

VOLUNTARY DISCLOSURE IN CORPORATE CONTROL CONTESTS—
EVIDENCE OF MANAGEMENT EARNINGS FORECAST CHARACTERISTICS
AND CONSEQUENCES

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Voluntary Disclosure in Corporate Control Contests—Evidence of Management Earnings
Forecast Characteristics and Consequences

ABSTRACT

This dissertation examines how managerial incentives in contested takeovers affect voluntary disclosure strategies. I study characteristics of voluntary disclosure around contested takeovers, based on the conjecture that good news in earnings forecasts serves as a defensive strategy to resist a takeover and/or to negotiate a higher offer price. To gauge the relation of voluntary disclosure on takeover consequences, I examine the association between voluntary disclosure and target premiums as well as the length of time to resolve the acquisition.

Using a difference-in-differences research design, I find that relative to friendly targets, target management in contested target firms alters the timing of normal information flows by forecasting more good news during the takeover. Managers also manipulate the content of information by releasing optimistically biased forecasts during the takeover to favorably influence the market. Further investigations indicate that target firms adopt voluntary disclosure and alter strategies at the time of contested takeover as a means to convey favorable inside information. The stock market responds positively to optimistic forecasts issued during the contested takeover. Moreover, voluntary disclosure influences contested takeovers by helping target firms negotiate better offers and postpone the M&A process.

As a whole, this study demonstrates that target firms adopt voluntary disclosure and alter their strategies under the threat of contested takeover to reveal their true worth and enhance their bargaining power. Unlike prior literature that documents value-destroying managerial entrenchment resistance, voluntary disclosure by targets with favorable information induces information leakage and is one of the resistance tactics that potentially benefits target shareholders.

TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION	1
CHAPTER 2 LITERATURE REVIEW	10
2.1 Voluntary Disclosure and Management Earnings Forecasts	10
2.2 Management Earnings Forecasts in Special Corporate Events	15
2.3 Corporate Control Contests and Accounting Information.....	19
CHAPTER 3 HYPOTHESIS DEVELOPMENT	25
3.1 Nature of Forecast News.....	25
3.2 Incentive for Making a Forecast	27
3.3 Stock Market Response.....	31
3.4 Forecast Bias	33
3.5 Effects of Voluntary Disclosure on Takeover Consequences.....	35
CHAPTER 4 RESEARCH DESIGN	38
4.1 Likelihood of Good News Forecast.....	39
4.2 Propensity to Issue Earnings Forecast.....	41
4.3 Stock Market's Perceived Credibility of Earnings Forecast	44
4.4 Bias in Earnings Forecast	45
4.5 Effect of Voluntary Disclosure on Takeover Consequences	46
CHAPTER 5 EMPIRICAL RESULTS.....	49
5.1 Sample Selection and Descriptive Statistics	49
5.2 Nature of News in Forecasts	53
5.2.1 Univariate Results	53
5.2.2 Multivariate Results	53
5.3 Managerial Incentive for Making Forecasts.....	55
5.4 Market Reaction to Voluntary Disclosure during Takeover Events	56
5.5 Bias in Voluntary Disclosure	57
5.6 Impact of Voluntary Disclosure on Contested Takeovers.....	59
CHAPTER 6 ROBUSTNESS CHECK.....	62
6.1 Robustness Test of Forecast News	62
6.2 Comparison between the Takeover Period and the Pre-takeover Period	63
6.3 Additional Test on Forecast Horizon and Precision.....	64

6.4 Alternative Measures of Moral Hazard.....	65
CHAPTER 7 CONCLUSION	66
Appendix A Examples of Corporate Voluntary Disclosure in Contested Takeovers	69
Appendix B Variable Definitions	73
REFERENCES	76

LIST OF TABLES

Table 1 Sample Selection and Distribution	86
Table 2 Descriptive Statistics and Correlations	89
Table 3 Forecast News in Contested Takeovers	93
Table 4 Managerial Incentives for Making Forecasts	95
Table 5 Short-term Market Reactions to Forecasts	97
Table 6 Management Forecast Bias	98
Table 7 Impact of Target Management Forecasts on Contested Takeover Consequences	99
Table 8 Robustness Test: Comparison of Forecasts News between Takeover Period and Pre-takeover Period	103

LIST OF FIGURES

Figure 1 Overview of the Hypotheses	84
Figure 2 Timeline of Voluntary Disclosure around a Takeover	85

CHAPTER 1

INTRODUCTION

Corporate voluntary disclosure is a potentially important means for management to communicate expected firm performance to shareholders and other market participants. How managers' incentives in corporate control contests affect their disclosure strategies is a question of considerable interest in accounting and finance. Anecdotal evidence on voluntary disclosure from target management in hostile and unsolicited bids indicates that management earnings forecasts are an important form of corporate voluntary disclosure,¹ and that management adopts a self-serving, voluntary disclosure strategy during the takeover events.² Given the considerable interest in and importance of this question, there is surprisingly little empirical research on voluntary disclosure accompanying corporate control contests (Healy and Palepu 2001; Beyer et al. 2010).

Motivated by these observations, I investigate the interaction between the incentives of incumbent management and the voluntary disclosure strategies they adopt during contested takeovers. Using a sample of contested takeover target firms from 1995 to 2010, I address the following research questions: (1) Is target management more likely to forecast good earnings news during the takeover period? (2) What managerial

¹ I focus on management earnings forecasts as one of the most prevalent and widely investigated forms of voluntary disclosure because (1) management earnings forecasts have information content as indicated by the market reaction to their announcement (Rogers and Stocken 2005; Anilowski et al. 2007); (2) both the nature and the credibility of the forecasts are easy to verify ex post, which allows me to examine whether managers exercise discretion in a takeover event; and (3) earnings forecasts have implications for firm valuation.

² For instance, The New York Times October 6, 2003 reported PeopleSoft Hoists Earnings Projections, Survives in the Bids. Wall Street Journal December 19, 2006 reported LSE Forecasts Earnings Surges, Battle Nasdaq Bid. Please refer to Appendix A for more details.

incentives lead to the disclosure of good news? (3) Do target managers issue upwardly biased earnings forecasts to favorably influence the market? (4) How does the market react to the voluntary disclosure made by target firms during the contested takeover period? (5) How do management earnings forecasts during contested takeovers impact the takeover consequences?

In this study, I define both unsolicited bids and hostile bids as contested takeovers, which are not welcomed by the target firm. While a friendly merger proposal is usually approved by the target firm's board of directors before it is submitted to a shareholder vote, in a contested takeover, the board of the target company does not recommend the offer to the stockholders and tends to aggressively reject the tender offer. However, the bidder continues to pursue the target, which intensifies the conflict.³

I choose the context of contested takeover to examine voluntary disclosure characteristics for several reasons. First, voluntary disclosure is potentially useful in the relatively infrequent but important strategic decision of a corporate control contest. Target shareholders face an immediate decision about whether or not to give up their rights to future profits of the firm.⁴ Takeovers involve long-term consequences, yet shareholders are often ill-equipped to assess the reasonableness of the offer due to a lack of future-oriented information. Therefore, the target firm is most in need of fair assessment and disclosure of future corporate performance. Further, target firm voluntary disclosure is potentially useful because information costs are high in contested takeovers.

³ There can be different forms of resistance such as statements in the press urging shareholders to reject the offer, lawsuits by management to block the offer, and active searching for a white knight to rescue the target.

⁴ The target must respond to the bidder's offer by filing the information required by Schedule 14d-9 within ten business days.

In friendly takeovers, target inside information becomes available through the due diligence process; however, the bidder has difficulty in obtaining target inside information in contested takeovers. Second, managerial incentives in contested takeovers are different from those in friendly takeovers. While there is collaboration between targets and acquirers in friendly takeovers, target management in contested takeovers is likely to resist aggressively. Prior literature documents that the turnover rate for top managers of target firms is significantly higher following completion of a contested takeover than of a friendly takeover (Franks and Mayer 1996; Denis et al. 1997). In addition to the more pronounced career concerns, salaries and perquisites tend to be distributed less freely. Therefore, I expect that managerial opposition leads to a change in voluntary disclosure strategies during contested takeovers. Third, because I examine voluntary disclosure following a highly visible, economically significant takeover event, I can identify a relatively well-defined time when career concerns are imposed on managers, whereas in other settings it is difficult to pinpoint when managers' jobs are jeopardized. Fourth, focusing on the contested takeover setting improves our understanding of how managers exercise discretion under specific economic conditions in choosing earnings forecast characteristics (Hirst et al. 2008).⁵

Upon the announcement of a contested takeover, the bidder attacks the target which he believes to be undervalued. The bidder expects to manage the firm more effectively (Manne 1965). I assume there are two types of target management (Black and Kraackman 2002; Carline and Yadav 2009).⁶ The first type of target management takes

⁵ Forecast characteristics include nature of the news, accuracy versus bias, precision versus vagueness, etc.

⁶ Black and Kraackman (2002) argue that there are two types of target firms. One type has "hidden value" that is visible to corporate directors but not to shareholders or potential bidders. The other type has "visible

actions that are detrimental to shareholder wealth (e.g., investing in high risk projects, exploiting private benefits from controlling the firm). The gain for the bidder following a successful takeover results from enhancing managerial discipline and relieving poorly performing managers of their assets. The second type of target management holds favorable inside information (e.g., new corporate strategy, names of key suppliers and clients) but cannot credibly communicate that information to the market (e.g., a growth firm in a volatile and competitive industry).⁷ The target management has superior information over both target shareholders and the bidder about the future prospects of the firm (Ruback 1988), so the market cannot correctly value such firms based on the available public information and temporarily undervalues them by pooling them with other firms in the industry.⁸

I anticipate that the two types of target management, i.e., with moral hazard or favorable information, will respond to the bidder in different ways. On one hand, if target managers hold favorable information and believe their assessment of valuation incorporating the hidden information is above the bidder's offer price, they will adopt voluntary disclosure to signal their superior information about the true value of the firm

value" that shareholders and potential bidders have knowledge of or can be informed about firm value through disclosure by the target management. Carline and Yadav (2009) differentiate two types of target resistance. One is entrenchment oriented resistance, which benefits target managers. The other is information leakage induced resistance, which benefits targets shareholders. Based on the evidence in these two papers, I assume there are two types of target management: hidden information and hidden action.

⁷ If management can communicate its information credibly to the market, the bidder would never launch a contested takeover. If the stock is worth more than he bids, the target management will communicate that to the market and the bidder loses whatever it costs to launch a bid. If the stock is worth less than the bid, the target management remains silent and the bidder wins by overbidding. Both are non-positive payoffs for the bidder.

⁸ Notice the two categories may not be mutually exclusive. There could be some overlaps (a firm could have some favorable information and an entrenched CEO), but the primary reason for resistance is different. A favorable information firm endeavors to convey inside information and maximize shareholder value whereas a moral hazard management desires to retain its job and cement entrenchment.

(Ruback 1988; Dimopoulou and Saccetto 2011).⁹ According to the evidence cited in Appendix A, analysts and industry watchers usually indicate that revised guidance clarifies the target's worth and imposes pressure on the acquirer to increase the price.¹⁰ A takeover attempt results in two possible outcomes. If the bid is withdrawn, managers can still fulfill the commitment to realize the projected earnings. If the takeover is completed, target shareholders extract a takeover premium reflecting the firm's true valuation. Therefore, voluntary disclosure is beneficial for target management with favorable information. However, voluntary disclosure also entails costs. The release of private information can damage a firm's competitive position in the product market (Dye 1986). Information released with earnings forecasts may provide competitors with confidential information on the source of value creation, and may potentially result in a substantial loss of proprietary information. Further, accounting disclosure has real effects on firms' real decisions and on resource allocation in the economy (Kanodia 2006). Voluntary disclosure under the pressure of a takeover may lead managers to focus more on short-term profits rather than long-term objectives, resulting in losses to long-term shareholders. Therefore, target management with favorable inside information prefers to guide company earnings when the benefit of voluntary disclosure outweighs the cost.

⁹ Ruback (1988) suggests that the target resists when the manager holds favorable hidden information about the firm. Dimopoulou and Saccetto (2011) suggest the target will reject the positive premium bidder offer when new information on the stand-alone value of the firm is revealed after the initiation of the contest. To the extent that there is no asymmetric information between the bidder and the target about the target's true valuation, when the bidder makes a bid that signals a high enough valuation for the target to deter the entry of a rival (Fishman 1988), the target will not make any voluntary disclosure and the bidder wins. This can be the counter argument for my prediction.

¹⁰ Since I obtain management earnings forecast observations from First Call Company Issued Earnings Guideline (CIG) Database, throughout this study, I use management earnings forecast and company issued guidance interchangeably.

On the other hand, target managers who have taken hidden actions and are inefficient probably do not have valuable good news to forecast. To the extent that they thwart the takeover to retain their jobs, they may want to mimic target firms with favorable information, capital market pricing pressure and potential litigation risk prevent them from doing so because they cannot live up to expectations. Instead of voluntary disclosure, they would prefer to adopt other effective antitakeover mechanisms to resist the takeover (e.g., poison pills and staggered boards). The finance literature has documented the negative impact on shareholder wealth associated with antitakeover mechanisms.¹¹ In comparison, firms with favorable information will tend to avoid these defensive mechanisms because of their potentially value-destroying effect.¹² Using several measures of favorable information and moral hazard, the empirical results support the hypothesis that favorable information firms are likely to adopt voluntary disclosure in contested takeovers while moral hazard firms are not.

Given the argument that target management with favorable information is more likely to make a forecast, I examine the properties of observed earnings forecasts in the context of contested takeovers, including the nature of the disclosed news and the credibility of earnings forecasts. Compared to other forms of voluntary disclosure, the nature of the news as well as the biases in earnings forecasts are easy to verify *ex post*, which allows me to examine whether managers exercise discretion in a takeover event.

¹¹ For example, Bebchuk and Cohen (2005) report that staggered boards bring about, and not merely reflect, a reduced firm value. Dann and DeAngelo (1988) show the wealth decreasing effects of defensive restructurings. Bradley and Wakeman (1983) and Dann and DeAngelo (1983) show the negative shareholder returns of targeted repurchases (greenmail). Malatesta and Walkling (1988), and Ryngaert (1988) indicate the negative wealth effects of poison pills. Denis (1990) demonstrates the negative wealth effects of defensive payouts.

¹² One may argue the possibility that voluntary disclosing firms also trigger poison pills. However, in the contested takeover target firm sample, only 2% of firms adopt both poison pills with voluntary disclosure.

Recent evidence indicates that under normal conditions, managers tend to issue pessimistic forecasts in order to lower earnings expectations to an achievable level (Matsumoto 2002; Baik and Jiang 2006; Cotter et al. 2006; and Burgstahler and Eames 2006). However, when facing a contested takeover, I find that target management has incentives to raise earnings guidance to resist the takeover and/or to negotiate a better bid price. At this critical time any misrepresentation is less detectable and forecasts become harder to prove, increasing the opportunity for optimism (Rogers and Stocken 2005). Accordingly, I find that, in a contested takeover, target management is more likely to issue overly optimistic earnings guidance to favorably influence the market and negotiate a better bid price.

Having documented the effects of target managerial incentives on voluntary disclosure, I then explore the relation between voluntary disclosure and contested takeover consequences by answering the following questions: how would target firms' voluntary disclosure impact target long-term premium, bidder revised price, and length of the M&A process? Along with the above argument that target firms tend to eliminate market misvaluation by announcing management forecasts, I find that, relative to silent firms, forecasting firms during contested takeovers have higher long-term premiums, higher bidder revised prices, and longer M&A processes. The positive association between takeover consequences and guidance is pronounced only in favorable information firms, but not in moral hazard firms. The evidence suggests that voluntary disclosure adopted by favorable information firms, on average, improves target shareholder wealth by seeking a reasonable takeover premium. Favorable information firms are also able to delay the process and create uncertainty about the value of the firm

by disclosing forward-looking financial information. These findings corroborate the “information leakage induced target resistance” argument in Carline and Yadav (2009). The details of empirical predictions are discussed in the hypothesis development section and an outline of the paper’s structure is illustrated in Figure 1.

This study contributes to research on corporate control contests and on voluntary disclosure. The finance literature documents a variety of antitakeover tactics and the associated potential negative effects on target shareholder wealth (Ruback 1988), but is silent on the role of voluntary disclosure. Given that accounting information alleviates information asymmetry between the target management and the bidder, target management can choose to disclose forward-looking financial information during a contested takeover to signal hidden information. I provide evidence that bid resistance and/or negotiation in the form of voluntary disclosure can represent a strategic maneuver designed to increase target firm valuation.

This study also extends concurrent work on managerial financial reporting behavior surrounding corporate control contests. In recent years, an increasing number of studies have emphasized the importance of accounting information in corporate control transactions.¹³ Other studies have investigated earnings management in takeover acquirers and targets when managerial incentives for manipulation are strong.¹⁴ This study complements that stream of evidence by examining managers’ discretionary disclosure rather than their mandatory reports. During the short period of takeover events,

¹³ Such studies include Raman et al. 2008; Marquardt and Zur 2010; McNichols and Stubben 2011; and Skaife and Wangerin 2011.

¹⁴ Such studies include Erikson and Wang 1999; Louis 2004; Braga-Alves et al. 2010; Easterwood 1997; and Chen et al. 2011.

target managers can disclose good news at the initial stage of the bargaining process before the earnings announcement date.¹⁵ They can also disclose bad news or keep silent. This study explains the motive for target management to make a forecast and the strategies they will adopt once such a decision has been made. Contrary to the evidence documented in the capital markets research that managers tend to forecast bad news and downwardly biased news (Hutton and Stocken 2007; Anilowski et al. 2007), I provide evidence that target management is likely to forecast good news and upwardly biased good news in the market for corporate control.

The third contribution of this study is to document that voluntary disclosure helps target shareholders realize higher long-term premiums and postpone the M&A processes. This differs from most prior empirical research that mainly focuses on how managerial incentives influence voluntary disclosure. The findings support the argument of information leakage induced target resistance (Carline and Yadav 2009) and should be interesting to M&A practitioners, target CEOs, and regulators.

The remainder of the paper is organized as follows. Chapter 2 reviews the existing literature on voluntary disclosure and corporate control contests. Chapter 3 develops the hypotheses. Chapter 4 discusses the empirical setting and research designs. Chapter 5 outlines the sample selection criteria and discusses the empirical results. Chapter 6 discusses robustness checks. Chapter 7 concludes the study.

¹⁵ The mean (median) horizon of contested takeovers in the sample is 124 (89) days.

CHAPTER 2

LITERATURE REVIEW

In this chapter, I review the related literature in the following areas: theory of voluntary disclosure, voluntary disclosure in the form of management earnings forecasts, nature of the news in and credibility of management earnings forecasts, and existing evidence of management earnings forecasts in special corporate settings. I also outline previous research evidence on corporate control contests and the significance of accounting information in contested takeovers.

2.1 Voluntary Disclosure and Management Earnings Forecasts

The signaling or screening rationales for voluntary disclosure are outlined by Ross (1978), Grossman (1981), Milgrom (1981), and Verrecchia (1983). Lee and Penman (1990) state:

In the disclosure scenario of these models, managers with information that implies firm values larger than those assessed by the market will disclose it credibly such that their stock prices will be revised upward, while managers with information that implies values below market will withhold the information. The downward price revision of non-disclosing firms will, in turn, encourage those within the group with good news, relative to recently decreased average valuation, to screen themselves out of the group by disclosing their information. The disclosure process thus proceeds, until the positions of all firms in the valuation hierarchy are identified.

Dye (1985) refers to this fully revealing outcome as the disclosure principle. Lev and Penman (1990) provide empirical evidence consistent with the screening motive for

disclosing earnings forecasts. On average, firms with good news voluntarily disclose forecasts in order to distinguish themselves from firms with bad news.

Among the different types of voluntary disclosure, management earnings forecasts represent one of the key mechanisms by which managers establish or alter market earnings expectations, preempt litigation concerns, and influence their reputation for transparent and accurate reporting (Hirst et al. 2008). Healy and Palepu (2001) and Hirst et al. (2008) summarize the benefits to firms that issue voluntary earnings forecasts. Management earnings forecasts can preempt litigation risk (Skinner 1994), improve stock liquidity (Coller and Yohn 1997), adjust market expectations (Matsumoto 2002), and reduce cost of capital (Botosan 1997). Management forecasts have information content, which is evidenced by the market reaction to these announcements (Pownall et al. 1993; Rogers and Stocken 2005; Anilowski et al. 2007). They also influence analysts' forecasts (Baginski et al. 1993) and reduce bid-ask spreads (Coller and Yohn 1997). The voluntary information permits sharing of management's private information, mitigation of private information acquisition by others, reduction of information asymmetry, and increase in share value. Voluntary earnings forecasts can also bring personal benefits to managers by signaling their ability to anticipate future changes in the firm's economic environment and adjust the firm's production plan accordingly (Trueman 1986).

Despite all these benefits, voluntary management forecasts are not without cost. Dye (1986) overviews the impact of proprietary costs on the disclosure decision. Revealing estimated earnings information may allow competitors to partially infer important confidential information on the source of value creation. The release of private

information can damage a firm's competitive position in the product market. Voluntary disclosure may also result in legal action from target firm shareholders. Francis et al. (1994) show that management forecasts can expose firms to unintended litigation risk. According to Rule 10b-5 of the U.S. Security Exchange Act of 1934, a deliberately misleading voluntary disclosure is unlawful, even if it happens under the "safe harbor" provision of the Private Securities Litigation Reform Act of 1995. The mere possibility of incurring legal costs resulting from issuing voluntary information might work as a deterrent to voluntary disclosure. Further, Chen (2004) documents that firms experience much stronger negative market reactions if they miss their own forecasts than the positive market reaction to beating their own forecasts. Therefore, providing earnings guidance itself is a tradeoff decision between the benefits and costs associated with issuing forecasts.

Once managers decide to issue an earnings forecast, they have considerable discretion over its characteristics such as nature of the earnings news, its accuracy, and its bias. A large body of research attempts to understand the specific nature of the news contained in management earnings forecasts. Early studies report that earnings forecasts predominantly conveyed good news (Penman 1980; Waymire 1985). Studies based on samples from the early 1980's to the middle 1990's suggest a different trend: good and bad news forecasts are equally likely (McNichols 1989; Hutton et al. 2003). A more recent study based on a sample between 1996 and 2003 finds that the majority of earnings forecasts contain bad news (Hutton and Stocken 2007). Over half of all earnings forecasts provide downward guidance (Anilowski et al. 2007). The bad news forecasts are explained by managers' litigation and reputation concerns (Skinner 1994) and are

positively associated with analyst optimism (Cotter et al. 2006) and firm size (Kasznik and Lev 1995).

Similar to the nature of the news, forecast credibility is another important characteristic of voluntary disclosure “quality”. In addition to controlling the overall news content of their forecasts, managers have the ability to bias their earnings forecasts (Hirst et al. 2008). Management earnings forecast credibility is obtained by an ex post comparison of the forecast to realized earnings. However, this measurement depends on realized earnings, which can be manipulated by management. Another proxy for management forecast credibility in the equity market, price reaction to the forecast, is also well-established (Pownall and Waymire 1989). Price reaction at the management forecast date has the advantage of being independent of realized earnings. Research between 1980 and the middle 1990’s documents that the release of managerial earnings forecasts is associated with changes in the stock prices of forecasting firms. Conditional on the management forecast signal, the capital market revises its expectations in an unbiased fashion (Penman 1980; Waymire 1985; Pownall and Waymire 1989; McNichols 1989; Johnson et al. 2001). The expectation adjustment posits that managers issue forecasts to align investors’ expectations with their own (Ajinkya and Gift 1984).

Researchers also conjecture that the credibility of good news and bad news forecasts are differently perceived. While bad news forecasts are considered to be inherently informative, good news forecasts are considered credible only when supported by verifiable forward-looking information (Hutton et al. 2003). They find the absolute magnitude of market reaction to bad news greater compared to the reaction to an

equivalent level of good news, suggesting that bad news is inherently more credible whereas managers have to spend greater effort to make good news credible.

At times, managers might benefit from exercising discretion in forecast credibility to intentionally influence investors. Using a sample from more recent time periods, a number of empirical studies show a steadily increasing pessimistic bias in quarterly earnings forecasts. This is caused by management's desire to walk down analysts' expectations to an achievable level (Matsumoto 2002; Baik and Jiang 2006; Cotter et al. 2006; Burgstahler and Eames 2006). However, managers' abilities to bias their forecasts are limited because investors are able to use the subsequent earnings report to determine whether management is providing credible forecasts. Rogers and Stocken (2005) find that managers are more likely to strategically bias their forecasts, according to their incentives, when it is more difficult for investors to assess the credibility of the forecasts. In regard to the consequences of biased forecasts, prior research shows that managers develop a forecasting reputation based on their prior forecasts (Williams 1996), which suggests that optimistically biased management forecasts will potentially taint management's forecasting reputation and limit managers' ability to use earnings forecasts to meet or beat expectations in the future. In addition to the reputation cost, managers are likely to be concerned with the legal liability associated with issuing false or misleading forecasts under SEC Rule 10b-5 and may not wish to suffer the capital market consequences of falling short of a management forecast.

Overall, extant literature has identified theoretical rationales for firms to voluntarily disclose accounting information, along with the associated benefits and costs.

Prior research also provides strong evidence of different characteristics of management earnings forecasts, such as nature of the news and credibility. Surprisingly, only limited work has been done to explain how and why firms make important earnings forecast decisions under specific economic conditions once they choose to issue earnings forecasts (Baginski et al. 2004; Hirst et al. 2008). We are still unclear how managers will choose different properties of earnings forecasts when the firm is in corporate control contests (Healy and Palepu 2001; Beyer et al. 2010). In this study, I address this question and respond to Hirst et al.'s call for examining how managers exercise discretion in choosing earnings forecast characteristics under specific economic conditions.

2.2 Management Earnings Forecasts in Special Corporate Events

Accounting theory suggests that managerial incentive is a key determinant of discretionary disclosure. Since managers are motivated by a variety of incentives simultaneously, the disclosure literature often concentrates on some specific settings where managerial incentives are clear. A large body of research attempts to understand why and how managers issue opportunistic earnings forecasts during specific capital market scenarios

Hafzalla (2007) examines the setting of management leveraged buyout (MBO), where managers have a clear incentive to engage in discretionary disclosure to lower the market value of the firm. Along with the managerial incentives, he finds managers in MBO firms make pessimistic discretionary disclosure and selectively release negative disclosure to downwardly influence their firm valuation just before the MBO transaction. The voluntary disclosure includes less optimistic quotes, fewer good news disclosures,

and less positive earnings forecasts. Similar to managerial incentives to walk down the market value of the firm in the MBO period, managers also try to alter the information flows by increasing the percentage and magnitude of bad news announcements during the one-month period prior to repurchasing shares (Brockman et al. 2008). They also find weak evidence of overly optimistic forecasts during the one-month period following their repurchases.

Several papers have examined how managerial incentives during initial public offerings (IPOs) and seasoned equity offerings (SEOs) affect corporate disclosure activity. Using a sample of Canadian firms, Jog and McConomy (2003) find that the use of earnings forecasts is generally beneficial, especially for small firms where the degree of information asymmetry may be high. Forecasting firms, on average, have a significantly lower degree of underpricing. However, if the forecast is unduly optimistic, the lower initial underpricing of firms with optimistic forecasts will be offset by significantly worse post-IPO return performance. In other words, firms tempted to cheat can only prosper for a short time.

Lang and Lundholm (2000) examine corporate disclosure activity around seasoned equity offerings (SEOs) and its relationship to stock prices. They find sample firms dramatically increase their disclosure activity, particularly for the categories of disclosure over which firms have the most discretion, beginning six months before the offerings. The stock price consequence of voluntary disclosure depends on the firm's historical pattern of voluntary disclosure frequency; firms that maintain a consistent level of disclosure experience price increases prior to the offering, and only minor price

declines at the offering announcement relative to the control firms. However, firms that substantially increase their disclosure activity in the six months before the offering also experience price increase prior to the offering, but suffer much larger price declines at the announcement of their intent to issue equity. Hence, the increased disclosure activity may have been hyping the stock, and firms inflating stock price continue to suffer negative returns. Following Lang and Lundholm (2000), Shroff et al. (2012) revisit the impact of the Securities Offering Reform on management voluntary disclosure behavior before SEOs and the associated economic consequences. Since the reform relaxes pre-SEO disclosure restrictions by providing safe harbor for certain disclosures before SEOs, firms provide significantly more pre-offering disclosure after the reform and there is no evidence of hyping after the reform. The evidence suggests that relaxation of pre-SEO disclosure restrictions leads to a reduction in the cost of raising equity capital.

Voluntary disclosure around insider trading is examined by Noe (1999) and Cheng and Lo (2006). Noe (1999) finds managers selectively time insider transactions after management earnings forecasts when the stock price reactions to these disclosures are more favorable. In addition, managers appear to make insider transactions based upon knowledge about their own firms' long-term prospects. Cheng and Lo (2006) find similar results that insiders strategically choose disclosure policies and the timing of their equity trades to maximize trading profits, subject to litigation cost associated with disclosure around insider trading. In addition, Aboody and Kasznik (2000) suggest that CEOs make opportunistic voluntary disclosure decisions to maximize their stock option compensation, and they issue downward biased voluntary disclosure prior to scheduled awards.

Overall, extant research provides evidence of voluntary disclosure strategies in different corporate special events. However, one overlooked question in the literature is how career concerns in corporate control contests will impact corporate disclosure patterns. It is still an open question how managerial incentives under the threat of contested takeover affect voluntary disclosure strategies, a fact noted by Healy and Palepu (2001) and Beyer et al. (2010). In this study, I focus on contested takeover to take advantage of two features of this setting: a highly visible strong managerial opposition to the takeover announcement and an economically material variation in the CEO's probability of turnover linked to the takeover outcome. These advantages provide me a powerful sample to explore the relation between career concern and voluntary disclosure decisions. More importantly, I attempt to explain the underlying reason for firms to voluntarily guide corporate earnings and the impact of voluntary disclosure on takeover consequences.

Further, a potential concern with the extant literature on voluntary disclosure in different settings is the possibility that the corporate decision making (e.g., going public, issuing equity, repurchasing stock, making insider transactions, getting stock compensation awards on a scheduled date, etc.), the decision to change voluntary disclosure strategy, and the stock price change are all driven by a fourth factor that becomes available to the firm. Ideally, researchers would like to explicitly control for the company's investment opportunity set, but this is difficult to observe. Therefore, endogeneity remains a potential problem in this stream of literature that might render the results spurious. Instead of examining these corporate special events that are not exogenously given, I focus on corporate control contests, specifically, contested

takeovers to examine voluntary disclosure strategy. Unlike investment choices and financial policies, to be involved in a contested takeover resembles an exogenous shock. A contested takeover is neither anticipated nor welcomed by the target CEO, compared to other decisions that the CEO makes. Therefore, even though my study is not totally free of endogeneity, it is less of a concern here. It is less likely that the omitted variable affects whether a firm is a contested takeover target and the voluntary disclosure policy in such a systematic way that renders all the results spurious.

2.3 Corporate Control Contests and Accounting Information

Following Jensen and Ruback (1983), I view the market for corporate control, also referred to as the takeover market, as a market in which alternative managerial teams compete for the rights to manage corporate resources through mergers and acquisitions (M&As). Those transactions enable the buying, selling, dividing, and combining of different companies and similar entities that can help an enterprise grow rapidly without creating a subsidiary or using a joint venture. Mergers and Acquisitions rank among the most critical investment decisions made by firms. The transactions represent one of the largest and most readily observable investments made by firms and result in massive reallocations of resources within the economy (Jensen and Ruback 1983). In 2011 alone, there were 38,000 M&A deals announced globally, with deal value amounting to a total of \$2.47 trillion (Thomson Financials 2011).

M&A is an ideal setting to investigate the usefulness of accounting information because information asymmetry plays a major role here. Accounting information is used both to value a target firm and assess potential synergies. A stream of recent papers

examines settings in which M&A transactions are affected by target financial reporting quality. For example, Raman et al. (2012) examine the impact of target earnings quality on acquirer decisions along three dimensions: takeover method, offer premium, and form of payment. They find that when targets exhibit poor earnings quality, proxied by Dechow and Dichev (2002) residuals, acquirers are less likely to stage a hostile takeover, but more likely to offer lower premiums and pay with stock to share the risk of overpayment with target shareholders. Marquardt and Zur (2010) use the same measure of earnings quality and find that target earnings quality increases the likelihood of the deal being negotiated and is positively associated with the speed of completion.

High quality of accounting information not only impacts the course of the acquisition process, but also facilitates the due diligence process. It reduces uncertainty about target firm value and prevents acquirer overpayment. McNichols and Stubben (2011) find transparent target financial reporting reduces agency cost and winner's curse at the acquirer, leading to better bidding decisions in acquisitions. Skaife and Wangerin (2012) investigate the role of financial reporting quality in M&As that are ultimately terminated. They find that low target financial reporting quality impedes the due diligence process, increases the likelihood of deal renegotiation, and increases the probability of the deal being withdrawn.

Previous studies have also investigated earnings management around M&A transactions and focus mainly on the earnings management behavior of the acquirer prior to announcement of acquisitions. Results from this stream of literature suggest that acquirers have incentives to manage earnings upward prior to stock-for-stock acquisitions.

For example, Erickson and Wang (1999) find that managers of acquiring firms boost earnings prior to stock-based acquisitions, in an effort to increase their stock price and reduce the number of shares issued in exchange. Louis (2004) confirms this result and suggests that the long-term post-acquisition underperformance of stock-for-stock acquisitions can be attributed partially to the reversal of positive pre-acquisition accruals.

Only a few papers examine earnings management behavior of the target prior to corporate control contests. They document evidence of income-decreasing earnings management preceding management buyouts, when managers have the incentive to decrease the current share price and underpay outside shareholders (DeAngelo 1986; Perry and Williams 1994). More recent studies suggest that managers also have incentives to overstate earnings prior to management buyouts in certain cases with conflicting interests arising from external financing needs (Fisher and Louis 2011). When a company faces a higher probability of being the target of a takeover, the target manager uses discretionary accruals to make income-increasing accounting choices (Braga-Alves et al. 2010). They suggest earnings management is used to influence shareholder perception and consequently, can decrease the probability of a takeover occurrence. When the acquirer is able to induce the target to cooperate, target firms in completed friendly mergers report lower earnings and cash flows during the quiet takeover period and such under-reporting boosts acquirers' post-acquisition performance (Chen et al. 2012).

Collectively, prior literature provides strong evidence on the significance of target firm's financial reporting in the course of M&As. It also provides evidence of accounting

manipulations by both the acquirer and the target prior to corporate control contests. However, most of extant literature does not distinguish between friendly and contested takeovers, perhaps because of the small percentage of contested takeovers in the sample. Morck et al. (1988) indicate disciplinary takeovers are likely to be hostile, whereas synergistic takeovers are likely to be friendly. Difficulties can arise when disciplinary and synergistic takeovers are analyzed together, presenting the researcher with a mix that may have few common characteristics. As a result, one cannot use the evidence in friendly takeovers to make inferences about contested takeovers. Morck et al. (1988) also suggest that researchers separate contested takeovers from friendly takeovers. I focus only on contested takeovers in this study for two reasons. First, while friendly takeovers attempt to increase value by combining businesses and require cooperation from target management, managerial cooperation in a contested takeover is low. Given the target's strong opposition to the takeover, the acquirer has high information acquisition cost in contested takeovers, highlighting the importance of target voluntary information disclosure. Second, managerial career concern is greater following a successful contested takeover than a friendly merger (Frank and Mayer 1996; Denis et al. 1997). The career concern is likely to motivate managers to change their voluntary disclosure strategies during contested takeovers. Therefore, focusing only on contested takeovers provides me a powerful setting to examine managerial discretion and the usefulness of accounting information.

Moreover, in addition to mandatory disclosure properties examined in the prior literature, there is only limited evidence on other discretionary tools at the managers' disposal, i.e., voluntary disclosure. Auditors are not obligated to review or audit

voluntary disclosure, and compliance rules are less stringent on voluntary disclosure than on financial statements. Selective disclosure is a less costly tool than manipulating real activities because no actual damage is caused to the firm's operation (Hafzalla 2007). Surprisingly, only three papers investigate the acquirer's discretionary disclosure in M&As and only one paper studies the target's voluntary disclosure. Regarding the acquirer, Ge and Lennox (2011) document that companies have incentives to increase their market values by withholding impending bad news about future earnings prior to the acquisition when acquisitions are financed through stock. Consistent with litigation risk, they do not find companies mislead investors by issuing overly optimistic forecasts of future earnings. Likewise, Kimbrough and Louis (2011) suggest acquirers are more likely to hold conference calls at merger announcements when mergers are financed with stock and when transactions are large. Acquirers reduce information asymmetry by signaling forward-looking information to convey credible favorable information to the market. In a different setting, Bens et al. (2012) study the whether value-destroying M&As impose heightened career concerns on the acquiring CEOs and motivate them to issue management forecasts that are long-term and optimistic.

Brennan (1999) is the only study available about the target's voluntary disclosure in M&As. She investigates the determinants for target management to issue profit forecasts in both friendly and hostile takeovers in the U.K.. My study differs from Brennan (1999) in several respects. First, there are significant differences in takeover regulations between the U.K. and the U.S. Unless shareholders approve, the U.K. takeover regulator, City Code, strictly prohibits target management from employing any defensive tactics that would have the effect of blocking an actual or anticipated bid. In

contrast, target management in the U.S. has more flexibility to engage in defensive tactics (e.g., poison pills and staggered boards), which are difficult for the U.K. target management to employ (Armour and Skeel 2007). Therefore, ex-ante, it is unclear whether target management in the U.S. will still disclose material information to resist the takeover given the availability of antitakeover mechanisms. Second, Brennan (1999) studies both friendly and contested takeovers. As she mentions, forecasts in friendly takeovers are required by the bidder, or used to justify the target director's recommendation that shareholders accept the offer. Because of the ameliorated agency conflict in friendly takeovers, managerial incentive behind such disclosure is of less tension and interest. Therefore, I only focus on contested takeovers, which are associated with stronger managerial incentives to thwart the takeover. Third, Brennan (1999) shows in the descriptive statistics that 80 percent of management profit forecasts during contested takeovers contain good news. However, it is not clear how target managers opportunistically alter the nature of the forecast news around contested takeovers, and how the type of takeover (contested versus friendly) impacts such discretion. I address these questions in this paper: how target management alters the information flows around contested takeovers, what managerial incentives motivate firms to forecast rather than keeping silent, and whether forecasts are credible or not. Lastly, I expand Brennan (1999) not only by examining multifaceted forecast characteristics, but also by investigating the impact of voluntary disclosure on takeover consequences.

CHAPTER 3

HYPOTHESIS DEVELOPMENT

3.1 Nature of Forecast News

The literature on voluntary disclosure indicates that, under normal conditions, managers are more forthcoming with bad news than good news. Managers make preemptive bad news disclosures to minimize legal liabilities and reputation costs (Skinner 1994). Bad news is more frequent than other types of earnings news (Kasznik and Lev 1995). Evidence from relatively recent periods shows that managers manipulate earnings guidance to guide analysts' forecasts downward in order to avoid negative earnings surprises (Matsumoto 2002; Cotter et al. 2006; Burgstahler and Eames 2006). For instance, Baik and Jiang (2006) study management earnings forecasts from 1995 to 2002 and find that 51.9% exhibit pessimistic news, 18.7% show confirmatory news, and only 29.4% display optimistic news. As a result of the pessimistic bias, management successfully induces analysts to lower earnings expectations to an achievable level.

During contested takeovers, target management will be forthcoming with good news for two reasons. First, good news earnings forecasts are a defensive mechanism for target management, communicating that the incumbent management team is better at running the company than bidder management would be. Since career concerns are more pronounced following a successful contested takeover than a friendly merger (Franks and Mayer 1996; Denis et al. 1997), managers have strong incentives to resist a contested

takeover by disclosing favorable inside information that otherwise would be withheld. If the goal is to avoid being acquired, favorable stock price reaction to the good news forecast will decrease the likelihood of a successful takeover. Appendix A shows anecdotal evidence that managers defend the initial bid with good news earnings forecasts and the takeovers were withdrawn.

In addition to working as a defensive mechanism, raised earnings guidance also serves as a negotiation strategy to show that shares are more valuable than the offer price. Schwert (2000) finds that strategic bargaining, rather than non-value maximizing behavior by target management, is the motivation for hostile bids. Favorable information disclosed by target management can inform target shareholders of higher firm value, motivating shareholders to tender their shares at a higher price than the initial bid. Disclosure of high firm value projection helps persuade target shareholders that the bidder's price is inadequate. Here the voluntary disclosure serves as a price signaling mechanism. If the signal is correct and meaningful, the mispricing of the offer will be eliminated (or reduced) by an upward revaluation of the target firm's shares. Appendix A also lists two examples showing that target management raises earnings guidance in response to the initial offer price. Eventually, the contested takeovers got through with revised higher prices.

In light of these two incentives, while under normal situations target managers are prudent in not disclosing favorable news, facing a contested takeover, they are pressed to disclose favorable inside information to resist the takeover and/or to negotiate a better bid price. Although this argument sounds straightforward, there could be two reasons for not

finding this result. First, the proprietary cost of private information may discourage the target from issuing good news earnings forecasts, given that the expected gain from negotiation and/or defense may not exceed the expected loss of disclosing the proprietary information. Second, accounting disclosure affects firms' real decisions (Kanodia 2006). Optimistic voluntary disclosure under the takeover pressure may lead managers to focus more heavily on boosting short-term profits rather than maintaining long-term objectives, resulting in losses to long-term shareholders. To avoid potential managerial myopia, target management may not choose to offer optimistic earnings guidance. Hence, I address this proposition in the following hypothesis:

H1: Target management is likely to voluntarily issue good news earnings forecasts under the threat of contested takeover.

3.2 Incentive for Making a Forecast

Hypothesis 1 does not distinguish between the reasons that target managers are more likely to issue good news earnings forecasts during contested takeovers. It is unclear whether the dominant managerial incentive is the manager's own benefit (i.e., retaining his position), or the shareholders' benefits (i.e., negotiating a higher offer price). Next, I attempt to distinguish between these two motives by examining two different reasons that a company is likely to become a contested takeover target: favorable inside information and moral hazard.

While many contested takeovers are launched to attack the performance of target management, not all targets necessarily suffer from inefficient management (Frank and

Mayer 1996). Black and Kraackman (2002) argue that there could be a type of target firm with hidden value in which the firm's true value is visible only to corporate directors but not to shareholders or potential bidders, leading the firm to be temporarily undervalued. I call such firms "favorable inside information" targets. The active capital market may encourage opportunistic bidders to exploit temporary underpricing of such favorable information firms. In this case, target management will reject a bid to protect their positions and prevent shareholders from being unfairly taken advantage of by raider. A good example of this is Samsung Electronics' unsolicited takeover bid of \$5.9 billion for the flash memory card maker Sandisk (The New York Times, October 22 2008). Sandisk rejected the unsolicited offer as too low, deriding it as an opportunistic bid timed to take advantage of falling valuations amid an industry-wide downturn and the current financial turmoil. The lower the stock prices of targets such as Sandisk, the more attractive the takeover becomes in the eyes of the opportunistic bidder to exploit temporary mispricing.

Given that favorable inside information may cause a company to become a contested takeover target, I predict that the incumbent management in such a target is likely to issue good news earnings forecasts during contested takeovers. When the board of the target cooperates, the bidder can conduct extensive due diligence into the affairs of the target company, providing the bidder with a comprehensive analysis of the target company's financial disclosure (Wangerin 2010). In contrast, a hostile acquirer will only have publicly available and limited private information about the target, rendering the bidder vulnerable to a severe asymmetric information problem regarding the target's potential value. The more uninformed the acquirer is, the more likely the offer price will be below the target manager's assessment of its value. In such cases, target management

will have incentives to actively oppose the offer and disclose favorable forward-looking information that eliminates the mispricing. Voluntary disclosure supports a signaling interpretation in which targets characterized by a high level of asymmetric information are able to remedy the information opacity problem.¹⁶

Several theoretical papers support this prediction. Dimopoulo and Saccetto (2011) develop an auction model and suggest reasons why target shareholders may reject a positive premium takeover offer, even though the initial acquirer may deter the entry of a rival by making a bid that signals a high enough valuation of the target (Fishman 1988). They suggest the target resistance can be explained by the new information on the stand-alone value of the firm revealed after the initiation of the contest, which implies, in my setting, that target management with hidden information is likely to justify its resistance with optimistic earnings forecasts. In addition to raising the bid, target resistance is also justified by the benefit of instigating a multiple bidder auction (Giammarino and Heinkel 1986; Khanna 1997). The initial acquirer submits a high “pre-emptive” bid to discourage subsequent bids. When asymmetric information exists, target resistance is justified as a tactic designed to delay the process and thereby allow time for more acquirers to enter the contest, and raise the expected value of the target. Collectively, the likelihood of voluntary disclosure is positively associated with the level of asymmetric information between managers and investors with respect to the stand-alone value of the target firm. The above analysis leads to the following hypothesis:

¹⁶ Appendix A includes two examples of targets that issue earnings forecasts in contested takeovers to alleviate information asymmetry in order to resist the initial offer and/or solicit a higher price. Both targets, PeopleSoft and Midwest, are in my sample.

H2a: Target management with favorable information is likely to issue earnings forecasts in contested takeovers.

Moral hazard is an alternative explanation for firms becoming contested takeover targets. Most contested takeovers are designed to remove the policies of managers who do not maximize shareholder value (Morck et al. 1988). Firms are more likely to be acquired when they have inefficient management, and when there is a mismatch between their growth and the financial resources at managers' disposal (Palepu 1986). These firms have middling to mediocre performance in which the bidder sees a profitable opportunity to enhance managerial discipline by relieving poorly performing managers of their assets.

Whether or not targets suffering from a moral hazard problem will also adopt voluntary disclosure to forecast favorable information is unclear. On one hand, with deteriorating financial performance, managers probably do not have much favorable news to forecast. However, in order to retain their positions under heightened career concerns, managers may mimic favorable information targets in disclosing good news, even though market discipline could be a concern. On the other hand, instead of voluntary disclosure, they can resort to other potent defensive tactics to successfully oppose the takeover. For example, target managers can decrease the attacker's perception of the firm's intrinsic value (by spin-offs, special dividends, asset sales, or "crown jewels" sales);¹⁷ they can raise the price paid by the attacker through diluting the shares

¹⁷ Defenses that destroy assets are probably harmful to shareholders. This includes assets sold below their value or assets purchased above their value simply to thwart a takeover. Similarly, liability restructuring to the extent that it interferes with investment also destroys assets. Shleifer and Vishny (1989) find managers can acquire and divest assets to entrench themselves and reduce shareholder wealth. Firms destroying assets can also make voluntary disclosure and forecast pessimistic earnings during contested takeovers, which is a counterargument for H1.

(by payment required under golden parachutes, or poison pills); they can also impose delay and preserve time and flexibility (by a staggered board, supermajority provision, or waiting period imposed by law or regulation). Prior literature documents significant negative impacts on shareholder wealth associated with a variety of antitakeover mechanisms (Sudarsanam 1991; Bebchuk and Cohen 2005). For example, Bebchuk, Coates, and Subramaniam (2002) find that the combination of staggered board and poison pills is associated with sharply higher defense success and is value-destroying for target shareholders.¹⁸ Collectively, whether or not a moral hazard firm will voluntarily disclose financial information is unclear. The analysis leads to the following competing hypotheses:

H2b: Moral hazard target management is likely to issue earnings forecasts in contested takeovers.

H2c: Moral hazard target management is not likely to issue earnings forecasts in contested takeovers.

3.3 Stock Market Response

My primary argument, that target management with favorable information has incentives to issue good news earnings forecasts during contested takeovers, requires that target management believes that discretionary forecasts (at least to some extent) eliminate market mispricing. However, it is unclear whether earnings forecasts issued during

¹⁸ Bebchuk et al. (2002) find that effective staggered boards do not appear to have a significant beneficial effect on premiums in takeover transactions. Staggered boards reduced the expected returns of the shareholders of hostile targets by 8-10%. They also find the shareholders of targets that remain independent are substantially worse off compared with those accepting the bid, so they conclude that defensive tactics are likely to be abused.

contested takeovers are as informative as those issued in a normal business situation, and whether the market discounts the credibility of good news forecasts in contested takeovers. Therefore, I examine investor assessment of target voluntary disclosure credibility during contested takeovers. Evidence of investors' reaction to earnings forecasts will further distinguish investor initial assessment of the dominant managerial incentive: positive reaction indicates that managerial incentive is more aligned with shareholders' benefits whereas negative reaction means the opposite.

On one hand, the stock market will respond little to voluntary disclosure during contested takeovers, if good news earnings forecasts are opportunistically made to inflate the stock price. Even though bad news is likely to be inherently credible, investors are naturally more skeptical about earnings guidance deviating from the historical pattern and need to be convinced of the veracity of good news forecasts. Accordingly, Hutton et al. (2003) report that good news earnings forecasts are only informative (with average stock price reactions above 3%) when accompanied by verifiable forward-looking information, suggesting that those forecasts are not perceived as credible without supplemental information. If target management tends to use voluntary disclosure to cement entrenchment and artificially influence the stock price, managers would have difficulty in providing specific firm rationales to make the good news credible. In this case, the stock market will discount the information content of voluntary disclosure.

On the other hand, if H2a holds, voluntary disclosure is mainly adopted by favorable information targets as a signaling mechanism. Therefore, making a forecast on average implies favorable information and keeping silent on average implies a moral

hazard problem. In a target firm's recommendation to reject the tender offer, the target usually supports raised earnings guidance by providing detailed information about restructuring plans to cut costs and revenue creating channels to boost earnings.¹⁹ Given the value of proprietary information revealed to validate the good news forecasts, rational market participants should regard such disclosure as a costly signal about the target value. Therefore, the decision to disclose private information in contested takeovers should result in favorable abnormal stock returns due to the reduction of information asymmetry (Diamond and Verrecchia 1991). This argument leads to the following hypothesis:

H3: In contested takeovers, the stock market responds positively to good news earnings forecasts issued by targets.

3.4 Forecast Bias

Examining the stock market response to the announcement of management earnings forecasts indicates perceived credibility in the short term. Another interesting and relevant question is whether these forecasts are accurate or biased.

Under the threat of contested takeovers, target management can discretionally influence market perception by disclosing overly optimistic news. The board of directors usually lacks sufficient knowledge to decide whether a project is value-maximizing shareholders' benefits, and thus has insufficient information to challenge bold earnings projections. Any misrepresentation is less detectable and forecasts in this critical time

¹⁹ For example, in the company release "Take-Two Interactive Software, Inc. Recommendation of the Board of Directors to Reject Electronic Arts Inc.'s Hostile Offer", management mentioned significant earnings upside potential is due to: 1) \$25 million of annual cost savings 2) additional scale for sports business 3) lower legal expenses 4) major launches of high-margin, owned IP.

become harder to prove, thus increasing the opportunity for optimism (Rogers and Stocken 2005). In particular, for the target anticipating a successful takeover, scrutiny from market participants declines further, because the target will soon be absorbed into the acquirer and not be liable for fulfilling forecasts. Target management is less constrained from biasing forecasts as the probability of ex-post verification decreases. By forecasting upwardly biased news, the target can take advantage in bargaining a better offer as much as possible, given that the hard bargaining will not impede the deal completion. Therefore, the benefit of overstating future performance may exceed the relatively low cost in some circumstances.

A potential question is why target management issues unattainable optimistic forecasts if such forecasts are likely to be perceived less credible and less informative ex-ante. The “cheap-talk” model suggests that disclosures that are not constrained to be truthful can still convey information (Crawford and Sobel 1982). Privately informed incumbent management can provide a noisy, but still informative signal to stockholders and potential bidders. The reliability of voluntary disclosure depends on the other players’ uses of the information (Newman and Sansing 1993).

Managers’ opportunistic behavior is not without cost. It is subject to litigation risk and reputation loss once the manipulation is detected. Indeed, the integrity of target management is a very important issue in takeover contests. Issuing unreasonable forecasts generally would be counter-productive. Therefore, if the target discloses upwardly biased good news under the threat of takeover, the motivation for issuing such

forecasts must be sufficiently strong to outweigh the general prudence. This argument leads to the following hypothesis:

H4: Management earnings forecasts issued during contested takeovers are more likely to be optimistically biased than management earnings forecasts issued in other periods.

3.5 Effects of Voluntary Disclosure on Takeover Consequences

Hypotheses 1 to 4 examine how managerial incentives impact voluntary disclosure characteristics and the market response to the disclosure. A number of studies examine the economic consequences of voluntary disclosure and suggest voluntary disclosure can improve stock liquidity, reduce cost of capital, and increase information intermediation (Healy et al. 1999; Botosan 1997). However, prior research has not studied the impact of voluntary disclosure in the takeover market. Accordingly, I examine the effects of voluntary disclosure on contested takeover consequences.

First, the target can extract higher takeover premium by adopting discretionary voluntary disclosure strategies to enhance the bargaining position during contested takeovers. Through research and initiative, the acquirer discovers profitable opportunities and launches a contested takeover to harvest the profit. Usually, the range of choice for the bidder's offer price will be bounded on the high side by the acquirer's most optimistic estimate of the target's intrinsic value. Depending on how likely the acquirer believes it is that a competing bidder or value-creating plan will surface, the acquirer will choose to make its initial offer. When the acquirer is patient and/or confident of there being no or

few other competing bidders, the acquirer usually bids a low offer price and tries to save the gains from takeover. But this will invite the favorable information target to announce optimistic earnings forecasts in order to leak value relevant information, and hence, enhance its bargaining power. As shown in Appendix A, when the target raises earnings guidance, analysts and industry watchers indicate that the revised guidance clarifies the target's worth and signals that the firm can survive the bid and move forward. These comments impose pressure on the acquirer to increase the offer price. Moreover, developing plans to realize earnings guidance and identifying value drivers and competitive threats enhances target shareholder value both immediately and in the long term. Therefore, voluntary disclosure should be generally associated with higher target shareholder premiums.

H5a: In contested takeovers, forecasting targets are associated with higher shareholder premiums.

Second, voluntary disclosure can benefit target shareholders by postponing the takeover process and casting more uncertainty on target valuation. In a contested takeover, valuation is the key. The acquirer should take actions that shorten the time to outcome, that preempt potential competitors, and that reduce investor uncertainty about the value of the bid. The target firm should do the opposite: delay and explore the white knight bidders, cast uncertainty on its own value, and generally pressure the target board not to cooperate. Time is very valuable to target shareholders, and is the enemy of the acquirer. Searching for a white knight buyer, developing a recapitalization plan, or mounting defenses all take time. Therefore, I directly test whether targets are able to

postpone the takeover process by disclosing forward-looking financial information and creating uncertainty:

H5b: In contested takeovers, forecasting targets are associated with longer M&A processes.

Further, whether discretionary disclosure creates or destroys value for target shareholders depends on whether target managerial incentives are aligned with those of shareholders. If target management designs voluntary disclosure to signal favorable private information and enhance the bargaining power of management, it can help target shareholders. Otherwise, if the goal is to merely avoid being taken-over and cement managerial entrenchment, such defense harms shareholders, i.e., target CEOs sacrifice premiums paid to shareholders in return for their personal gains (Hartzell et al. 2004; Fich et al. 2012). Therefore, I posit that the positive value implication of voluntary disclosure on target shareholders is concentrated in favorable information targets, not in moral hazard targets, in the following two hypotheses:

H5c: Earnings guidance is positively associated with premium (duration) for targets with favorable information.

H5d: Earnings guidance is not positively associated with premium (duration) for targets with moral hazard.

CHAPTER 4

RESEARCH DESIGN

This chapter discusses the research methodology and develops research models to test hypotheses. I also discuss measurement of variables used in the analysis.

The difference-in-differences method is often used to measure the change induced by a particular treatment or event. In contrast to a within-subjects estimate of the treatment effect that measures the difference in an outcome after and before treatment, or a between-subjects estimate of the treatment effect that measures the difference in an outcome between the treatment and control groups, the difference-in-differences estimator represents the difference between the pre-post, within-subjects differences of the treatment and control groups (Angrist and Pischke 2008). As discussed in hypothesis development, first, there is a time-series variation in voluntary disclosure strategies comparing contested takeover periods to the same group of targets in other periods. Second, there is a cross-sectional variation in voluntary disclosure strategies comparing contested takeover targets to friendly takeover targets. Therefore, the research questions provide me a superior environment for using the difference-in-differences method to compare changes between other periods and takeover periods for both the contested takeover sample and the friendly takeover sample. I define a takeover event starting from the date when the takeover is announced and ending when it is withdrawn or completed. The procedures for selecting the contested target sample and the friendly target sample

are described in Chapter 5. To facilitate the research design, Figure 2 illustrates a timeline of management forecasts around contested takeovers.

4.1 Likelihood of Good News Forecasts

Hypothesis 1 predicts target management is likely to voluntarily issue good news earnings forecasts during contested takeovers. I compare the likelihood of good news forecasts during firms-years for contested takeovers versus friendly takeovers by estimating the following equations (1) and (2):

$$NEWS = \beta_0 + \beta_1 TAKEOVER + \beta_2 CONTEST + \beta_3 TAKEOVER * CONTEST + \sum \gamma Controls + FirmFE + YearFE + \varepsilon$$

$$Prob(NEWS_IBES=1) = \beta_0 + \beta_1 TAKEOVER + \beta_2 CONTEST + \beta_3 TAKEOVER * CONTEST + \sum \gamma Controls + FirmFE + YearFE + \varepsilon$$

Where

NEWS is an indicator variable for nature of the news contained in management forecasts. Following Cao et al. (2011), in Company Issued Guideline database description, if CIC_CODE is E, the earnings forecast exceeds the expected earnings and is an upward guidance (NEWS= 1); if CIG Code is D, it falls short of the expected earnings and is a downward guidance (NEWS= -1); if CIG Code is M or anything other than E and D, it does not provide any surprise to the stock market and is a neutral guidance (NEWS=0);

NEWS_IBES is a dummy variable for nature of the news contained in forecasts (Anilowski et al. 2007). The classification is based on the sign of the management forecast surprise, defined as the difference between the management forecasted EPS and the most recent prevailing median analyst forecasted EPS obtained from the IBES

database. Management forecasted EPS equals point forecast or the midpoint of range forecast. I define positive surprise as good news ($NEWS_IBES = 1$), and non-positive surprise as bad news ($NEWS_IBES = 0$);

$TAKEOVER$ is a period indicator which equals one when a management earnings forecast falls within the takeover event for both contested targets and friendly targets and zero otherwise;

$CONTEST$ is a firm indicator which equals one when a firm is a contested target and zero if it is a friendly target.

The coefficient of interest is the one on the interaction term of contested firm and takeover period, which captures the change in contested target's disclosure pattern from other periods to takeover period, incremental to the change in friendly targets. $H1$ predicts a positive and significant coefficient on the interaction term, $TAKEOVER * CONTEST$. I construct two forecast news variables. The first one, $NEWS$, is defined by First Call database. As a robustness check against potential bias in First Call's classification, I also use an alternative definition to categorize nature of the news, $NEWS_IBES$, by comparing the forecast with the most recent consensus analyst forecast covered in the IBES database. Since the response variable $NEWS$ in equation (1) is treated as ordinal under the assumption that the levels of news status have a natural ordering, I use an ordered logistic regression to estimate equation (1) and a logistic regression to estimate equation (2). The choice of control variables closely follows that in the prior literature (Brockman et al. 2008; Lang and Lundholm 2000). Firm size ($SIZE$) affects the information availability about the firm. Market to book ratio (MB) captures a

company's investment opportunity set. It also controls for the level of target's stock misvaluation prior to takeover announcement. Return on equity (ROE) and cumulative abnormal return (ABRET) measured by 90 days prior to the takeover announcement day control for the contemporaneous target performance that shape nature of the news in voluntary disclosure. Leverage (LEV) is the sum of short and long-term debt scaled by assets. SIZE, MB, LEV, and ROE are all measured at the end of fiscal year prior to the takeover announcement year. In all forecast-level regressions in this paper, I include indicator variables for each year and each firm to allow for unobserved year and firm attributes to affect firms' disclosure choices. All continuous variables are winsorized at the 1st and 99th percentiles to alleviate the effects of outliers on the analysis.

4.2 Propensity to Issue Management Earnings Forecasts

Hypothesis 2 tests the relation between underlying target characteristics (favorable information or moral hazard problem) and the likelihood of management earnings forecasts. I use the following multivariate logistic regression (equation 3) to test the second hypothesis.

$$\text{Prob (GUIDANCE=1)} = \beta_0 + \beta_1 \text{CONTEST} + \beta_2 \text{FI} + \beta_3 \text{MH} + \beta_4 \text{FI} * \text{CONTEST} + \beta_5 \text{MH} * \text{CONTEST} \\ + \sum \gamma \text{Controls} + \text{IndustryFE} + \text{YearFE} + \varepsilon$$

The dependent variable, GUIDANCE, is an indicator variable that takes the value of one if the target issues at least one management forecast during the takeover and zero otherwise. H2a predicts a positive association between favorable information target and the likelihood of issuing a management forecast in contested takeovers, compared to the association in friendly takeovers ($\beta_4 > 0$). H2b predicts a positive association between

moral hazard targets and the likelihood of issuing a management forecast in contested takeovers ($\beta_5 > 0$), while H2c does not suggest a positive association (β_5 is either insignificant or negatively significant). I first regress the likelihood of making a forecast on favorable information and moral hazard firm characteristics separately. To test whether different characteristics co-exist and whether the relation between voluntary disclosure and two firm characteristics attenuate each other, I also perform a test including favorable information and moral hazard measures together.

I construct two variables to measure favorable information. Firms with higher research and development (R&D) intensity ratio or higher intangible assets ratio (Intangible) are regarded with favorable information. Payoffs to investment in R&D and intangibles can be highly uncertain and information asymmetries between insiders and outside investors are found to be higher in R&D and intangibles intensive firms (Aboody and Lev 2000; Frankel and Li 2004; Officer et al. 2009). First, firms with more R&D expenditures have greater information asymmetry because unlike tangible assets (e.g., Property, Plant and Equipment), there are no organized markets for intangible assets from which to derive asset pricing information. Further, R&D is firm-specific and informational value cannot be obtained from observing other firms (Aboody and Lev 2000). Second, Barth et al. (2001) indicate that for firms with substantial intangible assets there is greater uncertainty about firm value and these firms are more likely to be perceived as mispriced by outsiders (e.g., analysts). Similarly, Lev and Zarowin (1999) indicate that firms with substantial intangible investments have lower earnings informativeness. The evidence indicates firms with high R&D expense ratio or intangible

ratio are vulnerable to misvaluation. Therefore, they are being exploited by opportunistic bidders to take advantage of their temporary underpricing.

I use declining ROE (ΔROE) to measure the moral hazard problem, because deteriorating financial performance is the mainstream explanation for firms becoming contested targets. With the worsening performance, the acquirer sees a profitable opportunity to enhance managerial discipline by relieving the poorly performing managers of their assets. ΔROE is calculated in the following way: I take an average of ROEs through years prior to the fiscal year of takeover announcement, then make a difference between the takeover year's ROE and the prior years' average, finally multiply this difference by negative one to render it positive. Therefore, more positive ΔROE signifies more deteriorating financial performance and more severe moral hazard problem.

In addition to these continuous variables, I also construct dummy variables for firm characteristics. Firms with top tercile of R&D intensity or intangible ratio are considered to have favorable information ($FI=1$) and firms with top tercile of change in ROE are considered to have moral hazard problem ($MH=1$).

The control variables in the regression include the market value of equity ($SIZE$) because of the positive association between firm size and the extent of voluntary disclosure as a result of greater investor demand for disclosure and greater economies of scale in disclosure (Kasznik and Lev 1995). MB controls for firm growth opportunities. On one hand, firms with high growth opportunities tend to have proprietary costs and are less likely to make disclosure. On the other hand, because firms with high growth opportunities often requires external financing, high-growth firms may undertake greater

disclosure to obtain access to lower cost funds (Frankel et al. 1995). Baginski et al. (2002) document that firms with decreasing earnings tend to issue forecasts (DECHANGE). I also include the target's abnormal return three months prior to takeover announcement (ABRET) to control for the firm's good/bad information environment prior to the takeover. Because the propensity to engage in voluntary disclosure likely varies across industries, I control for industry effects by incorporating separate indicator variables corresponding to the target's membership. Firms in regulated industries have less demand for management earnings forecasts, since these firms are required to disclose a great deal of information (Kasznik and Lev 1995; Baginski et al. 2002).

4.3 Stock Market's Perceived Credibility of Management Forecast

Hypothesis 3 investigates investor assessment of management earnings forecasts credibility. I regress the stock market response on earnings forecast news and other control variables in equation (4):

$$\begin{aligned}
 CAR = & \beta_0 + \beta_1 GOODNEWS + \beta_2 BADNEWS + \beta_3 TAKEOVER + \beta_4 GOODNEWS * TAKEOVER \\
 & + \beta_5 BADNEWS * TAKEOVER + \beta_6 CONTEST + \beta_7 TAKEOVER * CONTEST \\
 & + \beta_8 GOODNEWS * TAKEOVER * CONTEST + \beta_9 BADNEWS * TAKEOVER * CONTEST \\
 & + \sum \gamma Controls + FirmFE + YearFE + \varepsilon
 \end{aligned}$$

CAR is cumulative abnormal returns calculated as the excess firm returns over the CRSP value weighted index over the three day window [-1, 1] around issuance of a management earnings forecast. GOODNEWS (BADNEWS) indicates nature of the news in management forecast, which equals one if NEWS equals one (negative one) for each earnings forecast, and zero otherwise. The coefficient on β_8 (β_9) measures the

incremental market response to good (bad) news earnings forecasts during contested takeovers, relative to the market reaction to good (bad) news forecasts in friendly takeovers. H3 predicts a positive and significant coefficient on β_8 .

Prior evidence shows that forecasts issued with longer horizon (HORIZON) are more likely to contain good news, thus to be capitalized with positive reaction (Baginski et al. 2004; Hutton et al. 2007; Skinner 1994). Horizon is defined as the difference between the forecast release date and the end of the fiscal period being forecasted. Making a loss (LOSS) is expected to negatively influence the market reaction (Burgstahler et al. 2006). All other control variables are defined as before.

4.4 Bias in Earnings Forecast

Hypothesis 4 examines whether management forecasts during contested takeovers are associated with overly optimistic bias. In order to assess forecast accuracy, I first follow Ajinkya et al.'s (2005) model specification and construct the following regression model (equation 5):

$$BIAS1/BIAS2 = \beta_0 + \beta_1 TAKEOVER + \beta_2 CONTEST + \beta_3 TAKEOVER * CONTEST + \sum \gamma Controls + FirmFE + YearFE + \varepsilon$$

Where

BIAS1 = (management forecast of earnings per share – actual earnings per share)

/ price at the beginning of forecast month;

BIAS2 = (management forecast of earnings per share – actual earnings per share)

/ absolute value of management forecast of earnings per share.

If target management manipulates the credibility of voluntary disclosure around contested takeovers, I expect that earnings forecasts contain more optimistically biased information during contested takeovers than in friendly takeovers or all other periods. H4 predicts a positive and significant coefficient on β_3 . The control variables are closely followed by Baik and Jiang (2006) and Ajinkya et al. (2005). I control for litigation industries (LITIGATION) as litigation environment is likely to reduce firms' incentive in issuing opportunistic forecasts.

Second, I follow Baik and Jiang (2006) to estimate the following logistic regression model of the decision to issue optimistically biased forecasts (equation 6):

$$\text{Prob}(MGT > ACT = 1) = \beta_0 + \beta_1 \text{TAKEOVER} + \beta_2 \text{CONTEST} + \beta_3 \text{TAKEOVER} * \text{CONTEST} \\ + \sum \gamma \text{Controls} + \text{FirmFE} + \text{YearFE} + \varepsilon$$

The dependent variable takes the value of one if the forecasted EPS exceeds the actual EPS, indicating an upward biased forecast, and zero otherwise. Similarly, H4 predicts a positive and significant coefficient on β_3 .

4.5 Effect of Voluntary Disclosure on Takeover Consequences

Hypothesis 5 tests the relation between voluntary disclosure and takeover consequences. In equations 7, 8, 9 below, I test the association between target earnings guidance and contested takeover consequences, i.e., target shareholders premiums and the length of M&A processes.

$$\begin{aligned}
\text{PREMIUM} = & \alpha_o + \alpha_1 \text{CONTEST} + \alpha_2 \text{GUIDANCE} + \alpha_3 \text{GUIDANCE} * \text{CONTEST} \\
& + \alpha_4 R \& D + \alpha_5 R \& D * \text{GUIDANCE} + \alpha_6 R \& D * \text{GUIDANCE} * \text{CONTEST} \\
& + \alpha_7 \Delta \text{ROE} + \alpha_8 \Delta \text{ROE} * \text{GUIDANCE} + \alpha_9 \Delta \text{ROE} * \text{GUIDANCE} * \text{CONTEST} \\
& + \sum \gamma \text{Controls} + \text{IndustryFE} + \text{YearFE} + \varepsilon \\
\text{REVISE} = & \beta_o + \beta_1 \text{CONTEST} + \beta_2 \text{GUIDANCE} + \beta_3 \text{GUIDANCE} * \text{CONTEST} \\
& + \beta_4 R \& D + \beta_5 R \& D * \text{GUIDANCE} + \beta_6 R \& D * \text{GUIDANCE} * \text{CONTEST} \\
& + \beta_7 \Delta \text{ROE} + \beta_8 \Delta \text{ROE} * \text{GUIDANCE} + \beta_9 \Delta \text{ROE} * \text{GUIDANCE} * \text{CONTEST} \\
& + \sum \gamma \text{Controls} + \text{IndustryFE} + \text{YearFE} + \varepsilon \\
\text{DURATION} = & \gamma_o + \gamma_1 \text{CONTEST} + \gamma_2 \text{GUIDANCE} + \gamma_3 \text{GUIDANCE} * \text{CONTEST} \\
& + \gamma_4 R \& D + \gamma_5 R \& D * \text{GUIDANCE} + \gamma_6 R \& D * \text{GUIDANCE} * \text{CONTEST} \\
& + \gamma_7 \Delta \text{ROE} + \gamma_8 \Delta \text{ROE} * \text{GUIDANCE} + \gamma_9 \Delta \text{ROE} * \text{GUIDANCE} * \text{CONTEST} \\
& + \sum \tau \text{Controls} + \text{IndustryFE} + \text{YearFE} + \varepsilon
\end{aligned}$$

In equation 7 and 8, I use two proxies to measure the change in target shareholder wealth. Following Schwert (2000), the first measure PREMIUM is the cumulative abnormal return of the target's stock for trading days [-63, +126] around the takeover announcement, i.e., in a period from three months prior to the announcement date to six months subsequent to the announcement date. I calculate abnormal returns by first estimating the market model parameters for each target, using daily returns in a period of 200 trading days over the trading day window [-263, -64], relative to the takeover announcement date. I use the market model parameters to estimate cumulate daily abnormal target returns and get the takeover premium (Chatterjee et al. 2012). H5a predicts a positive and significant coefficient on α_3 . The second measure, REVISE, is the percentage of bidder's revised price from the initial price to the final offer price. I calculate the revised price as the difference between final price and initial price, divided by the final price. If target voluntary disclosure is mainly motivated to negotiate a better offer, then the coefficient on β_3 should be positive and significant. In addition, in

equation 9 I define DURATION as the length of days between the first deal announcement date to the deal resolution date and test if voluntary disclosure lengthens the time to reach a resolution in a M&A transaction, i.e., a positive and significant coefficient on γ_3 confirms H5b.

After examining the relation between takeover consequences and guidance made by contested targets, I further decompose contested targets into favorable information targets and moral hazard targets and identify the source of such association. Following H2, favorable information target is motivated to mitigate temporary misevaluation through voluntary disclosure whereas target management in moral hazard firm has incentive to purely block the takeover and strengthen managerial entrenchment. H5c and H5d predict a positive association between takeover consequences with favorable information target's voluntary disclosure only.

In the equation, I not only control for target characteristics as before, but also control for several M&A characteristics, including the value of transaction (TRAN_VALUE), if the acquisition is a tender offer (TENDER), a cash offer (CASH), the acquirer and target are in the same industry, as defined by the two-digit SIC codes (SAME_IND). I also control for the target defensive tactics to countervail a takeover attempt (DEFENSE) and especially, if the target firm has adopted a poison pill which affects the transaction (PILL).

CHAPTER 5

EMPIRICAL RESULTS

This chapter first presents the data and sample selection procedure, and then illustrates the descriptive statistics and correlation between primary variables under investigation. The remaining chapter reports findings on all hypotheses.

5. 1 Sample Selection and Descriptive Statistics

I form the sample from the intersection of (a) the Security Data Corporation (SDC)'s Merger and Acquisition database on contested and friendly takeovers, (b) the First Call Company Issued Guideline database that contains management earnings forecasts, (c) the merged Compustat annual industrial file for target performance data, (d) the return files from CRSP, and (e) analyst consensus forecasts from the IBES database. Table 1 Panel A depicts the sample selection procedure. First, the sample of unsolicited bids and hostile bids is obtained from the Securities Data Corporation (SDC) database.²⁰ I restrict the sample to U.S. publicly listed target companies, as my analyses require financial statement data for the target. This requirement yields an initial sample of 922 takeover announcements, involving 834 unique targets during the period 1995 to 2010. If the status of a deal is not classified as either successful or withdrawn, I exclude it to facilitate my identification of a takeover event period. This procedure results in a final sample of 731 takeovers bids, for 671 targets. Second, the First Call database covers

²⁰ According to SDC, a transaction is defined as hostile if the target board officially rejects the offer but the acquirer persists with the takeover. A transaction is defined as unsolicited if the offer is a surprise to the target's board and it has not yet given a recommendation.

management earnings forecasts from January 1995 through December 2010. I treat multiple forecasts by the same firm on the same day as a single forecast, and include both annual and quarterly forecasts. I also exclude forecasts made in conjunction with earnings announcements. By merging contested takeovers with First Call management earnings forecasts, I obtain 4,392 management forecasts issued by 520 unique targets. After excluding management earnings forecasts with insufficient data in the annual CRSP file and Compustat file, the final sample includes 3,933 management earnings forecasts from 489 unique targets.²¹ To compare managerial incentives in contested takeovers to those in friendly takeovers, I follow the same procedure and construct a sample of 5,605 friendly targets with 32,870 management earnings forecasts.

Of the contested sample observations, I identify 163 forecasts that were issued in contested takeovers by 67 unique firms, as well as 3,730 forecasts by 422 firms that were issued outside of contested takeovers. As for nature of the news in all forecasts, the majority (53 percent) is collaborating news, 25 percent provides bad news, while only 22 percent contains good news. Based on the outcome of the deal described in SDC, 79 transactions were successful, and 410 transactions were withdrawn.

Table 1 Panel B displays the frequency distribution of sample firms by target's 2-digit Standard Industry Classification (SIC) code. In general, the sample firms are from a broad spectrum of industries. Specifically, the sample appears to be more concentrated in

²¹ The contested firm sample size is comparable to those in other corporate control contests studies. For example, Heron and Lie (2006) study 526 unsolicited takeover targets from 1985 to 1998, with 526 firm-year observations in all regressions. Schewert (2000) identifies 593 firm-year observations for hostile deals, based on SDC database. Wangerin (2010) analyzes the due diligence of 308 M&A deals from 2001 to 2006. Bens et al. (2012) study financial reporting of M&A firms from 1996 to 2007, with 2293 firm-year observations in the whole sample and 462 firm-year observations in the management earnings forecasts regression.

Automobile, Depository Institutions, Chemicals, Electrical, Retail sales, and Services industries. Table 1 Panel C reports the sample distribution by M&A announcement year and by different modes (friendly and contested). As it is shown, the number of acquisitions per year increases steadily until it peaks in 1998 and then decreases following the market crash in 2000, a trend which is consistent with evidence in prior literature (Masulis et al. 2007; Francis and Martin 2010).

Prior to performing the main tests with appropriate controls, I examine simple descriptive statistics. In Table 2 Panel A, I compare the mean of management earnings forecast variables and control variables between takeover firm-years and non-takeover firm-years, for both contested targets and friendly targets. As shown in the table, forecasts issued during contested takeovers contain more good news and are more upwardly biased than those issued in non-takeover periods (p-value of difference < 0.01 for news content and <0.05 for upward bias). In comparison, even though forecasts issued during friendly takeovers also contain more good news, they are not upwardly biased. I also find contested targets experience lower ROE and MB in takeover firm-years.

Table 2 Panel B summarizes the comparison of target and deal characteristics between targets making at least one forecast during takeovers and targets keeping silent, for both contested targets and friendly targets. Compared to 14 percent of targets voluntarily making earnings guidance in contested takeovers, only 6 percent of targets do so during friendly takeovers, which is consistent with managerial opposition in contested takeovers and managerial collaboration in friendly takeovers. Regarding target characteristics, forecasting targets in contested takeovers are significantly larger, with

more intangible assets, higher R&D expense ratios, higher abnormal returns in the past three months, and lower M/B ratios, whereas forecasting targets in friendly takeovers do not have high R&D ratios and intangible ratios. In M&A characteristics comparison, forecasting targets obtain higher premiums (p-value of difference <0.1) and higher bidder's revised price (p-value of difference <0.01) in contested takeovers, while the premium and revised price for guiding firms in friendly takeovers are not significantly different from silent firms. Forecasting firms generally takes longer days to resolve the transaction (p-value of difference < 0.01). Targets are generally more likely to issue forecasts in larger M&A transactions and when the bidder structures the bid as a tender offer.

Table 2 Panel C and Panel D present correlation matrices. Panel C shows a pair-wise correlation matrix of variables including forecasts in contested takeovers, forecast news, bias, market response, and target characteristics. This table shows that forecasts in contested takeovers (*TAKEOVER*CONTEST*) are positively associated with good news, market response, and upward bias (significant at 10% level or better for both Pearson and Spearman correlation coefficients). These univariate results support Hypotheses 1, 3 and 4. Panel D displays a pair-wise correlation matrix of variables including targets making guidance, target characteristics, and M&A characteristics. As expected, R&D intensity and intangible ratio, but not change in ROE, are positively associated with guidance. Targets issuing earnings guidance in contested takeovers (*GUIDANCE*CONTEST*) are positively related to premium, price revision, and takeover duration. Panel C and Panel D of Table 2 also show statistically significant correlations between most of the control

variables and predicted variables, which are consistent with prior studies and my expectations.

5.2 Nature of News in Forecasts

5.2.1 Univariate Results

Table 3 Panel A presents univariate tests to examine whether managers alter voluntary disclosure strategies around contested takeovers. I categorize management forecasts by news types (good news, confirmative news, and bad news) and whether a management forecast falls within or outside the two periods (friendly takeover period and contested takeover period). There is a significant association between nature of the news and where a management forecast falls (χ^2 -statistics equal to 36.13 and 9.28 for contested and friendly event, respectively). In particular, the percentage of good news forecasts is much greater when issued during contested takeovers (51%) than those issued outside contested takeovers (21%). In contrast, there is no significant difference for the percentage of good news issued in and out of friendly takeovers (22% of good news in friendly takeovers and 21% outside the event). Therefore, the univariate results indicate while target managers maintain the same forecasting pattern in friendly takeovers, they tend to release more good news during contested takeovers.

5.2.2 Multivariate Results

Table 3 Panel B presents results for H1 and shows how target management alters voluntary disclosure strategies around contested takeovers after controlling for other firm characteristics that potentially impact voluntary disclosure. In column (1) I estimate

equation (1) with forecast news variable *NEWS*, using ordered logistic regression. As shown in the regression contested targets disproportionately increase their good news forecasts in contested takeovers relative to other periods and the friendly targets. The coefficient on *TAKEOVER*CONTEST* is positive and statistically significant at 5% level ($\beta_2=0.603$, Chi-square-stat=4.77). It suggests that for contested targets, moving from non-takeover to takeover events yields an increase in the odds ratio of good news forecasts by 1.83, given all other variables in the model are held constant.²² In column (2) I estimate equation (2) with dependent variable *NEWS_IBES*, with logistic regression. Similarly, the coefficient on the interaction term is positive and statistically significant at 1% level ($\beta_2=0.873$, Chi-square-stat=9.09), indicating that for contested targets, the odds ratio of good news is 2.39 higher for forecasts in takeover than in other periods, holding other variables constant. Therefore, relative to target management in friendly takeovers, target management in contested takeovers has incremental incentives to issue good news earnings forecasts.

Regarding control variables, the coefficient on market-to-book ratio is negative and weakly statistically significant, implying proprietary cost prevents firms from issuing favorable news. Larger and more profitable firms tend to have a more optimistic tone in voluntary disclosure, as the coefficients on firm size and return on equity ratio are positive and significant in both samples at the 0.01 level. Finally, stocks with positive abnormal returns in the past three months predicts the optimistic tone in forward-looking voluntary disclosure, as abnormal return has positive and significant coefficients in both regressions.

²² 1.83=EXP (0.6035); 2.39= EXP (0.8728).

To summarize, the univariate and regression results are consistent with H1, which shows that target management tends to alter voluntary disclosure strategies around contested takeovers by issuing more earnings forecasts containing good news during contested takeovers.

5.3 Managerial Incentive for Making Forecasts

Table 4 reports the logistic regression results estimating the relation between target characteristics and the propensity to make voluntary disclosure during contested takeovers. Panel A presents results with firm characteristics as continuous variables. Favorable information is measured by R&D intensity and intangible ratio, and moral hazard problem is measured by deteriorating performance, i.e., declining ROE. Column (1) and (2) show that a target with higher R&D intensity or intangible ratio has a stronger tendency to issue at least one earnings forecast during contested takeovers relative to the same target in friendly takeovers (coefficient on $R\&D*CONTEST$ is 3.072, Chi-square-stat=4.09, and coefficient on $INTANGIBLE*CONTEST$ is 1.413 and Chi-square-stat=22.27). It suggests that for contested targets, one standard deviation increase in R&D ratio (Intangible ratio) yields an increase in the odds ratio of guidance by 1.676 (1.101), given all of the other variables in the model are held constant.²³ However, we cannot find that contested targets with declining ROE make voluntary disclosure, as shown in column (3). The coefficient on $\Delta ROE*CONTEST$ is 0.015 but is statistically insignificant. It is possible that the target shares both favorable information and moral hazard characteristics to some extent, therefore, the coefficients on $R\&D*CONTEST$

²³ The standard deviation for R&D intensity (Intangible ratio) is 0.124 (0.172).
 $1.676 = \text{EXP}(0.124 * 4.165)$; $1.101 = \text{EXP}(0.172 * 0.561)$.

and $\Delta ROE * CONTEST$ (or $INTANGIBLE * CONTEST$ and $\Delta ROE * CONTEST$) could attenuate each other. To examine whether the information-signaling incentive and job-keeping incentive coexist or attenuate each other, I regress voluntary disclosure propensity on both favorable information and moral hazard measures. Results in column (4) and (5) are consistent with before, i.e., R&D or intangible intensive firms tend to guide in contested takeovers while firms with declining ROE do not. This evidence supports H2a and H2c but rejects H2b. Regarding control variables, I find larger firms are more likely to guide company earnings, while firms in regulated industries, firms with more proprietary information, and firm with declining earnings are less likely to guide, which is consistent with prior literature.

Table 4 Panel B shows similar results with dummy variables for favorable information and moral hazard. Firms with top tercile R&D intensity or intangible ratio are coded as favorable information targets. Firms with top tercile ΔROE are coded as moral hazard targets. The regressions show a positive and statistically significant coefficient on $FI * CONTEST$ interaction and an insignificant coefficient on $MH * CONTEST$ interaction. Favorable information targets increase the odds ratio of making guidance by 1.59, holding other variables constant. Collectively, these findings are consistent with H2a and H2b that favorable information targets are likely to issue earnings forecasts to alleviate information asymmetry in contested takeovers, while moral hazard firms are not.

5.4 Market Reaction to Voluntary Disclosure during Takeover Events

Table 5 reports the multivariate regression results to test whether the market

capitalizes good news earnings forecasts in contested takeovers as much as those in other periods. From column (1) to (3), I include good news indicator, bad news indicator, takeover period indicator, contested firm indicator, and the interaction terms one by one. Column (1) and (2) show that good news is capitalized with positive reaction and bad news is generally penalized, while the magnitude of negative reaction is as much as twice of the positive reaction. In column (3), the coefficients of primary interest are β_8 on the *GOODNEWS*TAKEOVER*CONTEST* interaction and β_9 on the *BADNEWS*TAKEOVER*CONTEST* interaction. These coefficients capture the change in the pricing of good and bad news forecasts in contested takeovers relative to other periods and friendly targets. β_8 is significantly positive ($\beta_8=0.044$, T-stat=2.73). Therefore, the market treats good news earnings forecasts issued during contested takeovers as more informative than those issued by friendly targets and in other periods. I also find the coefficient on the *BADNEWS*TAKEOVER*CONTEST* interaction not significantly different from zero ($\beta_9=-0.015$, T-stat=-0.38), suggesting that investors do not significantly change their perception of information content of bad news forecasts in contested takeovers relative to other periods. To summarize, the market responds positively to good news earnings forecasts issued during contested takeovers.

5.5 Bias in Voluntary Disclosure

Having documented that the incentives in contested takeovers lead to more good news forecasts and positive market short-term reaction, I next examine whether managers exercise their discretions in managing earnings forecast bias. Table 6 column (1) and (2) present OLS regression results with firm and year fixed effects, using forecast bias,

BIAS1 and BIAS2, as dependent variables. Larger values of bias indicate more optimistically biased forecasts. The sample size is reduced to 21,237 observations due to the requirement of having realized earnings for earnings forecasts. In particular, the coefficient of interest is the one on the *TAKEOVER*CONTEST* interaction, which captures the change in upward bias in contested takeovers incremental to that in friendly takeovers. I find that this coefficient is positive and significant at the 0.01 level for both BIAS1 and BIAS2. This finding is consistent with managers in contested targets actively attempting to manage market expectation by providing optimistic forecasts during takeovers. Consistent with the expected sign for the control variables, I find larger firms and firms experiencing loss are more likely to contain optimistic bias in forecasts. Forecasts with longer horizons are also more upwardly biased. Consistent with Biak and Jiang (2006), I find negative associations between MB and bias, and between litigation and bias.

Table 6 column (3) presents logistic regression results with the dependent variable as the probability of upwardly biasing the forecast, i.e., forecasted earnings higher than realized earnings. The coefficient on *TAKEOVER*CONTEST* is again positive and significant ($\beta_3 = 0.704$, Chi-square-stat=5.46). It indicates that for contested targets, moving from non-takeover to takeover events yields an increase in the odds ratio of upward bias by 2.02, given all of the other variables in the model are held constant.²⁴ In summary, the results support H4 that earnings forecasts issued during contested takeovers are more likely to be optimistically biased than those in other periods.

²⁴ $2.02 = \text{EXP}(0.704)$

5.6 Impact of Voluntary Disclosure on Contested Takeovers

Table 7 presents the association between voluntary disclosure and M&A consequences: Panel A uses target premium around the takeover; Panel B uses the target revised offer price; and Panel C presents results for the duration of M&As. To the extent that voluntary disclosure alleviates information asymmetry between target management and outsiders, forecasting firms in contested takeovers should obtain higher takeover premiums, negotiate better offers, and postpone the time to resolve the transaction, incremental to forecasting firms in friendly takeovers. Therefore, H5a and H5b predict the coefficient on *GUIDANCE*CONTEST* interaction term in column (1) to be positive and significant in all three panels. Following the evidence in Table 4 that targets with favorable information tend to guide company earnings and signal private information but moral hazard targets do not, I further decompose forecasting targets to favorable information firms with high R&D intensity and moral hazard firms with declining ROE. In column (2), (3), (4) of Panel A, B, and C, I include favorable information firm's guidance, moral hazard firm's guidance, and both of them together. H5c and H5d predict that the coefficient on *R&D*GUIDANCE*CONTEST* interaction term is positive and significant and the coefficient on *ΔROE*GUIDANCE*CONTEST* interaction term is insignificant, in all three panels.

The effect of a target's voluntary disclosure on takeover premium is presented in Panel A. The first column implies that forecasting firms can obtain 0.206 higher long-term premiums in contested takeovers incremental to those in friendly takeovers, controlling for target and deal characteristics [α_3 in column (1) =0.206, T-stat=2.42].

This result is both economically and statistically significant. When forecasting firms are further interacted with favorable information or moral hazard in column (2), (3), and (4), the coefficient on $R\&D*GUIDANCE*CONTEST$ is positive and statistically significant at the 0.05 level, but the coefficient on $\Delta ROE*GUIDANCE*CONTEST$ remains insignificant. These results support H5c that the positive relation between guidance and takeover premium only exists in favorable information targets but not moral hazard targets. For the control variables, I find targets with higher growth prospect obtain higher long-term premiums. High premium targets usually suffer from declining earnings and have loss in the current fiscal year. An increasing past three months' abnormal return is positively related to premium as well. Cash deals and tender deals give targets more negotiation advantages, which leads to higher premiums.

The effects of a target's voluntary disclosure on revised offer price are reported in Panel B in Table 7. Consistent with the expectation in H5a, forecasting firms negotiate higher offer prices in contested takeovers [β_3 in column (1) = 3.161, T-stat=1.81], suggesting that on average voluntary disclosure in contested takeover negotiates 3% higher offer price. Results on column (4) show that R&D intensive firms' voluntary disclosure helps negotiate offer prices in contested takeovers ($\beta_6=73.45$, T-stat=2.76), but moral hazard firms' guidance does not have the same effect ($\beta_9=7.155$, T-stat=1.44). It suggests that one standard deviation increase in R&D intensity help negotiate 12% higher bidder's offer price.

The results in Panel C examine the length of takeover to gauge the effect of voluntary disclosure in delaying the transaction. The first column shows that forecasting

firms on average take longer to resolve contested takeovers ($\gamma_3=0.510$, T-stat=4.82). It implies that voluntary disclosure in contested takeovers on average extends M&As by 66 days.²⁵ I expect that if a contested target holds favorable information in intensive R&D expenditures, voluntary disclosure will cast more uncertainty in firm valuation and thus postpone the transaction. Accordingly, the coefficient on $R\&D*GUIDANCE*CONTEST$ is positive and statistically significant at the 0.05 level ($\gamma_6=2.351$, T-stat=2.22).

Finally, the untabulated analysis shows that voluntary disclosure is not significantly associated with a higher probability of takeover being withdrawn. This is consistent with the argument that voluntary disclosure is adopted by target firms to signal superior information and such defensive strategy may not be as effective in blocking the takeover as other antitakeover mechanisms such as poison pill and staggered board.

Collectively, voluntary disclosure in contested takeovers helps favorable information targets negotiate better offer prices and postpone M&A processes, both of which potentially benefit target shareholders. Evidence that the positive relation between target guidance and M&A consequences exists only in favorable information firms but not in moral hazard firms further reinforces the main argument in this paper that voluntary disclosure is selectively used by a group of contested targets to signal their superior forward-looking accounting information.

²⁵ The mean of DURATION is 99.5. $\text{LOG}(99.5)=4.60$. $\text{EXP}(0.51+4.60)-99.5=66$ days.

CHAPTER 6

ROBUSTNESS CHECK

6.1 Robustness Test of Forecast News

I use the difference-in-differences method in empirical tests, given the interest in examining how managerial incentives in contested takeovers strategically manage voluntary disclosure in corporate control contests and impact the takeover consequences. A potential disadvantage of using the difference-in-differences method is the inability to explore the change in voluntary disclosure patterns around the corporate control event. To the extent that contested takeover is normally unexpected, we expect to observe a drastic change in voluntary disclosure strategies between a pre-takeover period and a contested takeover period. Therefore, as a robust check, I focus on voluntary disclosure in contested takeovers only and use two dummy variables to re-examine H1.

In Table 8, I compare the likelihood of issuing good news forecasts by contested targets in three periods: the takeover period, the pre-takeover period, and all other periods. Pre-takeover period is defined as a 90-day window prior to the beginning of a contested takeover (see Figure 1). Investigating voluntary disclosure strategies around the two adjacent periods shows how managers strategically alter the information flow around contested takeovers. I focus on the coefficients on TAKEOVER and PRE-TAKEOVER. In Panel A, the coefficient on TAKEOVER (PRE-TAKEOVER) is positively (negatively) and statistically significant at the 0.01 (0.05) level, suggesting that the logit odds ratio for

takeover (pre-takeover) period relative to other period is 0.671 higher (0.476 lower) for preferring good news to bad news, given all other predictor variables in the model held constant. In other words, the result is consistent with H1 that forecasts in takeover (pre-takeover) period are more (less) likely to contain good news than other periods. The logistic regression results in Panel B are similar to those in Panel A, except that I use another dependent variable NEWS_IBES. The coefficient on TAKEOVER is positive and statistically significant at the 0.01 level, while the coefficient on PRE-TAKEOVER is negative and statistically insignificant. In summary, the robust check comparing voluntary disclosure in adjacent periods confirms the findings in Table 3. The evidence implies that nature of the news in forecasts issued immediately preceding contested takeovers is more negative or not significantly different from normal, but forecasts issued during contested takeovers are strikingly different and with more good news.

6.2 Comparison between the Takeover Period and the Pre-takeover Period

The sample time period includes both a boom and a decline, so there is a necessity to examine the sensitivity of the results to market conditions and alternative time periods. To reduce market conditions' moderation on the characteristics of voluntary disclosure around contested takeovers, I directly compare earnings forecasts in contested takeovers to those in pre-takeover periods, because market conditions and firm characteristics remain more stable during the relatively short duration. The untabulated analysis continues to show more good news and more upwardly biased good news in the takeover relative to the pre-takeover period. The results reinforce the argument that managerial

incentives to signal superior information lead to the changes in voluntary disclosure strategies around the takeover.

6.3 Additional Test on Forecast Horizon and Precision

I supplement the management earnings forecasts tests with an investigation of whether managers also respond to contested takeover pressure by providing more precise forecasts or forecasts with longer horizons. Increasing the horizon of a forecast is consistent with management providing more timely information to the market. Prior research finds longer horizon forecasts are more effective at reducing information asymmetry among investors (Rogers 2008). The upwardly bias in earnings guidance would be quickly revealed at the time of earnings realization, so target management would issue guidance with a longer horizon. In untabulated analysis regressing horizon on the interaction term $TAKEOVER * CONTEST$, I find a positive and weakly significant coefficient ($\beta_3 = 0.201$, T-stat=1.78), implying some weak evidence that target management tends to issue forecasts with longer horizons.

Further, more precise forecasts can impress investors and serve as an attempt to buy time with the board of directors. Forecast precision is defined as follows: precision equals 4 for point estimates, 3 for range estimates, 2 for open-ended estimates, and 1 for qualitative estimates. Thus point estimates of earnings are more informative than range estimates. I use an ordered logistic model to test differences in precision. In untabulated analysis, I observe no significant incremental change in management forecast precision in contested targets relative to friendly targets from other periods to takeover periods. It appears that as managers use earnings guidance to manage market expectation during the

takeover, they selectively choose to alter some forecast characteristics to realize the objective of voluntary disclosure.

6.4 Alternative Measures of Moral Hazard

I use the declining ROE to measure a moral hazard problem in the main regression, because worsening performance is the main reason driving a company becoming a contested takeover target. However, it is possible that the change of ROE will be influenced by the R&D intensity. First, I check that the correlation between R&D and declining ROE is not significantly positive. Second, I construct two additional measures of a moral hazard problem to alleviate the potential problem. The second measure of moral hazard is a dummy variable equals one if a target has decreasing ROEs in three consecutive years. Each year's change of ROE is the difference between the current year's ROE and previous years' average. Having declining ROEs three years in a row can manifest the moral hazard (incapable management) problem. The third measure of moral hazard is the level of free cash flow maintained in the target. Jensen (1986) argues that firms that refuse to pay free cash flows to shareholders are likely to be takeover targets. Firms may hold excess cash if they do not have adequate positive NPV projects and managers do not want to return cash to shareholders. Cash also allows managers to make investments without being subjected to capital market monitoring. If managers desire to build empire or consume perquisites, cash enables them to do so. Hence, free cash flow symbolizes that managers are not working in the best interests of shareholders. Untabulated analysis shows that the results still hold for H2 with the additional measures of the moral hazard problem.

CHAPTER 7

CONCLUSION

The prior literature has documented the effectiveness of a variety of antitakeover mechanisms and the associated potentially negative impacts on target firm value. Instead of these widely used antitakeover mechanisms, anecdotal evidence suggests that target management chooses to issue earnings forecasts during contested takeovers. However, little empirical research has examined the characteristics and the consequences of voluntary disclosure of forward-looking accounting information in contested takeovers. In this dissertation, I investigate the incentives of target management to issue earnings forecasts during the takeover, the characteristics of observed forecasts (including the nature of the news, and the bias), and the market response. To gauge the effect of voluntary disclosure on takeover consequences, I also examine the association between voluntary disclosure and target premium as well as the length of time to resolve the acquisition.

Addressing the variation in voluntary disclosure between the takeover and the non-takeover period and between friendly targets and contested targets, I use the difference-in-differences research design and construct a contested firm sample of 489 targets with 3,933 forecasts, and a friendly firm sample of 5,605 targets with 32,970 forecasts. I find that relative to friendly takeovers, target management in contested takeovers manipulates information flow around the takeover by releasing more good news during contested takeovers.

Next I examine the underlying managerial incentives in making good news earnings forecasts in contested takeovers. Is voluntary disclosure mainly driven by job-keeping incentive or information signaling incentive, or both? To answer this question, I compare the propensity to issue an earnings forecast by favorable information targets and moral hazard targets. Empirical findings support the hypothesis that only contested targets with favorable information are likely to adopt voluntary disclosure as a strategy to convey private financial information, so that the market re-evaluates the target. Since voluntary disclosure is not effective in thwarting the takeover, target management with a moral hazard problem chooses to use other more potent antitakeover mechanisms to deter the takeover and cement entrenchment.

Having documented the managerial incentives to signal favorable information through voluntary disclosure, I also confirm the information content of good news forecasts with positive market reactions three days around a forecast announcement. With the incentives to favorably influence the market perception and with a lower probability of ex-post verification, target management tends to exercise discretion in issuing optimistically biased forecasts during contested takeovers.

Depending on different managerial incentives in contested takeovers, some targets choose to issue earnings forecasts while others choose not. I further study the association between voluntary disclosure and takeover consequences. Interestingly, forecasting firms in contested takeovers on average obtain higher takeover premiums, negotiate better offer prices, and experience longer M&A processes. Deeper investigations suggest that the positive association between takeover consequences and forecasts in contested takeovers

only exists in favorable information firms but not moral hazard firms. Therefore, unlike prior literature that documents value-destroying managerial entrenchment resistance, voluntary disclosure by targets with favorable information induces information leakage and is one of the resistance tactics that potentially benefit target shareholders.

As a whole, this study demonstrates that the target adopts voluntary disclosure and alters the strategies under the threat of contested takeovers. Further results of the relation between voluntary disclosure and takeover consequences confirm that targets engage in voluntary disclosure of financial information to reveal firm true worth and postpone the acquisition process. This dissertation contributes to the literature by examining the effect of managerial incentives in contested takeovers on voluntary disclosure strategies and the corresponding effect on the takeover process. The results should be of interest to market participants (e.g., investors, analysts, etc.) who need to interpret the information content of voluntary disclosure by contested targets and to identify the true target worth. The study should also be of interest to stakeholders (e.g., board of director members, regulators, etc.) who seek to mitigate agency conflicts by aligning incentives. The evidence suggests that target management with favorable information tends to align interests with those of target shareholders in negotiating a higher offer price and postponing the M&A process. Finally, this study should be of interest to academics because the results highlight (1) the importance of differentiating managerial incentives in contested takeovers from those in friendly takeovers when examining managerial behaviors in corporate control contests, and (2) the differences in voluntary disclosure strategies between capital market circumstances and corporate takeover market situations.

Appendix A

Examples of Corporate Voluntary Disclosure in Contested Takeovers

Target management defends the initial bid with good news earnings forecasts:

Case 1: Wall Street Journal Sep 20, 1989 reported Avon Products Trims Forecast for Year 1989's Earnings. The CEO said in a statement that weak sales and the strong U.S. dollar have prompted the company to reduce its forecast of 1989 per-share earnings to a range of \$1.95 to \$2.15, down from an earlier estimate of \$2.30 to \$2.40 a share. Earlier this year, Avon rejected takeover bids from Amway Corp. and Minneapolis investor Irwin Jacobs. At that time, Avon management not only projected increased earnings but stated that Avon shareholders would benefit from cost efficiencies then being implemented. Jeffrey Ashen, an analyst with Dean Witter Reynolds Inc., said that Avon is experiencing what he described as serious roadblocks. He also questioned whether the company's earnings projections were unduly affected by the bids by Amway and Mr. Jacob.

Case 2: Take-Two Interactive Software, Inc. pointed out in its recommendation of the board of directors to reject Electronic Arts Inc's tender offer, stating that Electronic Arts Inc inadequately and substantially undervalues the company. The projected market growth will increase from \$40.9 in 2008 to \$47.7 in 2009, \$52.3 in 2010 and \$54.8 in 2011. The company also projects the significant earnings upside potential--EPS will increase from \$-1.13 in 2007 to \$1.51 in 2008. The company resisted the hostile bid on September 14th, 2008.

Case 3: Australasian Business Intelligence on May 6, 2003 reported Forecast Upgrade Helps Bristle Fight Takeover. Australian brick and tile manufacturer, Bristle, has increased its earnings estimates for the current financial year 2004. The company's announcement said that as a result, dividends were expected to be considerably higher than was previously estimated. Analysts say the bullish Bristle forecast could help to protect it from the \$493m hostile takeover offer made by rival brick group, Brickworks. Bristle directors have already rejected the offer as hostile, inadequate and opportunistic.

Target management raises profit guidance to negotiate a higher target premium:

Case 4: Wall Street Journal Dec 19, 2006 reported LSE Forecasts Earnings Surges, Battle Nasdaq Bid. The London Stock Exchange issued a bullish profit forecast and pledged a dividend hike as it urged shareholders to reject a £2.7 billion hostile bid from U.S. rival Nasdaq. The LSE said its strong performance justified its rejection of the inadequate price offered from Nasdaq. Eventually, the hostile bid was withdrawn.

Case 5: Financial Times Sep. 14, 2005 reported BPB Stiffens Resolve against Hostile Saint-Gobain Bid. BPB, the leading maker of plasterboard and building plasters, raised full-year pre-tax profits forecast by £30 million to £350 million and laid out a stout defense against a hostile bid from larger French rival Saint-Gobain. BPB also said the earnings per share would not be less than £50 on a diluted basis this year. These revised forecasts put a new light on what the company's worth. Eventually, the bid completed with a premium increased from \$6.7 billion to \$7.75 billion.

Case 6: Telegraph U.K. Jan 08, 2010 reports Cadbury Set to Bolster Kraft Defense with Strong Results. Cadbury is expected to beat its 2009 earnings forecasts and predict a strong 2010 when it issued its final defense against Kraft's hostile takeover offer.

Cadbury expects its 2009 revenue will rise 5%, while revenue for the second half will rise 6%. In addition, Cadbury says dividend growth will be at least 10% a year, compared with 6% in 2008. Cadbury said food giant Kraft \$16.5 billion bid was too low and the offer was unappealing. Eventually, Kraft completed the bid on Jan 19, 2010 with offered price increased from £9.8 billion to £11.5 billion. Kraft, which issued a statement stating that the deal will create a "global confectionery leader", had to borrow £7 billion (US\$11.5bn) in order to finance the takeover.

Target management forecasts earnings in contested takeovers to alleviate information asymmetry:

Case 7: The New York Times reported PeopleSoft Hoists Earnings Projections on October 6, 2003. Enterprise software maker PeopleSoft has once again raised its estimates for third-quarter earnings, and earnings per share from 10 cents to 11 cents, after Oracle announced its \$7.25 billion unsolicited bid to the company. Industry watchers do not expect the third-quarter results to beat the previously reported estimate, but the continued performance is a sign that the company can survive the bid and is moving forward. Analysts commented this quarter's performance looks to be based more on nature business, as opposed to last quarter when it was more about helping the company beat Oracle. Eventually, the company was acquired by Oracle with an increased price from \$7.25 billion to \$10.3 billion.

Case 8: Market Watch reported Midwest Forecasts Sharp Gain in 2007 Profit, Rejects AirTran Offer on Jan 25, 2007. Midwest Airline stated the airline industry has been under pressure due to rising fuel prices. This has lowered earnings and, consequently, stock prices. The airline industry is currently in a down-cycle. All of this has put pressure on stock prices for Midwest. It is apparent to see AirTran is indeed trying to buy low. Midwest estimates a fourth-quarter profit in 2007 as \$3.6 million, or 16 cents a share, reversing its year-ago loss for the period of \$ 13.8 million. These are ahead of the average estimate of analyst survey of earnings of 11 cents a share. Midwest also forecasts 2007 earnings of more than \$1.70 a share and sales of more than \$825 million. Its 2006 revenue grew 27% to \$664.5 million from \$523 million. Eventually, the company resisted the bid.

Appendix B

Variable Definitions

Variables	Description
<u>Management earnings forecasts characteristics:</u>	
NEWS	An indicator variable coded as 1 when a management earnings forecast provides positive surprise, 0 for collaborating news, and -1 for negative surprise, according to CIDCODED in CIG database.
NEWS_IBES	A dummy variable coded as 1 when a management earnings forecast exceeds the most recent analyst consensus forecast and 0 otherwise.
Takeover	A dummy variable coded as 1 when management earnings forecasts fall in the takeover event period (between deal announcement date and deal withdrawn/completion date) and 0 otherwise, for both contested and friendly targets.
Pre-takeover	A dummy variable coded as 1 when management earnings forecasts fall within the pre-takeover event period (between 3 months before contested takeover announcement date and deal announcement date) and 0 otherwise.
BIAS1	(management forecast of earnings per share – actual earnings per share) / price at the beginning of forecast month.
BIAS2	(management forecast of earnings per share – actual earnings per share) / Absolute value of management forecast of earnings per share.
Prob(MGT>ACT)	A dummy variable which equals 1 if the management forecast of earnings per share is higher than the actual earnings per share and zero otherwise.
CAR	The abnormal returns calculated as the excess firm returns over the CRSP value weighted index over the three day window [-1, 1] around issuance of management forecasts.
HORIZON	Log of the number of calendar days between the management forecast and the corresponding earnings announcement.
PRECISION	Equals 1 if it's a qualitative EPS forecast, 2 if it's a maximum or minimum EPS forecast, 3 if it's a range EPS forecast, and 4 if it's a point EPS forecast conditional on the firm issuing at least one forecast.

Target firm characteristics:

GUIDANCE	A dummy variable equals 1 if a target firm makes at least one earnings forecast during the takeover period and 0 otherwise, for both contested and friendly targets.
CONTEST	A dummy equals one if a firm is a contested target and zero if a firm is a friendly target.
R&D	Ratio of R&D expenses of the target firm to its total assets measured at fiscal year-end prior to the deal announcement. If the value of R&D expenses is missing, it is set to be zero.
INTANGIBLE	Ratio of intangible assets of the target firm to its total assets measured at fiscal year-end prior to the deal announcement. If the value of intangibles is missing, it is set to be zero.
FI	A dummy variable equals 1 if a firm-year falls in the top tercile of R&D intensity or intangible ratio.
Δ ROE	The difference between the takeover announcement year's ROE and the prior years' average, multiplied by negative one.
MH	A dummy variable equals 1 if a firm-year falls in the top tercile of Δ ROE .
ROE	Return on equity ratio as of the one year proceeding the fiscal year of takeover announcement.
LEV	The long-term debt to book value of common equity ratio as of the one year preceding the fiscal year of takeover announcement.
MB	The market to book ratio as of the one year preceding the fiscal year of takeover announcement.
SIZE	Log of market value of equity as of the one year preceding the fiscal year of takeover announcement.
ABRET	Cumulative abnormal return computed as the excess firm returns over the CRSP value weighted index during the three months ending two days before the issuance of earnings forecasts.
DECHANGE	A dummy variable equals 1 if realized earnings in the takeover announcement fiscal year is greater than, or equal to that in the previous period, and 0 otherwise.
LITIGATION	A dummy variable equals one if SIC code falls into high litigation industries (2833-2836, 3570-3577, 3600-3674, 5200-5961, 7370-7374, 8731-8734), and zero otherwise.
LOSS	A dummy variable takes the value of one if a firm-year reports losses in the period and zero otherwise
REGULATE	A dummy variable equals 1 if a firm-year is with two-digit SIC codes of 48 or 49, and 0 otherwise.

M&A characteristics:

Premium	The cumulative abnormal return to the target firms' stock for the trading days (-63, 126) relative to the date of the bid announcement day, with (-263, -64) as the estimation window, and the CRSP
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	value-weighted index return as the market return, as prescribed in Schwert (2000).
Revise	The percentage of change from the bidder's initial offer to the final offer price. $(\text{final price} - \text{initial price}) / \text{initial price}$
Duration	The natural log of the length of days between the first deal announcement date to deal resolution (withdrawn or completion) date.
Auction	A dummy variable equals 1 if there are multiple bidders for a target, zero otherwise.
Withdrawn	A dummy variable equals to 1 if the contested takeover bid is withdrawn, zero otherwise.
Complete	A dummy variable equals to 1 if the contested takeover bid is complete, zero otherwise.
Pill	A dummy variable equals 1 where the target company invokes a poison pill or the existence or enactment of a poison pill discourages the potential acquirer. Poison pill is indicated only if it affects the transaction.
Defense	A dummy variable equals 1 when the target employs a defensive tactic to countervail a takeover attempt by an unwanted suitor. Examples include poison pills, lock-ups, greenmail, white knights, etc.
Same_ind	A dummy variable equals 1 when the acquirer and the target are in the same two digit SIC industry.
Tender	A dummy variable equals to 1 if the acquiring firm structures its bid in the form of a tender offer, zero otherwise.
Tran_value	The natural log of the value of the consideration offered by the acquirer as reported in the deal value field reported by SDC.
Cash	A dummy variable equals 1 when the transactions in which the only payment consideration offered is CASH, zero otherwise.

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A Bidder Announces a Contested Takeover

Target Management Decision-Making

Consequences of the Decision Making

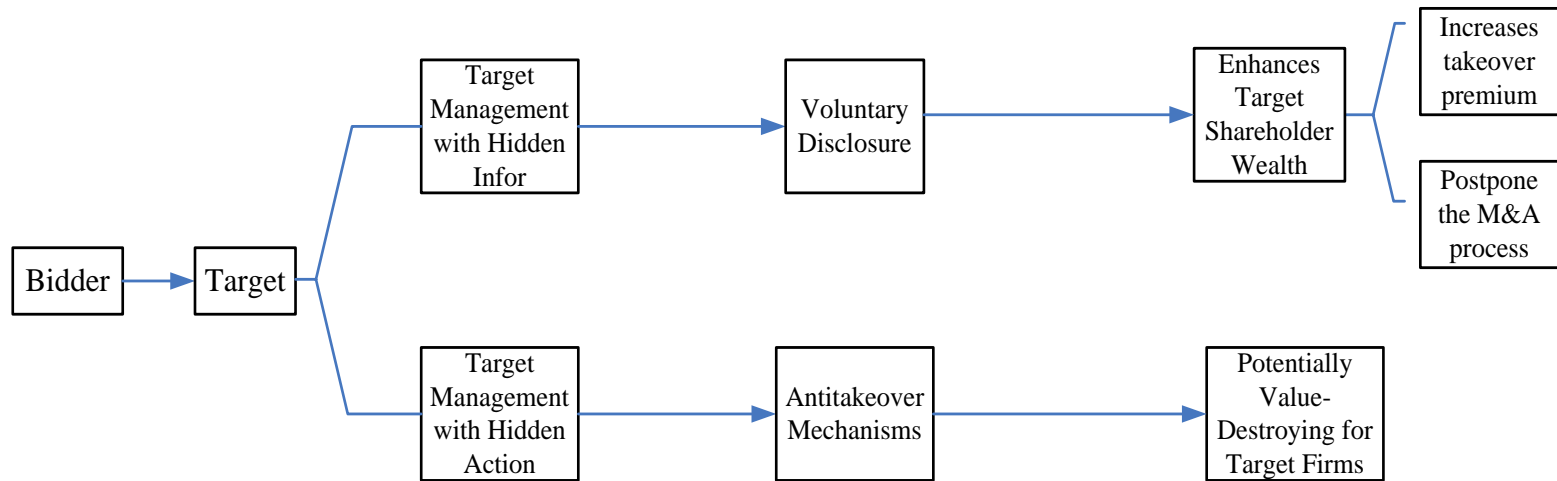


Figure 1 Overview of the Hypotheses

This figure summarizes the hypotheses in the paper. Please see Chapter 1 for detailed explanation.

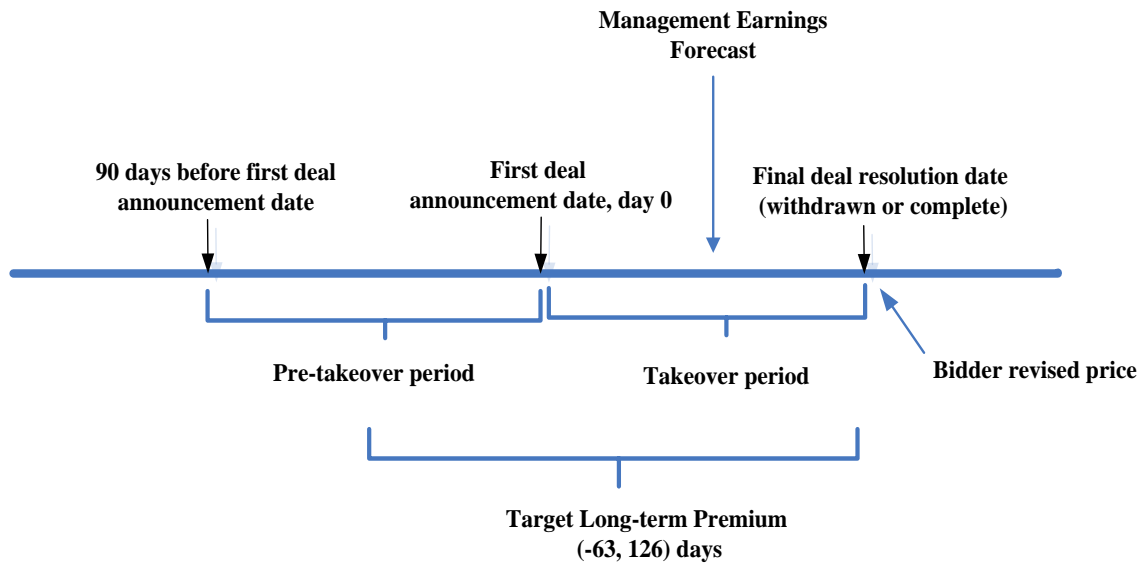


Figure 2 Timeline of Voluntary Disclosure around a Takeover Event

This figure illustrates the timeline of voluntary disclosure around a takeover event. A takeover event is defined as a period between the first takeover announcement date recorded in the SDC database and the final takeover resolution date. A takeover could be withdrawn or completed. A pre-takeover event is defined as 90 days prior to a takeover announcement date and the takeover announcement date. I am interested in comparing management earnings forecast characteristics in and outside the takeover event. Regarding takeover consequences, I use three measures to gauge the relation between voluntary disclosure and takeover consequences: target long-term premium, bidder's revised price, and the length of a M&A transaction.

Table 1 Sample Selection and Distribution

<u>Panel A: Sample Selection</u>		
	<u>Deals</u>	<u>Unique firms</u>
<u>Announced contested takeover takeovers during 1995-2010 time period:</u>	922	834
Less:		
Takeovers not classified by SDC as either successful or withdrawn	(134)	(115)
Takeovers for which the value of transaction is less than 1 million	(57)	(48)
Contested takeovers in the sample	731	671
<u>Merge SDC sample with First Call Company Issued Guideline Database:</u>	<u>Forecasts</u>	<u>Unique firms</u>
Number of management forecasts issued by targets	4392	520
Less:		
Forecasts with missing CRSP return	(188)	(19)
Forecasts with missing COMPUSTAT performance variables	(271)	(12)
<u>Number of management forecasts in contested firm sample</u>	<u>3933</u>	<u>489</u>
This sample is pooled with forecasts made by target firms in friendly takeovers:		
Number of management forecasts in the friendly takeover sample	32870	5605

Table 1 Continued**Panel B: Sample Distribution by Target Industry**

Industry	2-Digit SIC Code	n	% Total
Automobile	37	393	6.45
Depository Institutions	60	822	13.49
Chemicals	28-29	392	6.43
Clothing	22-23	60	0.99
Consumer goods	15-16	38	0.63
Electrical	36, 38	634	10.41
Equipment	35	68	1.12
Food	1-7, 20-21	127	2.08
Healthcare	80,82	95	1.56
Material	32-33	82	1.34
Media	27,48	241	3.96
Metallurgy	34	55	0.91
Mining	10, 14	72	1.18
Misc. manufacturing	39	48	0.79
Oil	13,46	164	2.69
Professional service	87	105	1.72
Retail sales	50-59	456	7.47
Services	70-79	1079	17.7
Transport	40-45, 47	127	2.09
Wood products	24-26	53	0.86
All others	All others	983	16.43
Total		6094	100

Table 1 Continued
Panel C: Sample Distribution by Takeover Announcement Year

Fiscal Year	Contested Target Sample		Friendly Target Sample	
	Number of takeovers	Percent of sample	Number of takeovers	Percent of sample
1995	44	9.00	355	6.34
1996	41	8.40	513	9.16
1997	42	8.57	550	9.81
1998	50	10.21	567	10.12
1999	38	7.74	515	9.18
2000	24	4.78	405	7.23
2001	33	6.75	280	4.99
2002	34	6.92	330	5.88
2003	29	5.93	272	4.85
2004	29	5.93	298	5.32
2005	20	4.12	324	5.78
2006	19	3.95	340	6.07
2007	39	8.07	228	4.07
2008	25	5.11	211	3.76
2009	11	2.31	236	4.22
2010	11	2.20	181	3.23
Total	489	100	5605	100

Table 1 presents the sample selection procedures and sample distributions. The sample consists of 489 public targets in contested takeovers and 5605 public targets in friendly takeovers in the U.S. between 1995 and 2010. Panel A presents the sample selection procedures. Panel B presents the frequency distribution of targets' two-digit SIC code. Panel C presents the frequency distribution of takeovers by announcement year. See "Variable Definition" in Appendix B for variable definitions.

Table 2 Descriptive Statistics and Correlations

Panel A: Management Forecast Characteristics

	<u>CONTESTED TAKEOVER TARGETS</u>				<u>FRIENDLY TAKEOVER TARGETS</u>			
	Takeover firm-years	Non-takeover firm-years	T-Stat difference		Takeover firm-years	Non-takeover firm-years	T-Stat difference	
No. of Forecast-years	163	3770			517	32353		
News	0.251	-0.039	5.17	***	0.029	-0.073	3.41	***
News_ibes	0.494	0.321	3.34	***	0.348	0.315	1.29	
CAR	0.039	-0.021	2.94	**	0.020	-0.021	2.75	***
Bias_1	0.031	0.026	2.26	**	0.016	0.026	-1.54	
Bias_2	0.888	0.629	2.46	**	0.523	0.704	-1.14	
Prob(MGT>ACT)	0.698	0.590	2.12	**	0.522	0.519	0.08	
Horizon	4.749	4.588	1.74	*	4.55	4.585	0.68	
ROE	0.131	0.249	-3.07	***	0.228	0.182	2.09	**
Leverage	0.198	0.221	-1.04		0.225	0.207	1.84	*
MB	2.528	3.606	-2.41	***	3.057	3.29	1.07	
Size	7.164	6.648	4.01	***	6.748	6.313	5.93	***
Abret	0.133	-0.043	7.79	***	0.116	-0.041	12.78	***

Table 2 Continued

Panel B: Target Firms and M&A characteristics

Variables	<u>CONTESTED TAKEOVER TARGETS</u>				<u>FRIENDLY TAKEOVER TARGETS</u>			
	Forecasting Firms	Silent Firms	T-Stat diff.		Forecasting Firms	Silent Firms	T- Stat diff.	
No. of firms	67	422			315	5290		
<u>Target firm Characteristics:</u>								
R&D	0.035	0.016	3.17	***	0.047	0.058	-1.68	*
Intangible	0.141	0.060	4.82	***	0.162	0.110	5.96	***
ΔROE	-0.076	-0.021	-0.05		0.032	0.036	-0.09	
FI	0.405	0.234	3.33	***	0.382	0.338	1.86	*
MH	0.117	0.076	1.52		0.243	0.224	0.74	
MB	0.602	1.074	-3.82	***	0.566	0.772	-3.75	***
SIZE	7.013	5.704	4.79	***	6.534	5.315	12.87	***
Abret	-0.098	-0.230	3.76	***	-0.042	-0.065	0.98	
Regulate	0.065	0.063	0.05		0.069	0.070	0.01	
LOSS	0.152	0.182	-0.5		0.176	0.316	-6.11	***
Dechange	0.343	0.440	-1.48		0.324	0.432	-4.36	***
<u>M&A Characteristics:</u>								
Premium	0.385	0.260	1.76	*	0.302	0.345	-1.12	
Revise	9.128	4.202	3.12	***	0.778	0.690	0.15	
Duration	5.064	4.171	5.91	***	4.923	4.635	7.11	***
Complete	0.140	0.233	1.49		1.000	1.000	0	
Withdrawn	0.861	0.767	1.49		0.000	0.000	0	
Tran_value	6.738	4.562	7.52	***	6.844	5.108	14.67	***
Same_industry	0.508	0.407	1.54		0.581	0.546	1.23	
Tender	0.358	0.241	2.03	**	0.188	0.130	2.58	***
Cash	0.672	0.683	0.19		0.455	0.416	1.36	

Table 2 Continued

Panel C: Pearson (below diagonal) and Spearman (above diagonal) Correlation between Management Earnings Forecast Variables and Contested Takeover

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Takeover*Contest		0.02	0.02	0.01	0.02	0.02	0.01	0.00	0.01	0.00	0.02	0.03
(2) News	0.03		0.46	0.36	0.09	0.08	0.03	0.03	0.02	-0.01	0.09	0.11
(3) News_IBES	0.02	0.47		0.21	0.07	0.06	0.16	0.05	0.04	0.01	0.06	0.11
(4) CAR	0.01	0.33	0.27		-0.12	-0.11	-0.05	0.02	0.02	-0.01	0.04	0.06
(5) Bias1	0.01	0.06	0.04	-0.08		0.90	0.42	-0.08	0.04	-0.05	0.01	-0.06
(6) Bias2	0.01	0.05	0.04	-0.08	0.94		0.41	-0.10	0.07	-0.06	0.01	-0.06
(7) Prob(MGT>ACT)	0.01	0.03	0.16	-0.04	0.12	0.12		0.09	0.00	-0.04	0.09	-0.05
(8) ROE	-0.01	0.00	0.02	0.00	-0.04	-0.04	-0.03		0.02	0.07	0.05	0.01
(9) LEV	-0.01	0.02	0.05	0.02	-0.01	-0.01	0.00	0.03		-0.11	0.17	0.00
(10) MB	-0.00	-0.03	0.00	-0.02	-0.01	-0.01	-0.04	0.03	-0.04		0.05	-0.02
(11) Size	0.02	0.09	0.05	0.03	0.05	0.05	0.08	0.02	0.10	0.03		0.02
(12) Abret	0.03	0.11	0.11	0.09	-0.06	-0.06	-0.05	0.05	-0.01	0.02	0.04	

Table 2 Continued
Panel D: Pearson (below diagonal) and Spearman (above diagonal) Correlation between M&A Characteristics and Guidance in Contested Takeover

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Guidance		0.41	0.04	0.12	0.01	0.01	0.05	0.11	0.19	-0.07	-0.04	-0.02	-0.01
(2) Guidance*Contest	0.41		0.01	0.05	0.01	0.01	0.11	0.06	0.08	-0.02	-0.03	0.03	0.03
(3) R&D	0.01	0.01		0.07	0.08	0.15	0.04	0.21	-0.03	-0.02	0.04	0.08	0.06
(4) Intangible	0.08	0.02	0.04		-0.07	0.06	0.03	0.09	0.22	-0.11	0.01	0.09	0.14
(5) Δ ROE	0.01	0.01	0.02	-0.02		0.02	-0.02	0.00	-0.11	0.32	0.06	-0.02	-0.02
(6) Premium	0.01	0.03	0.09	0.02	0.03		0.06	0.13	-0.13	0.10	0.41	0.15	0.12
(7) Revise	0.02	0.07	0.01	-0.01	-0.02	0.06		0.03	0.04	-0.00	-0.00	0.15	0.13
(8) Duration	0.10	0.06	0.08	0.07	0.01	0.07	0.03		0.07	0.07	-0.05	-0.14	-0.15
(9) Size	0.21	0.09	-0.12	0.14	-0.03	-0.14	0.03	0.09		-0.16	-0.12	-0.2	-0.05
(10) Dechange	-0.07	-0.02	0.01	-0.09	0.14	0.08	-0.02	0.06	-0.14		0.07	-0.02	-0.04
(11) Abret	-0.03	-0.03	0.02	0.00	0.04	0.33	0.02	-0.04	-0.14	0.05		0.06	0.02
(12) Tender	-0.02	0.03	0.02	0.07	-0.01	0.12	0.08	-0.26	0.02	-0.03	0.05		0.38
(13) Cash	-0.01	0.03	-0.01	0.11	-0.02	0.08	0.06	-0.19	-0.07	-0.04	0.02	0.38	

Table 2 presents the descriptive statistics. Panel A presents the descriptive statistics of the management earnings forecast variables used in the tests. Panel B presents the descriptive statistics of the target and M&A variables used in the tests. *, **, *** denote significance at the 10%, 5%, and 1% levels (two-tailed), respectively. Panel C presents the correlation coefficients of the management forecast variables and Panel D presents the correlation coefficients of the M&A characteristics variables. In Panels C and D, correlations significant at the 10% level are in bold. See Appendix B for variable definition.

Table 3 Forecast News in Contested Takeovers
Panel A: Univariate Results for Management Forecast News

Nature of the News in Management Earnings Forecasts								
	Friendly Takeover Event				Contested Takeover Event			
	Good news	Confirmative news	Bad news	Total	Good news	Confirmative news	Bad news	Total
Management forecasts within the event window	114(22%)	290(56%)	113(22%)	517	82(51%)	68(42%)	13(7%)	163
Management forecasts outside the event window	6794(21%)	16824(52%)	8735(27%)	32353	807(21%)	1950(52%)	1013(27%)	3770
Total	6908	17114	8848	32870	889	2018	1026	3933
Chi-square test of difference	9.28***				36.40***			

This table presents univariate results for testing the difference in forecast news between takeover event and non-takeover event, and between contested targets and friendly targets. It reports the frequency of good news, confirmative news, and bad news around management forecasts that fall in the takeover window versus those that fall outside the takeover window. The event window for the takeover period is from the first deal announcement date to deal withdrawn or completion date. Management forecasts are classified as good new, confirmative news, and bad news, according to CIDCODED (E, M, and D, respectively) in the CIG database. See Appendix B for variable definitions. ***, **, and * denote statistical significance at the 1, 5, and 10 percent levels, two-tailed respectively, for the Wald Chi-Square test.

Table 3 Continued
Panel B: Regression Results for Management Forecast News

Variable	NEWS	NEWS_IBES
Takeover	0.2261 (2.72) *	0.0481 (0.12)
Contest	0.0848 (2.72) *	0.0506 (0.20)
Takeover*Contest	0.6035 (4.77) **	0.8728 (9.09) ***
MB	-0.0012 (3.12) *	-0.0033 (1.69)
LEV	0.0971 (1.67)	-0.1669 (0.80)
SIZE	0.1723 (342.81) ***	0.1893 (82.17) ***
ROE	0.0081 (2.80) *	-0.0225 (0.82)
ABRET	1.1195 (457.02) ***	0.8819 (186.90) ***
Intercept 1	-1.3678 (497.93) ***	-1.136 (21.36) ***
Intercept 0	0.0667 (1.96)	
Firm Dummy	YES	YES
Year Dummy	YES	YES
Observations	36803	20286
Likelihood Ratio	65204.54	316.07
Pr>Chisq	<0.0001	<0.0001

This table reports the results of estimating equations 1 and 2 below.

$$NEWS = \beta_o + \beta_1 TAKEOVER + \beta_2 CONTEST + \beta_3 TAKEOVER * CONTEST + \sum \gamma Controls + FirmFE + YearFE + \varepsilon$$

$$Prob(NEWS_IBES=1) = \beta_o + \beta_1 TAKEOVER + \beta_2 CONTEST + \beta_3 TAKEOVER * CONTEST + \sum \gamma Controls + FirmFE + YearFE + \varepsilon$$

See Appendix B for variable definitions. Wald Chi-Square Statistics are in parentheses. ***, **, and * denote significance at the 1, 5, 10 percent levels (two-sided), respectively. All regressions control for firm and year fixed effects.

Table 4 Managerial Incentives for Making Forecasts

Panel A: Favorable Information and Moral Hazard as Continuous Variables

Variable	(1)	(2)	(3)	(4)	(5)
Intercept	-4.796 (48.78) ***	-4.326 (45.39) ***	-4.627 (46.64) ***	-4.597 (39.76) ***	-4.731 (39.48) ***
CONTEST	0.959 (37.18) ***	0.884 (38.24) ***	0.959 (36.03) ***	0.865 (34.98) ***	0.834 (24.12) ***
R&D	0.454 (0.46)			0.055 (0.01)	0.324 (0.22)
R&D*CONTEST	3.072 (4.09) **			4.132 (5.65) ***	4.165 (5.66) ***
INTANGIBLE		0.173 (0.08)			1.143 (13.73) ***
INTANGIBLE*CONTEST		1.413 (22.27) ***			0.561 (11.47) ***
Δ ROE			0.037 (0.10)	0.027 (0.06)	0.042 (0.14)
Δ ROE*CONTEST			0.015 (0.00)	0.293 (1.45)	0.216 (0.89)
SIZE	0.351 (14.19) ***	0.312 (13.41) ***	0.342 (13.33) ***	0.359 (14.54) ***	0.354 (16.98) ***
REGULATE	-0.412 (4.13) *	-0.508 (6.37) ***	-0.531 (6.28) ***	-0.475 (5.11) ***	-0.523 (6.08) ***
MB	-0.301 (8.26) ***	-0.378 (12.51) ***	-0.325 (9.85) ***	-0.318 (9.41) ***	-0.299 (8.48) ***
DECHANGE	-0.432 (15.65) ***	-0.437 (16.05) ***	-0.281 (6.26) ***	-0.293 (6.79) ***	-0.282 (6.31) ***
ABRET	0.093 (0.55)	0.157 (1.57)	0.161 (1.71)	0.123 (0.97)	0.133 (1.15)
Industry Dummy	YES	YES	YES	YES	YES
Year Dummy	YES	YES	YES	YES	YES
Observations	6094	6094	6094	6094	6094
Likelihood Ratio	301.34	298.78	277.54	303.25	323.34
Pr>Chisq	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Table 4 Continued

Panel B: Favorable Information and Moral Hazard as dummy variables						
Variable	(1)		(2)		(3)	
Intercept	-4.948		-4.825		-5.028	
	(41.63)	***	(36.07)	***	(32.19)	***
CONTEST	0.876		1.069		1.000	
	(26.47)	***	(42.19)	***	(31.59)	***
FI	0.483				0.167	
	(7.94)	***			(0.28)	
FI*CONTEST	0.468				0.462	
	(4.87)	**			(5.93)	***
MH			0.213		0.196	
			(1.79)		(1.51)	
MH*CONTEST			-0.274		-0.287	
			(0.57)		(0.62)	
SIZE	0.362		0.343		0.367	
	(15.80)	***	(14.33)	***	(13.52)	***
REGULATE	-0.344		-0.385		-0.325	
	(2.85)	*	(3.16)	*	(2.23)	
MB	-0.283		-0.309		-0.274	
	(7.40)	***	(7.95)	***	(6.42)	***
DECHANGE	-0.438		-0.389		-0.394	
	(16.05)	***	(11.19)	***	(11.51)	***
ABRET	0.079		0.171		0.138	
	(0.40)		(1.52)		(0.98)	
Industry Dummy	YES		YES		YES	
Year Dummy	YES		YES		YES	
Observations	6094		6094		6094	
Likelihood Ratio	339.48		300.82		312.21	
Pr>Chisq	<0.0001		<0.0001		<0.0001	

This table reports the results of estimating the relation between target characteristics and voluntary disclosure propensity during contested takeovers. It reports estimation results for equation 3. Panel A presents logistic regression results with R&D ratio and Intangible assets ratio as measures for favorable information, and Δ ROE as a measure for moral hazard. The dependent variable GUDIANCE equals 1 if the target makes at least one earnings forecast during the contested takeover and 0 otherwise. Panel B presents the same logistic regression results with dummy variables for favorable information and moral hazard. Wald-Chi-Square Statistics are reported in parentheses. ***, **, and * denote significance at the 1, 5, 10 percent levels (two-sided), respectively. See Appendix B for variable definitions. All regressions control for industry and year fixed effects.

Table 5 Short-term Market Reactions to Forecasts

Variable	CAR		CAR		CAR	
Intercept	0.0213		0.021		0.021	
	(6.03)	***	(5.86)	***	(6.06)	***
GOODNEWS	0.033		0.033		0.033	
	(16.30)	***	(16.23)	***	(16.27)	***
BADNEWS	-0.076		-0.077		-0.077	
	(-40.53)	***	(-40.82)	***	(-40.66)	***
TAKEOVER	0.0142		-0.002		0.005	
	(1.91)	*	(0.26)		(0.42)	
GOODNEWS*TAKEOVER			0.066		-0.002	
			(3.27)	***	(-0.07)	
BADNEWS*TAKEOVER			-0.006		-0.004	
			(-0.36)		(-0.13)	
CONTEST					0.006	
					(2.44)	**
TAKEOVER*CONTEST					-0.004	
					(-0.19)	
GOODNEWS*TAKEOVER*CONTEST					0.044	
					(2.73)	***
BADNEWS*TAKEOVER*CONTEST					-0.015	
					(-0.38)	
MB	-0.002		-0.002		-0.002	
	(-1.84)	*	(-1.80)	*	(-1.84)	*
SIZE	0.002		0.003		0.002	
	(5.20)	***	(5.13)	***	(5.20)	***
ABRET	0.018		0.018		0.018	
	(6.65)	***	(6.66)	***	(6.62)	***
LOSS	-0.029		-0.029		-0.029	
	(-15.41)	***	(-15.31)	***	(-15.42)	***
ROE	0.001		0.001		0.001	
	(1.73)	*	(1.69)	*	(1.73)	*
HORIZON	0.001		0.001		0.0003	
	(2.59)	***	(1.32)		(2.61)	***
Firm dummy	YES		YES		YES	
Year dummy	YES		YES		YES	
Observations	36803		36803		36803	
R-Square	13%		13%		13%	

This table reports the results of estimating short-term market reactions to management earnings forecasts issued during contested takeovers. It reports regression results for equation 4. See Appendix B for variable definitions. T-Statistics are in parentheses. ***, **, and * denote significance at the 1, 5, 10 percent levels (two-sided), respectively. All regressions control for firm and year fixed effects.

Table 6 Management Forecast Bias

Variable	BIAS1	BIAS2	Prob (MGT>ACT)
Intercept	0.002 (1.26)	-0.153 (-1.26)	-1.197 (144.64) ***
TAKEOVER	-0.003 (-0.74)	-0.249 (-0.80)	0.075 (0.91)
CONTEST	0.013 (1.45)	0.289 (0.53)	-0.094 (2.23)
TAKEOVER*CONTEST	0.014 (7.19) ***	0.313 (2.55) ***	0.704 (5.46) ***
MB	-0.001 (-6.05) ***	-0.011 (-2.09) **	-0.013 (18.99) ***
SIZE	0.001 (2.27) **	0.013 (0.75)	0.148 (26.81) ***
LITIGATION	-0.007 (6.51) ***	0.018 (0.30)	-0.125 (15.85) ***
LOSS	0.066 (55.88) ***	3.563 (50.79) ***	1.784 (19.55) ***
ROE	0.005 (6.04) ***	-0.051 (-1.00)	0.059 (5.22) **
ABRET	-0.007 (-4.41) ***	-0.595 (-6.22) ***	-0.153 (9.71) ***
HORIZON	0.0001 (15.45) ***	0.0001 (0.32)	0.004 (91.27) ***
Firm Dummies	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes
Observations	21237	21237	21237
R-Square	13%	12%	
Likelihood Ratio			2793.49
Pr>Chisq			<0.0001

This table reports the results of estimating the relation between contested takeovers and forecast bias. Columns 1 and 2 present Ordinary Least Squares regression results for equations 5 and 6, with firm and year fixed effects, using the forecast bias (i.e., BIAS1 and BIAS2), as the dependent variable. T-statistics are in parentheses. Column3 presents logistic regression results for equation 6, with Wald- Chi-Square statistics in parentheses, using Prob (MGT>ACT) as the dependent variable. ***, **, and * denote significance at the 1, 5, 10 percent levels (two-sided), respectively. All regressions control for firm and year fixed effects.

**Table 7 Impact of Target Management Forecasts on Contested Takeover
Consequences**

Panel A: The association between guidance and M&A premium

Variable	Premium (1)		Premium (2)		Premium (3)		Premium (4)	
Intercept	0.182		0.161		0.169		0.151	
	(5.25)	***	(4.63)	***	(4.86)	***	(4.30)	***
CONTEST	-0.094		-0.092		-0.093		-0.091	
	(-2.60)	***	(-2.55)	***	(2.56)	***	(2.51)	***
GUIDANCE	0.009		0.008		0.011		0.010	
	(0.29)		(0.24)		(0.36)		(0.33)	
GUIDANCE*CONTEST	0.206		0.119		0.211		0.127	
	(2.42)	**	(1.23)		(2.39)	**	(1.31)	
R&D			0.376				0.348	
			(4.47)	***			(3.97)	***
R&D*GUIDANCE			0.646				0.542	
			(0.50)				(0.42)	
R&D*GUIDANCE*CONTEST			1.419				1.420	
			(2.43)	**			(2.42)	**
Δ ROE					-0.005		-0.020	
					(-0.24)		(-0.99)	
Δ ROE*GUIDANCE					-0.202		-0.193	
					(-1.41)		(-1.35)	
Δ ROE*GUIDANCE*CONTEST					-0.031		-0.170	
					(-0.12)		(-0.85)	
MB	0.038		0.041		0.037		0.040	
	(4.04)	***	(4.33)	***	(3.94)	***	(4.21)	***
SIZE	0.007		0.014		0.010		0.017	
	(0.73)		(1.49)		(1.03)		(1.74)	*
REGULATE	-0.038		-0.033		-0.036		-0.032	
	(-1.15)		(-1.01)		(-1.09)		(-0.96)	
LOSS	0.092		0.063		0.094		0.072	
	(4.42)	***	(2.92)	***	(4.32)	***	(3.25)	***
DECHANGE	0.083		0.085		0.079		0.082	
	(4.97)	***	(5.09)	***	(4.61)	***	(4.80)	***
ABRET	0.822		0.831		0.835		0.840	
	(37.11)	***	(36.79)	***	(36.63)	***	(36.88)	***
TRAN_VALUE	-0.015		-0.017		-0.016		-0.020	
	(-1.73)	*	(-1.96)	**	(-1.66)	*	(-2.10)	**
SAME_IND	0.021		0.019		0.026		0.024	
	(1.33)		(1.17)		(1.63)		(1.47)	
PILL	0.119		0.116		0.130		0.125	
	(1.40)		(1.36)		(1.52)		(1.46)	
DEFENSE	-0.029		-0.030		-0.032		-0.033	
	(-0.96)		(-1.02)		(-1.05)		(-1.11)	
TENDER	0.086		0.087		0.088		0.088	
	(4.28)	***	(4.33)	***	(4.39)	***	(4.41)	***
CASH	0.056		0.057		0.060		0.061	
	(3.16)	***	(3.26)	***	(3.35)	***	(3.42)	***
Industry dummy	YES		YES		YES		YES	
Year dummy	YES		YES		YES		YES	
Observations	5900		5900		5900		5900	
Adj. R-Sqaure	31.81%		32.23%		32.33%		32.68%	

Table 7 Continued
Panel B: The association between guidance and M&A revised offer price

Variable	Revise (1)	Revise (2)	Revise (3)	Revise (4)
Intercept	-1.123 (-1.59)	-1.231 (-1.73) *	-1.167 (-1.63)	-1.302 (-1.81) *
CONTEST	3.647 (4.94) ***	3.662 (4.96) ***	3.612 (4.83) ***	3.633 (4.87) ***
GUIDANCE	-0.160 (-0.25)	-0.167 (-0.26)	-0.149 (-0.23)	-0.154 (-0.24)
GUIDANCE*CONTEST	3.161 (1.81) **	1.218 (0.61)	2.723 (1.55)	0.483 (0.24)
R&D		2.237 (1.31)		2.834 (1.57)
R&D*GUIDANCE		18.598 (1.56)		18.983 (1.59)
R&D*GUIDANCE*CONTEST		66.582 (2.52) ***		73.451 (2.76) ***
Δ ROE			7.215 (2.45) ***	7.435 (2.53) ***
Δ ROE*GUIDANCE			-0.358 (-0.89)	-0.583 (-1.14)
Δ ROE*GUIDANCE*CONTEST			6.366 (1.28)	7.155 (1.44)
MB	0.298 (1.57)	0.314 (1.64)	0.300 (1.56)	0.320 (1.66) *
SIZE	0.387 (1.99) *	0.433 (2.21) **	0.409 (2.08) *	0.468 (2.35) ***
REGULATE	1.192 (1.77) *	1.230 (1.83) *	1.192 (1.76) *	1.239 (1.83) *
LOSS	0.576 (1.36)	0.390 (0.88)	0.661 (1.47)	0.462 (1.12)
DECHANGE	-0.473 (-1.38)	-0.465 (-1.35)	-0.462 (-1.31)	-0.441 (-1.25)
ABRET	0.304 (0.66)	0.334 (0.72)	0.329 (0.71)	0.374 (0.81)
TRAN_VALUE	-0.132 (-0.76)	-0.155 (-0.88)	-0.149 (-0.84)	-0.180 (-1.01)
SAME_IND	-0.122 (-0.37)	-0.140 (-0.43)	-0.126 (-0.38)	-0.150 (-0.45)
PILL	1.998 (1.80) *	1.886 (1.38)	1.445 (1.19)	1.285 (1.28)
DEFENSE	0.098 (0.16)	0.088 (0.14)	0.150 (0.24)	0.138 (0.22)
TENDER	1.563 (3.81) ***	1.566 (3.82) ***	1.543 (3.72) ***	1.544 (3.73) ***
CASH	0.856 (2.57) ***	0.863 (2.39) **	0.912 (2.48) **	0.920 (2.56) ***
Industry dummy	YES	YES	YES	YES
Year dummy	YES	YES	YES	YES
Observations	6904	6904	6904	6904
Adj. R-Square	13.76%	13.91%	14.02%	14.21%

Table 7 Continued
Panel C: The association between guidance and M&A duration

Variable	Duration (1)		Duration (2)		Duration (3)		Duration (4)	
Intercept	4.734		4.742		4.720		4.726	
	(11.79)	***	(11.13)	***	(10.03)	***	(19.36)	***
CONTEST	-0.516		-0.516		-0.524		-0.524	
	(-11.34)	***	(-11.36)	***	(-11.41)	***	(-11.42)	***
GUIDANCE	0.186		0.187		0.190		0.190	
	(4.93)	***	(4.95)	***	(5.02)	***	(5.03)	***
GUIDANCE*CONTEST	0.510		0.381		0.499		0.358	
	(4.82)	***	(3.11)	***	(4.66)	***	(2.86)	***
R&D			-0.144				-0.082	
			(-1.42)				(-0.81)	
R&D*GUIDANCE			0.561				0.857	
			(0.71)				(1.08)	
R&D*GUIDANCE*CONTEST			2.442				2.351	
			(2.11)	**			(2.22)	**
Δ ROE					0.451		0.472	
					(2.39)	**	(2.48)	***
Δ ROE*GUIDANCE					-0.015		-0.009	
					(-0.41)		(-0.40)	
Δ ROE*GUIDANCE*CONTEST					0.213		-0.171	
					(0.71)		(-0.55)	
MB	0.018		0.017		0.019		0.018	
	(1.55)		(1.46)		(1.64)		(1.57)	
SIZE	0.061		0.058		0.062		0.060	
	(5.14)	***	(4.82)	***	(5.21)	***	(4.91)	***
REGULATE	0.289		0.289		0.294		0.294	
	(7.36)	***	(7.35)	***	(7.42)	***	(7.42)	***
LOSS	-0.077		-0.068		-0.065		-0.060	
	(-3.11)	***	(-2.61)	***	(-2.46)	**	(-2.21)	**
DECHANGE	0.058		0.057		0.051		0.049	
	(0.87)		(0.83)		(0.45)		(0.37)	
ABRET	-0.037		-0.038		-0.038		-0.039	
	(-1.37)		(-1.39)		(-1.38)		(-1.41)	
TRAN_VALUE	-0.037		-0.037		-0.036		-0.034	
	(-3.36)	***	(-3.19)	***	(-3.21)	***	(-3.05)	***
SAME_IND	0.005		0.006		0.004		0.001	
	(0.24)		(0.29)		(0.05)		(0.04)	
PILL	0.052		0.094		0.098		0.049	
	(1.59)		(1.72)		(1.71)		(1.61)	
DEFENSE	0.023		0.024		0.018		0.019	
	(0.64)		(0.66)		(0.51)		(0.52)	
TENDER	-0.444		-0.445		-0.442		-0.442	
	(-18.49)	***	(-18.52)	***	(-18.28)	***	(-18.31)	***
CASH	-0.156		-0.157		-0.154		-0.154	
	(-7.35)	***	(-7.38)	***	(-7.13)	***	(-7.13)	***
Industry dummy	YES		YES		YES		YES	
Year dummy	YES		YES		YES		YES	
Observations	6904		6904		6904		6904	
Adj. R-Square	22.25%		23.39%		22.23%		23.39%	

This table reports the association between targets making guidance during contested takeovers and M&A consequences. Panels A, B, and C report regression results for equations 7, 8, 9, as below:

$$\begin{aligned} \text{PREMIUM} = & \alpha_0 + \alpha_1 \text{CONTEST} + \alpha_2 \text{GUIDANCE} + \alpha_3 \text{GUIDANCE} * \text{CONTEST} \\ & + \alpha_4 R \& D + \alpha_5 R \& D * \text{GUIDANCE} + \alpha_6 R \& D * \text{GUIDANCE} * \text{CONTEST} \\ & + \alpha_7 \Delta \text{ROE} + \alpha_8 \Delta \text{ROE} * \text{GUIDANCE} + \alpha_9 \Delta \text{ROE} * \text{GUIDANCE} * \text{CONTEST} \\ & + \sum \gamma \text{Controls} + \text{IndustryFE} + \text{YearFE} + \varepsilon \end{aligned}$$

$$\begin{aligned} \text{REVISE} = & \beta_0 + \beta_1 \text{CONTEST} + \beta_2 \text{GUIDANCE} + \beta_3 \text{GUIDANCE} * \text{CONTEST} \\ & + \beta_4 R \& D + \beta_5 R \& D * \text{GUIDANCE} + \beta_6 R \& D * \text{GUIDANCE} * \text{CONTEST} \\ & + \beta_7 \Delta \text{ROE} + \beta_8 \Delta \text{ROE} * \text{GUIDANCE} + \beta_9 \Delta \text{ROE} * \text{GUIDANCE} * \text{CONTEST} \\ & + \sum \gamma \text{Controls} + \text{IndustryFE} + \text{YearFE} + \varepsilon \end{aligned}$$

$$\begin{aligned} \text{DURATION} = & \gamma_0 + \gamma_1 \text{CONTEST} + \gamma_2 \text{GUIDANCE} + \gamma_3 \text{GUIDANCE} * \text{CONTEST} \\ & + \gamma_4 R \& D + \gamma_5 R \& D * \text{GUIDANCE} + \gamma_6 R \& D * \text{GUIDANCE} * \text{CONTEST} \\ & + \gamma_7 \Delta \text{ROE} + \gamma_8 \Delta \text{ROE} * \text{GUIDANCE} + \gamma_9 \Delta \text{ROE} * \text{GUIDANCE} * \text{CONTEST} \\ & + \sum \tau \text{Controls} + \text{IndustryFE} + \text{YearFE} + \varepsilon \end{aligned}$$

The dependent variables are premium, revise, and duration. Premium is the cumulative abnormal return to the target's stock for the trading days (-63, 126) relative to the date of the first bid (Schwert 2000). Revise is the percentage of bidder revised price from the initial price to the final offer price, calculated as (final price – initial price)/final price. Duration is the length of time it takes to reach a resolution in M&A transaction. See Appendix B for variable definitions. T Statistics are in parentheses. ***, **, and * denote significance at the 1, 5, 10 percent levels (two-sided), respectively. All regressions control for industry and year fixed effects.

Table 8 Robustness Test: Comparison of Forecasts News between Takeover Period and Pre-takeover Period

Panel A: NEWS as dependent variable

Variable	NEWS	Variable	NEWS
Pretakeover	-0.476 (3.61) **	Takeover	0.671 (17.81) ***
MB	-0.013 (6.23) ***	MB	-0.013 (5.77) ***
LEV	0.286 (3.79) **	LEV	0.318 (4.67) **
SIZE	0.092 (21.45) ***	SIZE	0.086 (18.74) ***
ROE	0.083 (4.59) **	ROE	0.082 (4.54) **
ABRET	0.935 (73.59) ***	ABRET	0.877 (63.96) ***
Intercept 1	-1.892 (18.22) ***	Intercept 1	-1.901 (18.77) ***
Intercept 0	0.501 (13.53) ***	Intercept 0	0.497 (13.36) ***
Observations	3933	Observations	3933
Likelihood Ratio	120.87	Likelihood Ratio	133.87
Pr>Chisq	<0.0001	Pr>Chisq	<0.0001

Table 8 Continued

Panel B: NEWS_IBES as dependent variable

Variable	NEWS_IBES	Variable	NEWS_IBES
Intercept	-1.361 (23.23) ***	Intercept	-1.136 (21.36) ***
Pretakeover	0.073 (-0.15)	Takeover	0.316 (7.68) ***
MB	-0.007 (-1.63)	MB	-0.006 (-1.59)
LEV	0.614 (7.24) ***	LEV	0.628 (7.57) ***
SIZE	0.096 (9.08) ***	SIZE	0.093 (8.62) ***
ROE	-0.011 (-0.11)	ROE	-0.009 (-0.10)
ABRET	0.814 (21.84) ***	ABRET	0.773 (19.61) ***
Observations	1912	Observations	1912
Likelihood Ratio	45.24	Likelihood Ratio	52.66
Pr>Chisq	<0.0001	Pr>Chisq	<0.0001

This table reports the results of forecasts news in the takeover and in the pre-takeover period. Panel A reports the results on NEWS and Panel B reports the results on NEWS_IBES. ***, **, and * denote significance at the 1, 5, 10 percent levels (two-sided), respectively. Wald Chi-Square Statistics are in parentheses. All regressions control for firm and year fixed effects.