegel & Brockner, 2005). Recently, Graffin and colleagues (2011) presented findings that supported the idea that firms create “strategic noise” intended to obfuscate major firm events, in this case CEO succession. This obfuscation occurred when firms made contemporaneous announcements of significant firm occurrences unrelated to the CEO succession in an attempt to muddle investors’ ability to attribute negative financial market reactions to a single announcement. Because managerial succession announcements were found to increase the volume of voluntary information about significant firm activities, the firms engaging in the release of “strategic noise” show premeditation in their anticipation of negative investor reactions (Graffin et al., 2011).

Outside of management, several disciplines study instances where people and firms attempt the ex-ante manipulation of stakeholder perceptions of behaviors and outcomes. As early as the 1940s, psychological studies on opinion presented the idea that people have anticipatory responses to situations (Dollard, 1948). Dollard identifies the anticipatory response as “a portion of a later, fuller, stronger response which the subject can make” (624). These anticipatory responses are characterized as forecasts of reactions to later events (Dollard, 1948). To forecast reactions to their message, the purveyors of propaganda use “trial balloons” as part of a plan to push their ideas on people, and although these “trial balloons” must have some local support, they typically precede “tricks of manipulating, creating or even blocking naïve public reaction” (Dollard, 1948: 624). Psychologists also studied the effects of anticipatory distraction and priming on the perceptions of communication and found that warning individuals of an intent to persuade them results in them responding more negatively to future persuasive communication.

In public relations, scholars examine firms and their propensity to self-release negative information when they perceive the future threat that external sources will make that information public. This idea of firms “stealing thunder” by releasing negative news prior to external infomediaries shows that a firm may anticipate negative reactions to its behaviors and outcomes, and thus, seek to control the flow of information to its stakeholders (Arpan & Roskos-Ewoldson, 2005). This research overwhelmingly supports the conclusion that firms that engage in anticipatory impression management through “stealing thunder” enjoy weaker negative reactions to their behaviors and outcomes, as stakeholders view them as more transparent and honest (Arpan & Pompper, 2003; Arpan & Roskos-Ewoldson, 2005). Likewise, legal scholars have investigated “stealing thunder” during criminal and civil trials, and found that people who willfully disclose negative information about themselves before being prompted or compelled to do so are viewed as more credible than those who are not proactive in their disclosures. In addition, this information’s impact on external stakeholders is less negative during instances of “stolen thunder” (Williams, Bourgeois & Croyle, 1993).

The anticipatory impression management context is unique from the reactive context in several regards. First, the anticipatory impression management context exists when there are informational asymmetries between the firm and its stakeholders, whereas reactive impression management occurs when information related to an occurrence is public. Once information about negative occurrences becomes public, stakeholders’ reactions, often involving the search for attributions of responsibility, are subject to their own sensemaking processes and are influenced by the media and firm discourse. Stakeholder reactions begin with this inquiry into causes of the negative occurrences and shift into the sanctioning capacity, where stakeholders decide if the outcome is a result of firm managers’ incompetency or immorality (Sutton & Callahan, 1987).

The opportunity for firms to engage in anticipatory impression management tactics exists before any attributions or moral judgments are made, thus allowing those tactics to mediate the relationships between inside-knowledge of firm performance and stakeholder reactions. This mediation of stakeholder reactions makes anticipatory unique from reactive impression management, where tactics utilized after a negative occurrence are intended to moderate stakeholder reactions. The informational advantage that firm leaders enjoy over stakeholders allows them to assess the threat that release of that information poses and devise a strategy for manipulating stakeholder reactions.

### **Management Earnings Forecasts**

Management earnings forecasts are defined as voluntary public disclosures whereby managers predict firm earnings prior to an expected reporting date (King, Pownall & Waymire, 1990). Management earnings forecasts, colloquially and oftentimes academically referred to as earnings guidance, may occur at any point prior to official firm earnings announcements, and are sometimes even made after the official accounting period has passed.

In 2000, the SEC ratified Regulation FD (Fair Disclosure), which required firm managers to disclose material information to all investors at one time. Prior to 2000, firms could selectively disclose market-moving information to analysts and investors of their choosing before all others, almost certainly without fear of repercussions (Irani & Karamanou, 2003). Under Regulation FD, firms could not longer provide “earnings whispers” to select analysts and investors, thus replacing private disclosure with public earnings forecasts (Irani & Karamanou, 2003). While the SEC posited that this regulation would improve the information environment, institutional investors, the primary opponent of Regulation FD, contended that this regulation would result in less overall disclosure (Irani & Karamanou, 2003). This regulation does not require firms to

disclose forecasts, so firm leaders must decide if and how they want to incorporate earnings forecasts into their overall strategy. Wang (2007) found that half of firms that previously relied upon providing private forecasts to select analysts and investors chose non-disclosure after regulation FD. Likewise, Bailey, Li, Mao and Zhong (2003) and Irani and Karamanou, (2003) found that Regulation FD had no impact on firms' willingness to disclose forecasts and other performance information. In fact, it evidently decreases the quality of such information. In order to objectively investigate earnings forecasts, we must first look at the debate over the practice's place in voluntary corporate financial reporting.

The debate over the usefulness, or potential harm, that management earnings forecasts have in the business community is heated. Some investors are steadfast in their belief that earnings forecasts provide vital information that decreases uncertainty surrounding the value of a firm's underlying security. Other investors contend that earnings forecasts are detrimental to long-term growth and strategies because the incremental nature of forecasting encourages managers to make shortsighted decisions. Jack Welch, former CEO of General Electric, said of the balance between short-term earnings and long-range strategy,

“Any jerk can have short-term earnings. You squeeze, squeeze, squeeze, and the company sinks five years later. Any jerk can sit there and say, ‘Hey, come back in five years, I’m doing my long-range thinking’...Management is all about managing in the short term, while developing plans for the long term.” (Kudlow, 2009).

The short-term focus in managerial decision-making is often attributed to the direct affect of earnings on managerial compensation and job security. Indeed, as incentive-based executive compensation is typically tied to firm securities, it provides a plausible explanation for the need to manage earnings in the short-term. Additionally, threats to job security may put pressure on top managers to perform well in the short-term, measured by periodic earnings, but may also lead to managerial decision-making that threatens the long-term viability of a firm. Because of

this, several management studies investigate earnings as an antecedent of strategic decision marking (e.g., Zhang & Gimeno, 2010; Gentry & Shen, 2013; Washburn & Bromiley, 2013). Zhang and Gimeno (2010) investigated the effects of earnings pressure on oligopolistic competition, finding that firms under earnings pressure attempt to exploit market power by tightening their output, even when competitors could expand output in an effort to gain a competitive advantage. However, few studies in the management literature look into voluntary earnings forecasts as a managerial decision that may have some strategic motivation or consequences. Although the management literature on the earnings forecasts and their relationship with firm outcomes is scarce, there is much accounting literature on the topic. In the accounting literature, extant research identifies antecedents, characteristics, and consequences of earnings forecasts. A major focus of this body of research on earnings forecasts is the firm manager. As such, we will first examine the role that managerial characteristics and firm environment play in the managerial disclosure of earnings forecasts, followed by firm characteristics and forecasts characteristics.

***Managerial Characteristics.*** Firm managers are often motivated to make decisions by stock price and potential returns. Agency theory views managers as decision-makers who are both opportunistic and self-interested. Agency theorists posit that managers' decisions are motivated by both their desire to extract resources from the firm and their interest in entrenching their role in the firm (Jensen & Meckling, 1978). Prior research on opportunistic motivation to disclose earnings forecasts found that earnings forecasts are positively associated with trading by firm insiders (Noe, 1999). This supports the idea that managers make decisions to publicly disclose information based on the economic gains they may experience, or losses they may avoid, as a result of those forecasts. Likewise, research on the timing of forecasts found that

managers are more likely to delay the disclosure of good news and accelerate the disclosure of bad news in the period before they are awarded options (Aboody & Kasznik, 2000). Further, executive stock option compensation at risk was found to increase the likelihood of earnings forecasts for firms in turnaround situations.

Extant research on entrenchment motivation for earnings forecasts supports agency theory prescriptions, as managers of target firms during contested takeovers are more likely to make earnings forecasts (Brennan, 1999). Brochet, Faurel and McVay (2011) found that firms that historically disclose frequent forecasts, and experience a break in forecasting during CEO turnover, do not resume the practice. These authors also found that, in firms that historically did not disclose forecasts, external CEO succession increases the likelihood that the firm will disclose forecasts for future earnings periods (Brochet, Faurel & McVay, 2011). Hribar and Yang (2010) also found that CEO hubris contributed to the issuance of overly optimistic management earnings forecasts. Similarly, Malmendier and Tate (2005) found that CEO certification increases the likelihood that those CEOs will announce more accurate quarterly firm earnings than other elites. The results of these studies provide evidence that self-confidence and external confidence are contradictory forces on the accuracy of firm managers' information disclosures.

***Firm Characteristics.*** Accounting research has also focused on the role of firm information on earnings forecasts. Those firms that seek to diminish the information asymmetry between their managers and their external stakeholders are more likely to disclose forecasts, especially when those most salient stakeholders, analysts and investors, demanded firm forecasts (Ajinkya & Gift, 1984). Research also focuses on the firm outcomes of reducing information asymmetries through forecasts, such as higher liquidity and lower cost-of-capital (Diamond &

Verrecchia, 1991; Leuz & Verrecchia, 2000). Research also supports the idea that firms experiencing greater information asymmetries, as reflected by misalignment between investors of their underlying securities, are more likely to disclose earnings forecasts (Coller & Yohn, 1997).

Other accounting research has investigated the regularity of forecasts as an indication of a firm's pre-commitment to voluntary disclosure. This research reveals that firms are typically not regular in their provision of forecasts, with many firms only providing forecasts in one time period and very few providing forecasts at each regular interval of these studies (McNichols, 1989; Rogers & Stocken, 2005). Research also supports the idea that firms that experience higher volatility in capital markets (as a function of their Beta) are less likely to disclose forecasts and, when they do, provide it less frequently (Ajinkya, Bhojraj & Sengupta, 2005). Other research on earnings forecasts indicates that the frequency of earnings forecasts may be as high as sixty-four percent of firms, although many of these firms do not disclose point or range estimates (Kile, Pownall & Waymire, 1998).

Extant research also focuses on corporate governance and performance and their effects on the managerial decision to disclose earnings forecasts. Firms with more outside directors and higher levels of institutional ownership are more likely to disclose forecasts and provide them at a higher frequency than those with theoretically weaker corporate governance (Ajinkya et al., 2005). Firms with a higher percentage of institutional investment are also more likely to disclose specific forecasts than firms with lower levels (Ajinkya et al., 2005). The same study also indicated that firms experiencing a loss in the focal period are less likely to disclose forecasts, provide forecasts with less frequency and offer less specific forecasts (Ajinkya et al., 2005).



Research shows that firms that regularly miss consensus analysts' estimates are likely to stop the practice of providing forecasts (Houston, Lev & Tucker, 2009).

Other accounting scholars focus on firms' previous forecasting behaviors as predictors of future earnings forecasts. Research supported the idea that managers use forecasting as a means to develop reputations for consistency and transparency (Stocken, 2000; Healy, Hutton & Palepu, 1999). Research also shows that investors take the accuracy of prior management earnings forecasts as an indication of the credibility of current earnings forecasts (Hutton & Stocken, 2009). This emphasis on accuracy by investors helps to explain why managers are more concerned with meeting or beating consensus estimates than with exceeding previous periodic performance (Dechow, Richardson & Tuna, 2003). A study also found that frequent firm forecasts increased the likelihood earnings met or beat analysts' consensus estimate (Houston et al., 2009). Collectively, this research supports the proposition that prior disclosure shape firm and stakeholder beliefs and perceptions of disclosures.

***Forecast Environment.*** As context is important in managerial decision-making, accounting scholars have focuses research on the environmental and firm motivations for providing earnings forecasts. Much of this literature on the forecast environment focuses on the legal and regulatory environment under which firms operate. Research on earnings forecasts before Regulation FD focused on managers who disclose information to analysts through private communication (Hutton, 2005). Alternatively, post-Regulation FD research focuses on the decision to voluntarily disclose public forecasts. In response to the analyst argument that firm-provided information would dry up, several studies focused on firm forecast behaviors before and after this regulation. Research found that immediately after Regulation FD, firm-provided

quarterly earnings forecasts increased, but that these firms focused their forecasts only on current earnings periods (Bailey et al., 2003).

Other research examined firm characteristics relative to their environment as predictors of firms' decisions to continue providing earnings forecasts, finding that those firms classified as private forecast providers before regulation that had lower information asymmetries tend to choose nondisclosure after Regulation FD (Wang, 2007). Forecasts are also grounds for litigation, as U.S. managers in general disclose fewer forecasts during periods of prosperity and are more likely to disclose forecasts during periods in which earnings decrease than Canadian managers, suggesting that American managers behave in a manner consistent with concern over legal action (Baginski, Hassell & Kimbrough, 2002).

Literature on earnings environment focuses on primary firm stakeholders, specifically analysts and investors. Firms that disclose regular earnings forecasts are more likely to be covered by analysts and, as a result, invested in by large and small investors alike (Ajinkya et al., 2005). Approximations of firms providing forecasts in the mid-1990s are 10 to 15 percent, compared to approximately 50 percent of firms providing forecasts in 2004 (Anilowski, Feng & Skinner, 2007). As analysts and investors rely on this information, this increase in provision of forecasts reflects the desire by managers to be covered by analysts. The overall number of firms covered by analysts has grown from fewer than 2,000 in the mid-1980s to almost 6,000 in 2001 (Anilowski et al., 2007).

***Forecast Characteristics.*** Prior research on the characteristics of management earnings forecasts provides insight into the information managers are willing to disclose to external stakeholders. Forecasts characteristics are treated as exogenous variables (Baginski, Hassell & Kimbrough, 2004), as they represent aspects of forecasts which managers have greater control

over than the antecedents and consequences of forecasts (Choi, Myers, Zang & Ziebart, 2011). Some prior studies investigated why managers disclose forecasts with external versus internal attributions of responsibility, why they disclose forecasts concurrently with other disclosures, and the nature of those other disclosures (Baginski et al., 2004).

Several accounting studies have focused on the type of forecast disclosed by the firm. These studies provide mixed results in detailing the relationship between forecast type and investor reactions. An early study found that point forecasts lead to greater stock price reactions than range forecasts (Baginski, Conrad & Hassell, 1993). However, two other studies found no variation in investor reactions to explicit (point) forecasts and implicit (range and qualitative) forecasts (Pownall, Wasley & Waymire, 1993; Atiase, Supattarakul & Tse, 2005). Another study found that forecasting accuracy moderates the relationship between forecast form and investor reaction such that investor consideration and reaction to different forecast forms occurs only for firms with high levels of forecasting accuracy (Hirst, Koonce & Miller, 1999).

### **Management Earnings Forecasts & Anticipatory Impression Management**

Accounting and finance literature call the practice of manipulating analysts and investors by providing forecasts “expectations management.” Expectations management is defined as “activity that takes place whenever management purposefully dampens analysts’ earnings forecasts to produce a positive earnings surprise (or avoid a negative earnings surprise) upon the earnings release” (Bartov, Givoly & Hayn, 2002). Because this expectations management is behavior intended to influence or manipulate analysts and investors before an occurrence that may trigger a negative (or positive) reaction, it falls under what management scholars consider impression management or, specifically, anticipatory impression management (Elsbach et al., 1998; Cain, Graffin & Lange, Working Paper). Indeed, scholars studying voluntary financial

disclosures have pointed to these disclosures as the exploitation of information asymmetries in managing information users' perceptions (Merkl-Davies & Brennan, 2007). For example, scholars found that, in the anticipatory period, managers disclose bad news more than any other types of earnings news (Skinner, 1994; Kasznik & Lev, 1995). This represents an exploitation of insider firm knowledge in strategically choosing which information to disclose to external stakeholders.

Other, more recent research has explored managers' attempts to manipulate analysts' forecasts to the extent that analysts predict earnings that the firm can beat (Matsumoto, 2002; Richardson, Teoh & Wysocki, 2004). However, these studies do not directly document management forecasts, but instead focus on the outcomes of assumed forecasting activities (Cotter et al., 2006). This study takes an impression management perspective on managerial disclosure decisions and their outcomes, and by utilizing documented earnings forecasts, extends theory on anticipatory impression management.

### **Earnings Surprises**

Earnings surprises occur when a firm announces earnings that deviate from analysts' expectations of firm earnings (Degeorge, Patel, & Zeckhauser, 1999). Earnings surprises may be positive or negative, depending on whether those announced earnings exceed or miss consensus earnings estimates. Since analysts and investors expect predictable earnings, surprises represent violations of that expectation that threatens the accuracy of financial evaluations (Bartov, Givoly & Hayn, 2002; Degeorge et al., 1999; Kasznik & Lev, 1995; Kasznik & McNichols, 2002; Tan, Libby & Hunton, 2002). Firm-level implications of earnings news are reactions in stock prices, although financial markets take several periods to wholly reflect earnings information (Kothari, Lewellen & Warner, 2006). When a firm announces a negative surprise, the surprise both

violates expectations that expectations and reflects disappointing firm performance. Investors react negatively to both those violations of expectations and to poor firm performance (Brown, 2001; Kasznik & Lev, 1995; Skinner & Sloan, 2002). Conversely, when a firm announces a positive surprise, investor reactions are mixed. On one hand, positive earnings surprises signal stronger than expected firm performance. On the other hand, positive earnings surprises reflect the inability of analysts and investors to accurately predict firm performance, which may impede future investment. Because positive earnings surprises engender conflicting perceptions of firm performance and firm predictability in investors, they result in positive investor reactions of a smaller magnitude than those negative reactions to negative earnings surprises (Kasznik & Lev, 1995; Westphal & Clement, 2008).

The accounting, economics and finance literatures have examined earnings surprises extensively. As earnings surprises reflect deviations from predictable financial forecasting, they create temporary market inefficiencies (Tan et al., 2002). Market inefficiencies, resulting from differences between analysts' forecasts and reported earnings, attract attention from analysts and investors because they raise concerns over both the competence of analysts and the credibility of earnings announcements (Koester et al., 2011; Feng, Ge & Li, 2012). Because investors rely on analysts as infomediaries between them and the firm, the competency of analysts and accuracy of analysts' forecasts allows investors to use this information in their own assessments of a firms' stock (Degeorge et al., 1999). Earnings surprises also lead to higher volatility in firms' stock prices, which results in inefficiencies in the markets for their securities (Rogers, Skinner & Buskirk, 2009). Thus, managers attempt to avoid earnings surprises to the extent that this avoidance improves external firm valuations and market stability (Graham, Harvey & Rajgopal, 2005; Degeorge et al., 1999).

Although some, if not most, firms attempt to avoid earnings surprises, they do occur and they matter to both investors and managers (Johnson & Zhao, 2012). Studies have found the antecedents of earnings surprises to be related to both firm actions and environmental factors (Pfarrer et al., 2010). For instance, Hewlett-Packard's (HP) recent positive earnings surprise was internally attributed to "improved execution, improvement in our channel and go-to-market efforts and the impact of...restructuring program" (Rogers, 2013). By beating consensus estimates by 11 cents, HP's share price increased by almost five percent (Rogers, 2013). On the other hand, Olympic Steel's recent negative earnings surprise was attributed to low demand and a decline in prices for steel, both factors external to the firm (Zacks, 2013). Olympic missed expected positive earnings by 39 cents per share, causing investment research firm Zacks to "raise (their) concern over the financial health of Olympic Steel" (Zacks, 2013). These anecdotal examples and previous research support the notion that managers attempt to shape perceptions of positive earnings surprises as internally attributed to the firm, whereas they tend to pursue external explanations for negative earnings surprises.

Earnings surprises also differ in their magnitude of deviation from consensus analysts' estimates. Whereas smaller deviations from consensus estimates are not considered major violations of analyst and investor expectations, larger deviations from consensus estimates represent extreme errors in analysts' forecast and cause major market reactions (Barron, Byard, & Yu, 2008). These large deviations from consensus estimates, or "egregious forecasting failures," may significantly alter stakeholder perceptions of the firm (Barron et al., 2008; Kasznik & Lev, 1995; Ajinkya & Gift, 1984). Substantial earnings surprises may also threaten investors' wealth, threaten analysts' jobs, and put strain on the relationship between managers and analysts (Barron et al., 2008). Scholars also found that earnings surprises may lead to

directionally opposite investor returns when “noise” – including stale consensus forecast, preannouncements, and GAAP exclusions – exists in the earnings announcement (Johnson & Zhao, 2012). Additionally, scholars have found that negative earnings surprises may have a contagion effect on industry sectors, where other firms operating in an industry experience investor reactions to a single firm’s earnings surprise (Han & Wild, 1990; Ramnath, 2002; Prokopczuk, 2009). In the management literature, scholars found that the social approval assets of a firm – specifically reputation and celebrity – influence the likelihood of announcements of positive earnings surprises, the market rewards for announcing positive earnings surprises, and the market penalties for negative earnings surprises (Pfarrer et al., 2010). In aggregate, the aforementioned studies provide evidence that earnings surprises, while avoidable, still occur and lead to varying magnitudes of investor reactions.

## **CHAPTER 3**

### **THEORY AND HYPOTHESES**

#### **Research Setting: Earnings Forecasts as Anticipatory Impression Management**

Prior research on anticipatory impression management examined tactics that were implicit attempts to manipulate firm stakeholders (e.g. Elsbach et al., 1998; Graffin et al., 2011), but none examine seemingly candid firm disclosures as tactics to manipulate stakeholders. The explicit anticipatory impression management tactics are characterized by firms' public disclosures of information before their stakeholders are aware of its existence. In this context, explicit anticipatory impression management occurs when a firm discloses an earnings forecast with a point estimate of firm earnings at some time before its official earnings announcement. The purpose of more explicit anticipatory impression management may be for the firm to "steal thunder," or the impact of the information reveal, from stakeholders becoming aware of that information at the time of the trigger (Arpan & Pompper, 2003) – in this context the official earnings announcements.

More implicit anticipatory impression management tactics are less informative and may or may not include information directly related to the trigger. These tactics range from extremely implicit, such as general reputation building in anticipation of earnings announcements, to moderate, such as providing a range estimate in an earnings forecast. As the focal trigger in this context are SEC-required annual announcements of firm earnings, the period leading up to earnings announcements provides firm managers with the opportunity to anticipate stakeholder reactions to their internal forecasts of actual earnings and determine whether publicly disclosing



some related information is a beneficial firm strategy. These anticipated reactions influence firm managers' decisions on whether to disclose management earnings forecasts and to what degree those forecasts are explicit in the information they convey to external stakeholder (Soffer, Thiagarajan & Walther, 2000). This study examines those management earnings forecasts decisions and their impact on stakeholder reactions.

### **Earnings Forecasts as Anticipatory Impression Management**

At the crux of the argument between scholars who believe management earnings forecasts are a means for providing incremental information and scholars who believe management earnings forecasts are means for impression management is the general utility of earnings forecasts. Those who support the idea that management forecasts provide incremental information use the efficient market hypothesis as the rationale for providing earnings forecasts. Since economics and accounting scholars believe that earnings surprises create market inefficiencies (Tam et al., 1999), they expect firms seeking efficient markets through the provision of incremental information to have fewer earnings surprises than those less interested in remedying information asymmetries. By this logic, firms that disclose earnings forecasts should experience fewer earnings surprises than firms that do not disclose earnings forecasts, regardless of whether these forecasts are negative or positive.

However, markets are not perfectly efficient (Levine & Zajac, 2008), and reactions of those markets may be influenced by the actions and/or disclosures by the firm (Porac et al., 1999). Thus, firm leaders use their information advantages to influence market reactions (Graffin et al., 2011). In investigating market reactions to analysts' earnings estimate, prior research holds that investors reward firms for beating earnings estimates (Bartov et al., 2002). Prior research suggests that firms enjoy positive stock market returns for positive earnings surprises (e.g.

Bartov et al., 2002) and I expect managers will value the purveyance of beatable earnings estimates by analysts because of the benefits, such as job security and incentive-based compensation, that managers gain from beating consensus earnings estimates (Degeorge et al., 1999). Positive management earnings forecasts narrow information asymmetry between the firm and its stakeholders and can make those stakeholders' expectations more difficult to exceed. For this reason, firms have less incentive to disclose positive forecasts than to announce positive surprise earnings later in a period.

On the other hand, investors severely punish firms for missing earnings estimates (Skinner & Sloan, 2002). Management earnings forecasts can influence external expectations and help firms avoid punishment for negative performance. Extant research found that CFOs announce forecasts that are below their firms' expectations in an effort to manipulate external expectations of firm performance (Graham et al., 2005). Avoiding negative firm outcomes is important for managers because "negativity bias" posits that individuals tend to view negative occurrences as more relevant and indicative of actual performance than positive occurrences, causing them to react more strongly to those negative occurrences (Rozin & Royzman, 2001). Thus, I expect managers to engage in actions intended to decrease the likelihood of negative surprise earnings.

One way to avoid negative earnings surprises is through the manipulation of the analysts' perceptions of the firm. When a firm discloses a negative earnings forecast, they "steal thunder" from announcing the same figures as negative earnings surprise (Arpan & Pompper, 2003). Stealing thunder is the act of releasing information about an occurrence before some outside entity can release the same information (Arpan & Pompper, 2003). Releasing information about lower-than-expected firm earnings in advance of an earnings announcement gives a firm control

over characteristics of the information and the way that information is perceived that can influence stakeholder reactions and media responses to negative information. Prior research found that stakeholders tend to find organizational communications of information that is contrary to the firm's own interests are more credible than other organizational communication (Gollwitzer, 1986). Stakeholders will regard as more veritable firm disclosures of performance that are contradictory to firm interests than other firm communications. The stakeholder perceptions that negative disclosures containing more truth allow firm managers to use them in manipulation of those stakeholders. On the topic of negative disclosures, the *Wall Street Journal* printed:

“In short, there isn't anything surprising about earnings surprises. They aren't the exception; they are the rule. 'All of the numbers are gamed at this point,' says James A. Bianco, president of Bianco Research...

What's going on here? In what used to be called 'lowballing' but now goes by the euphemism of 'guidance,' an analyst will guesstimate what a company will earn...Then the company 'walks down' the analyst's forecast by providing a series of progressively lower targets until the analyst's prediction falls slightly below where the actual number is likely to come out.” – Jason Zweig, *Wall Street Journal*, July 2, 2001.

Indeed, Matsumoto (2002) found that managers attempt to strategically move analysts' estimates downward and that those attempts are usually successful. This influence of management earnings forecasts on analysts' earnings estimates represents a desired outcome of anticipatory impression management. Further, financial reporting requirements in Sarbanes-Oxley forced managers to shift their focus from income-increasing earnings management to downward earnings expectations management (Brown & Pinello, 2007).

If the purpose of management earnings forecasts was simply to reduce information asymmetry between firms and stakeholders, and not as anticipatory impression management, then firms that disclose forecasts would announce fewer positive and negative earnings surprises. That firm expectations of positive surprise earnings may impact a manager's decision to

withhold positive forecasts should further increase the likelihood that firms that voluntarily disclose forecasts subsequently announce earnings surprises under the assumption that forecasts are used to remedy information asymmetry. Additionally, research prior to Regulation FD found that earnings preannouncements and preemptive measures were most likely to occur in the case of negative earnings surprises (Skinner, 1994; Kasznik & Lev, 1995). However, I expect to find that the assumption of forecasts' use as a means to reduce information asymmetry between firms and stakeholders is misguided. The assumption that forecasts are disclosed to reduce information asymmetry does not consider the likelihood that managerial motivations to exceed earnings expectations outweigh motivations to reduce information asymmetry. Couple those managerial motivations with the fact that earnings forecasts are voluntary and not legally binding, and managers have impunity in using earnings forecasts to manipulate firm stakeholders. As such, managers have impunity in using forecasts to manipulate stakeholders in the interest of the firm. Since it is in a firm's interest to exceed its stakeholder's expectations, and more importantly avoid disappointing those stakeholders, I make the following prediction (refer to Figure 1 for a representation of comparisons and Figure 2 for expected frequencies under the different explanations for management earnings forecasts) about the relationship between earnings forecasts and earnings surprises.

*Hypothesis 1a. Firms that disclose management earnings forecasts are more likely to announce surprise earnings for the forecasted period than firms that did not disclose forecasts.*

*Hypothesis 1b. Firms that disclose management earnings forecasts are less likely to announce surprise negative earnings for the forecasted period than firms that did not disclose forecasts.*

*Hypothesis 1c. Firms that disclose management earnings forecasts are more likely to announce surprise positive earnings for the forecasted period than firms that did not disclose forecasts.*

## **Stakeholder Salience and AIM**

Although support for Hypothesis 1 may indicate a firm's manipulation of stakeholder perception via earnings forecasts, it will not rule out potential alternative explanations for the frequencies with which firms announce surprise earnings. Thus, in an effort to better substantiate my claim that firms engage in impression management using earnings forecasts, I focus my attention on the intended audience of earnings forecasts. I suggest that the salience of different stakeholder groups and those stakeholders' preferences influences firm decisions to manage impressions. I also expect these stakeholders to influence the degree to which those forecasts are explicit, or a signal that conveys more certain expectations.

Two key stakeholders firm managers must consider when disclosing any material financial information are institutional investors and securities analysts. Securities analysts represent infomediaries between the firm and all types of investors. These analysts provide their own assessments of firm performance based on the information they have available about the firm (McNichols, 1989). These assessments influence market perceptions of the value of a firm's underlying securities. Firm securities are representative of not only the performance and value of the firm, but also the quality of its leaders (Dedman & Lin, 2002). As such, managers have incentive to ensure that external expectations for their firm's securities are reasonable. One such way that managers might ensure expectations are reasonable is to influence analysts so that their forecasts are in-line with actual firm performance. Analysts may rely upon information disclosed by firm management in their assessments of firm performance such that firm managers can use this reliance to influence analysts' estimates in the firm's best interest (Zhu & Westphal, 2010). They may make forecasts intended to influence analysts' perceptions of firm performance such that those analysts amend their estimates to more closely match management's forecasts. Indeed,

firms providing management earnings forecasts have less dispersion in analysts' estimates than firms that do not disclose public forecasts (Lang & Lundholm, 1993). In addition, past studies support the idea that firms may disclose management earnings forecasts to "walk down" analysts' forecasts and avoid negative earnings surprises (Das, Kim & Patro, 2011).

Similarly, firms are concerned with the perceptions of influential investors in their underlying securities. Institutional investors represent an extremely large concentration, at just over 50 percent (\$10.24 trillion) at the end of 2009, of the total value of outstanding equities in United States markets (Tonello & Rabimov, 2010). Institutional investors provide a resource, in the form of capital, necessary for a firm to operate and gain competitive advantages. Thus, managing the impressions of institutional investors is important for firms because this stakeholder class represents the lifeblood of the firm. Matsumoto (2002) found that institutional ownership levels and reliance on stakeholders leads firms to engage in actions meant to avoid negative earnings surprises.

In their typology of stakeholders, Mitchell, Agle and Wood (1997) define stakeholders based on their salience, a function of those stakeholders' power over the firm, legitimacy and the urgency with which a firm must attend to their matters. "Stakeholder salience" is, then, "the degree to which managers give priority to competing stakeholder claims" (Mitchell et al., 1997: 869). Because a firm is environmentally dependent on its stakeholders, its managers must assess the claims of stakeholders based on their power, legitimacy and urgency. Investors and analysts of the firm represent two types of stakeholders that affect firm decisions because they control or influence resources critical to the firm (Mitchell et al., 1997).

Institutional investors have ownership of and expectations of the firm (Mitchell et al., 1997). They represent definitive stakeholders in that they have extreme power, legitimacy and

urgency. Because institutional investors are salient stakeholders, their claims warrant more attention from firm managers (Mitchell et al., 1997). This attention can result in the firm engaging in “direct influence tactics” – tactics intended to impact specific stakeholder relationships – such as political lobbying, the establishment of contractual relationships, and other means of influencing stakeholders “who can affect the discretion and performance of a firm” (Barnett, 2007). Institutional investors affect the performance of firms through their control over access to capital and market expectations. As earnings forecasts are intended to influence the perceptions of these stakeholders, they may then be categorized as direct influence tactics. These direct influence tactics become more important as single stakeholder classes gain salience relative to all other stakeholders. As such, higher levels of institutional ownership make those stakeholders more salient, and consequently more deserving of firm consideration. In consideration of these institutional investors, firms may use the justification that institutional investors used in their opposition to Regulation FD – that firms will stop providing earnings forecasts altogether if the proposed regulation passed – as a signal of the importance they place upon management earnings forecasts. Since institutional investors find them important, forecasts should serve as a key means for manipulating their perceptions, and I make the following prediction about the relationship between institutional investment levels and the provision of management earnings forecasts:

*Hypothesis 2. Firms with higher levels of institutional ownership are more likely to disclose management earnings forecasts than firms with lower levels of institutional ownership.*

Whereas institutional investors have ownership of the firm, equities analysts have exposure to the firm in the form of their dependence on firm information as a part of their employment (Mitchell et al., 1997). Thus, analysts represent less definitive stakeholders than

institutional investors. They do not have claims on firm equity, nor do they provide access to capital. However, analysts do have the power to influence external perceptions of firm performance, as evidenced by market reactions to analyst forecasts (Mitchell et al., 1997). This influence may, indeed, increase the firm's market value and access to capital (Westphal & Graebner, 2010). Therefore, analysts do influence stakeholders (e.g. institutional investors, media, individual investors) despite not having direct claims on firm performance. The power analysts have to influence stakeholders make analysts important targets for organizational impression management. The greater the number of analysts a firm has covering its performance, the greater that coverage impacts market reactions (Chung & Jo, 1996).

Since coverage has a direct impact on market reactions, firms with more analyst coverage may see more benefit, or a higher degree of influence, from their management earnings forecasts than less covered firms. Thus, a firm with high levels of analyst coverage that is at risk of missing its consensus analysts' estimate may utilize management earnings forecasts as a strategy for moving expectations downward, whereas low-coverage firms may not benefit from this strategy. As analyst coverage provides a conduit for greater influence over a broad stakeholder base, than a firm with lower analyst coverage, I make the following prediction about the relationship between analyst coverage and management earnings forecasts:

*Hypothesis 3. Firms with higher levels of analyst coverage are more likely to disclose management earnings forecasts than firms with lower levels of analyst coverage.*

Managers concerned with reactions of stakeholders to their forecasts must decide which type of forecast to disclose: point, range, or qualitative. Although prior research on forecasts suggests that managers choose the type of forecast they make based on the accuracy of their available information (King et al., 1990), other research suggests that stakeholders may react more strongly to information perceived to be more precise (Cotter et al., 2006). Further



reinforcing the idea that firms must consider stakeholder reactions in their decision regarding the degree of certainty they convey in their disclosures, Hirst and colleagues (1999) found that the precision of managerial forecasts increased investor confidence in those predictions. Similarly, Baginski and colleagues found that investor reactions to point forecasts are greater than reactions to other types of forecasts (1993). Thus, more explicit management earnings forecasts – those that convey more certainty and precision – may result in stakeholder reactions of a greater magnitude. Managers may use point estimates because they are explicit and are a more effective means for eliciting desired stakeholder reactions than qualitative forecasts, which are more vulnerable to differing stakeholder interpretations. Additionally, stakeholders with equity in the firm may expect managers to convey more certainty in their forecasts in order to justify their continued investment in the firm (Skinner, 1994). Institutional investors represent such as large proportion of available capital that competition for their investment may drive firm decision-making (Skinner, 1994). As institutional investors' continued investment levels may depend on a firm's willingness to provide more certain information, the type of management earnings forecast a firm discloses may be a means for satisfying institutional investors' demand for certainty. Thus, I make the following prediction about the relationship between firm institutional ownership levels and the explicitness of management earnings forecasts as represented by the type of forecast they disclose:

*Hypothesis 4. Firms with more institutional ownership will disclose more explicit management earnings forecasts.*

Firm managers also face pressure from analysts to be more forthcoming, which may influence their decisions regarding producing management earnings forecasts. When used as a direct means for manipulating equities analysts' perceptions of and attitudes towards the firm, managers may provide information that analysts perceive as more certain. As analysts typically

rely heavily upon this information to do their job well (Zhu & Westphal, 2010), their dependence on firm information presents the opportunity for managers to use analysts as intermediaries in influencing a broader stakeholder constituency. Providing analysts with explicit estimates (e.g. point forecasts) of future firm performance serves as a means for anticipatory impression management because explicit disclosures signal a higher degree of certainty upon which analysts can compare their own estimates. Earnings forecasts that are less explicit, such as range and qualitative forecasts, are less effective as a means for manipulating analysts' expectations because using them to inform their own estimates is inherently more risky to analysts. Indeed, the wrong interpretation of a qualitative forecast may cost an analyst his or her job. Additionally, the confidence analysts perceive in a manager's forecast may transfer to that analysts' display of confidence in their own amended estimate, which may broaden the intended impact of that management forecasts. Thus, I make the following prediction of the relationship between analyst coverage and the type of management earnings forecast a firm will disclose:

*Hypothesis 5. Firms with more analyst coverage will disclose more explicit management earnings forecasts.*

### **The Influence of AIM on Stakeholder Reactions**

In order to examine whether anticipatory impression management is beneficial to organizations, it is important to see what impact these tactics have on analysts and investors. Whereas studies prior to the securities litigation reform in 1995 found that investor reactions to management earnings forecasts were similar in magnitude to investor reactions to unexpected earnings announcements (cf. Ajinkya & Gift, 1984; Pownall & Waymire, 1989), the Private Securities Litigation Reform Act of 1995 changed the consequences of management earnings in that firms no longer faced litigation for errant forecasts. The number of firms providing management forecasts increased from 92 total firms in 1994 to over 1400 (approximately 40

percent) of the firms my sample ( $n = 3586$ ) (Kueppers, Sandford & Thompson, 2009). Investor reactions to management earnings forecasts and earnings announcements in pre-1995 studies were similar because forecasts were highly accurate because, when they were inaccurate, shareholders had the option of filing suit for fraud. Now, firms face no such litigation risk in volunteering earnings forecasts and can incorporate forecasts into firm strategy.

The strategic motivation for disclosure of management earnings forecasts may be influenced by expected stakeholder reactions. For example, Kasznik and Lev (1995) found that, of firms that announced negative surprise earnings, those firms that issued public warnings about missing earnings suffered more negative stock price reactions than firms that provided no warning. Contradicting that study, Libby and Tan (1999: 424) found that, “analysts believe a warning implies the earnings decline is less permanent, which leads to a reward for firms that warn.” Although these contradictory findings exist in accounting, legal literature sides with the study that found earnings forecasts to have a positive affect on firms. In studying trials, scholars found that individuals who provide negative information about themselves experience gains in credibility with stakeholders over those individuals who have negative information exposed by a third party (Arpan & Pompper, 2003). Indeed, the act of “stealing thunder,” or self-disclosure of information, is so effective at diminishing the impact of negative information that it is taught as a courtroom tactic in most introductory law courses (Williams, Bourgeois & Croyle, 1993).

In psychology research, scholars have tested the use of reticence versus apologies and denials. During instances where a firm has engaged in what stakeholders perceive to be an integrity or competence violation, remaining silent is a suboptimal response to providing accounts (Ferrin, Kim, Cooper & Dirks, 2007). When these violations are integrity-based, reticence is viewed similarly to apologies in that the responses fail to address responsibility for

the outcome. When these violations are perceived as competence-based, completely withholding information is viewed similarly to denial, as it “fails to signal redemption” (Ferrin et al., 2007). Since earnings forecasts are voluntary disclosures of information by a firm, I expect the outcome of negative forecasts to be optimal to withholding information because these forecasts signal either guilt or redemption to investors, which should lead to outcomes similar to the outcomes of individual self-disclosure during trials. Firm managers who disclose negative forecasts may also gain credibility with stakeholders because of perceptions of fairness and transparency (Skinner, 1994). Conversely, stakeholders will view firms that withhold negative material information until earnings announcements with skepticism, both because the firm violated their expectations (of earnings) and failed to volunteer material information warning analysts and investors of negative earnings (Matsumoto, 2002). Firm managers risk damaging their reputations if they fail to disclose the bad news of weaker than expected earnings to their stakeholders (Skinner, 1994), and the resulting reputational damage can affect that firm manager’s relationship with the firm’s most salient stakeholders, such as institutional investors and equities analysts. A manager’s lack of candor with those stakeholders, particularly regarding unanticipated surprise adverse earnings, can impact a firm’s access to its most important resource: capital (Skinner, 1994). If the movement out of equity positions in a firm increases more after firms surprise these stakeholders, the investor reaction to a surprise should appear much greater than their reaction to negative management earnings forecasts.

Since self-disclosure of negative information reduces the impact of negative information and since salient stakeholders expect managers to disclose negative news in a timely manner, I hypothesize (see Figure 4 for the model and Figure 5 for expected reactions) the following

differences between the effects of negative management earnings forecasts and negative surprise earnings on investor reactions:

*Hypothesis 6. A negative management earnings forecast will cause a weaker negative investor reaction than negative surprise earnings of the same deviation from the consensus analysts' estimate of firm earnings.*

I argue that firms do not, however, benefit from providing earnings forecasts before positive earnings surprises. The investor reaction to positive earnings surprises is appealing such that managers of firms anticipating positive earnings surprises have limited incentive to disclose or amend forecasts to account for their increased earnings expectations (Skinner, 1994). By disclosing positive management earnings forecasts, firm managers are “stealing thunder” from the earnings announcement that would have disclosed those surprise positive earnings. Similar to its impact on negative information, “stealing thunder” through self-disclosure diminishes reactions to positive information (Arpan & Pompper, 2003). However, stakeholder reactions are not diminished because the actor appears forthcoming in offering the positive information. Stakeholders viewed self-disclosed positive information as self-interested, which decreases the positive impact of that information has relative to positive information disseminated in third-party disclosures (Lupfer, Cohen, Bernard & Smalley, 1989). For example, legal studies found that jurors tend to discount positive information provided in the testimony of defendants because it appears motivated by self-interest, whereas positive information from impartial character witnesses resulted in more leniency from jurors (Frankel & Morris, 1976).

Additionally, information in management earnings forecasts represents degrees of uncertainty and self-interest that do not exist in official earnings announcements. Whereas earnings announcements are governed by the SEC and represent audited periodic performance, management earnings forecasts present uncertain information that does not have the same

downside, in punitive consequences, as manipulation. Firm managers may use earnings forecasts to manipulate expectations because they are afforded safe harbor in the Private Securities Litigation Reform Act of 1995. This safe harbor gives cause to stakeholder skepticism of forecasts because those forecasts are inherently uncertain and may contain thinly veiled manipulation efforts. The pressure to perform well may motivate managers to exploit advantages they have over external stakeholders, particularly in the form of information they voluntarily disclose to stakeholders. That pressure to perform well increases the importance placed upon periodic performance measures, culminating in the expectation to perform well in every fiscal period (Matsumoto, 2002). One such expectation is that these firms perform well relative to earnings estimates predicted by equities analysts covering the firm. Indeed, managers are expected to outperform expectations set by expert forecasters, regardless of the impact that periodic earnings management may have on long-term firm performance (Matsumoto, 2002). As managers are judged and compensated based on their abilities to perform well relative to these expectations, it is in their own self-interests, for both job security and remuneration, to exceed expectations. Thus, I expect external stakeholders to be skeptical of the managerial motivations for disclosing positive management earnings forecasts because those disclosures are voluntary for managers, and thus represent some combination of self-interest and uncertainty.

Additionally, extant research indicated that “well-informed” investors enjoyed an informational advantage over other investors because they received private information from firms. The beliefs of “well-informed” investors changed less than those of “less-informed” investors upon earnings announcements, causing relatively weaker responses to positive earnings surprises (Atiase & Bamber, 1994). I expect these “well-informed” investors to pay more attention to firms outside of regularly earnings intervals than other investors, which means that

this subset of investors would be most likely become aware of and respond to unexpected management earnings forecasts. Because the information gap between firms and “well-informed” investors should be relatively smaller than the gap between firms and other investors, those management earnings forecasts may be less of a violation of stakeholder expectations than end-of-period surprise earnings, which enjoy a broader and likely “less-informed” stakeholder audience (Atiase & Bamber, 1994).

Because of perceived self-interested motivations, stakeholder skepticism, and the subset of stakeholders most likely to respond to management earnings forecasts, I hypothesize (refer to Figures 4 for the model and Figure 5 for the expected relationships) the following difference between the effects of positive management earnings forecasts and positive surprise earnings on investor reactions:

*Hypothesis 7. A positive management earnings forecast will cause a weaker positive investor reaction than positive surprise earnings of the same deviation from the consensus analysts' estimate of firm earnings.*

Firms issuing earnings forecasts subject themselves to heightened scrutiny if these forecasts are wrong. When a firm's earnings forecasts are wrong, and those firms experience earnings surprises, it violates the investor expectations of predictable market outcomes (Bartov, Givoly & Hayn, 2002). Thus, those violations of expectations should moderate the investor reaction to surprise earnings announcements, as they are a reflection of some level of ineptitude or premeditation on the firm's part. I expect firms that disclose forecasts to experience less positive investor reactions to positive earnings surprises than firms that do not disclose forecasts, as the fact that the guiding firm had an earnings surprise may indicate premeditation in anticipation of positive earnings news. On the other hand, I expect firms that disclose forecasts to experience more negative investors reactions to negative earnings surprises than firms that do

not. Investors may view a firm missing its consensus analysts' estimate after providing management forecasts may be interpreted as a competency violation. Therefore, I make the following predictions about the moderating effect that management earnings forecasts have on stakeholder reactions to earnings surprises (see figure 5 for a model of the relationship):

*Hypothesis 8. During a period in which a firm announces negative surprise earnings, having disclosed a management earnings forecast will negatively effect investor reactions.*

*Hypothesis 9. During a period in which a firm announces positive surprise earnings, having disclosed a management earnings forecast will positively effect investor reactions.*

### **AIM Accuracy and Frequency**

As firms have the option of providing forecasts for each financial period, management earnings forecasts should not be viewed as singular, isolated occurrences. Quarterly and annual earnings are an ongoing influence on firm behaviors, and thus, providing earnings forecasts must be looked at from a multi-period perspective. Because corporate earnings are continuously reported, the outcomes from one period of reporting may influence the next period. Similarly, forecasting consequences from one period may be antecedents of forecasting in future periods (Miller, 2002). The strategic decision to engage in anticipatory impression management is recursive in that the same managers at the same firms will be using their bounded rationality to interpret past outcomes of forecasting in determining whether to continue the practice. Thus, past outcomes of forecasting can significantly influence the decision to disclose future forecasts and the characteristics of those forecasts (Miller, 2002). As such, investigating the impact of forecasting frequency and historical quality will provide insight into the longitudinal nature of anticipatory impression management decisions at the firm level.

Forecast frequency, or the overall propensity of a firm to disclose earnings forecasts, can affect market reactions to management earnings forecasts. Extant accounting research found



support for the prediction that investor reactions to management earnings forecasts are stronger when managers disclose more frequent and accurate prior forecasts (Hutton & Stocken, 2009). These results suggest that the frequency at which managers disclose earnings forecasts lend credibility to those forecasts (Hutton & Stocken, 2009). Similarly, other scholars have investigated the impact of forecast frequency on investor responses to future earnings predictions, finding that forecasts, even at a quarterly frequency, increase the effectiveness of current period earnings in shaping perceptions and attitudes towards future earnings (King et al., 1990). Indeed, subsequent research found that when firms forecast at a higher frequency, they allow investors to update their future earnings expectations (Choi et al., 2011). Further, scholars found that forecast frequency is associated with a firm's performance in that forecast frequency increases when firms experience periods of rising earnings and decreases when that period ends (Miller, 2002).

Additional research found that firm earnings forecast frequency is related to the firm's historical record of meeting consensus analysts' estimates such that firms that miss consensus analysts' estimates stop providing forecasts (Houston et al., 2009). This study also suggests that these firms improve their ability to meet analysts' estimates once they resume forecasting (Houston et al., 2007). However, other research in accounting found no causal connection between earnings forecast frequency and earnings outcomes (Francis et al., 2008). Because forecast frequency is linked to investors' perceptions of credibility in management earnings forecasts, this longitudinal characteristic of firm behavior should moderate the relationship between forecasts and investor reactions. That is, a firm's propensity to disclose earnings forecasts positively impact the relationship between its future earnings forecasts and investor reactions. I make the following proposition about the effects of forecast frequency on the

relationship (refer to Figures 7 and 8 for the moderation model and expected relationships) between management earnings forecasts and investor reactions:

*Hypothesis 10. The frequency of a firm's disclosure of prior management earnings forecasts will amplify the relationship between subsequent management earnings forecasts and investor reactions.*

In addition to frequency of forecasts, a firm's accuracy in making those forecasts impacts the effectiveness of using voluntary earnings disclosures as anticipatory impression management tactics. Firms face the challenge of being accurate in their earnings forecasts so they do not develop the reputation for earnings or forecasting incompetence or worse (Skinner, 1994; Stocken, 2000). Research on analysts' perceptions of forecast accuracy found that analysts perceive two temporally close instances where managers overestimated their earnings more negatively than when managers only overestimate earnings once, regardless of whether forecasting errors were higher or lower (Libby & Tan, 1999). Likewise, firms' historical forecast accuracy influences managers' decisions to publically disclose earnings forecasts, as errant forecasts reflect poorly on the managers who made them (Bhojraj & Libby, 2005). In a survey of firm managers, results found that managers disclose earnings forecasts in an effort to build an organizational reputation for accuracy and transparency (Graham et al., 2005). Indeed, scholars found that prior forecasting accuracy affects stakeholders' perceptions of the credibility of current and future earnings forecasts (Williams 1996; Hutton & Stocken, 2009). This suggests that both managers' decisions to forecast and stakeholders' reactions to forecasts are influenced by firms' historical forecast accuracy. Thus, I make the following proposition about the moderating effect of a firm's forecasting accuracy on the relationship between management earnings forecasts and investors reactions:

*Hypothesis 11. The accuracy of a firm's prior management earnings forecasts will amplify the relationship between subsequent management earnings forecasts and investor reactions.*

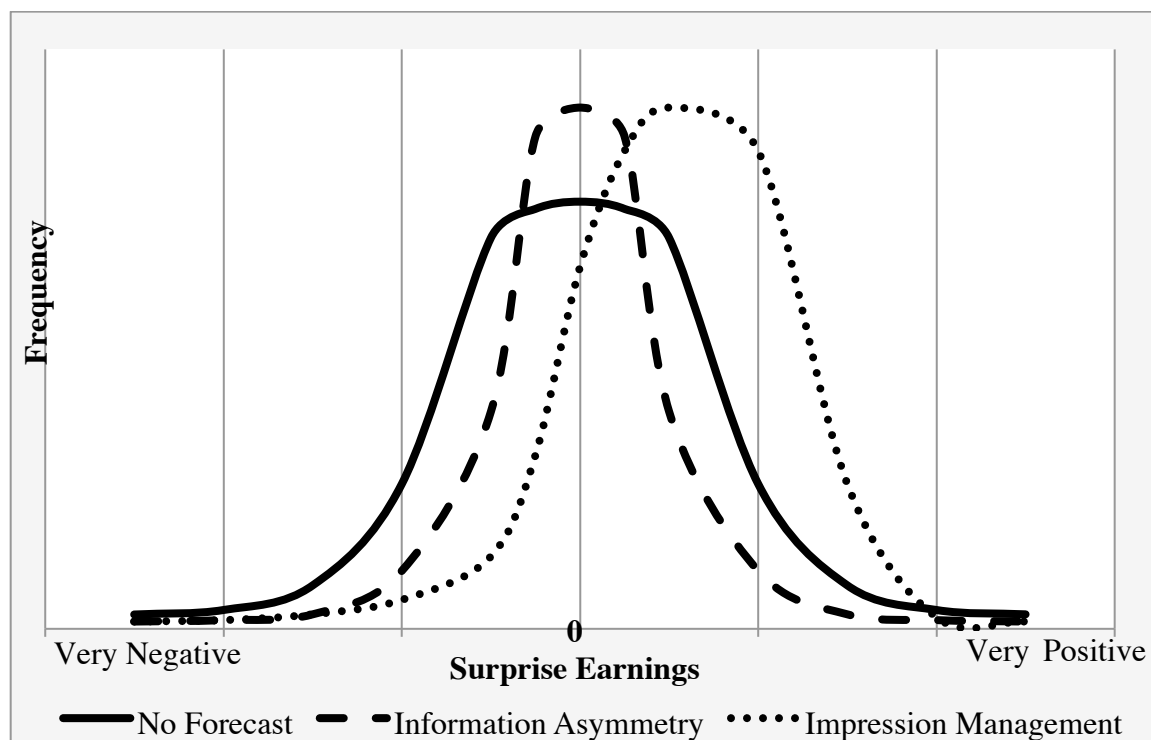
Similar to the aforementioned research that found firm forecast accuracy to impact the continuation of forecasting (Houston et al., 2009), other research found that more regularly forecasting firms tend to meet or beat analysts' forecasts with more frequency than firms that disclose sparse forecasts (Cheng et al., 2005). This suggests that firms may continue to disclose forecasts because they benefit from a combination of forecasting frequency and accuracy. Thus, in addition to the moderating effects of frequency and accuracy, I expect an interaction effect between these two constructs to have the following relationship:

*Hypothesis 12. An interaction of the frequency and accuracy of a firm's prior management earnings forecasts will amplify (moderate) the relationship between subsequent management earnings forecasts and investor reactions.*

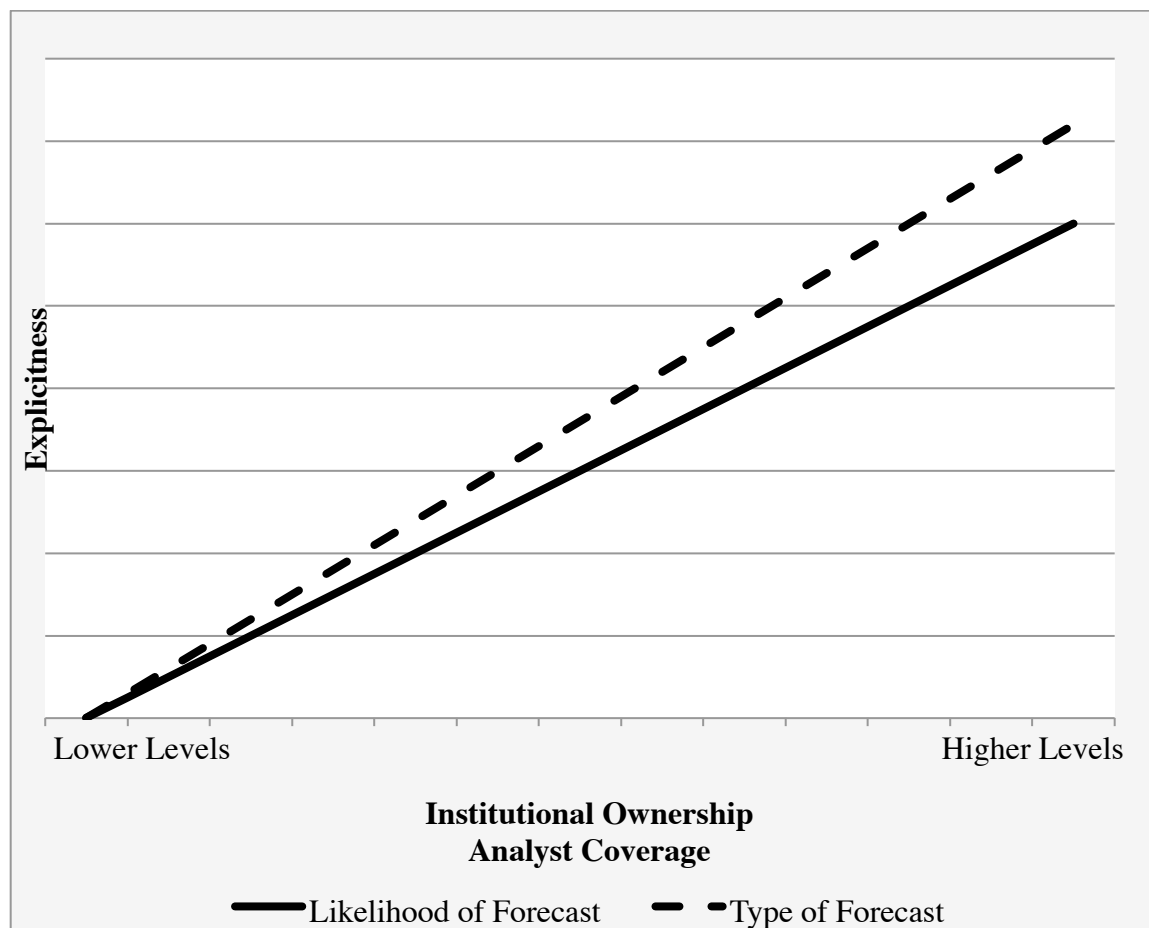
		Management Earnings Forecasts	
		Yes	No
Surprise Earnings	Positive	Positive, Forecasts	Positive, No Forecasts
	Negative	Negative, Forecasts	Negative, No Forecasts

<sup>a</sup> Group comparisons are indicated by shade of cell.

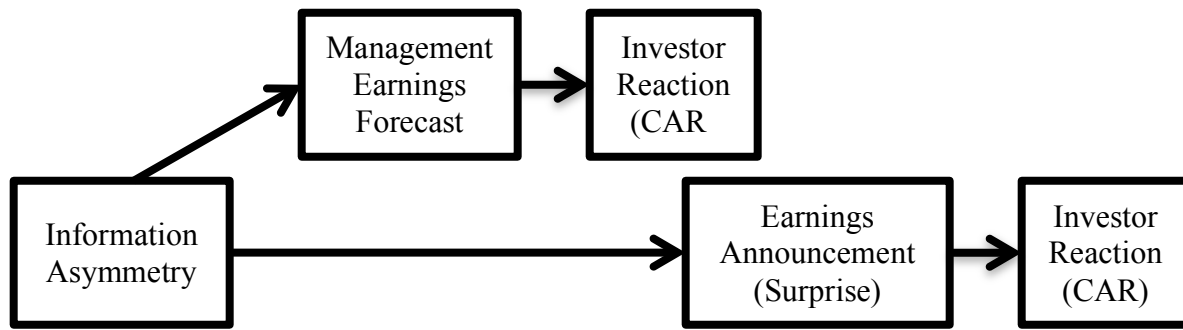
**Figure 1: Comparisons of the Frequency of Surprise Earnings based on Firm Disclosures of Management Earnings Forecast**



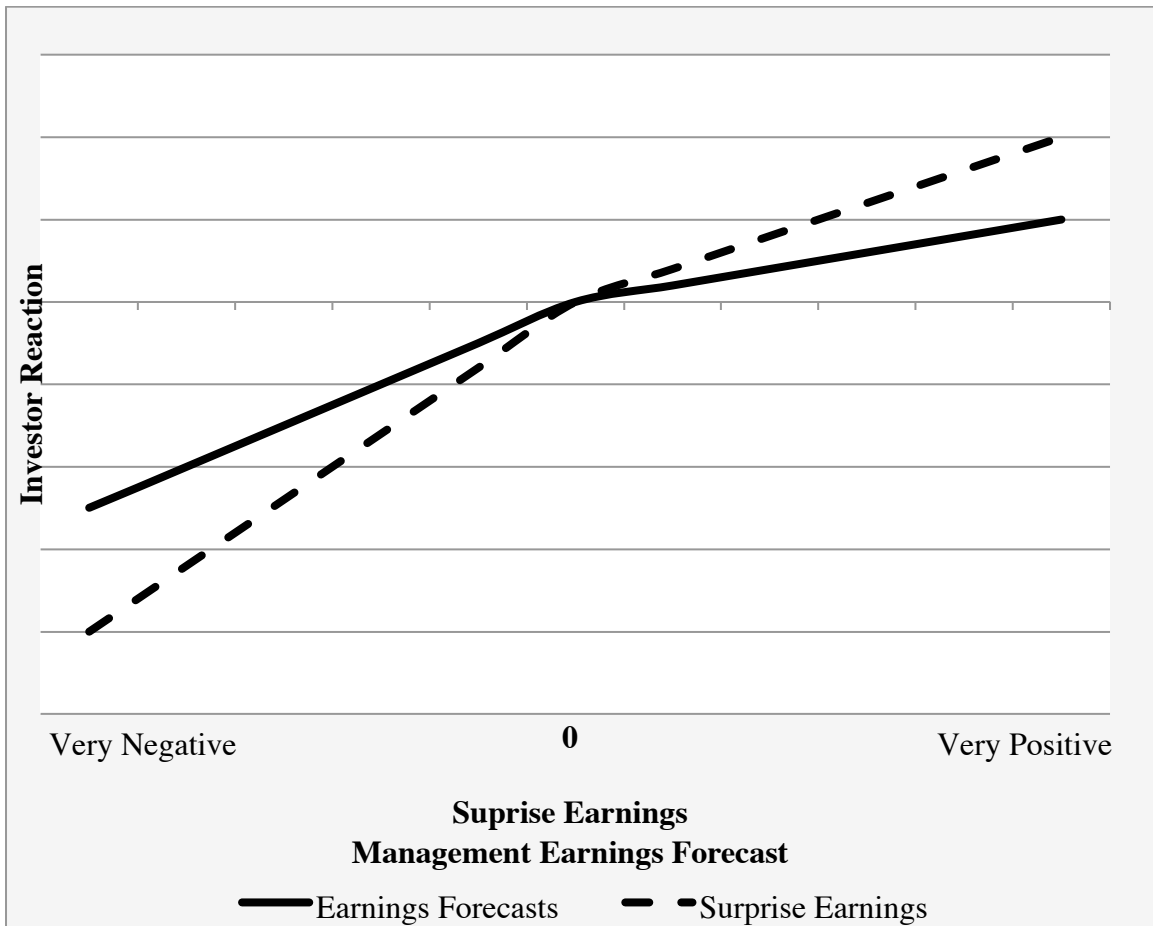
**Figure 2: Expected Frequencies of Surprise Earnings for the Information Asymmetry and Impression Management Perspectives of Management Earnings Forecasts**



**Figure 3: Predicted Effects of Salient Stakeholders on the Likelihood and Type of Firm Management Earnings Forecast**

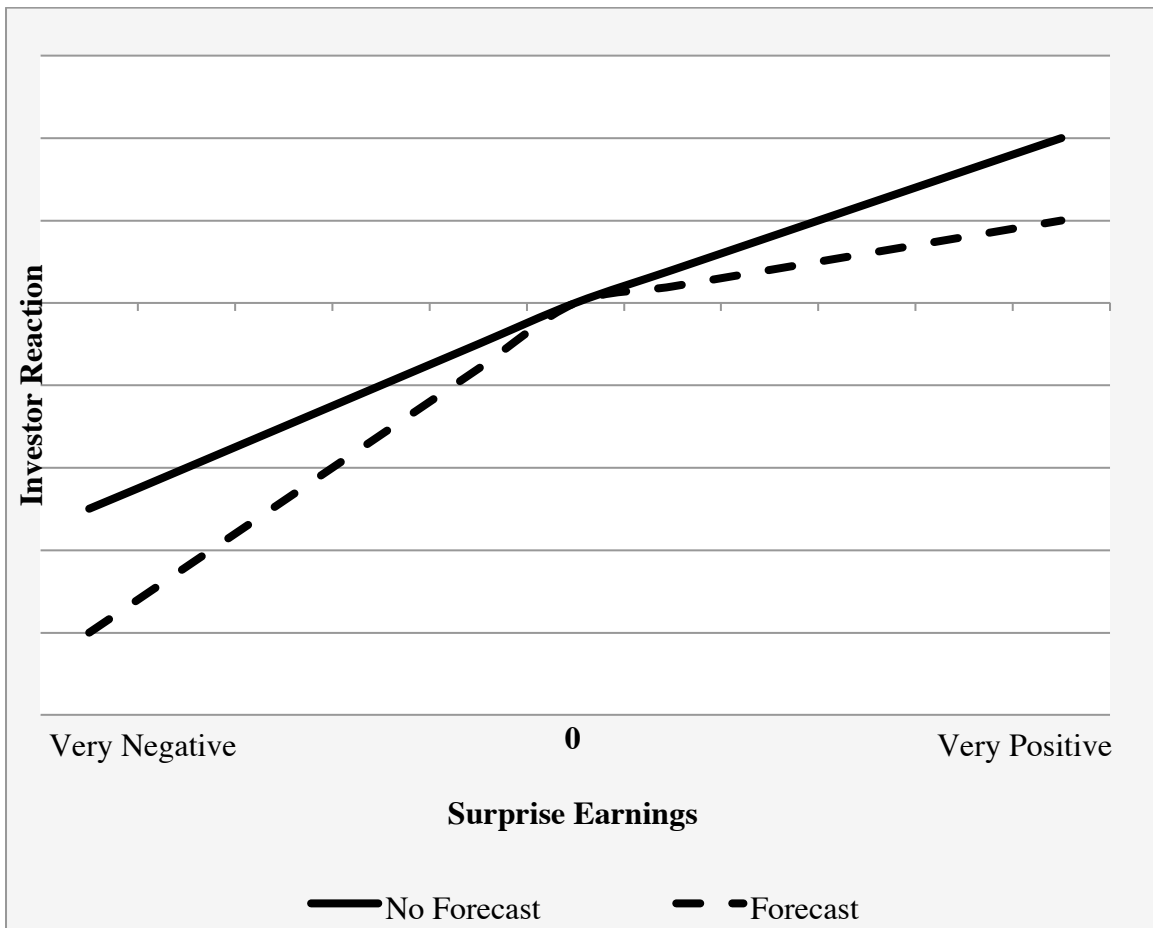


**Figure 4: Model of the Causal Pathways for the Effects of Management Earnings Forecasts and Surprise Announcements on Investor Reactions**

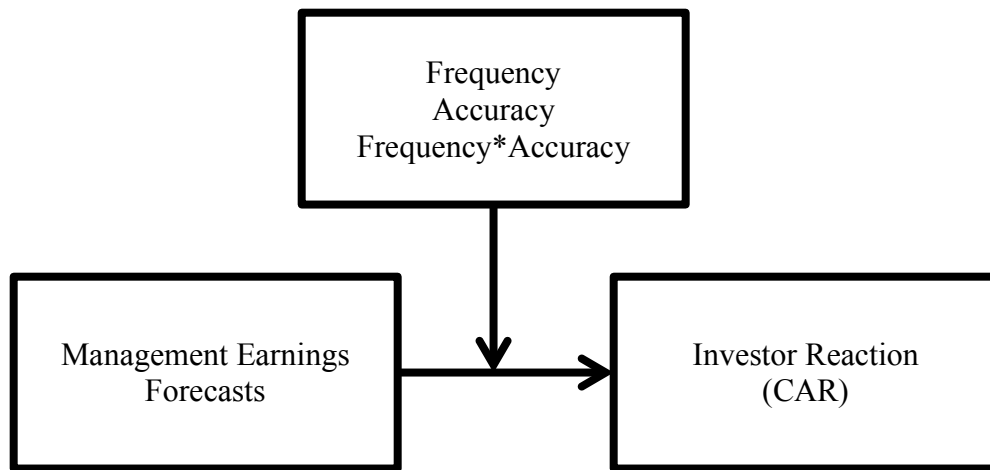


**Figure 5: Predicted Effects of Management Earnings Forecasts and Surprise Earnings on Investor Reactions**

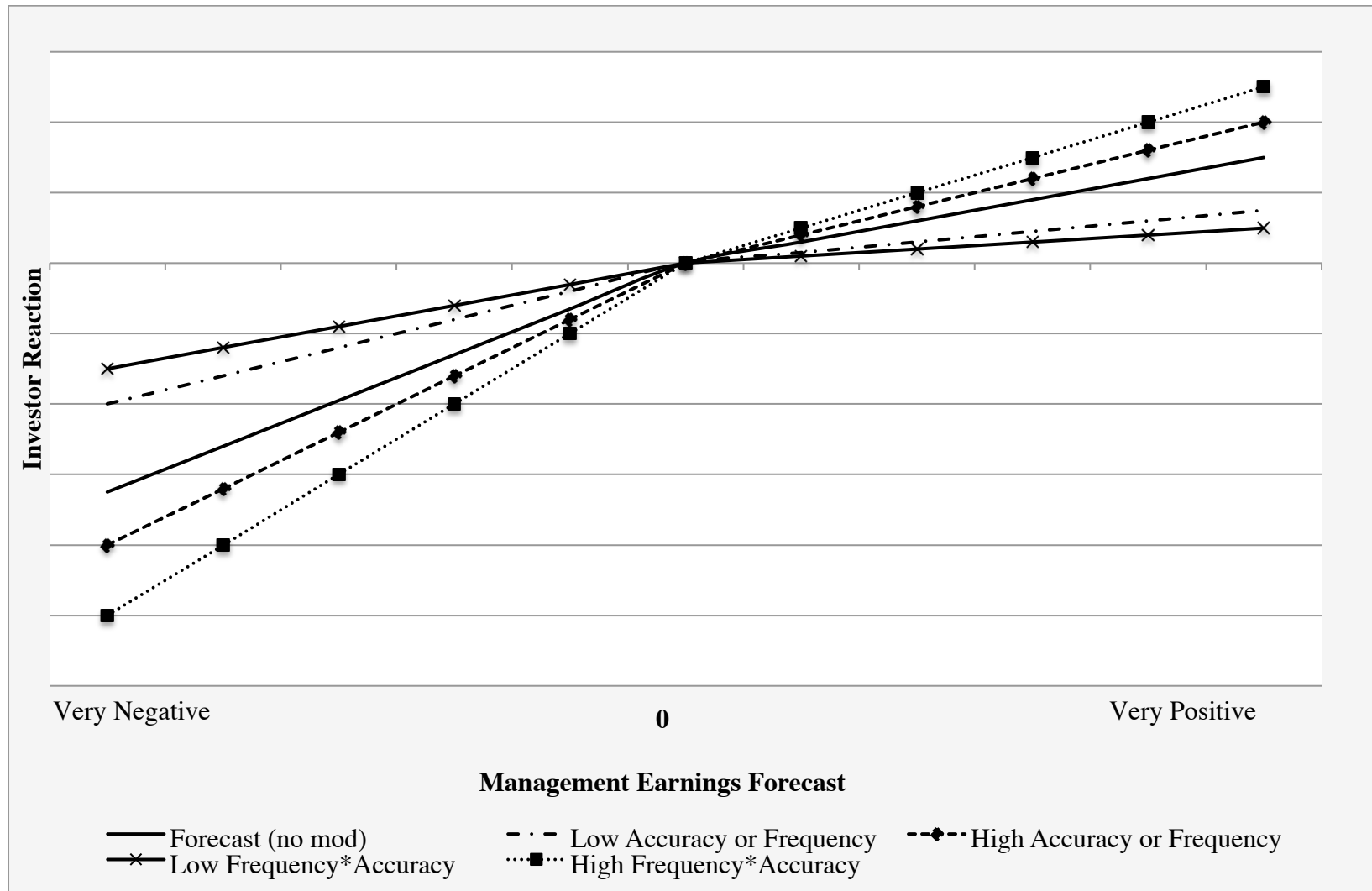




**Figure 6: Predicted Effects of Disclosing Management Earnings Forecasts and Subsequently Announcing Surprise Earnings on Investor Reactions**



**Figure 7: Model of the Moderation Effects of Frequency and Accuracy of Prior Firm Forecasts on the Relationship Between Management Earnings Forecasts and Investor Reactions**



**Figure 8: Predicted Moderation Effects of the Frequency and Accuracy of Prior Firm Forecasts on the Relationship between Management Earnings Forecasts and Investor Reactions**

## **CHAPTER 4**

### **METHODS**

#### **Sample**

The sample for this study consists of all earnings forecasts for Russell 3000 firms from 2006 until 2012. During this time-period, firms on the Russell 3000 index made approximately 14,600 annual management earnings forecasts. As the Russell 3000 is a dynamic list of the top public firms in the United States of America, this study actually consists of 3,587 firms and 18,002 firm years during the sample period. During the sample period, there were approximately 3,500 positive earnings surprise and 3,500 negative earnings surprises. As the Russell 3000 Index represents approximately 98 percent of the value of all outstanding equity in American equities markets, the results of this study should be generalizable to a wide sample of publicly traded firms.

#### **Data Sources**

Data was obtained from numerous public sources of secondary data. Data for the earnings forecasts was gathered using Earnings Whispers history of firm earnings forecasts, which dates back to 2006. Earnings Whispers is an investor's service that compiles all instances of public firm forecasting as part of its offering for members of the service. I manually entered the ticker symbol for each firm that was a part of the Russell 3000 Index between 2006 and 2012 into the a query on Earnings Whispers. Next, I manually copied the listed management earnings forecast data into a spreadsheet of forecasts that included the date, periodicity, type, estimate, relevant

press release, and analysts' consensus estimate on the date of each forecasts. Within the press release, there was typically a description of some firm activity included.

Firm financial data from income statements and balance sheets was collected using the COMPUSTAT annual database of firm information. Data related to analysts, including consensus analysts' estimates, standard deviation of analyst estimates, number of analyst estimates, announced earnings, and date of earnings announcement was collected from the Institutional Brokers Estimates System (I/B/E/S). Using EVENTUS through Wharton Research Data Services (WRDS), I obtained the cumulative abnormal returns (CARs) of the firm's underlying security for an event window surrounding each observed management earnings forecasts and each earnings announcements in my sample. My sample included 14,604 observations of annual forecasts.

## **Measures**

### ***Dependent Variables***

*Forecast* is a binomial variable that represents the disclosure of management earnings forecasts. To denote a firm's disclosure of annual earnings-per-share (EPS) forecasts for the focal year, the value "1" indicates that the firm disclosed some management earnings forecast during the focal period and the value "0" indicates that the firm disclosed no forecast. These values were used as the dependent variable in tests of Hypotheses 2 and 3. During the sample period, firms made 14,604 annual management earnings per share forecasts.

*Type of forecast* uses is an indicator variable that uses four values that represent the type of forecast(s) a firm disclosed in a focal period. This indicator variable is used as the dependent variable in testing Hypotheses 4 and 5, with no forecast represented by a value of "0," qualitative

forecasts represented by a value of “1,” range forecasts represented by a value of “2,” and point forecasts represented by a value of “3.”

*Investor Reactions* is an operationalization of investor reactions using a firm equity instruments' *cumulative abnormal adjusted return* (CAR) over the three-day (-1, +1) window surrounding management earnings forecasts or the announcement of an earnings surprises. Extant organizational research supports the use of a three-day window for measuring investor reactions to unanticipated occurrences, such as voluntary earnings forecasts and earnings surprises (Zhang & Wiersema, 2009; Pfarrer, Pollock & Rindova, 2010). Using a multi-day window is especially useful in alleviating any confounding effects that might result from information becoming known prior to the event or from delayed investor responses on the day after the occurrence.

Cumulative abnormal adjusted returns (CARs) are measured as the sum of abnormal adjusted returns (ARs) generated using the regression equation (Combs & Skill, 2003):

$$R_{it} = \alpha_j + \beta_i R_{mt} + \varepsilon_{rt}$$

where  $R_{it}$  is the return for security  $j$  on day  $t$ ,  $R_{mt}$  is the market return for the designated market (in this dissertation, the CSRP value-weighted index)<sup>1</sup>,  $\beta$  is the beta of stock  $j$ ,  $\alpha$  is the intercept, and  $\varepsilon$  is the error term over estimation period  $t$ . Using that, a firm's daily abnormal adjusted return is calculated using equation:

$$AR_{it} = R_{it} - (a_i + b_i R_{mt})$$

where  $a$  and  $b$  are ordinary least squares (OLS) parameter estimates generated from the regression. Thus, CARs are the cumulative daily ARs for a selected window around an event.

The CARs in this dissertation were calculated using EVENTUS, a program provided by Wharton

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<sup>1</sup> Following robustness checks employed in similar event studies (cf. Wade et al., 2006; Pfarrer et al., 2010), I measured the CARs against another market proxy – the CRSP equal-weighted index

Research Data Services (WRDS). The abnormal return regression equation above was estimated over a period between 255 and 46 trading days prior to the earnings announcement and earnings forecast dates, and utilized the WRDS “autodate=yes” command, which adjusts windows that include nontrading days (e.g., Saturday, Sunday or holiday) by including the next business day after the window (Wade, Porac, Pollock & Graffin, 2006). In order to prevent outlying market reactions from influencing the results of these tests, CARs for surprises and forecasts were Winsorized at the 5 and 95 percent tails of these variables (Skinner & Sloan, 2002).

### ***Independent Variables***

*Institutional Ownership* represents the number of shares of firm stock held by institutional investors divided by the total number of shares outstanding. This institutional ownership ratio will be taken for the most recent quarter before the forecast.

*Analyst Coverage* is the natural log of the number of analysts listed on I/B/E/S as following each firm during the year leading up to the period end. I use the natural log transformation to standardize the variable for better fit in my models.

*Standardized Unexpected Forecast<sup>2</sup>* is the difference in each management forecast and the mean analyst forecast at the time of the management forecast, standardized by the standard deviation of current analysts’ estimates. The equation used to calculate standardized unexpected forecasts (SUF) was:

$$\frac{EPS_f - \overline{EPS}_a}{\sigma_a}$$

where  $EPS_f$  is the management earnings forecast,  $\overline{EPS}_a$  is the mean consensus analyst earnings-per-share estimates on the date of the forecast, and  $\sigma_a$  is the standard deviation of

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<sup>2</sup> For SUF and SUE, the squares of the terms were used in models because prior research indicated that forecasts and earnings can have an S-shaped influence on investor reaction (Hutton & Stocken, 2009).

analysts' estimates on the date of the forecast. For range forecasts, I used the mean of the range to represent the management EPS forecast, whereas point estimates could be used without manipulation. This variable was Winsorized at 5 and 95 percent in order to eliminate the influence that outlier forecasts may have on results, which was consistent with previous research on forecasts (Skinner & Sloan, 2002).

*Standardized Unexpected Earnings* is a measure of earnings surprises that represents the number of standard deviations an earnings surprise is away from the mean consensus analysts' estimate. The equations used to calculate the standardized unexpected earnings (SUE) was:

$$\frac{EPS_e - \overline{EPS}_a}{\sigma_a}$$

where  $EPS_e$  is the firm's announced earnings-per-share,  $\overline{EPS}_a$  is the mean consensus analyst earnings-per-share estimate on the date of the announcement, and  $\sigma_a$  is the standard deviation of analysts' estimates on the date of the announcement. Like the previous SUF measure, SUE results were Winsorized at 5 and 95 percent.

*Forecasting Frequency* is a log transformation of the frequency of management earnings forecasts based on the number of management earnings forecasts disclosed in the period t-3 to present, excluding the current forecast. I used the log transformation of this count to create a more normal distribution of the variable. For this operationalization, I included quarterly management earnings forecasts and revisions because they, when combined with annual forecasts, indicate the total number of public disclosures a firm made during a focal period.

*Forecast Accuracy* is measured as the standardized accuracy of the deviation of all previous management forecasts relative to actual earnings during the previous three years. This measure includes all annual and quarterly forecasts during the sample period and represents the



known accuracy with which managers forecasts earnings. This statistic is calculated using the following equation:

$$\frac{1}{\sqrt{\frac{\sum_{t=3}^n (EPS_f - EPS_e)^2}{n-1}}} \div P_f^3$$

where  $EPS_f$  is the firm's management earnings forecast,  $EPS_e$  is the firm's actual announced earnings,  $n$  is the total number of management earnings forecasts during a period, and  $P_f$  is the firm security's share price at the time of the forecast. The equation:

$$\sqrt{\frac{\sum_{t=3}^n (EPS_f - EPS_e)^2}{n-1}}$$

is a measurement of the standard deviation of the differences between  $EPS_f$  and  $EPS_e$  for the previous three years ( $t-3$ ). By dividing the standard deviation calculation by the firm's share price, I reduced the likelihood that this measurement of accuracy be confounded by share price discrepancies. In taking the inverse of this share-price standardized measurement of firm forecasts' deviation from actual earnings, I transformed the variable so that higher measures indicate more accurate prior forecasting.

*Negative Forecast and Positive Forecast* is an indicator variable that represent whether a firm disclosed a positive or negative forecast during the period in which they ultimately announced surprise earnings. When a firm disclosed a positive forecast in the period, the indicator variable was coded as "1," whereas negative forecasts were coded as "-1." In the event that the firm disclosed no management earnings forecast for the period, I entered the code "0." This indicator variable was used in tests of Hypotheses 8 and 9 to determine whether disclosing

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<sup>3</sup> The standard deviation of past forecasts was divided by the share price for that firm's security on the day of the forecast so as to standardize the results of accuracy based on the size of the underlying security.

management earnings forecasts during the same period in which a firm announces surprise earnings affected investor reactions at the time of the surprise announcement.

*Negative Surprise* and *Positive Surprise* are dichotomous variables representing material negative or positive earnings surprises. Consistent with prior accounting studies (Foster, 1984; Bernard & Thomas, 1989; Shanthikumar, 2004), I used firm SUE scores (calculation provided earlier) to specify the top and bottom quartiles of standardized unexpected earnings for each two-digit SIC industry code. Because there is not a standard method for the operationalization of material earnings surprises, I used this method to avoid scaling measures based on value. Although these quartile cutoffs are arbitrary, they avoid the pitfalls of using some denomination of currency as the threshold for material earnings surprises. *Positive Surprise*, when “1,” represents the top quartile of SUE results in a given SIC, whereas *Negative Surprise*, when “1,” represents the bottom quartile of SUE results in a given SIC. These dummy variables were used only to specify which during hypotheses utilizing earnings surprise data to create a splined regression knot between positive and negative forecasts, and eliminate the potential confounding effects of any moderate surprises.

### ***Control Variables***

*Firm Size* is the base-10 log of the market capitalization of the firm in each period. This measure was calculated using the product of the average month-end share price of the security and the average month-end shares outstanding of each security.

*Trading volume* and *shares outstanding* are used to capture differences between value and growth stocks (Pfarrer et al., 2010). Research in finance and accounting has found that investors react differently to earnings announcements for value and growth stocks (Ertimur, Livnat & Martikainen, 2003; Skinner & Sloan, 2002). *Trading volume* is the log of the measure

of the average annual volume of shares traded for each firm, while *shares outstanding* is the log of the total number of shares outstanding.

*Analyst Coverage* is the natural log of the number of analysts on IBES following each firm during the year leading up to the period end. The number of analysts covering a firm has been linked to the likelihood that firms announce earnings surprises (Chen & Steiner, 2000; Pfarrer et al., 2010).

*Change in Analyst Coverage* is the change in the number of analysts' estimates from one year to the next. Prior finance and management research linked changes in analyst coverage to the subsequent issuance of earnings forecasts (Tucker, 2001; Washburn & Bromiley, 2013).

*Firm Performance* is linked to the issuance of management earnings forecasts (Houston et al., 2007), so controlling for firm performance should remove the predictive effects of firm performance on the use of management earnings forecasts. Performance is measured based on the firm's "decay rate"-adjusted Return on Assets for previous 10 years to control for performance halo effect (Pfarrer et al., 2010). This control is calculated using the equation:

$$\sum_{t=0}^{10} \frac{ROA_{(t-i)}}{i}$$

where  $i$  is the number of years prior to the observed year and  $ROA_{(t-i)}$  is the return on assets in that year  $i$ .

*Institutional Ownership* is used as a control when investor reactions to events are measured. Institutional ownership is the total number of institutionally held shares of a firm divided by the total number of shares outstanding of a firm. Institutional investors represent stakeholders with the ability to move individual securities and markets with strategically planned trades. Controlling for institutional ownership allows for the control and elimination of market-moving activity causing abnormal returns.

*Quarterly Forecast* is a dummy variable that denotes whether quarterly forecast was disclosed at the same time that an annual forecast was disclosed.

*Year* and *industry* were also used as controls to eliminate the confounding effects of any environmental or institutional shocks.

### **Estimation Procedures**

My time-series sample included 7 years of data in which individual firms could forecast multiple times and surprise several times, so variation around regression functions for panels cannot be assumed to be independent over time (Greene, 2012). For Hypotheses 1a-1c, which cumulatively posit that firms that forecast will be significantly less likely to announce negative surprise earnings and significantly more likely to announce positive earnings, I used t-test to compare the frequencies of negative, positive, and total earnings surprises between forecasting firms and non-forecasting firms. If these predictions are supported, the results will support the idea that firms use management earnings forecasts to manipulate their external stakeholders, not remedy information asymmetries, because the distribution of surprise earnings would skew positive for firms that forecast rather than tighten the distribution around zero.

To test Hypotheses 2 and 3, which predict that firms with higher levels of salient key stakeholders (analysts and institutional investors) will be more likely to disclose management earnings forecasts, I used random effects panel logistic regressions<sup>4</sup>. Using a longitudinal random effects logistic regression allowed me to control for within-firm variance while accounting for the fact that firm “memory” is going to effect their propensity to disclose earnings forecasts.

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<sup>4</sup> As robustness checks, I also used the following tests: random-effects panel probit regressions (OProbit), generalized linear latent and mixed models (GLLAMM) with the links specified as both logistic and probit (Rabe-Hesketh et al., 2004). Results were unchanged.

Support for these hypotheses will indicate that firm managers perceive forecasting as more beneficial when the firms have higher levels of salient stakeholders.

For Hypotheses 4 and 5, which predict that firms with higher levels of salient key stakeholders (analysts and institutional investors) will be more explicit in their management earnings forecasts, I used random-effects ordered logistic panel regression<sup>5</sup> (Rabe-Hesketh, Skrondal & Pickles, 2004). Significant effects in this test would indicate that firms are more likely to disclose point forecasts than range forecasts, range forecasts than qualitative forecasts, and qualitative forecasts than no forecasts, when they mutual influence with higher levels of salient stakeholders.

Understanding that the observations in my data represent a sample of the same individual firms collected over time, I used panel analyses when appropriate. Additionally, when using both time-series and cross-sectional variables in these panel analyses, the estimation procedure used in this study must account for the fact that error terms may be correlated over time and over cross-sectional units. Serial correlation may create bias in estimated coefficients and parameters, so I performed a Wooldridge test for autocorrelation in my data (Wooldridge, 2002). This test returned significant results ( $p < 0.05$ ), indicating that autocorrelation exists within my panels. Further, I performed a test to determine whether heteroscedasticity exists within my panel data by comparing models that account for heteroscedasticity to my fully specified model (Greene, 2012). The results of this test indicated that my panel data is homoscedastic. As it allows for the specification of panel autocorrelation and of data as homoscedastic, I used the feasible generalized least squares (FGLS) estimation models to test Hypotheses 6-12<sup>6</sup> (Wooldridge,

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<sup>5</sup> I also used a random-effects ordered probit panel regression. Results were unchanged.

<sup>6</sup> Using FGLS required multiple observations for panels, so firms that disclosed a single forecast or single earnings surprise were dropped. Results were unchanged.

2002). The FGLS uses an estimate of the variance-covariance matrix of errors to accommodate for the fact that an assumption of GLS regressions is that the variance-covariance matrix of the errors is known. Since the aforementioned Wooldridge test of serial correlation was significant, I used an FGLS model that controls for panel-specific auto-regression (Greene, 2012).

For Hypotheses 6 and 7, I performed FGLS regressions of the impact of earnings surprises and management earnings forecasts, measured as standardized-unexpected earnings (SUE) and standardized unexpected forecasts (SUF), respectively, on investor reactions, measured using cumulative-abnormal returns of the firm's underlying security during a three-day window around the forecasts and earnings announcements. These regressions were splined at a natural knot of 0 to account for the expectation of different slopes for the effects of positive and negative information on investor reactions.<sup>7</sup>

For Hypotheses 8 and 9, I used FGLS regression models of the impact of earnings surprises, measured as standardized-unexpected earnings (SUE), on investor reactions, measured using cumulative-abnormal returns of the firm's underlying security during a three-day window around the earnings announcement when the surprise occurred. I used a dichotomous indicator variable representing the disclosure of management earnings forecasts in the focal period.

For Hypotheses 10-12, I performed FGLS regressions of the impact of management earnings forecasts on investor reactions during a three-day window around the forecast.<sup>8</sup> In order

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<sup>7</sup> I used spline regression models for Hypotheses 6 - 12 because I expected slopes of investor reactions to negative earnings surprises are higher than expected slopes of positive earnings surprises, as negativity bias posits that negative information has five times the impact of positive information (Marsh & Cormier, 2001).

<sup>8</sup> As a robustness check, I tested to see if firms that frequently announced surprise earnings had any impact on the tests of relationships between forecasts and reactions. The only situation in which surprise history had an impact on these tests was when a firm that historically announced positive earnings surprises disclosed a negative earnings forecast. This relationship did not substantially change resulting coefficients.

to check these results, I also used a seven-day window around the forecasts dates. The effects of accuracy, frequency, and their interaction were tested to determine whether there were any moderating effects on the relationship between forecasts and investor reactions.

## CHAPTER 5

### RESULTS

Descriptive statistics and bivariate correlations are displayed in Table 1. Means and standard deviations in Table 1 reflect raw data rather than transformed measures. To test Hypotheses 1a-1c, which posit that firms that disclose management earnings forecasts are more likely to announce surprise earnings, less likely to announce negative surprise earnings, and more likely to announce positive surprise earnings, I performed t-tests to compare the rates at which forecasting firms announce surprises. Table 2 displays the results of these t-tests. When a firm voluntarily disclosed management earnings forecasts in a period, it was 5.7 to 13.8 percent more likely to announce surprise earnings in that period than a firm that disclosed no forecast (95% C.I.,  $t=4.75$ ,  $p < 0.001$ ). However, a firm that disclosed management earnings forecasts was 6.2 to 14.6 percent less likely to announce negative surprise earnings in that period (95% C.I.,  $t=-4.02$ ,  $p < 0.001$ ). Finally, a firm providing a forecast increased the likelihood of it announcing positive surprise earnings for that period by 27.8 to 41.8 percent (95% C.I.,  $t=9.75$ ,  $p < 0.001$ ). These results provide *support* for Hypotheses 1a-1c. Thus, the explanation that management earnings forecasts are used as a means to remedy information asymmetry, particularly when firms expect better earnings than stakeholders anticipate, may be refuted because I found that firms that disclose forecasts are *more* likely to announce positive surprise earnings. These results support the prediction that management earnings forecasts are impression management tactics that may be used, in anticipation of earnings announcements, to manipulate the perceptions external stakeholders have of the firm.



To test Hypotheses 2 and 3, which posit that institutional ownership and analyst coverage will increase the likelihood that a firm discloses management earnings forecasts, I used a panel logistic regression model.<sup>9</sup> Table 3 displays the results of my test. Consistent with Hypothesis 2, a one percent change in a firm's analyst coverage increases the odds that the firm discloses management earnings forecasts by 0.36 to 0.68 percent (95% C.I., s.e.=0.08,  $p < 0.001$ ). Similarly, my test of Hypothesis 3 shows that a one percent increase in institutional ownership increases the odds that a firm discloses a forecast by 1.11 to 2.13 percent (95% C.I., s.e.=0.26,  $p < 0.001$ ). Thus, the results of my tests provide support for Hypotheses 2 and 3.

Similarly, Hypotheses 4 and 5 posit that salient stakeholders will increase firm disclosures of more explicit management earnings forecasts. To test these hypotheses, I used a panel ordered logistic regression model to test the impact of those stakeholders on the type of forecast a firm will disclose.<sup>10</sup> Table 4 displays the results of this test, using an ordered range of values with "0" being no forecast, or the least explicit, and "3" being a point forecast, or most explicit. My results show that a one percent change in analyst coverage increases the odds of more explicit earnings forecasts by 0.30 to 0.44 percent (95% C.I., s.e.=0.07,  $p < 0.001$ ), whereas a one percent increase in institutional ownership increases the odds that a firm discloses more explicit management earnings forecasts by 1.87 to 2.39 percent (s.e. 0.21,  $p < 0.001$ ). These results support both Hypothesis 4 and Hypothesis 5.

Although the results are not counterintuitive, my tests of Hypotheses 2-5 provided interesting insight into just how much influence the consideration of different stakeholder groups has on firm decision making. Institutional ownership levels had three times the impact that levels

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<sup>9</sup> As a robustness check, I performed a panel probit regression. Results were similar and are provided in Table 3.

<sup>10</sup> As a robustness check, I performed a panel ordered probit regression on the data. Results were similar and are provided in Table 4.

of analyst coverage did on a firm's likelihood to disclose management earnings forecasts. Further, institutional ownership levels had six times the impact of levels of analyst coverage on the type of forecast, or explicitness of forecast, a firm disclosed. These results suggest that, although two stakeholder classes may both be salient to the firm, a dominant class may exist that garners more consideration from firm managers.

Hypotheses 6 and 7 predict the effects that management earnings forecasts and earnings surprises have on investor reactions. The results of FGLS regression models are displayed in Table 5. Hypothesis 6 posits that investor reactions to a firm's negative management earnings forecast will be weaker than investor reactions to a firm's announcement of negative surprise earnings that deviate the same amount from analysts' estimate. Using FGLS to test the reactions to negative forecasts and negative surprises, I found that negative forecasts elicit over three times the negative reaction (0.19% per s.d. below consensus,  $p < 0.001$ ) from investors than do negative surprise earnings of the same magnitude (0.06% per s.d. below consensus,  $p < 0.001$ ). To put those results into context, if a \$10 billion firm's (market-capitalization) underlying security has a consensus analysts' estimate of \$1.00 earnings per share with a standard deviation of the analysts' estimate of \$0.05, and that firm discloses a management earnings forecast of \$0.75 (5 s.d. below consensus), the firm's expected abnormal return would be -0.95%, or approximately -\$95 million. If the same firm had announced surprise earnings of \$0.75 (5 s.d. below consensus estimate of \$1.00), it would only see an abnormal return of -0.30%, or approximately -\$30 million.

Hypothesis 7 posits that investor reactions a firm's positive management earnings forecasts will be weaker than reactions to positive surprise earnings of the same deviation from consensus analysts' estimate. In other words, positive voluntary earnings forecasts should elicit

weaker reactions than positive surprises during required firm earnings announcements because they contain some degree of uncertainty and “stealing the thunder” of the earnings surprise seems counterintuitive when investors and managers prefer that a focal firm beats consensus analysts’ estimates rather than missing or meeting those estimates (Matsumoto, 2002). The results of my panel FGLS regression indicate that the abnormal investor reaction to positive management earnings forecasts (0.22% per s.d. above consensus,  $p < 0.01$ ) are five and a half times the reaction to the same size positive surprise earnings (0.04% per s.d. above consensus,  $p < 0.001$ ). Using the same firm in the example above (\$10 billion firm, consensus estimate \$1.00 EPS, \$0.05 s.d. of estimate), results predict that disclosing a management earnings forecast of \$1.25 (5 s.d.’s above consensus) would result in an abnormal return of 1.10%, or approximately \$110 million. On the other hand, announcing positive surprise earnings of \$1.25 (5 s.d.’s above consensus) would only result in an abnormal return of 0.2%, or approximately \$20 million.

An explanation for this finding may be found in prior accounting research that decomposed management earnings forecasts down to two elements - the forecasts surprise and the earnings forecast (Yeo & Ziebart, 1995). This study found that forecast surprise - or the sheer fact that a forecast was disclosed and not the information in the forecast - explains more of the investor reactions to management earnings forecasts than the actual forecast (Yeo & Ziebart, 1995). This surprise provides rationale for the more drastic reactions to management earnings forecasts than reactions to similar-sized surprise earnings. However, there may be more to consider when explaining the disparity between these reactions.

Another explanation for the larger reactions to forecasts than surprises may reflect investors being more informed than surprised. When the results of my tests of Hypothesis 7 are considered in conjunction with the results of my tests of the longitudinal effects of prior

forecasts, the larger investor reactions to management earnings forecasts may suggest that investors have some knowledge of prior firm forecasts that affects their interpretation of subsequent forecasts. Investors may learn of firm predispositions to manipulate stakeholder perceptions of earnings through their own analyses of prior forecasts, which would in turn help them to gauge the veracity of new forecasts. This explanation would mean that investors could deduce when a firm is “sandbagging,” or disclosing lower than internally expected earnings numbers, and adjust their reactions to that disclosure according to their knowledge.

Another plausible explanation for the smaller relative effect of positive surprise earnings on investor reactions is that those reactions are not always positive. Depending on the attributions stakeholders make about perceived firm control over performance, surprise earnings might be interpreted as either competency or integrity violations of expectations (Pfarrer et al., 2010). These expectancy violations may be punished, rather than rewarded, by investors. If a higher proportion of positive earnings surprises elicit negative stakeholder reactions than forecasts, the ability to generalize those reactions based merely on the size of a positive surprise would be confounded.

One of the most interesting outcomes in testing Hypotheses 6 and 7 was that the slopes representing the effects of positive and negative forecasts and surprise earnings on stakeholder reactions were not different. All of the regression models testing investor reactions used splined regressions at 0 because I expected there to be negativity bias towards negative earnings surprises or negative management earnings forecasts. However, my results returned similar coefficients for positive and negative predictor variables in all tests. These matching slopes may suggest that positive management earnings forecasts and surprise earnings are expectancy violations and are perceived with the same negativity as negative forecasts and surprise.

Hypotheses 8 and 9 posited that the decision of firms to disclose management earnings forecasts prior to earnings announcements would have a positive effect on investor reactions in the event that the firm announced a positive earnings surprise and a negative effect on investor reactions to negative earnings surprises. The direction of a focal period management earnings forecast should impact investor reactions to surprises differently, and I expected investors to react negatively if positive management earnings forecasts were disclosed in a period when firms announce negative surprise earnings. When a forecast is followed by a surprise in the opposite direction, there is a violation of stakeholder expectations (c.f. Pfarrer et al., 2010), so I divided the models into combinations of forecast direction and surprise directions. When a firm disclosed negative earnings forecasts and experienced surprise positive earnings, the firm saw an abnormal return 0.78 percent higher than firms disclosing no forecast and announcing positive surprise earnings ( $p < 0.05$ ). Similarly, when a firm discloses positive forecasts and then experiences a negative earnings surprise, the firm experienced an additional abnormal market return -1.56 percent beyond its expected return ( $p < 0.001$ ). The two scenarios in which a firm disclosed forecasts in the same direction as subsequent surprises were not statistically significant. Thus, Hypotheses 8 and 9 found partial support, specifically when surprise earnings follow forecasts of the opposite direction.

Hypotheses 10 through 12 assert that a characteristics of a firm's prior management earnings forecasts, specifically frequency, accuracy and the interaction between accuracy and frequency, will amplify the relationship between subsequent management earnings forecasts and abnormal investor reactions. Table 7 displays results for the tests of Hypotheses 10-12, and figures 9-12 display the moderating effects of prior firm forecasts' accuracy and frequency on the reactions to management earnings forecasts. Hypothesis 10, which posits that a higher

frequency of past forecasts will amplify reactions to subsequent forecasts, was partially supported. When a firm disclosed forecasts frequently, this frequency amplified the relationship between positive forecasts and investor reactions ( $\beta = 0.0018$ ,  $p < 0.01$ , see Figure 9 for interaction). However, the frequency with which firms previously disclosed management earnings forecasts did not have a statistically significant impact on the relationship between subsequent forecasts and their reactions. Hypothesis 11, which posits that more accurate prior forecasting will amplify reactions to subsequent management earnings forecasts, was not supported for positive or negative forecasts. In fact, my findings suggest that past accuracy attenuates the abnormal reactions to both negative ( $\beta = -0.0157$ ,  $p < 0.01$ , see Figure 10 for interaction) and positive ( $\beta = -0.0052$ ,  $p < 0.05$ , see Figure 11 for interaction) management earnings forecasts. Hypothesis 12, which predicted that an interaction of accuracy and frequency would influence stakeholder reactions to management earnings forecasts, was supported for negative management earnings forecasts ( $\beta = 0.0051$ ,  $p < 0.05$ , see Figure 12 for interactions), meaning that the interaction between frequency and accuracy causes a more negative investor reaction to negative forecasts. The interaction was not statistically significant in its moderation of positive management earnings forecasts.

The results of my test of the moderating effect of frequency on the relationship between positive forecasts and investor reactions indicate that more interactions between the firm and stakeholders may foster trust between them. This trust may give investors more confidence in firm forecasts and cause them to react more decisively to those forecasts. The prior accuracy with which a firm's managers disclosed earnings forecasts attenuated the abnormal reactions to subsequent forecasts indicates that investors may adjust their expectations of actual firm performance by combining their knowledge of the accuracy of past firm forecasts with

subsequent earnings forecasts. This may result from the fact that investors have less uncertainty to compensate for with firms that have forecasts earnings accurately in the past. Low accuracy prior firm forecasts, seen in Figure 11, amplify positive investor reactions to positive forecasts. This suggests that investors may learn, through past outcomes, that a firm has a propensity to forecast lower than internal expectations, and they will adjust their own expectations accordingly. Less accurate forecasters may consistently “sandbag” via their forecasts, so investors will react more positively to their positive forecasts. Since the results for tests of the interaction between frequency and accuracy’s moderation of negative forecasts found that high levels of both amplified the negative investor reaction to negative forecasts, repeated information exchanges between firms and their stakeholders may create stakeholder competence in interpreting disclosure, or resisting the intended effect of anticipatory impression management. Figure 12 may also represent selective forecasting on the part of firms, where low frequency coupled with high accuracy may signal more manipulative intent to stakeholders.

**TABLE 1**  
**Descriptive Statistics and Correlations<sup>a</sup>**

	Variables	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18
1	SUF	-0.12	15.54																	
2	Forecast CAR	0.00	0.08	0.26																
3	SUE	0.57	11.23	0.05	0.08															
4	Surprise CAR	0.00	0.08	0.04	0.07	0.07														
5	Accuracy	0.19	0.32	0.03	0.01	0.02	0.01													
6	Frequency	1.79	0.79	0.01	-0.01	0.04	0.02	-0.19												
7	Forecast Dummy	0.51	0.50	.	0.00	0.03	0.00	.	.											
8	Surprise	0.42	0.49	-0.04	0.00	-0.02	0.00	-0.13	0.05	0.03										
9	Positive Surprise	0.21	0.41	0.05	0.08	0.46	0.09	-0.06	0.04	0.07	0.61									
10	Negative Surprise	0.21	0.41	-0.11	-0.09	-0.49	-0.10	-0.09	0.02	-0.03	0.60	-0.26								
11	Firm Size <sup>c</sup>	5,948.21	132.21	-0.01	0.00	0.06	0.01	-0.05	0.17	0.04	0.09	0.09	0.02							
12	Analyst Coverage	8.18	0.04	0.00	-0.01	0.03	0.00	-0.05	0.20	0.20	0.08	0.09	0.01	0.28						
13	Firm Performance	0.23	1.71	-0.05	-0.02	0.03	-0.01	-0.02	0.11	0.10	0.02	0.02	0.00	0.20	0.23					
14	Change in # Analysts	0.39	2.15	0.01	-0.02	0.01	-0.01	-0.03	0.05	0.05	0.02	0.00	0.02	0.05	0.26	0.06				
15	Institutional Ownership	0.70	0.27	-0.03	0.00	0.05	0.02	-0.07	0.05	0.23	0.10	0.13	0.00	0.10	0.32	0.15	0.06			
16	Shares Outstanding <sup>c</sup>	170.58	1.22	-0.04	-0.03	0.03	-0.02	0.03	0.14	0.17	0.03	0.04	0.00	0.36	0.56	0.06	0.01	0.12		
18	Trade Volume <sup>c</sup>	363.00	6.79	-0.02	-0.01	0.05	-0.01	-0.02	0.23	0.37	0.07	0.09	-0.01	0.27	0.53	0.06	0.04	0.34	0.71	
19	Quarterly Forecast	0.07	0.26	0.06	0.02	0.05	0.00	-0.03	0.04	0.28	0.01	0.05	-0.04	0.02	0.14	0.05	0.03	0.11	0.05	0.12

a.  $n=1,022$

b.  $cd$

c. In millions (\$ or shares)

Values over .04 are significant at  $p < 0.05$ . Values over 0.05 are significant at  $p < 0.01$



**TABLE 2**  
**Results of the t-Tests Comparing the Frequencies of Earnings Surprises Based on Firm Disclosures of Management Earnings Forecasts**

Type of Surprise	No Forecast	se	Forecast	se	Difference	95% CI	t-statistic
Positive Surprise	19.29%	0.33%	26.00%	0.65%	6.71%***	5.36%, 8.06%	(9.75)
Negative Surprise	21.30%	0.34%	18.55%	0.57%	-2.76%***	-3.10%, -1.31%	(-4.02)
Surprise	40.60%	0.41%	44.55%	0.73%	3.56%***	2.31%, 5.59%	(4.73)

*N*=18,790

*t*-statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**TABLE 3**  
**Results of Panel Logistic Regression and Panel Probit Regression Analyses of the Effects of**  
**Salient Stakeholders on Firm Disclosure of Management Earnings Forecasts**

Variables	Panel Logistic	Panel Probit
<b>Firm Size<sub>ln</sub></b>	-0.1349 <sup>***</sup> (0.0296)	-0.0772 <sup>***</sup> (0.0168)
<b>Analyst Coverage<sub>ln (t-1)</sub></b>	0.5202 <sup>***</sup> (0.0763)	0.3005 <sup>***</sup> (0.0436)
<b>Firm Performancet<sub>t-1</sub></b>	0.3774 <sup>***</sup> (0.0734)	0.2110 <sup>***</sup> (0.0415)
<b>Change in # of Analysts<sub>t-1</sub></b>	-0.0208 (0.0165)	-0.0115 (0.0094)
<b>Institutional Ownership</b>	0.9645 <sup>***</sup> (0.2350)	0.5148 <sup>***</sup> (0.1330)
<b>Constant</b>	-2.9790 <sup>***</sup> (0.6596)	-1.6754 <sup>***</sup> (0.3765)
<b>Panel Variance<sub>Log</sub></b>	2.1002 <sup>***</sup> (0.0711)	0.9781 <sup>***</sup> (0.0695)
<b>Observations</b>	9846	9846
<b>Chi-squared</b>	406.40 <sup>***</sup>	417.26 <sup>***</sup>

*N*=9,846

Industry and year dummies included in analyses but are omitted from the table. Control variables measured annually are lagged (t-1), while rolling control variables are calculated through (n-1). Firm size, shares outstanding, and trading volume are collinear, so only firm size is used in this analysis.

Standard errors in parentheses

<sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**TABLE 4**  
**Results of Panel Ordered Logistic Regression and Panel Ordered Probit Regression**  
**Analyses of Effects of Salient Stakeholders on the Type of Management Earnings Forecasts**  
**Firms Disclose**

<b>Variables</b>	<b>Panel Ordered Logistic</b>	<b>Panel Ordered Probit</b>
<b>Firm Size</b>	-0.0445 <sup>*</sup> (0.0187)	-0.0226 <sup>*</sup> (0.0103)
<b>Analyst Coverage</b>	0.3699 <sup>***</sup> (0.0650)	0.1969 <sup>***</sup> (0.0355)
<b>Firm Performance</b>	0.3246 <sup>***</sup> (0.0692)	0.1868 <sup>***</sup> (0.0385)
<b>Change in Estimates</b>	-0.0182 (0.0126)	-0.0109 (0.0067)
<b>Institutional Ownership</b>	1.1281 <sup>***</sup> (0.1937)	0.5851 <sup>***</sup> (0.1042)
<b>Quarterly Forecast</b>	3.2090 <sup>***</sup> (0.1115)	1.5820 <sup>***</sup> (0.0567)
<b>cut1</b>	4.5506 <sup>***</sup> (0.4884)	2.4583 <sup>***</sup> (0.2694)
<b>cut2</b>	5.2752 <sup>***</sup> (0.4894)	2.8370 <sup>***</sup> (0.2698)
<b>cut3</b>	11.2841 <sup>***</sup> (0.5010)	5.8998 <sup>***</sup> (0.2733)
<b>Panel Variance<sub>og</sub></b>	12.8788 <sup>***</sup> (0.7896)	3.6443 <sup>***</sup> (0.2154)
<b>Observations</b>	15469	15469
<b>Log likelihood</b>	-9568.1039	-9847.4052
<b>Chi-squared</b>	1190.70 <sup>***</sup>	1176.04 <sup>***</sup>

Industry and year dummies included in analyses but are omitted from the table. Control variables measured annually are lagged (t-1), while rolling control variables are calculated through (n-1). Firm size, shares outstanding, and trading volume are collinear, so only firm size is used in this analysis.

Standard errors in parentheses

<sup>+</sup>  $p < 0.10$ , <sup>\*</sup>  $p < 0.05$ , <sup>\*\*</sup>  $p < 0.01$ , <sup>\*\*\*</sup>  $p < 0.001$

0 = No Forecasts, 1 = Qualitative (implicit), 2 = Range Estimate, 3 = Point Estimate (explicit)

**TABLE 5**  
**Results of Feasible Generalized Least Squares Estimation Analyses Comparing the Effects of**  
**Management Earnings Forecasts and Surprise Earnings**

Variables	Positive Surprise	Positive Forecast	Negative Surprise	Negative Forecast
SUE	0.0004** (0.0001)		0.0006*** (0.0001)	
SUE <sup>2</sup>	-0.0000*** (0.0000)		0.0000*** (0.0000)	
SUF		0.0022*** (0.0004)		0.0019*** (0.0003)
SUF <sup>2</sup>		-0.0000** (0.0000)		0.0000*** (0.0000)
Firm Size	-0.0007+ (0.0004)	-0.0001 (0.0007)	-0.0018*** (0.0004)	0.0013 (0.0009)
Analyst Coverage	0.0039*** (0.0006)	-0.0169*** (0.0023)	0.0057*** (0.0006)	0.0063** (0.0021)
Firm Performance	0.0000 (0.0008)	0.0025 (0.0024)	-0.0017* (0.0007)	0.0027 (0.0022)
Change in Analyst Coverage	-0.0007*** (0.0002)	0.0017** (0.0006)	-0.0005** (0.0001)	-0.0004 (0.0006)
Institutional Ownership	0.0030* (0.0012)	-0.0160** (0.0060)	-0.0201*** (0.0024)	-0.0247*** (0.0061)
Quarterly Forecast		0.0102*** (0.0030)		-0.0095*** (0.0025)
Constant	0.0176* (0.0079)	0.0796*** (0.0166)	0.0276** (0.0094)	-0.0307 (0.0190)
Observations	1460	1911	1320	1645
Firms	568	392	523	399
Chi-squared	880.77***	162.20***	650.86***	232.58***

Industry and year dummy variables were included in analyses but are omitted from the results. Control variables measured annually are lagged (t-1), while rolling control variables are calculated through (n-1). Firm size, shares outstanding, and trading volume were collinear, so only firm size is used in this analysis. Additionally, regressions using forecasts were performed with a dummy variable that signified whether quarterly earnings forecasts were disclosed in the same announcement as the annual forecasts used in this study.

Standard errors are in parentheses.

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**TABLE 6**  
**Results of Feasible Generalized Least Squares Estimation Analyses of the Effects of Prior Forecasts on Investor Reactions**  
**during Subsequent Earnings Surprises**

	Positive Surprises			Negative Surprises		
Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
SUE	0.0003 <sup>+</sup> (0.0001)	0.0003 <sup>*</sup> (0.0001)	0.0003 <sup>*</sup> (0.0001)	0.0006 <sup>***</sup> (0.0001)	0.0006 <sup>***</sup> (0.0002)	0.0006 <sup>***</sup> (0.0002)
SUE <sup>2</sup>	-0.0000 <sup>***</sup> (0.0000)	-0.0000 <sup>***</sup> (0.0000)	-0.0000 <sup>***</sup> (0.0000)	0.0000 <sup>***</sup> (0.0000)	0.0000 <sup>***</sup> (0.0000)	0.0000 <sup>***</sup> (0.0000)
Firm Size <sub>ln (t-1)</sub>	0.0033 <sup>***</sup> (0.0008)	0.0032 <sup>***</sup> (0.0009)	0.0034 <sup>***</sup> (0.0008)	-0.0003 (0.0007)	-0.0002 (0.0007)	-0.0004 (0.0007)
Shares Outstanding <sub>ln</sub>	-0.0095 <sup>***</sup> (0.0009)	-0.0094 <sup>***</sup> (0.0013)	-0.0096 <sup>***</sup> (0.0010)	-0.0005 (0.0012)	-0.0005 (0.0012)	-0.0007 (0.0011)
Trading Volume <sub>ln (t-1)</sub>	0.0030 <sup>***</sup> (0.0002)	0.0030 <sup>***</sup> (0.0003)	0.0030 <sup>***</sup> (0.0002)	-0.0022 <sup>***</sup> (0.0005)	-0.0021 <sup>***</sup> (0.0005)	-0.0020 <sup>***</sup> (0.0005)
Analyst Coverage <sub>ln</sub>	0.0046 <sup>***</sup> (0.0006)	0.0046 <sup>***</sup> (0.0006)	0.0046 <sup>***</sup> (0.0006)	0.0070 <sup>***</sup> (0.0006)	0.0070 <sup>***</sup> (0.0006)	0.0074 <sup>***</sup> (0.0006)
Firm Performance	-0.0018 (0.0013)	-0.0018 (0.0013)	-0.0018 (0.0013)	-0.0025 <sup>***</sup> (0.0005)	-0.0024 <sup>***</sup> (0.0005)	-0.0024 <sup>***</sup> (0.0006)
Change in Analyst Coverage	-0.0009 <sup>*</sup> (0.0004)	-0.0009 <sup>*</sup> (0.0004)	-0.0009 <sup>*</sup> (0.0004)	-0.0006 <sup>**</sup> (0.0002)	-0.0006 <sup>**</sup> (0.0002)	-0.0007 <sup>**</sup> (0.0002)
Institutional Ownership	-0.0044 <sup>**</sup> (0.0017)	-0.0047 <sup>*</sup> (0.0022)	-0.0045 <sup>**</sup> (0.0017)	-0.0196 <sup>***</sup> (0.0024)	-0.0193 <sup>***</sup> (0.0025)	-0.0198 <sup>***</sup> (0.0026)
Negative Forecast		0.0078 <sup>*</sup> (0.0035)			-0.0067 (0.0048)	
Positive Forecast			-0.0004 (0.0033)			-0.0156 <sup>***</sup> (0.0017)
Constant	-0.0745 <sup>***</sup> (0.0147)	-0.0725 <sup>***</sup> (0.0157)	-0.0763 <sup>***</sup> (0.0145)	0.0326 <sup>**</sup> (0.0121)	0.0308 <sup>*</sup> (0.0130)	0.0334 <sup>*</sup> (0.0130)
Observations	1460	1460	1460	1320	1320	1320
Number of Firms	568	568	568	523	523	523
Chi-squared	5174.43 <sup>***</sup>	14614.69 <sup>***</sup>	2562.22 <sup>***</sup>	756.69 <sup>***</sup>	1908.66 <sup>***</sup>	18529.30 <sup>***</sup>

Industry and year dummies year included in analyses but are omitted from the table. Control variables measured annually are lagged (t-1), while rolling control variables are calculated through (n-1).

Standard errors in parentheses

<sup>+</sup>  $p < 0.10$ , <sup>\*</sup>  $p < 0.05$ , <sup>\*\*</sup>  $p < 0.01$ , <sup>\*\*\*</sup>  $p < 0.001$

**TABLE 7**

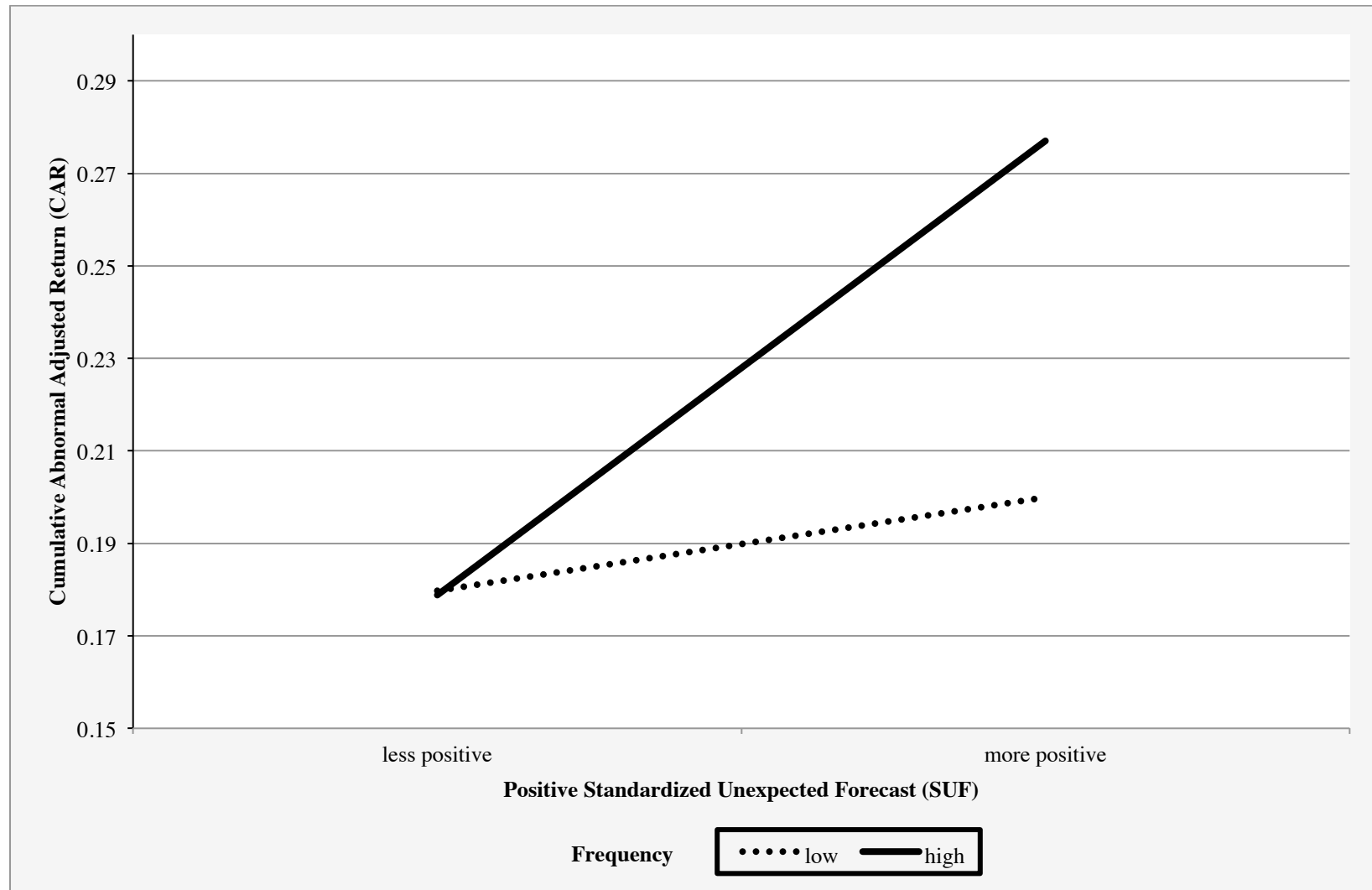
**Results of Feasible Generalized Least Squares Estimation Analyses of the Moderation Effects of the Frequency and Accuracy of Prior Firm Forecasts on the Relationship between Management Earnings Forecasts and Investor Reactions**

Variables	Positive Forecasts				Negative Forecasts			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
SUF	0.0015** (0.0005)	0.0021*** (0.0006)	-0.0024+ (0.0014)	-0.0066** (0.0024)	0.0031*** (0.0003)	0.0037*** (0.0002)	0.0022** (0.0007)	0.0038** (0.0011)
SUF <sup>2</sup>	-0.0000 (0.0000)	-0.0000 (0.0000)	-0.0000+ (0.0000)	-0.0000* (0.0000)	0.0000*** (0.0000)	0.0000*** (0.0000)	0.0000*** (0.0000)	0.0000*** (0.0000)
Firm Size	-0.0049** (0.0018)	-0.0049** (0.0018)	-0.0043* (0.0018)	-0.0034* (0.0015)	0.0034* (0.0018)	0.0031* (0.0014)	0.0040* (0.0018)	0.0033+ (0.0017)
Analyst Coverage	-0.0088* (0.0041)	-0.0095* (0.0042)	-0.0099** (0.0038)	-0.0104** (0.0037)	-0.0027 (0.0045)	0.0004 (0.0032)	-0.0019 (0.0046)	0.0001 (0.0044)
Ten Year ROA	0.0079* (0.0036)	0.0071* (0.0029)	0.0072* (0.0033)	0.0065** (0.0021)	0.0037 (0.0026)	0.0028 (0.0022)	0.0035 (0.0026)	0.0039 (0.0025)
Change in Analyst Coverage	0.0015* (0.0007)	0.0018* (0.0007)	0.0014+ (0.0007)	0.0017* (0.0007)	0.0014+ (0.0008)	0.0010 (0.0006)	0.0011 (0.0009)	0.0009 (0.0009)
Institutional Ownership	-0.0215** (0.0082)	-0.0209** (0.0081)	-0.0207** (0.0073)	-0.0200* (0.0078)	-0.0338*** (0.0089)	-0.0288*** (0.0065)	-0.0360*** (0.0091)	-0.0279*** (0.0079)
Quarterly Forecast	0.0087* (0.0038)	0.0095* (0.0039)	0.0075+ (0.0040)	0.0083* (0.0038)	-0.0094+ (0.0035)	-0.0071+ (0.0042)	-0.0084+ (0.0043)	-0.0081+ (0.0045)
Accuracy		-0.0101 (0.0157)		-0.1626* (0.0743)		-0.0209*** (0.0020)		-0.1544* (0.0655)
Accuracy x SUF		-0.0052* (0.0023)		0.0241 (0.0162)		-0.0042*** (0.0006)		-0.0157** (0.0057)
Frequency			-0.0158*** (0.0043)	-0.0315*** (0.0063)			-0.0036 (0.0043)	-0.0086 (0.0078)
Frequency x SUF			0.0018** (0.0006)	0.0039*** (0.0010)			0.0005 (0.0003)	-0.0001 (0.0004)
Accuracy x Frequency				0.0685* (0.0318)				0.0805** (0.0285)
Acc x Freq x SUF				-0.0132+ (0.0068)				0.0051* (0.0024)
Constant	0.1877*** (0.0375)	0.1825*** (0.0365)	0.2087*** (0.0350)	0.2194*** (0.0324)	-0.0210 (0.0360)	-0.0268 (0.0375)	-0.0273 (0.0331)	-0.0116 (0.0396)
Observations	944	944	944	944	626	626	626	626
Firms	249	249	249	249	208	208	209	208
Chi-squared	242.07***	214.61***	324.88***	651.28***	202.99***	1410.00***	199.17***	1224.60***

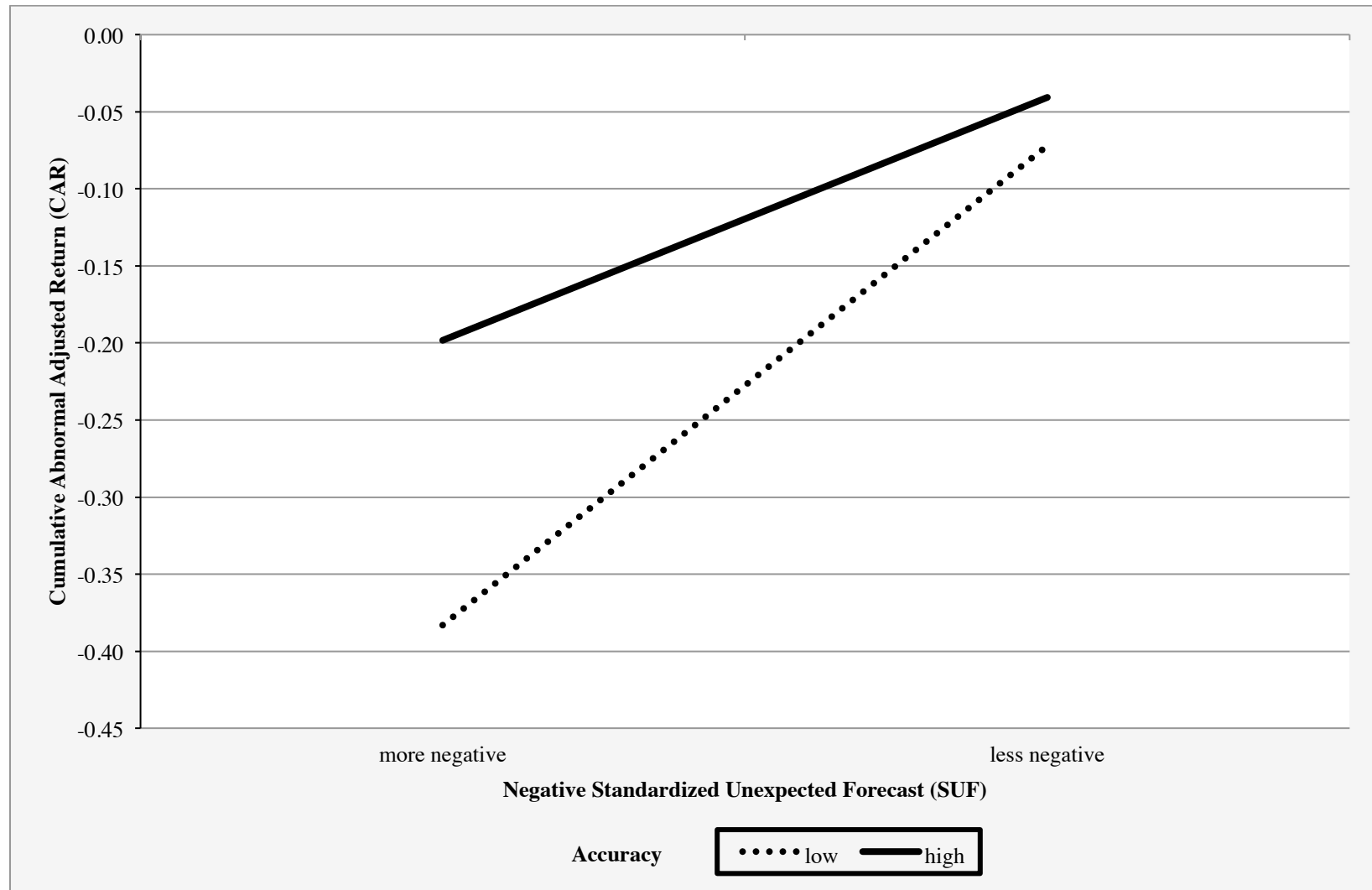
Industry and year dummies year included in analyses but are omitted from the table. Control variables measured annually are lagged (t-1), while rolling control variables are calculated through (n-1). Firm size, shares outstanding, and trading volume were collinear, so only firm size is used in this analysis.

Standard errors in parentheses

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

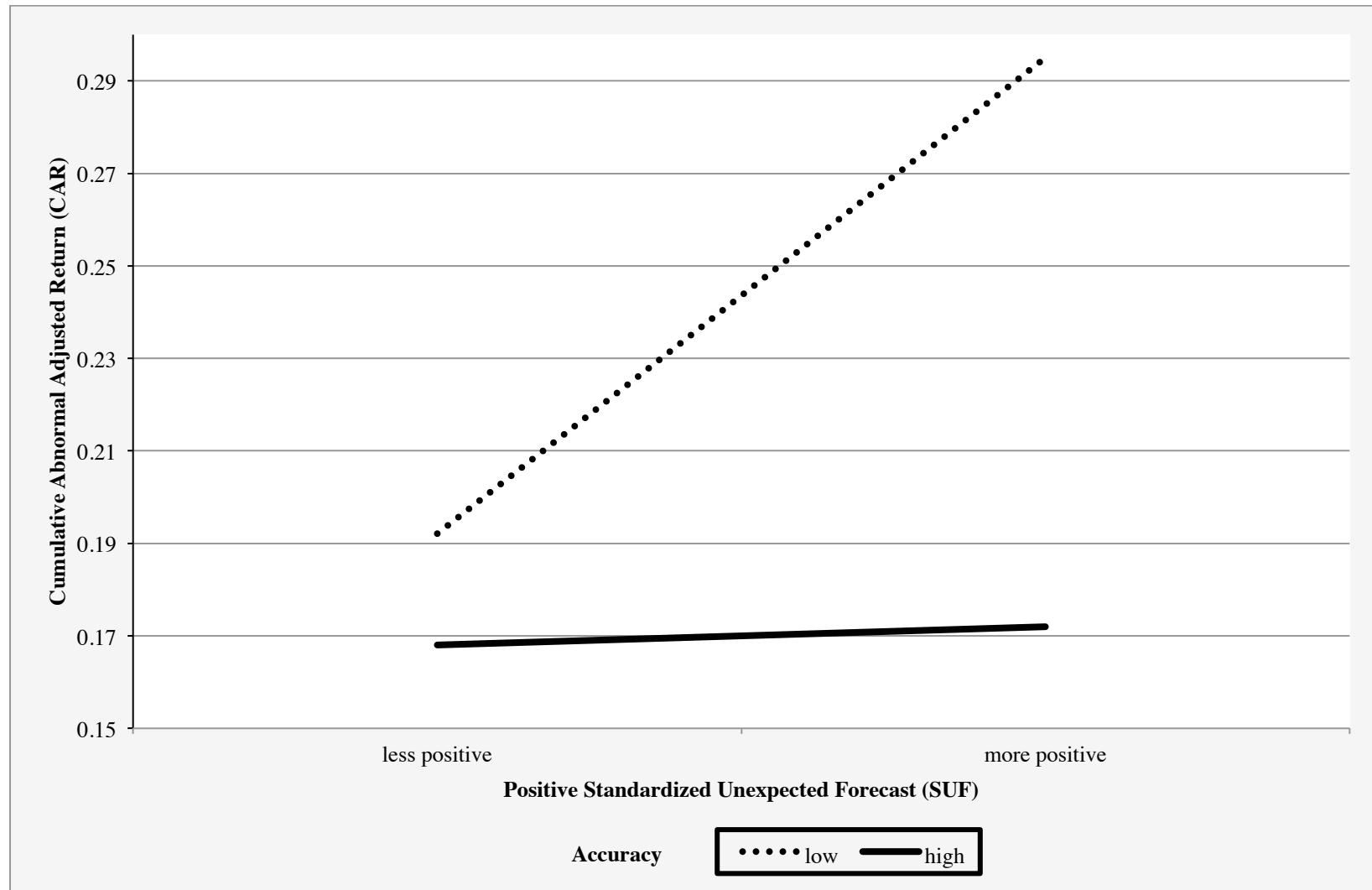


**Figure 9: The Moderation Effect of the Frequency of Prior Firm Forecasts on the Relationship between Negative Management Earnings Forecasts and Investor Reactions**

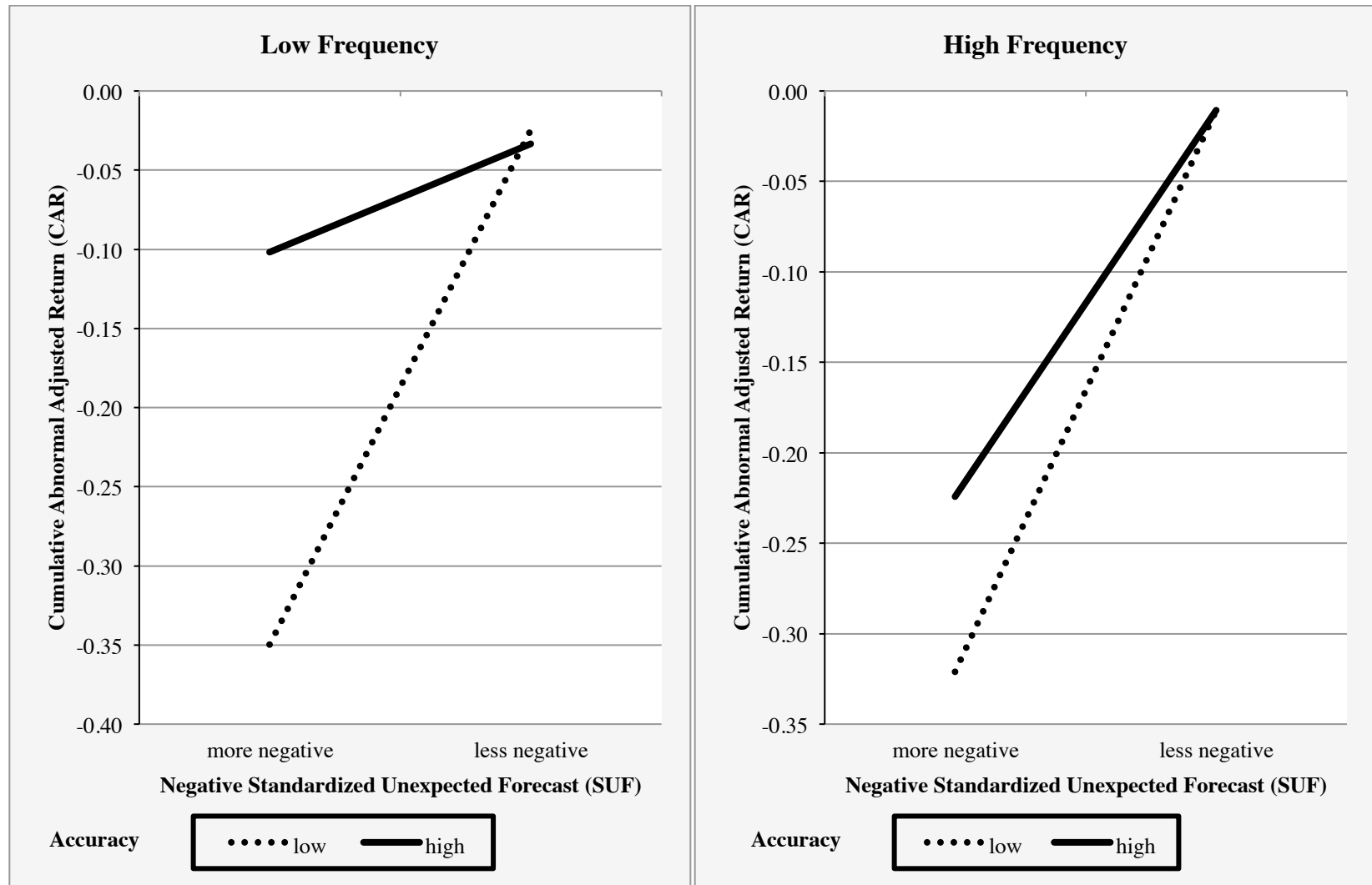


**Figure 10: The Moderation Effect of the Accuracy of Prior Firm Forecasts on the Relationship between Negative Management Earnings Forecasts and Investor Reactions**





**Figure 11: The Moderation Effect of the Accuracy of Prior Firm Forecasts on the Relationship Between Negative Management Earnings Forecasts and Investor Reactions**



**Figure 12: The Moderation Effects of Interactions of the Frequency and Accuracy of Prior Firm Forecasts on the Relationship between Negative Management Earnings Forecasts and Investor Reactions**

## **CHAPTER 5**

### **DISCUSSION**

Earnings, as outcomes of firms over some period, are equivocal. Measuring firm performance through earnings is difficult without context. Whereas a startup tech firm earning \$100 million in a year may be viewed as incredible performance, Apple's investors might rebel against firm management over those earnings. It is in the information context that firm performance is judged, impressions are formed, and comparisons can be made. Because external stakeholders' perceptions of earnings might impact firm access to resources, influence over those perceptions may be important to managers. Thus, firm managers may manipulate stakeholder perceptions of earnings by exerting some influence over the information environment, particularly by means of management forecasts in advance of earnings announcements. Since firm managers have an idea of the external performance expectations (e.g. analysts' consensus earnings estimates), firms may forecast to avoid or change anticipated stakeholder reactions to actual performance.

In this dissertation, I make several contributions to organizational theory. First, I join and extend a research stream in impression management by incorporating an argument between factions of accounting and finance scholars about the motivation for management earnings forecasts. I contribute to this stream by providing evidence that firms use forecasts as a means for anticipatory impression management, and not as a means for asymmetrical information remediation. Incorporating research on stakeholder salience (e.g. Mitchell et al., 1997), I provide insight into the antecedent role stakeholders play in decisions to engage in anticipatory

impression management tactics. I addressed institutional investors' preference to avoid uncertainty and equities analysts' role as intermediaries between firms and investors to provide insight into firm decisions regarding the degree of candor to use in their anticipatory impression management efforts.

Second, comparing outcomes of anticipatory impression management tactics to outcomes of the triggers they are intended to manipulate allowed me to provide insight into the effectiveness of impression management in influencing stakeholders' perceptions of the firm. By using quantitative measures of tactics and reactions, I extend research on organizational impression management by investigating its outcomes, not merely identifying its use. I also examine the impact that past impression management efforts have on stakeholder reactions to subsequent impression management efforts. In doing so, I contribute to our understanding of stakeholder reactions to firms' repeated uses of organizational impression management tactics over time. This repeated use of impression management also informs literature on stakeholder learning, as my results indicate that stakeholders adjust their reactions to firm disclosures based on knowledge of that firm's prior disclosure.

Next, I contribute to research on perceptions of management control and competence. A particularly interesting insight from this study is that, when results of tests of Hypotheses 6 and 8 are taken together, it appears that investor reactions when firms disclose negative forecasts and then announce positive surprise earnings offset a substantial portion of value lost to that earlier negative forecast. Firms realize an abnormal return of 0.78% ( $p < 0.05$ ), which would mitigate the effects of a previous negative earnings forecast that was four standard deviations below consensus analysts' estimates. That a firm can make up returns lost to negative management earnings forecasts suggests that there is a "cushion" where the benefits of providing forecasts

outweigh the costs. This cushion may help explain why a firm will disclose negative forecasts when, according to the results of my study, it is less consequential to wait and announce negative surprise earnings.

I also contribute to literature on expectancy violations. This study provides evidence that investors penalize managers who make inaccurate positive forecasts before negative surprise earnings. The penalty delivered by investor's reactions for extreme expectancy violations may serve as a deterrent to other firms who might mislead by creating some institutional pressure to forecast accurately. Additionally, the evidence that reactions to negative and positive forecasts are not disparate may provide insight into an expectancy violation where negativity bias does not seem to differentiate reactions to information.

Finally, I contribute to nascent organizational research on voluntary performance disclosures by explicating the rationale for stakeholders' disparate reactions to impression management and its triggers. While I expected investor reactions to the triggers - surprise earnings - to exceed reactions to the anticipatory impression management tactics - management earnings forecasts - of similar deviation from expectations, in this context the reactions to management earnings forecasts were more severe. In this way, investors react differently to "stealing thunder" than juries, as voluntary self-disclosure creates stronger positive and negative reactions than involuntary disclosure.

### **Limitations and Implications of Non-findings**

While my study advances our collective understanding of anticipatory impression management, my findings are subject to a number of limitations. The first limitation of this study is that the decision to disclose earnings forecasts may not be made by firm managers, and thus would not be a reflection of the managerial decision to manage impressions. For example,

corporate boards may require their managers to disclose forecasts, which would make forecasting an involuntary action and reflect corporate governance motivations and outcomes.

As other motivations and decisions other than impression management may influence both the decision to disclose earnings forecasts and the announcement of earnings, my research is susceptible to endogeneity. In order to overcome the issue of endogeneity, I performed several robustness checks in order to rule out confounding variables. It is also plausible that there is endogeneity in my study resulting from the relationship between analyst coverage and management earnings forecasts. Research has shown that forecasting can increase the amount of coverage a firm receives from analysts (Healy, Hutton & Palepu, 1999), which may confound the directionality of the causal relationship I hypothesize between analyst coverage and the likelihood that a firm discloses a management earnings forecast.

Another limitation of this study is the operationalization of institutional ownership. While institutional owners have been classified into three groups (Bushee, 1998), I treat all institutional ownership the same. Dedicated institutional investors - those with long positions in a firm's equity - behave differently than transient and quasi-index institutional owners in that they value long-term firm performance and are less likely to punish disappointing short-term results (Connelly, Tihanyi, Certo & Hitt, 2010). Firms that have a higher concentration of dedicated institutional ownership may perceive less need to engage in managing impressions through management earnings forecasts because those block owners will tolerate adverse surprises if they do not diminish the long-run value proposition of the firm. However, parsing out the different classes of block owners and their impacts on the propensity to disclose management earnings forecasts is outside of the scope of this study

In addition, my study is limited in that I am not considering alternative explanations for firm outcomes during earnings forecasting and announcements. While my focus is on the actual forecasts disclosed by managers during forecasting and the actual earnings figures during announcements, there may be information disclosed contemporaneous to these forecasts that influences investor reactions. Many of the press releases and calls in which firm managers discuss future earnings also include allusions to sales and the current economic climate, and there may be signals in those communications that elicit investor reactions that I do not account for in my study.

A final limitation of my study is that the relationship between forecast frequency and forecast accuracy may be confounded. As studies in the development of my hypotheses on the impact of frequency and accuracy of prior forecasts suggest, there may be a causal relationship where these characteristics influence firm decisions to disclose forecasts. Thus, there may be endogenous factors in the decision to forecast that impact investor reactions to those forecasts.

This study assumes that market changes are a direct result of motivated firm actions, but these market fluctuations may actually represent changes in investor sentiment toward the disclosure of managerial forecasts. Extant research shows trends in managerial forecasts where firms that once disclosed point estimates are moving toward range estimates, and that range estimates are becoming wider and, as a result, less explicit (Du, Budescu, Shelly & Omer, 2011). Because markets do not always react in a manner consistent with my hypotheses, this may mean that investor cognition plays an important role in the interpretation of firm disclosures. Non-findings for hypotheses may suggest that internal motivations, rather than the external expectations of stakeholders, influence firms' decisions to engage in anticipatory impression management tactics. This internal motivation may come from corporate governance pressure,

previous earnings management, or the intrinsic desire to maintain a record of consistently meeting or exceeding earnings expectations. The implication of my non-finding from the moderation of frequency on negative forecasts might be that investors will sometimes react positively to negative forecasts if their repeated interactions with the firm indicate that they firm expects better actual earnings.

### **Extensions and Directions for Future Research**

Firms' use of anticipatory impression management to influence firm stakeholders, specifically through earnings forecasts, may be investigated in many ways beyond this study. First, this study does not account for institutional forces that may motivate firms to engage in anticipatory impression management. For example, forecasts may be less effective at manipulating analyst and investor perceptions in institutional environments where several or many firms have a history of intentionally "sandbagging" or self-handicapping their earnings forecasts. Results that support diminished effects of anticipatory impression management would provide insight into the role that the first mover – in this case the first impression manager – advantage plays in non-competitive aspects of institutional environments. This research may also indicate that analysts and investors are aware of impression management less susceptible to tactics previously used in institutional environments. Studies of institutional effects on the disclosure of management earnings forecasts found that institutional forces impact earnings warnings prior to negative surprise earnings, as managers have incentive to release their negative earnings forecasts contemporaneously with other industry firms' negative forecasts to give the appearance of systematic factors causing those poor earnings (Tse & Tucker, 2010). By expediting the disclosure of their forecasts after other firms, they hoped to attribute their poor earnings results to externalities. Indeed, "safety in numbers" has its benefits in some contexts.



Scholars found that periods of higher levels of wrongdoing at the institutional level mitigated the decline in tenor of media coverage of a focal firm's media coverage (Zavyalova et al., 2012).

This study also found that firms are susceptible to negative spillover effects - less positive tenor of media coverage of a focal firm - when other members of their industry have negative news - in this case product safety recalls (Zavyalova et al., 2012). It would be interesting to see if there are institutional pressures to engage in anticipatory impression management so that there is a lower risk of an industry member announcing negative earnings that may have a spillover effect on other industry firms. Because there are industry spillovers in media coverage of a focal firm after negative within-industry triggers, other managers may expect firms to engage in anticipatory impression management to mediate or moderate stakeholder reactions. Or, stakeholders expect to achieve performance similar to other firms in an institutional environment, which may influence a firm to engage in anticipatory impression management when they compete in an environment where surprise earnings are expected.

Another extension of this research may investigate newly public firms and their initial disclosures to stakeholders. As my dissertation sample is largely comprised of mature firms, evaluating the impact that prior forecasts have on subsequent forecasts is difficult because I have no data before 2006. The effects on my sample data of any forecasts made before 2006 cannot be quantified, so the impact of durable firm actions or tacit stakeholder knowledge is unknown. By utilizing data from firms who make their first public earnings announcements, and may make their first management earnings forecasts, scholars may explore how firms interact with stakeholders who have no *a priori* knowledge of the firm. This study would also allow scholars to determine whether there is a game played in manipulation through disclosures where firms seek to influence and stakeholders learn, or resist, that influence.

Future research may also investigate how agency theory, prospect theory and the upper echelons perspective influence decisions to engage in anticipatory impression management. For example, managerial opportunism may influence decisions within the context of management earnings forecasts when a manager can increase their own incentive-based takeaway by inducing investor reactions (Jensen & Meckling, 1976). Additionally, as job security is important for risk-averse managers, there may be entrenchment motivations to anticipatory impression management. Prospect theory might also provide an extension in which we explore risk preferences in earnings forecasts as they related to a manager's incentive-based compensation. For example, we might find that a typically risk averse manager discloses optimistic management earnings forecasts as his option contracts near their expiration date or are out of the money. The upper echelons perspective might also provide an interesting basis for studying impression management in firms with hubristic managers. For example, stakeholders might recognize managerial hubris and adjust their responses to forecasts knowing that the manager is going to disclose forecasts that can be beat by a significant margin.

Finally, research on corporate governance and anticipatory impression management would extend our knowledge of board control. For instance, a network of board members may perpetuate the practice of making earnings forecasts publicly available. In addition, the monitoring function of boards may influence when and how firms disclose earnings forecasts. For example, boards may require managers to disclose forecasts if they expect firm performance to be short of analysts' expectations. This insight into corporate governance would provide insight into impact of monitoring on decisions to manage for short-term and long-term goals.

## **Contributions to Practice and Policy**

My study also has important implications for managers and stakeholders. Instead of using a field study to examine anticipatory impression management or providing empirical evidence predicting its use, my study informs managers by estimating the outcomes of anticipatory impression management tactics and comparing those outcomes to the outcomes of an unimpeded trigger. My results suggest that firm managers may manipulate their stakeholders through the disclosure of voluntary performance information, but that the manipulation is dependent on any previous firm disclosures. In this, managers must consider that stakeholders may learn through those repeated interactions that firms disclose biased forecasts and adjust their expectations of actual performance accordingly. This outcome of my study also suggests that managers must consider whether their own disclosures of management earnings forecasts or the diffusion of the practice as a means for manipulating stakeholders diminishes the effects of those disclosures as anticipatory impression management tactics.

Beyond its practical implications for managers, my study raises some issues that may influence firm stakeholders and public policy. My results show that firms that disclose earnings forecasts are more likely to surprise investors upon their earnings announcement. Thus, stakeholders need to be aware of firm interests in the motivation for disclosing forecasts and scrutinize forecasts accordingly. Existing firm investors need also be aware of the influence that managers' have on short-term value through disclosures, and consider monitoring options that may promote management for long-term value. Additionally, policymakers may consider revisiting the Private Securities Litigation Reform Act of 1995 and Regulation FD because forecasts are being used strategically rather than informatively. Both of these policies were enacted before Sarbanes-Oxley, which made forecasts managers' *de facto* means to manipulate

shareholders by preventing earnings manipulation (Brown & Pinello, 2007). As forecasts became a focal means for manipulating investors, policymakers may consider the results of this study in forecast reform intended create hazard to using forecasts in this manner.

## **CHAPTER 6**

### **CONCLUDING REMARKS**

My dissertation was an intensive study of management earnings forecasts from an impression management perspective. First, I challenged the belief held by subset of accounting and finance scholars that firms disclose earnings forecasts to remedy information asymmetries. Next, I examined how managers' decisions of when and how to engage in impression management tactics, through voluntary performance disclosures, reflect salient external stakeholders of their firms. Then, I examined the effectiveness of anticipatory impression management tactics, comparing the stakeholder responses to a tactic - management earnings forecasts - to stakeholder responses to a trigger - surprise earnings. Finally, I investigated impression management longitudinally, focusing on the impacts that prior forecasting accuracy and forecasting frequency had on subsequent management earnings forecasts.

To the extent that my hypotheses were supported, these results suggest that firms strategically manipulate the perceptions and attitudes of stakeholders through earnings forecasts. Further, my dissertation supports the notion that some firms benefit from the decision to voluntarily disclose earnings information, which helps explain why firms use forecasts as anticipatory impression management.

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