# ACQUIRING FIRMS' STRATEGIC DISCLOSURE PRACTICES AROUND MERGERS AND ACQUISITIONS

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#### **Chapter 1 - Introduction and Motivation**

The study examines the strategic disclosure practices of acquiring firms around mergers and acquisitions (M&A). It investigates the following major questions: (1) whether and how firms strategically announce their M&A plans and completion/withdrawal resolutions to attract or distract market attention? Whether the management's timing strategy is effective in changing market attention to the M&A announcement as management expects? (2) Whether and how firms strategically vary their news stories updates in the transaction period and how the news stories updates affect the stock returns at resolution? (3) Does the dynamics of strategically disclosure pattern change around M&A? (4) Whether and how firms adjust their disclosures in response to variations in market conditions, such as investor sentiment? (5) Whether and how firms adjust the disclosure tone from plan announcement to resolution, and how the tone change affects the stock returns around resolution?

It is important to explore acquiring firms' disclosure practices around M&A. Managers have an information advantage over outside investors, have incentives to self-serve and can strategically decide whether and how to disclose the proprietary information. As a major type of voluntary disclosure, compared to other types of disclosure, firms' press releases are much rarely regulated, therefore are particularly suitable for strategic management. With respect to firms' disclosure practices around mergers and acquisitions, the existing literature concentrates on the disclosure practices around the plan pre-announcement and announcement period, and examines one or two aspects of the disclosure practices. Accordingly, examining various aspects of disclosure practices around the whole process of mergers and acquisitions may provide valuable insights to the existing literature. Using acquiring firms' press releases as the voluntary disclosure

measure, this study examines various aspects of disclosure practices (i.e., timing, disclosure level, and disclosure sentiment (tone)) around the whole process of mergers and acquisitions, from the plan announcement, transaction period, to the deal resolution.

First, existing literature finds that firms would change the earnings announcement date depending on the nature of the earnings news (Chen and Mohan (1994)). deHaan et al. (2015) argue that managers prefer to hide (highlight) bad (good) news by setting the news announcement timing such as on Fridays (on Mondays) to take advantage of variations in market attention. In this study, I expect that the management would strategically highlight the news by announcing the proposed mergers and acquisitions transactions on early weekdays (such as Mondays) to take advantage of higher market attention since management anticipates to complete the proposed transactions without the market reaction information. When it comes to the resolution news disclosure, management has learned that whether the market likes or dislikes the proposed mergers and acquisitions bids based on the investors' reaction to the plan announcement over the stock market. I project that for the resolution news release, management might time the market based on the market signal obtained from the plan announcement. Theory shows that market participants are generally distracted before the weekend and give less attention on Fridays than on Mondays through Thursdays (deHaan et al. (2015)). This study then examines whether variations in market attention on different weekdays speak to the variations of announcement timing of firms' M&A plans, as well as resolution news.

Second, I analyze the M&A news update frequency during the M&A transaction period to investigate whether and how firms strategically vary their M&A news stories updates in the transaction period depending on the resolution of a transaction to be a completion or a withdrawal. Literature suggests that managers' disclosure behaviors are different based on their anticipation of the nature of the earnings news (e.g., Kothari (2009), Kasznik and Lev (1995)). On the one hand, acquiring firms tend to provide less forthcoming disclosures on less favorable acquisitions (bad news) (see Shalve (2009)). Thus, acquiring firms will less likely provide news updates toward less favorable acquisition conditions. On the other hand, according to Kasznik and Lev (1995), firms facing greater earnings disappointment are more likely to update their information to minimize the negative impacts of earnings disappointments. It is thus possible that acquiring firms will more likely provide news updates in less favorable acquisition conditions. Therefore, I am interested in investigating whether and how management varies its news updates on M&A activities during the transaction period given these two possibilities. In addition, I examine the outcomes of firms' strategic disclosure of M&A news during the transaction period. I am interested in whether firms with higher levels of news updates recognize a capital market benefit around resolution by doing so. In specific, I examine the association between the M&A news update volume and acquirers' abnormal stock returns around completion or withdrawal.

Third, the literature is scant on the communication/disclosure pattern change after the M&A transactions. Existing research on post-acquisition performance concentrates on the financial performance of the combined businesses. This study intends to investigate acquiring firms' disclosure practices after the completion of the transaction. In specific, I examine the acquirers' financial performance news volume change from the pre-announcement, transaction period, to post-transaction period. Managers' intentions to close the proposed transactions present potentially strong incentives for acquiring firms to change their disclosure practices to complete the deals. Lang and Lundholm (2000) suggest that some firms dramatically increase their disclosure activities when issue equity capitals. Firms that maintain a consistent level of disclosure experience price increases prior to the offering and only small price declines at the offering

announcement. In contrast, firms that substantially increase their disclosure activities prior to the offering experience price increases prior to the offering, while suffer much greater price declines thereafter (Lang and Lundholm (2000)). In the scenario of mergers and acquisitions, it is possible that management may increase the voluntary disclosure levels to persuade shareholders to vote in favor of the transaction. I empirically examine whether acquiring firms may maintain their disclosure levels or adjust the disclosure levels to affect investors' perceptions around mergers and acquisitions. Studies document that voluntary disclosures are associated with stock performance (Healy and Palepu (2001)). I further analyze the impact of the acquiring firms' disclosure practices on their stock performance, such as stock return, volatility, and trading volume.

Moreover, prior research shows that the firm level disclosure strategy is associated with macroeconomic market level effect, such as investors' sentiment. Existing studies establish a strong negative relation between the corporate disclosure and investor sentiment, suggesting that management increases disclosure levels to correct the low sentiment induced mispricing (Bergman and Roychowdhury (2008), Cooper et al. (2015)). With a low investor sentiment condition, the pessimistic outlook on market's future prospects generally results in undervalued firms. In contrast, with a high investor sentiment condition, the optimistic outlook on market's future prospects generally results in overvalued firms (Cooper et al. (2015)). Therefore, it is reasonable to assume that management might adjust the disclosure practices depending on the prevailing levels of market uncertainty to time various levels of market sentiment that could affect the M&A outcome. Taking into consideration of the general market factor, this study investigates whether and how firms adjust their strategic disclosure levels in response to variations in market conditions measured as investor sentiment. Specifically, I examine under various conditions of investor sentiment, whether disclosure timing is different and how market attention to the disclosure varies. I also test the

association between the levels of M&A news update and market sentiment towards either a completion or a withdrawal, as well as the impact of firms' strategic disclosures in response to the prevailing investor sentiment on firm performances; that is the stock returns.

Lastly, this study examines the information content (tone) of press releases specific to the M&A transactions that are made at the point of initial announcement, during the transaction period, and at the deal resolution (either a completion or a withdrawal). The tone analysis provides a unique opportunity to study whether and how management is actively involved in the disclosure content of the M&A news. In specific, I examine how the tone of press release varies for plan announcement, M&A news update, as well as deal resolution. I am also interested in testing whether the tone differs between completed deals and abandoned deals. With respect to the outcome of the tone variations, I investigate how the tone of the press releases affects investors' response to the communication and whether the tone can be used as a tool to affect investors' perceptions about the proposed transactions.

The empirical results contribute to the literature showing: (1) Management strategically chooses the timing in announcing different events during the M&A process. Specifically, I find that M&A plan announcement made on Mondays is twice as much of that made on Fridays and the frequency almost decreases monotonically over weekdays from Mondays to Fridays. In contrast, I find no monotonically increasing or decreasing patterns for management's disclosure timing for M&A resolutions. Instead, there are different patterns of completions versus withdrawals for favorable versus unfavorable M&A deals. (2) The news stories update of an M&A completion is similar to that of an M&A withdrawal during the period from the M&A plan announcement to the M&A resolution. While the news update positively affects the stock returns for the withdrawal deals, it does not significantly influence stock returns of completed deals. (3)

Firms likely maintain a consistent level of voluntary disclosures during the M&A process (over the pre-announcement, transaction, and post-transaction periods). Correspondingly, firms' stock returns remain consistent during this process. However, these firms' stock volatility and trading volumes fluctuate during this process, which are possibly influenced by firms' overall information environment as reflected by fluctuations in all financial news from both the acquirer firms and other news media. (4) Investor sentiment does not significantly influence management's strategic disclosure behaviors in the M&A process. Specifically, I find similar patterns for management's announcement timing, market attention to various announcement timing, and news update frequency toward a completion versus a withdrawal under both high and low investor sentiment conditions. However, news updates significantly influence firms' stock returns at M&A resolution in the low sentiment condition, not in the high sentiment condition. (5) The study shows that the tone of M&A news varies for different announcements. Market pays similar amount of attention to various types of tones used in the M&A announcement. Tone for M&A plan announcement and M&A news update generally is not associated with the stock returns at resolution. There is no difference between tone of M&A news update for completion and withdrawal deals.

This study contributes to the literature in a number of ways. First, this study takes a dynamic view of voluntary disclosure (Guttman et al. (2014)). Corporate disclosure environments are characterized by multi-period and multi-dimensional information flows. This study examines management's voluntary disclosure practices around M&A process in a holistic picture. Not only the level of disclosures matters, but also the timing and content of releases constitute important elements of disclosure practices. This study illustrates the complexity of M&A related voluntary disclosure disclosure for a forecast/cash flow forecast, M&A disclosure practices as well as underlying mechanism are much more complicated. The information flow

during the M&A process often is not one way directed. Rather, it takes a form of information releasing to the market first, management listening to the market's reaction, and management releasing new information based on the feedback from the market. Therefore, management may learn from the market's reaction to the proposed M&A deals and thus strategically adjusts the disclosure activities depending on the nature of resolution (completion or withdrawal) and market's favorability of the proposed deals (favor or does not favor).

Second, this study contributes to the research of management voluntary disclosure by concentrating on the roles of firm initiated press releases. Management voluntary disclosure is an important channel of information flow from firms to the market. As insiders, management has the proprietary information of the company. Whether to disclose and how to disclose the private information are largely depending upon the dynamic conditions between the management and the investors. While there is a large body of literature examining the voluntary disclosure issues, existing studies have been focusing on a particular type of voluntary disclosure, primarily management's earnings forecast or cash flow forecasts (Beyer et al. (2010)).

Management voluntary disclosures take various forms, among which press releases give management large degrees of discretion to strategically disclose since press releases are not strictly regulated as financial statements are. Research shows that press releases provide great opportunities for management disclosures in terms of contents, formats, as well as timing (Dyck and Zingales, 2003). Findings through examining firms' press releases in the setting of corporate financial events have important implications in terms of discovering the extent to which management is flexible in the corporate information environment.

Third, this study contributes to the research of mergers and acquisitions by examining the disclosure practices around various periods of mergers and acquisitions and investigating the

communication patterns change over time. Extant literatures of disclosures' influence on mergers and acquisitions largely concentrate on the deal announcement period. Some examines the disclosure practices around the negotiation and pre-negotiation periods (Ahern and Sosyura (2014)). This study examines firms' disclosure practices change from pre-announcement to postannouncement in an intent to discover potential communication patterns stability and underlying mechanism. It also studies the timing of deal withdrawal disclosure to discover whether management takes advantage of markets' general reaction pattern, in which withdrawal disclosure is largely ignored in existing literature. In addition, it takes a progress view and examines the effect of M&A news release updates on the investors' decision revision at a later time.

In addition, research on firms' performance during post-acquisition period is limited. Specifically, Haleblian et al. (2009) call for research on firms' external communication pattern change if there is any after mergers and acquisitions as well as the potential mechanism associated with the communication pattern change. This study examines firms' disclosure practice changes from pre-announcement to post-transaction in an intent to discover acquiring firms' communication patterns.

Lastly, as Beyer et al. (2010) point out that an issue that has long plagued the empirical research on voluntary disclosure is the appropriate measure of this construct. Some popular measures of disclosure capture both voluntary and mandatory disclosures. Some research uses numerical value of corporate earnings forecast to represent the overall voluntary disclosure quality, ignoring other aspects of voluntary disclosure. In the setting of mergers and acquisitions, this study uses firms' related press releases as a direct measure of voluntary disclosure. The advantage of using this measure is its straightforwardness and measuring the voluntary disclosure activities around mergers and acquisitions only.

This research is organized as following. Chapter 2 presents the literature review of mergers and acquisitions, management disclosure practices, and market conditions' impact on the relationship. Chapter 3 discusses the research questions and hypothesis development. Chapter 4 describes the data and methodology. Chapter 5 discusses the empirical results. Chapter 6 concludes the paper.

#### **Chapter 2 - Literature Review**

The literature review focuses on (1) management voluntary disclosure, (2) a brief overview of mergers and acquisitions research, (3) disclosure practices around mergers and acquisitions, (4) market participants' attention around mergers and acquisitions, (5) management disclosure tone, and (6) the discussion of market conditions' impact on the relationship between corporate disclosure and mergers and acquisitions from the investor sentiment perspective in particular, because previous studies document that firm level information uncertainty only matters when it is correlated with the market uncertainty. Finally, I summarize the differences of my study from prior literatures.

## 2.1. Corporate Information Environment and Management Voluntary Disclosure

There are three sources of disclosures that form the corporate reporting environment: voluntary disclosure by the management, mandatory disclosure required by the regulators, and financial information intermediaries' (analysts) disclosure (see Beyer et al. (2010)). Management disclosure represents an important component of a firm's overall information environment (e.g., Hirst et al. (2008)). Beyer et al. (2010) find that management forecasts and preannouncements (voluntary disclosures) account for two-thirds of the accounting based information for firms between 1994 and 2007. Since managers have an information advantage over outside investors with respect to the firm's value and profitability, they can decide whether and how to disclose such information.

It has been long recognized in the accounting literature that one of the main roles that accounting information plays in the market driven economy is that it reduces information asymmetry (Verrecchia (2001), Healy and Palepu (2001), Khurana et al. (2006), Kothari et al. (2009)). Accounting information allows capital providers to evaluate the return potential of investment opportunities, which is the valuation role of accounting information (Beyer et al. (2010)). Extant literature shows that high quality disclosure can improve the investment efficiency by reducing the information asymmetry between investors and management (Khurana et al. (2006)). Ball and Shivakumar (2008) suggest that management forecasts are considerably more informative than earnings announcements. The reduced information asymmetry smooths the efficient resource allocation and capital market development, and tends to reduce firms' cost of capital (Kothari et al. (2009)).

Companies have varying disclosure strategies and managers are likely to disclose good news but withhold or delay bad news (Kothari et al. (2009)). Firms may withhold proprietary information if there are great costs associated with disclosing that information (Verrecchia (1983)). Investors therefore would presume that the undisclosed information is less favorable compared to the disclosed information and investors' expectations put an incentive on management to disclose higher level of information (Verrecchia (1983)). Dye (1985) suggests that managers should withhold information in the condition of being viewed by investors as controlling complex information. Kothari et al. (2009) document evidence of management asymmetric disclosure behavior, suggesting that managers disclose good news early and tend to withhold or delay disclosure of bad news. Consistent with the expectation, Kothari et al. (2009) find that the market discounts the impact of management's statements, suggesting that management's favorable disclosures may not be credible. Empirical literature also suggests that management disclosure activity varies with different expectations for good versus bad earnings conditions. Kasznik and Lev (1995) examine management disclosure policy when facing a large earnings surprise. The authors find that there is a positive association between the scale of earnings surprise and management voluntary disclosure level, which suggests that firms facing bad earnings news surprises are more likely to disclose the information to the investors.

Firms engage in various voluntary disclosures, such as management forecasts, press releases, and conference calls. Firms communicate directly with investors through media such as press releases (Healy and Palepu, 2001). There are various types of firm press releases, among which Mahoney and Lewis (2004) claim that earnings press releases are the major news event for companies and investors. The information content of earnings press releases has received substantial investigation among researchers (Landsman and Maydew 2002, Collins et al. 2009). According to Dyck and Zingales (2003), firms' press releases are particularly suitable for active management because it is less regulated than accounting statements are. However, these press releases are not unbiased, and they provide greater flexibility in content and format in a desirable way for management (Dyck and Zingales, 2003). Davis et al. (2012) argue that languages that management uses in earnings press release signal mangers' expectations of the firm's performance. Based on the self-serving attribution theory that managers presumably attribute favorable (unfavorable) performance to internal (external) causes to influence the investors' perception, Kimbrough and Wang (2014) study investors' reaction and find that investors use industry and firm specific information to evaluate the self-serving disclosures.

In addition to the earnings press releases, researchers also examine the role of media coverage in corporate finance in the settings of IPOs, secondary equity offering and mergers and acquisitions. Examining the relationship between media coverage and the success of an IPO, researchers find that media coverage meaningfully influences the outcomes of IPO (Cook et al. 2006), and greater media coverage results in higher initial returns and long term value (Liu et al. 2014). Similarly, Lang and Hundholm (2000) examine corporate voluntary disclosure around

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seasoned equity offerings using the company press releases as the voluntary disclosure measure. They find that companies significantly increase their disclosure level before the equity offering. The voluntary disclosure practices around mergers and acquisitions are discussed in Section 2.3.

Recent studies examine the role of financial media on stock market in general. As Fang and Peress (2009) argue, mass media play a crucial role in disseminating information to individual investors. News has a muted impact on prices since certain investors are trading on the information released in the news (Tetlock, 2010). Griffin et al. (2011) quantify the importance of financial news' information content in an international setting and study the differences of the equity market's reaction to the news announcement across countries. Studies on the topic of media's impact on stock market not only uses the measure of news coverage (e.g. Fang and Peress, 2009, Tetlock, 2010), but also investigates some other aspects of news release, such as linguistic content of the media. Tetlock (2007) documents that media pessimism predicts the stock price downward pressure. Tetlock (2008) establishes that the negative tone in news stories predicts earnings and stock returns.

More recent research examines the relationship between media disclosure and corporate governance factors. Yermack (2014) demonstrates a close connection between corporate news disclosure pattern and CEOs' vacation trips. The author shows that when CEOs are away from headquarters, companies disclose less news, therefore companies' news release is constraint by factors such as CEO's personal schedule.

## 2.2. A Brief Overview of M&A Research

Mergers and acquisitions have been a major growth strategy in the corporate world. According to a 2015 survey conducted by KPMG LLP, mergers and acquisitions deals value in the U.S. in the first three quarters of 2014 is almost \$1 trillion and has reached the pre-financial crisis levels. As Figure 1 suggests, the dollar value for all the proposed mergers and acquisitions deals in 2014 reaches a historical high since 2008, mainly driven by the market recovery.

The popularity and complexity of mergers and acquisitions have attracted numerous research interests. Early research in mergers and acquisitions is mostly prevailing in the finance literature. Early research on takeover bids shows that there is an informational role of takeover bids; M&A firms are revalued upwards by the market even with a failed takeover bid (Grossman and Hart (1981)).

In their comprehensive theoretical survey of M&A literature, Haleblian et al. (2009) categorize the research framework into three broad areas: antecedents, moderators, and postcedents. Based on a time-series logic, Haleblian et al. (2009) suggest that factors leading firms to undertake acquisitions, factors moderating acquisition characteristics and performance, and factoring affecting acquisition outcomes are the primary three lines of research in mergers and acquisitions.

Deal completion and acquisition premiums are prevailing research topics in the mergers and acquisitions literature (Haleblian et al. (2009)). Researchers examine various factors that influence the likelihood of deal completion and acquisition premiums. One of the basic assumptions in mergers and acquisitions research is that the acquirers have incentives to complete the deal. It is also generally assumed that acquiring firms attempt to pay the lowest premium possible, and to deter competing offers (Bradley et al. (1988), Malatesta & Thompson (1993)). Empirical evidence suggests that higher premium is positively associated with the target shareholder controls (Moeller (2005)).

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Empirical research in mergers and acquisitions has extensive interest in examining whether acquisitions add value to firms through investigating the relationship between acquisition activity and firms' shareholder value (Carper (1990)). Extant literature is undisputed in its conclusion that mergers and acquisitions are expected to create value for the target and bidder shareholders combined, which is usually reflected in the announcement abnormal returns (Martynova and Renneboog (2008)). The majority of the value of a target is reflected in its stock price (Haunschild (1994)). The returns to target company are generally documented to be positive, while the evidence on the wealth effects for the bidding company is mixed (Cartwright and Schoenberg (2006)). Literature generally finds slightly negative average stock returns for the acquirer's shareholders (Moeller et al. (2005), Haleblian et al. (2009)).

In addition, some research examines the post-acquisition performance in terms of productivity, operating cash flows, and market power. Healy et al. (1992) find that there is significant improvement for merged firms in asset productivity, leading to higher operating cash flow returns. Gugler et al. (2003) find increased profits and decreased sales for the acquiring firm, indicating a market power expansion post acquisition.

Literature in management has also examined the issue of firms' internal communication, such as organizational communication and employee communications in the mergers and acquisitions process (Schweiger and Denisi (1991), Balmer and Dinnie (1999), Seo and Hill (2005)). It is recognized that certain merged firms fail to produce the expected synergy benefits largely due to the neglect of corporate communication issues (Balmer and Dinnie (1999)). After the mergers and acquisitions, the new organization may decide to adopt the communications of one organization, maintain both, integrate certain aspects of both, or create something entirely new

(Brooks et al., 2005). Therefore, communication patterns are expected to be affected for either the acquirer firm, the target firm, or both.

Existing studies also document the impact of mergers and acquisitions on top management and board of directors. It is largely observed that top management of target firms are often dismissed (Agrawal and Walkling (1994)), and board members of target firms typically lose their board seats after the acquisitions being completed (Harford (2003)). Top management and board members normally play an important role in firms' communication styles in a top-down influencing way (Hatch and Schultz (1997), Kirkpatrick (2009)). Therefore, the communication pattern might not be the same after M&A transactions due to the change in top management.

Much of the early empirical work focuses on the performance of acquiring firms, some pays attention to the performance of target firms as well. Recent research is interested in detecting potential moderators that affect acquisition performance and outcomes, and reveals circumstances that would benefit acquirers (Haleblian et al. (2009)). More recent work also examines antecedents of acquisitions that are the factors leading to firms' mergers and acquisitions activities (Haleblian et al. (2009)).

Empirical work on mergers and acquisitions examines the short-term wealth effects as well as the long-term wealth effects (Martynova and Renneboog (2008)). In the short term, it is largely observed that M&A create positive gains around the deal announcement dates for the combined firms as well as target firms (Moeller et al. (2005), Haleblian et al. (2009), McNichols and Stubben (2015)). In addition to the short term effect around the takeover announcement, empirical evidence shows that U.S. acquirers in cross-border mergers experience significant negative long term abnormal returns subsequent to the takeover (Black et al. (2007)). Study also shows that there is a decline in post-merger profitability over several years subsequent to the transaction when using earnings based measures (Martynova and Renneboog (2008)).

In the accounting area, researchers have examined the influences of a target firm's accounting quality in mergers and acquisitions. For example, Skaife and Wangerin (2013) suggest that target firms' low quality financial reporting has various consequences for the mergers and acquisitions outcomes, including deal renegotiation and termination. Similarly, Raman et al. (2013) examines how takeover decisions are influenced by the earnings quality of target firms. The authors suggest that the findings are driven primarily by the asymmetric information component of earnings quality as opposed to the symmetric component. Extending findings on target firm accounting quality, Marquardt and Zur (2014) examine how the target accounting quality is linked to the choice of sales method, the length of the mergers and acquisitions process, and the decision to complete or terminate a proposed deal.

More recently, McNichols and Stubben (2015) examine the impact of accounting information quality on the target firms' stock returns based on the financial statement information. McNichols and Stubben (2015) examine whether acquisitions are more profitable for acquirers when the target firms disclose higher quality accounting information. The authors predict and find that an acquiring firm is able to bid more effectively and pays less to acquire a target when the acquirer is able to more precisely value the target with high quality accounting information, indicating that higher quality accounting information leads to better bidding decisions in acquisitions. The authors use accounting accruals to reflect the accounting quality, which reflect the mandatory disclosure information from the financial statements.

Sometimes announced acquisitions are not completed or are withdrawn before they become effective. Reasons for withdrawal can range from the rejection of the deal by the shareholders,

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problems with the approval of the deal by relevant authorities, to the negative market reaction to the deal (Luo (2005), Jacobsen (2014)). Luo (2005) and Kau et al. (2008) suggest that managers of acquiring firms appear to be influenced by their firms' stock price reactions at the announcement of proposed acquisitions: the more negative the stock price reaction, the greater the likelihood that the bid will be cancelled. Martin and Shalev (2009) posit that information revealed on an opaque target subsequent to an acquisition announcement can be one factor leading to a withdrawal decision. The authors expect and find that the likelihood of withdrawal after acquisition announcements decrease with target firms' specific information. It is intuitive, and also suggested by Wandler (2007), that the management of the acquirer firm has an incentive to complete the transaction. The more information available to the investors, the less information asymmetry between the management and the investors. Jacobsen (2014) utilizes withdrawn acquisition deals as a special event to examine the market response to revelations of CEO quality. Specifically, Jacobsen (2014) focuses on a sample of acquisition bids that are withdrawn because the transaction price becomes too expensive, and analyzes how the market learns about the CEO quality from this event. Existing literature provides conflicting evidences of market reaction to withdrawn transactions. On the one hand, Davidson et al. (1989) find negative returns for acquirer when the bid is cancelled. They establish that a failed transaction brings loss to the bidder. Asquith (1983) shows zero withdrawal returns for bidder. On the other hand, Dodd (1980) finds a small positive withdrawal returns for bidder. Savor and Lu (2009) find that there are positive withdrawal returns for stock-financed deals, while non-significant withdrawal returns for cash-financed deals. There needs further evidence on whether the withdrawal announcement brings in new information based on various market reactions.

Overall, the literature on mergers and acquisitions primarily focuses on the issue of whether mergers and acquisitions are wealth producing or wealth destroying to the shareholders (Cartwright and Schoenberg (2006)). In other words, it focuses on whether M&A add value to the firm, by concentrating on assessing the connection between acquisition activity and firm performance/shareholder value. As a result, Haleblian et al. (2009) suggest that empirical research on the outcome of mergers and acquisitions should focus on firms' performance as well as outcome such as premiums, impact on employee, and impact on customers or bondholders.

## 2.3. Management Voluntary Disclosures around M&A

Management's voluntary disclosure is among the essential ways of supplying firms' information to the market. Management can have discretions over the mergers and acquisitions related events announcement. Before the proposed agreement is made, a company does not have a duty to disclose all plans or internal proposals involving acquisitions, including the existence of negotiation unless the merger negotiations is deemed to be material (Gaughan (2011)). Once a proposed agreement is implemented, the acquirer and target normally issue a press release announcing the agreement, with material terms of the transaction included.

Existing literature largely focuses on firms' intrinsic communication change (see Schweiger and Denisi (1991), Balmer and Dinnie (1999), Seo and Hill (2005)). Whether and how firms' extrinsic communication patterns, such as management voluntary disclosure to the market may change after mergers and acquisitions are under-investigated. There lacks empirical evidence on firms' external communication pattern change if there is any over the process.

There are various aspects and factors that influence the outcomes of mergers and acquisitions. Extant theory posits that to the extent that a firm's disclosure policy mitigates the

problems arising from information asymmetry between managers and outside investors, the disclosure improves the efficiency of firms' investments by lowering their cost of external financing to fund the growth opportunity (Khurana et al. (2006)).

Although the empirical research on mergers and acquisitions has largely concentrated on the area of corporate finance, there are important empirical studies done on mergers and acquisitions in the context of accounting information environment. Brennan (1999) investigates factors that influence voluntary forecast disclosure by target firms. The author also examines the characteristics of the forecasts (good/bad news) as well as the influence of forecasts on the outcome of hostile bids. Focusing on the stock for stock mergers, Erickson and Wang (1999) find that through earnings management, acquiring firms attempt to increase their stock price in order to reduce the cost of buying the target. Wandler (2007) examines the characteristics of firms that voluntarily disclose forward-looking earnings estimates in the proxy-prospectus when completing a merger. The author examines whether or not voluntarily disclosing earnings estimates increases the likelihood of merger completion. The author also examines the firm characteristics that determine management's decision to voluntarily disclose earnings estimates, and finds that acquirers with stronger financial positions and targets with weaker financial positions are more likely to voluntarily disclose earnings estimates.

Shalev (2009) explores causes and effects of business combinations disclosure level. The author finds that acquirers' future performance increases with abnormal levels of disclosure on business combinations. The author constructs a numerical disclosure score, which is derived from the business combination items disclosed in the 10-K. Martin and Shalev (2009) investigate the relation between target's specific information and the expected synergies. The authors find that both combined stock returns around acquisition announcement and post-acquisition performance

of the combined entity are positively related to the pre-acquisition level of target firm-specific information. Martin and Shalev (2009) also find that acquirer shareholders benefit from target firm specific information, while target shareholder wealth effect around acquisition announcement decreases.

Using data on media coverage and merger negotiations, Ahern and Sosyura (2014) propose and find that firms originate and disseminate information to the media to influence the stock prices during mergers and acquisitions. The authors suggest that for stock mergers, acquirers originate large quantity of news stories during the deal negotiation period. They further claim that management can manipulate information disclosure to achieve certain self-interests through various levels of media coverage.

Given the role of disclosure in mitigating information asymmetry to facilitate corporate investment opportunity, it is expected that a higher level of disclosure, especially voluntary disclosure likely brings value to major corporate events, such as mergers and acquisitions. The investigation can be based on how the management voluntary disclosure affects the outcome of mergers and acquisitions, and the value/returns to the shareholders. Management may adjust disclosing strategy to improve valuation around mergers and acquisitions. Behavioral finance theory has documented the role of familiarity in stock valuation. Merton (1987) offers a theoretical model, suggesting that every stock is familiar to a subset of investors, and stocks that receive more attention will have higher valuations/prices. Huberman (2001) provides empirical evidence that investors simply prefer to choose the familiar investment opportunities. In other words, people feel comfortable investing in a firm that is visible to them. Van Nieuwerburgh and Veldkamp (2009) analyze investment home bias and show that individuals should be more willing to pay attention to stocks with which they are already familiar. Liu et al. (2014) argue that if investors only consider stocks with which they have some familiarity, then media coverage effectively shifts out the demand curve by having more investors paying attention to the stock. Given the importance of familiarity on investor's investment practice as well as the significance to stock valuation, management can have motivations to strategically disclose information to the market.

## 2.4. Market Participants' Attention around M&A

Psychology theory suggests that human beings have a psychological constraint, i.e. limited attention or processing capacity. Attention requires efforts, so the information processing can be selective (Kahneman, 1973). Empirical evidence shows that limited attention affects how investors interpret accounting information. Hirshleifer and Teoh (2003) examine the effects of firms' different information presentations on market prices when investors have limited attention and processing power. Hirshleifer et al. (2011) suggest that limited attention plays a role for both investors' under-reaction and over-reaction to earnings and earnings components. In addition to investigating the effect of investors' limited attention, researchers also examine whether management manipulates earnings information disclosure based on investors' attention. Empirical research suggests that management tends to time the market to release earnings news under various investor attention. For example, management tends to release bad earnings news on Fridays rather than on other weekdays (Bagnoli et al. (2005), DellaVigna and Pollet (2009), deHaan et al. (2015)), and in afterhours rather than in trading hours (Bagnoli et al. (2005), deHaan et al. (2015)). Taking a different perspective, Lou (2014) investigates the role of advertising in firms' product market on firms' security market. Traditionally, advertising is used to promote customers' attention to a firm's products rather than to its securities. However, based on the spillover effect, Lou (2014) provides evidence that managers adjust firm advertising levels to attract investor attention and

influence short-term stock returns. Lou (2014) also examines the advertising spending around insider sales, seasoned equity offerings and stock financed acquisitions, and concludes that managers opportunistically adjust advertising levels to influence short term stock returns.

Research on market attention around mergers and acquisitions has largely concentrated around the deal announcement period. Literature has documented that there are significant positive returns around the announcement dates for the target firms and generally non-positive returns for acquiring firms (Haleblian et al. (2009), McNichols and Stubben (2015)). Luo (2005) studies the issue of market reaction to mergers and acquisitions announcements and suggests that management seems to learn from the market reaction to announcement and later considers it in closing the deal. Similarly, Liu and McConnell (2013) examine the role of media attention to mergers and acquisitions announcement and suggest that the media coverage influences management's capital allocation decisions.

#### 2.5. Management Disclosure Tone

There is a growing interest in the literature examining the qualitative aspects of various forms of firm communications. As some research argues, quantitative information provides investors with an incomplete picture of a firm's situation (Huang et al. 2014). The qualitative content of disclosures through press release and financial media may deliver important information instead. Managers have a tendency to use positive language to describe their firms' performance and prospects (Henry (2008)). As Henry (2008) argues, framing financial performance in positive terms will cause investors to think about the results in terms of increases relative to the reference points.

Researchers study the impact of firms' qualitative disclosures from various aspects. Kothari et al. (2009) examine the mandatory corporate disclosures and suggest that market participants are likely to recognize that management has an incentive to self-serve thus tend to have favorably skewed disclosure. Kothari et al. (2009) suggest that the regulation on management might be less effective when disclosures are in the qualitative rather than quantitative form. Rogers et al. (2011) establish that firms tend to have higher litigation risks if they disclose abnormally optimistic earnings news. Davis et al. (2012) document a positive relation between increase in optimism of earnings press releases and the stock returns around announcements. Davis and Tama-Sweet (2012) examine the language used in earnings press releases and 10-K, and find that negative tone in mandatory filing is associated with lower future accounting performance. Huang et al. (2014) establish that abnormal positive tone in earnings releases is significantly positively associated with M&A and SEOs activities in the immediate future. Huang et al. (2014) conclude that management strategically uses disclosure tones to influence investors' perception prior to major corporate events. Davis et al (2015) examine the management tone in the setting of conference calls. They suggest that manager specific optimism affects investors' interpretation of messages delivered in conference calls.

Some studies examine the impact of media tone on stock market specifically. Studies have shown that the tone of company's media article can significantly affect the stock prices and market returns (Ahern and Sosyura (2014)). Barber and Odean (2008) document that individual investors tend to buy attention-grabbing stocks in the news. Tetlock (2007) examines the connection between pessimism in the financial press and stock prices, and finds that excessive pessimism in the news stories can predict immediate lower prices. Tetlock et al. (2008) obtain similar results as those in Tetlock (2007). Tetlock et al. (2008) show that the amount of negative words used in news

stories are associated with lower future earnings. Demers and Vega (2011) find a positive relation between future returns and change in tone of earnings press releases. Therefore, the narrative content of a company's written reports provides valuable information to the market.

#### 2.6. Market Conditions' Impact on the Relationship between Voluntary Disclosure and M&A

Classical finance theories generally assume that investors make rational decisions. Studies have been grounding on the assumption of market efficiency for pricing of information, leaving no role for investor behaviors' influence on interpreting accounting information. With the development of research of behavioral finance, how investors' psychological and emotional conditions affect the market have been examined widely. Empirical studies have documented that investor sentiment is significantly related to stock prices (Baker and Wurgler (2006)).

To demonstrate the association between firm level disclosure strategy and macro level market effect, more and more recent studies start to take a behavioral view in the research of market reaction to firm disclosure. Mian and Sankaraguruswamy (2012) examine whether market wide investor sentiment influences the stock price sensitivity to firm specific earnings news. Folsom et al. (2015) examine the effect of investor sentiment on the stock market reaction to earnings news (i.e., ERC) for loss firms. They find that the ERC for loss firms' earnings increases is less positive as sentiment increases, contrary to the findings in prior literature examining how sentiment affects the ERC for profit firms. Using Michigan Consumer Index as a measure of investor sentiment, Bergman and Roychowdhury (2008) examine how firms utilize corporate disclosure as a means of influencing investor sentiment. The authors find that firms reduce the frequency of long term earnings forecasts during high sentiment periods, while increase the frequency of these forecasts during low sentiment periods. Lemmon and Portniaguina (2006) conduct an analysis on the

relationship between investor sentiment and the small-stock premium using consumer confidence as a measure of investor sentiment. Cooper et al. (2015) examine how firms' voluntary disclosure level relates to investor sentiment. Consistent with the view that managers increase disclosure to correct low sentiment induced mispricing, the authors find a negative relation between disclosure and investor sentiment. Cooper et al. (2015) suggest that mispricing is corrected more for firms that increase their corporate voluntary disclosure following low sentiment periods.

Existing evidence on the effects of investor sentiment almost exclusively focuses on the U.S. stock market. There are limited studies on the effect of investor sentiment from an international perspective. Using consumer confidence as a proxy for consumer sentiment, Schmeling (2009) examines whether and how investor sentiment affects expected stock returns internationally in eighteen industrialized countries. In line with evidence for the U.S., the author finds that investor sentiment negatively forecasts stock market returns across countries, suggesting that the U.S. results can be translated to other markets.

Existing research of investor sentiment has largely concentrated on the area of stock market reaction, while there are a few studies investigating the real effects of investor sentiment on major corporate financial events. Lowry (2003) finds that investor sentiment is an important determinant of the fluctuation in IPO volume. Alimov and Mikkelson (2012) find that firms going public during periods of favorable sentiment spend substantially more on investments than firms going public in other periods. In the event of mergers and acquisitions, Rosen (2006) investigates whether investor sentiment influences the investors' reaction to a merger announcement. The author finds that the market reaction to a merger is positively associated with the response to other mergers in the recent past.

## 2.7. Literature Review Summary

In summary, the literature reviews illustrate that managers have an information advantage over outside investors, and can strategically decide whether and how to disclose the proprietary information. As a major type of voluntary disclosure, firms' press releases are much rarely regulated, therefore are particularly suitable for strategic management. Research on mergers and acquisitions has largely focused on whether acquisitions add value to the firm. With respect to firms' disclosure practices around this event, the emphasis of existing literature is placed on the plan pre-announcement and announcement period. Due to the psychological fact of investors' limited attention, research shows that management can actively manipulate information disclosure based on investors' attention. Management strategically utilizes disclosure tones to influence investors' perception about the firm and to affect stock returns. Moreover, research shows that the firm level disclosure strategy is associated with macro level market effect, such as investor sentiment.

This study differs from prior literature mainly in the following ways. First, no prior studies have examined whether and how the acquiring firms strategically announce the mergers and acquisitions events along this whole process, including the mergers and acquisitions plan, mergers and acquisitions completion, or withdrawal. Specifically, few studies examine the disclosure practices around mergers and acquisitions withdrawal, while this paper investigates the disclosure of withdrawal firms to discover whether management takes advantage of markets' general reaction pattern. The amount of withdrawn mergers and acquisitions is now at a high level, which is thus worth specific attention. As Figure 1 suggests, withdrawn mergers and acquisitions deals total \$280 billion in 2014, reaching a historical high since the last financial recession. The percentage of dollar value for withdrawn deals out of total deals announced from year 2005 to 2014 ranges

from 2% to 22%, with a historical high point of 22% withdrawn deals in 2014. As an article in The Economist (2014) suggests, although it looks like nothing has really changed, failed transactions often have material consequences. The author suggests that usually a failed transaction damages the credibility or reputation of the acquirer's management. For example, before the retirement in 2001, Jack Welch of General Electric stained his reputation by failing to buy Honeywell. In 2014, Sprint terminated its CEO Daniel Hesse after the deal to acquire T-Mobile withdrawn. Therefore, with the huge withdrawn mergers and acquisitions value and the under-investigated consequences to management, this study puts a special interest in the management disclosure practices around withdrawal deals. It investigates how management voluntary disclosure plays a role in withdrawal deals through introducing self-interest oriented information to the market.

Second, research on firms' performance during post-acquisition period is limited. Specifically, Haleblian et al. (2009) call for research on firms' external communication pattern change if there is any after mergers and acquisitions as well as the potential mechanism associated with the change. This study examines firms' disclosure practices change from pre-announcement to post-transaction with an intent to discover potential communication patterns and underlying mechanism. It also examines the stock performance associated with the communication pattern over the mergers and acquisitions process to investigate the impact of disclosure on stock returns.

Third, this study takes a dynamic view of voluntary disclosure (Guttman et al. (2014)). Corporate disclosure environments are characterized by multi-period and multi-dimensional information flows. The disclosure level, timing, as well as content all create important elements of disclosure practices. As a result, the focus of this study is on the disclosure practices of press release by the acquiring firms, including multiple dimensions (e.g. timing, frequency as well as content) of disclosures. In addition, the measure of this study is different from some prior literatures. In Wandler (2007), the disclosure measure is restricted to the proxy-prospectus only, and the author examines only one dimension of the disclosure which is the existence/frequency of disclosure. Shalev (2009) explores causes and effects of business combinations disclosure level. The measure of disclosure in Shalev (2009) is the mandatory disclosure based on items disclosed in the 10-K rather than the voluntary disclosure. Moreover, prior studies mainly focus on the mergers and acquisitions announcement period (Luo (2005), Liu and McConnell (2013)) or preannouncement period (Ahern and Sosyura (2014)), while this study examines various aspects of disclosure over the whole M&A process.
#### **Chapter 3 - Hypothesis Development**

# 3.1. H1-1 Timing Effect

To examine the first research question whether and how firms strategically announce their mergers and acquisitions plan and completion/withdrawal resolution to attract and distract market attention, I test the following hypothesis:

H1-1a: Management disclosure timing is the same for M&A plan announcement.

H1-1b: Management disclosure timing is the same for M&A completion announcement if the market favors the M&A deal versus if the market does not favor the M&A deal.

H1-1c: Management disclosure timing is the same for M&A withdrawal announcement if the market favors the M&A deal versus if the market does not favor the M&A deal.

Firms have discretions over the timing of news release. Literature on earnings announcement shows that investors form expectations not only based on the earnings news, but also on the timing of the earnings release (Duarte-Silva et al. (2013), So (2014)). It is also found that managers speed up and suspend earnings announcement timing strategically. For example, Yermack (2014) find that there are connections between CEOs' absence from headquarters and corporate news releases, in the sense that companies announce less news when CEOs are away from headquarters. Chen and Mohan (1994) find that firms would change the earnings announcement date depending on the nature of the earnings news. deHaan et al. (2015) argue that managers prefer to hide (highlight) bad (good) news by setting the news announcement timing such as on Fridays (on Mondays) in an attempt to take advantage of any possible differences in market attention. Since mergers and acquisitions are the major corporate financial events, similar to earnings announcement practices, management is likely to strategically disclose the mergers and acquisitions related news. Ahern and Sosyura (2014) and deHaan et al. (2015) argue that

managers prefer to hide (highlight) bad (good) news by setting the news announcement timing in an attempt to take advantage of any possible differences in market attention in order to manipulate their stock prices. Thus, management has incentives to time the public disclosure of the deal in order to take advantage of the variation in market attention. That is, given the importance of familiarity or attention on investor's investment practices as well as the significance to stock valuation, management can attract/distract the market attention through strategically disclose information to the market. Since the market attention to news disclosed on different weekdays varies (see deHaan et al. (2015)), it provides opportunities for management to improve the valuation of the stock price through adjusting the disclosure timing.

The nature of the news releases of M&A is different from that of earnings announcement however. It is crystal clear whether the earnings information is good (e.g., earnings is positive or earnings increases from prior periods) or bad (e.g., earnings is negative or earnings decreases from prior periods) once the information becomes available. That is, when managers announce the earnings news, they know that earnings news is good or bad (see deHaan et al., 2015). In contrast, when the acquiring firm announces the M&A news, it is not crystal clear whether the planed M&A is good or bad news. That is, once the plan is announced, the market might or might not favor the deal, which is reflected by either a positive or negative reaction to the acquiring firms' stock price (Luo 2005). Recall that a large literature has found zero or slightly negative average stock returns surrounding the M&A plan announcements for the acquiring firms (McNichols and Stubben (2015), Moeller et al. (2005), Andrade et al. (2001)). Luo (2005) specifically reports that only 42% of M&A result in non-negative reactions for the acquiring firms when they are announced. Thus, how management strategically chooses the timing of its MA news becomes more complicated. First, according to prior research (Wandle 2007), when the M&A plan is announced, the management of acquiring firms expects the deal to go through. Therefore, I make the assumption that the news of a M&A plan is favorable at least to the management, otherwise, acquiring firms will not propose merges and acquisitions. If the management is aware of investors' limited attention capacity when they disclose the mergers and acquisitions announcement news, I expect that the management would strategically highlight the news by announcing the proposed mergers and acquisitions deal on early weekdays (such as Monday) to take advantage of higher market attention since the M&A plan is good news to the management.

Second, when it comes to the resolution news disclosure, management has learned that whether the market likes or dislikes the proposed mergers and acquisitions bids based on the investors' reaction to the plan announcement over the stock market. Luo (2005) establishes that learning occurs during the mergers and acquisitions process, such that merging companies seem to extract information from the market reaction and consider it in closing the deal. Luo (2005) suggests that the stock market reaction to the initial M&A announcement predicts whether the deal goes through or not. Therefore, I predict that for the resolution news release, management might time the market based on the market signal obtained from the plan announcement. A completion of a deal is a good news if the market favors the deal, while it can be a bad news if the market does not favor the deal. Thus, management might strategically time market attention by announcing the completion news depending on whether the market favors or does not favor the deal. In contrast, a withdrawal of a deal is a good news if the market does not favor the deal, while it can be a bad news if the market favors the deal. Thus, management might strategically time market attention by announcing the withdrawal news depending on whether the market favors or does not favor the deal. Overall, this study predicts that managers strategically choose the timing of mergers and acquisitions resolution disclosure based on the market's expectation on the deal. If management

actively participates in timing the announcement, firms' disclosure behaviors are expected to be different with various market expectations.

### 3.2. H1-2 Timing Effect on Market Attention

H1-2a: Market attention to mergers and acquisitions **plan** announcement is the same on Fridays as on other weekdays.

H1-2b: Market attention to mergers and acquisitions **completion** announcement is the same on Fridays as on other weekdays.

H1-2c: Market attention to mergers and acquisitions withdrawal announcement is the same on Fridays as on other weekdays.

The theory shows that market participants are distracted before the weekend and give less attention on Fridays than on Mondays through Thursdays (see DellaVigna and Pollet (2009) and deHaan et al. (2015) about the attention to earnings announcement). If investors have limited attention to M&A announcements as they do to regular earnings announcements as observed in deHaan et al. (2015), they are expected to pay various levels of attention to the news announced on different weekdays. This study therefore examines whether variations in market attention on different weekdays speak to the variations of announcement timing of firms' mergers and acquisitions events as predicted in H1-1. That is, H1-2 examines whether management's timing strategies as predicted in H1-1 can be effective in changing market attention as management expects.

Prior studies have documented mixed evidence on the wealth effect for acquiring firms (Cartwright and Schoenberg (2006)). Luo (2005) finds that nearly half of the deals experience negative market reactions around the initial announcement. In addition, existing literature has

established that investors simply prefer to choose the familiar investment opportunities (Huberman (2001), Liu et al. (2014)). In other words, people feel comfortable investing in a firm that is familiar to them. Firms attract attention through media coverage. The analysis of H1-2 may contribute to existing literature by examining how market attention varies on different announcement dates. Specifically, if investors are subject to their limited attention and if management's timing strategy is effective, I expect investors' attention to M&A plan may vary when management announces the plan on different days of a week. This leads to H1-2a.

Following the logic in H1-2a, the announcement timing of firms' mergers and acquisitions resolution is also important with respect to the variation in market attention. If investors pay various levels of attention to the M&A news announced on different weekdays, firms thus have incentives to actively manage their media coverage by originating and disseminating the news of mergers and acquisitions completion or withdrawal on different weekdays. This study therefore argues that if investors have limited attention capacity, they will place various levels of attention across different timed disclosures of mergers and acquisitions resolution news.

### 3.3. H2 Hypothesis

The second hypothesis analyzes acquiring firms' news volume update during the transaction period of mergers and acquisitions to investigate whether and how firms strategically vary their news stories updates in the transaction period depending on the resolution of a transaction to be a completion or a withdrawal.

First, I examine whether management's news stories updates during the transaction period differ depending on the resolution of a transaction to be a completion or withdrawal in the following hypothesis:

H2-1a. Acquiring firms' news update in the transaction period is the same toward a completion as it is toward a withdrawal resolution.

H2-1b. Acquiring firms' news update in the transaction period is the same toward a completion as it is toward a withdrawal resolution when the market favors the deal around plan announcement.

H2-1c. Acquiring firms' news update in the transaction period is the same toward a completion as it is toward a withdrawal resolution when the market disfavors the deal around plan announcement.

The analysis provides an ex-post observation to help understand different events occurred in the transaction period given the M&A completion/withdrawal resolution.

According to Wandler (2007), it is generally assumed that management of the acquirer firm has an incentive to complete the proposed M&A transaction. Wandler (2007) further argues that when managers have the incentive to complete the transaction, they likely increase their voluntary disclosures in order to reduce information asymmetry. However, Luo (2005) finds that management learns from market reactions to M&A announcements to close the deals. Moreover, various reasons may lead the proposed M&A to be withdrawn and these reasons can range from the unacceptable transaction prices, the rejection of the deal by the shareholders to problems with the approval of the deal by relevant authorities (Lev et al. (2010), Jacobsen (2014)). These findings suggest that (1) not all management seems to have the consistent incentives to complete the transactions, and (2) even management has the incentives to complete the transactions, the final resolutions depend on various internal/external factors. Thus, in this study, I argue that management's incentives to disclose and its disclosure strategies will vary depending on various considerations during the M&A process. At first, around the time a transaction is just announced, I expect that management of the acquiring firm has the incentive to complete the M&A bid and thus will voluntarily update its news stories about the mergers and acquisitions in order to reduce the information asymmetry. This argument corresponds to my H1-1a that management of the acquiring firm views the M&A plan as a good news. Otherwise, it will not plan the M&A. During the M&A process, managers, as insiders of the process, gradually gets more information about the possible resolution, and thus vary their disclosure behaviors depending on whether the resolution is either a completion or a withdrawal. My expectation is based on the finding from prior studies (e.g., Kothari (2009), Kasznik and Lev (1995)), that is management's disclosure behaviors are different based on their anticipation of the nature of the earnings news. On the one hand, based on the finding of Shalve (2009), acquiring firms tend to provide less forthcoming disclosures on less favorable acquisitions (bad news). Thus, acquiring firms will provide less news updates towards two bad news conditions (i.e., completion if the market does not favor the deal and withdrawals if the market favors the deals) than towards two good news conditions (i.e., completion if the market favors the deal and withdrawals if the market does not favor the deals). On the other hand, based on Kasznik and Lev (1995), firms facing greater earnings disappointment are more likely to update their information to minimize the negative impacts of earnings disappointments. Thus, it is possible that acquiring firms will provide more news updates in the two bad news conditions than in the two good news conditions. Given these two possibilities, I am motivated to examine whether and how management varies its news updates on M&A activities during the transaction period.

H2-2a. There is a positive relationship between acquiring firms' news update level during the transaction period and stock return on **resolution** (both completion and withdrawal).

H2-2b. There is a positive relationship between acquiring firms' news update level during the transaction period and stock return on **completion**.

H2-2c. There is a positive relationship between acquiring firms' news update level during the transaction period and stock return on **withdrawal**.

The hypothesis H2-2 is based on two lines of research. On the one hand, empirical research in mergers and acquisitions has been interested in examining whether acquisitions add value to firms through investigating the relationship between acquisition activity and firms' shareholder value, which is usually reflected in the announcement abnormal returns (Carper (1990), Martynova and Renneboog (2008)). On the other hand, the financial media's role in the stock market has been studied by researchers. Klibanoff et al. (1998) argue that news events lead some investors to react more quickly, thus resulting in a positive relation between financial news and liquidity. Tetlock (2010) tests a model in which public news eliminates an information asymmetry in the stock market. Griffin et al. (2011) investigate the information content of news announcements in the global market. More recently, Ahern and Sosyura (2014) propose and test that firms originate and disseminate information to the media to influence their stock prices during mergers and acquisitions. They put a special emphasis on the stock mergers in which management has great incentives to influence the stock prices.

Mergers and acquisitions are major corporate events for the acquiring firms. My study focuses on whether management's own news updates specific to mergers and acquisitions better reflect its strategic disclosure practices. It is in contrast to Ahern and Sosyura (2014) who examine all financial news releases issued by both the firms and other information media. I examine the outcomes of firms' strategic disclosures of mergers and acquisitions news during the transaction period. In particular, I investigate whether the level of corporate voluntary disclosure is associated with acquirers' abnormal stock returns in this hypothesis.

Based on the existing evidence that news dissemination reduces information asymmetry and results in higher financial asset values (Fang and Peress (2009), Griffin et al. (2011)), I then project that the M&A news updates volume will have a positive impact on the acquirers' stock returns upon resolution.

#### 3.4. H3 Hypothesis

To answer the third research question whether the dynamics of strategically disclosure pattern change around mergers and acquisitions, I examine the hypothesis as following:

H3-a. Acquiring firms' strategic **disclosure volume** is the same over the pre-transaction, transaction, and post-transaction periods.

H3-b. Acquiring firms' stock performance is the same over the pre-transaction, transaction, and post-transaction periods.

In the extant theoretical literature (see the review by Guttman et al. (2014)), the dynamic model of voluntary disclosure of information shows that corporate disclosure environments are characterized by multi-period and multi-dimensional flows of information from the firm to the market. With ongoing mergers and acquisitions resolution (completion/withdrawal), there exists information asymmetry (effects) between firms and other market participants with respect to how the relevant information are obtained and disclosed.

This study tests the dynamic model of voluntary disclosure by investigating acquiring firms' voluntary disclosure activity before and after the mergers and acquisitions completion. The intention to close the mergers and acquisitions transaction presents potentially strong incentives

for acquiring firms to change their disclosure policy to complete the deal. For example, Lang and Lundholm (2000) argue that firms dramatically increase their disclosure activity when issue equity capitals. In the scenario of mergers and acquisitions, it is possible that management may provide market participants with voluntary forward-looking information such as an optimistic view of the merged firm to persuade the shareholders to vote in favor of the transaction. Based on the findings of Lang and Lundholm (2000), some companies "hype" the stock by increasing the disclosure level first, then decrease, while some other companies maintain consistent levels of disclosures. In this study, I empirically examine whether acquiring firms may maintain their disclosure levels or just "hype" the stock by adjusting the disclosure levels to affect investors' perceptions around mergers and acquisitions.

Existing research on post-acquisition performance has concentrated on the financial performance as well as integration of the combined business (e.g. Francis and Martin (2010), Zollo and Singh (2004)). There is little literature on the communication/disclosure pattern change after the transaction. This study intends to make up the missing puzzle of acquiring firms' disclosure practices after transaction completion in the literature. Based on studies on the impact of M&A on corporate governance, acquiring firms may maintain their disclosure levels because these firms' top management and board are expected to maintain their existing communication patterns after completion. That is, top management of target firms is often dismissed (Agrawal and Walkling (1994)), and board members of target firms typically lose their board seats after the acquisitions being completed (Harford (2003)). Top management and board members normally play an important role in firms' communication styles are expected to be affected due to the fact that top management and board members lose their voice in the acquired firm, while the acquiring firms' top

management and board are expected to maintain their existing communication patterns. Thus, I anticipate that management's strategic disclosures practices would not change after the transaction since the top management of acquiring firm tends to remain in the firm. Therefore, the disclosure pattern remains constant during the process of mergers and acquisitions.

When a firm increases levels of disclosure, the potential for information asymmetries to arise between the management of the firm and its shareholders diminishes (Bailey et al (2006)). Studies document that voluntary disclosures are associated with stock performance (Healy and Palepu (2001)). Kim and Verrecchia (1994) argue that voluntary disclosure reduces information asymmetries such that investors can be relatively confident with firms with higher levels of disclosure, increasing liquidity in the firm's stock. Leuz and Verrecchia (2000) find that German firms with a higher disclosure level experience lower bid-ask spreads and higher trading volume. Following the spirit of Yermack (2014), I analyze the impact of the acquiring firms' disclosure practices on their stock performance. Yermack (2014) investigates the empirical relations between corporate news release pattern and CEO absences, as well as abnormal stock price, and stock volatility. According to Lang and Lundholm (2000), firms that maintain a consistent level of disclosure experience price increases prior to the offering and only small price declines thereafter, suggesting that the information asymmetry has been diminished throughout this process with a consistent disclosure level. In contrast, firms that substantially increase their disclosure activity prior to the offering experience price increases prior to the offering, while suffer much greater price declines thereafter. The comparison between these two types of firms indicates that disclosure increase may have been used to just "hype" the stock. With the expectation that acquiring firms' voluntary disclosure pattern remains the same, I project that the stock

performance, such as stock return, volatility and trading volume would keep constant over the mergers and acquisitions process.

### 3.5. H4 Hypothesis

Extant studies document that firm-level information uncertainty only matters when it is correlated with the market uncertainty (Anderson et al. (2009), Mian and Sankaraguruswamy (2012)). Taking into consideration of the general market factor, this study investigates whether and how firms adjust their strategic disclosures in response to variation in various market conditions measured as investor sentiment by examining the following hypothesis.

The hypothesis H4-1 and H4-2 retest the disclosure timing and market attention issues examined in the first research question under various investor sentiment conditions.

H4-1a: Management disclosure timing is the same for M&A plan announcement under high vs. low investor sentiment conditions.

H4-1b: Management disclosure **timing** is the same for M&A **resolution** announcement under high vs. low investor sentiment conditions.

H4-2a Market attention to mergers and acquisitions plan announcement is the same on Fridays as on other weekdays under high vs. low investor sentiment conditions.

H4-2b: Market attention to mergers and acquisitions resolution announcement is the same on Fridays as on other weekdays under high vs. low investor sentiment conditions.

The hypothesis H4-3 retest the issue of management M&A news update during transaction period examined in the second research question under various investor sentiment conditions. *H4-3a. Investor sentiment has no effect on the management M&A news update frequency toward a deal completion/withdrawal.* 

H4-3b. The relation between level of management M&A **news update** during transaction period and **stock returns** around resolution is the same under high vs. low sentiment conditions.

Corporate voluntary disclosure is a major information source in the event of mergers and acquisitions. Whether and how management tries to time the market using the disclosure tool under various market conditions is an open question in the literature of mergers and acquisitions. This research investigates the effect of one market condition, i.e. investors' sentiment, on the corporate disclosure practices during mergers and acquisitions. Existing literatures establish that investor sentiment leads to mispricing effects (Baker and Wurgler (2006, 2007), Baker et al. (2012)). Researchers find that management responds to this sentiment-induced mispricing with various corporate voluntary disclosures and suggest a negative association between sentiment and disclosure (Bergman and Roychowdhury (2008), Cooper et al. (2015)). In this study, I first examine under various conditions of investor sentiment, whether disclosure timing is different and how market attention to the disclosure vary in H4-1 and H4-2 respectively.

Both Bergman and Roychowdhury (2008) and Cooper et al. (2015) document a strong negative relation between corporate disclosure and investor sentiment, suggesting that management increases disclosure levels to correct the low-sentiment induced mispricing. The projection of the gloomy market with a low investor sentiment condition generally leads to undervalued firms. The project of the positive market with a high investor sentiment condition, however, generally results in overvalued firms. Therefore, it is reasonable to assume that management might adjust their disclosure practices depending on the prevailing levels of market uncertainty to time various levels of market sentiment that could affect the mergers and acquisitions outcome. Following the logic of prior literature, such as Bergman and Roychowdhury (2008) and Cooper et al. (2015), I project that with a low investor sentiment condition,

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management is likely to disclose more in order to mitigate the negative effect of prevailing market sentiment on both the plan and resolution of the deals. In contrast, during periods of high sentiment, management tends to remain silent to take advantage of the general overvaluation. I then expect a negative association between the levels of news updates and market sentiment towards either a completion or withdrawal. The higher (lower) the prevailing levels of market sentiment, the lower (higher) the management disclosure level. Under different market conditions, the effects of news update on stock returns are expected to be different. Hypothesis 4-3b explores the impact of firms' strategic disclosures in response to prevailing investor sentiment on firm performances, i.e. stock returns.

### 3.6. H5 Hypothesis

Content analysis, especially tone analysis is one of the main areas in existing disclosure research. Press releases are firms' voluntary disclosure and are not subject to enforced regulation inspection. Therefore, management has wide latitude in selecting the content to release. As argued before, since management has incentive to self-serve thus may favorably disclose, I am interested in investigating management's tone disclosure over the M&A process.

In specific, this study performs the textual analysis (e.g. positive/negative tones) of M&A news contents based on the M&A press release samples obtained from Factiva. The investigation has four folds: first, how the tone of press release varies for plan announcement, M&A news update, and deal resolution; second, how the tone of the press release affects investors' response to the communication and whether tone can be used as a tool to affect investors' perception about the proposed M&A deal; third, whether tone differs between deal completion and deal withdrawn; lastly, whether the magnitude of disclosure tone would have an impact on market attention since

the difference in tone magnitude will convey information variations to the market. The magnitude of tone represents the strength of sentiment in news releases.

As argued before, the nature (good news or bad news) of voluntary M&A news release is not as clear as other forms of disclosure, such as earnings announcement. Management has control over the content of the disclosed M&A news. Therefore, it is necessary to examine whether and how managers strategically disclose the content of the M&A news and what are the impacts of the content to firm valuation.

To examine the last research question about the voluntary disclosure tones of M&A news, including the tone difference for various announcement, and the impact of tone on firm valuation and market attention, I test the following hypothesis:

H5-1. The disclosure tone is the same for a plan announcement, M&A news update, and resolution announcement.

H5-2. The disclosure tone of M&A news update has similar impact on stock returns on resolution. H5-3. The disclosure tone of M&A news update is the same toward a completion as toward a withdrawal.

H5-4. The greater the magnitude of disclosure tone of M&A news, the greater the market attention.

Firms normally publicly announce their mergers and acquisitions related news using press releases. Firms might pay special attention to the information content of the press release because the information content of news stories contributes to the stock price efficiency (Fang and Peress, 2009).

In this study, I examine the information content of press releases specific to M&A transaction that are made at the point of initial public announcement, during the transaction period, and at the deal resolution (either a completion or withdrawal). The textual analysis provides a

unique opportunity to study whether and how management is actively involved in the news disclosure of M&A news and what are the consequences/outcomes of the involvement. The intuition is that since managers have overwhelming control over the content of the M&A news release and the nature of M&A news is not as straightforward as other types of news release, the M&A news content produced by management provides a natural experiment to test whether management actively manipulates the information content of the voluntary disclosure over the mergers and acquisitions process. The magnitude of tone is the absolute value of tone used in the M&A news normalized by the median value, characterizing the strength of sentiment that management uses in news releases.

### **Chapter 4 - Data, Sample and Methodology**

# 4.1. Data source

The research draws the sample of mergers and acquisitions from the Securities Data Company (SDC)'s Mergers and Acquisitions Database. The study selects the sample of domestic mergers and acquisitions with announcement dates between 2005 and 2014. Most of the empirical mergers and acquisitions studies set a minimum transaction threshold to eliminate immaterial deals. For example, some studies require one million dollars as a minimum transaction value (e.g. Wandler (2007), McNichols and Stubben (2015)). Following these studies, I delete the observations with deal values less than one million dollars to help ensure that the transaction is material enough. For all the tests, this study restricts the acquirer firms to be public companies that allow the study to utilize their accounting/financial data. Specific samples are described for individual test of each hypothesis (see the methodology section).

Following Ahern and Sosyura (2014), I obtain the news coverage information from Dow Jones's Factiva database. To investigate the timing and content effects of news stories update on the mergers and acquisitions activity, the sample covers both completed and withdrawn deals of U.S. publicly traded firms in the SDC database (Ahern and Sosyura (2014) focus on the completed mergers).

The study retrieves information about the terms of the transaction and the key dates in the mergers and acquisitions process from the SDC database. In particular, the study collects the key dates when a merger and acquisition is made public with the official public announcement for the M&A plan and the M&A resolution (completion/withdrawal). Figure 2 illustrates the sequence of time periods in a typical merger and acquisition. The transaction period is days between plan announcement date and the mergers and acquisitions resolution (completion/withdrawal) date for

each transaction. The preannouncement period is the same amount of days before the public announcement of M&A plan as the transaction days for each transaction, and the post-transaction period is the same amount of days after the resolution date as the transaction days for each transaction. For example, on May 9, 2011, Hertz Global announced a plan to acquire Dollar Thrifty. On October 27, 2011, Hertz announced the withdrawal of this proposed transaction. The transaction period is between May 9, 2011 and October 27, 2011. The transaction lasts 170 days. The preannouncement period is 170 days before the plan announcement. The post-transaction period is 170 days after the resolution date.

The press release disclosure data is collected from the Factiva database. Factiva assigns each company a unique identifier called Intelligent Indexing Code, which enables matching the most relevant articles based on this unique identifier. The research collects daily data on a firm's press releases issued in the transaction period and in the preannouncement/post-announcement period specified as the same number of days as in the transaction period. To investigate firms' media strategy around mergers and acquisitions, the media coverage includes multiple media outlets comprising all English-language media sources in the Factiva's category of press release newswires. The press release newswire articles are reports of firm press releases without additional analysis. The research utilizes the volume of a firm's press releases to understand how the firm strategically manages voluntary disclosures and whether the firm's disclosure strategy affects the mergers and acquisitions activity/outcome. In addition, it uses the content of a firm's press release for tone analysis. In testing hypothesis 2, the study restricts the disclosure data to firms' press releases specifically on the subject of mergers and acquisitions. In testing hypothesis 3, the study restricts to firms' press releases relating to financial performance. The research restricts the news to be those published in the United States.

The financial data is drawn from Compustat and the daily stock return/ trading volume is obtained from CRSP. To measure analysts' speed to revise the earnings forecast which is a measure of market attention, daily analyst forecasts are obtained from I/B/E/S detailed file. The investor sentiment data is obtained from monthly Michigan consumer sentiment index. In the text analysis, I obtain the word list developed in Loughran and McDonald (2011) to classify the positive words and negative words. The lists are obtained from the web page of Bill McDonald.

#### 4.2. H1-1 Sample and Methodology

To test H1-1, I include M&A transactions that satisfy the following criteria: (1) The U.S. mergers and acquisitions announced between January 1, 2005 and December, 30, 2014; (2) The transaction value is at least \$1 million; (3) The acquirer is a publicly traded company because most of research on M&A reviewed earlier have focused on public acquirers; (4) The sample has data available in CRSP to obtain the daily stock price information. In order to learn about whether the market favors or disfavors the mergers and acquisitions deals, I follow Luo (2005) by checking the 3-day average abnormal returns around the plan announcement of M&A deals. If the return is greater than zero, then it suggests that the market favors the bid at the time it is announced. In comparison, if the average abnormal return is less than zero, then the bid is deemed as a bad news to the market at the time it is announced. Thus, I limit the data with CRSP to calculate CARs at the plan announcements.

To test the disclosure timing effect, I follow the methodology used in deHaan et al. (2015). Specifically, I conduct analysis on the frequency of different weekdays that M&A events are announced.

## 4.3. H1-2 Sample and Methodology

To test H1-2, I include M&A transactions that satisfy the same three criteria as H1-1: (1) The U.S. mergers and acquisitions announced between January 1, 2005 and December, 30, 2014; (2) The transaction value is at least \$1 million; (3) The acquirer is a publicly traded company with data available in CRSP to obtain the daily stock price information and with information available in Compustat to obtain its accounting related data. Moreover, I require that (4) the target is a public company with data available in Compustat in order to obtain the target company's accounting related data; and (5) analyst data is available from IBES in order to calculate market attention. Following deHann et al. (2015), I construct the measure for market attention, which is the speed with which equity analysts impound mergers and acquisitions plan or withdrawal news into their future forecasts (ANALYST\_SPD).

To examine H1-2 about whether the announcement timing of firms' mergers and acquisitions plan and resolution is important to the variations in market attention, the study presents the partial correlation between market participants' attention and the mergers and acquisitions plan and resolution on Fridays or other weekdays to obtain the covariance between the two variables while eliminating the variance from a third variables. In addition, the research examines a regression model following deHaan et al. (2015),

$$Attention = \beta_0 + \beta_1 Fridays + Controls + \varepsilon.$$
(1)

The main measure of market attention derived from deHaan et al. (2015), ANALYST\_SPD, calculating analyst updating speed is

 $1/(\log(1/j\sum_{j=1}^{j}1 + \text{weekdays until forecast update}_{j}))$  for an analyst forecast j, that is updated within 30 days of the related M&A announcement. The main interest variable is Fridays, which is 1 if a M&A is announced on Fridays, 0 otherwise. If  $\beta_1 < 0$ , it would be consistent with market

attention being lower on Fridays. This negative coefficient would be simultaneously consistent with market attention being higher on Mondays through Thursdays (deHann et al. 2015).

This study controls the year effect, industry effect and other variables used in prior studies. Following deHaan et al. (2015), this study controls variables that are likely correlated with firm characteristics, such as the acquiring firm size (acq\_size), leverage (lev), book-to-market (btm). Acquirer's size is defined as the natural log of the acquirer's market value of equity. Leverage is acquirer's total liability/total asset. Book-to-market is acquirer's common equity/market value of equity. Following deHaan et al. (2015), it also controls the stock returns around plan announcement (CAR) which is defined as acquirer's two-day cumulative abnormal return around plan announcement and resolution announcement respectively.

Following the literature on mergers and acquisitions, such as McNichols and Stubben (2015), Ahern and Sosyura (2014), Levi et al. (2010), and Bates and Lemmon (2003), this study also controls some mergers and acquisitions deal characteristics. These control variables include whether the deal is a tender offer (indicator variable, tender offer=1, otherwise=0), whether the acquirer needs to pay a termination fee upon deal withdrawal (indicator variable, termination fee=1, otherwise=0), and whether the consideration is stock only (indicator variable, stock consideration=1, otherwise=0). The model also controls for relative size of the acquiring firms and target firms (ratio of the target's market value of equity to the acquirer's market value of equity), and Same Industry, an indicator variable that equals one if the acquirer and target firm have the same two-digit SIC code.

### 4.4. H2 Sample and Methodology

To test H2, I include M&A transactions that satisfy the following criteria: (1) The U.S. mergers and acquisitions announced between January 1, 2005 and December, 30, 2014; (2) The transaction value is at least \$1 million; (3) The acquirer is a publicly traded company with data available in CRSP to obtain the daily stock price and related information, and with data available in Compustat to obtain its accounting related data; (4) The target is a public company with data available in Compustat in order to obtain its accounting related data.

To test hypothesis 2, I follow the similar methodology used in Ahern and Sosyura (2014) by searching the Factiva database. However, different from Ahern and Sosyura (2014), the tests of my H2 are restricted to acquiring firms' press release wires with specific topic of mergers and acquisitions during the transaction period for each deal in order to focus on management's own strategical behaviors. The research utilizes the volume of an acquiring firm's news stories about its M&A between the plan announcement and the completion/withdrawal to measure the news updates drawn from Factiva. The measures for news stories updates are the frequency of news stories released by the acquirer itself about a firm's mergers and acquisitions after the plan announcement and before the completion/withdrawal. I match the completion deals with withdrawn deals using acquiring firms' industry and size. Then I conduct comparisons of the news release frequencies of the matched samples.

To test H2-2, following the spirit of Griffin et al. (2011), I test the news update's impact on a firm's stock return as follows:

 $Ab \ Ret_{resolution} = \beta_0 + \beta_1 \ Ab \ Ret_{announce} + \beta_2 \ NewsUpdate + \beta_3 \ Ab \ Ret_{announce} * NewsUpdate + \beta_4 \ Ab \ Ret_{transaction\_avg.} + Controls + Industry + Year + \varepsilon.$ (2)

The dependent variable is the acquirer's 5-day average abnormal return around the deal resolution period. I also test subsamples of completion and withdrawal by using acquirer's 5-day average abnormal return around completion and withdrawal as dependent variables respectively.

The main interest independent variable is the News Update, which is the M&A news update volume obtained from Factiva. I control the acquirer's 5-day average abnormal return surrounding the plan announcement, AbRetannounce, because market's reaction to a proposed investment significantly affects value added to the acquirer. Whether market responds favorably to a major corporate investment or not is indicated by the abnormal return around the plan announcement (Luo (2005), Kau et al. (2008), Liu and McConnell (2013)). Following Luo (2005), I also control the post-announcement information content during the transaction period (AbRet<sub>transaction ave.</sub>), which is the average abnormal return during the period of transaction (from 2 days after plan announcement until 2 days before resolution). This study also controls the year effect, industry effect and other variables that are likely correlated with firm characteristics, such as the acquiring firm size (acq\_size), leverage (lev), book-to-market (btm), as used in prior studies (Ahern and Sosyura (2014), and Bates and Lemmon (2003)). Following the literature on mergers and acquisitions, such as McNichols and Stubben (2015), Ahern and Sosyura (2014), Levi et al. (2010), and Bates and Lemmon (2003), this study controls some mergers and acquisitions deal characteristics, including whether the deal is a tender offer, whether the acquirer needs to pay a termination fee upon deal withdrawal, whether the consideration is stock only, whether the acquirer and target are in the same industry, and the relative size of acquirer and target. The definitions of these variables are the same as in prior tests.

### 4.5. H3 Sample and Methodology

The sample selection process for H3 is similar to that for H2. The M&A transactions satisfying the following criteria are included: (1) The U.S. mergers and acquisitions announced between January 1, 2005 and December, 30, 2014; (2) The transaction value is at least \$1 million; (3) The acquirer is a publicly traded company with data available in CRSP to obtain the daily stock price and related information, and with data available in Compustat to obtain its accounting related data; (4) The target is a public company with data available in Compustat in order to obtain its accounting related data.

This research focuses on changes in the intensity of the communications of acquiring firms captured by the financial performance voluntary disclosure frequency before and after mergers and acquisitions. The communication intensity proxy is obtained from the Factiva database by searching the volume of financial performance related voluntary disclosure activity. In specific, I search the Factiva database by restricting the press release wire with the subject to be financial performance of the acquiring firm during the preannouncement, transaction and post transaction The transaction period is days between plan announcement and the mergers and periods. acquisitions resolution (completion/withdrawal) date for each firm. The preannouncement period is the same amount of days before the public announcement of mergers and acquisitions plan as the transaction period days for each firm, and the post-acquisition period is the same amount of days after the resolution date as the transaction period days for each firm. This study conducts an ANOVA test to show whether acquiring firms maintain a consistent disclosure level around the mergers and acquisitions process. If a consistent disclosure pattern is observed, it is interested to investigate how the consistent level of disclosure is related to the acquirer firm's stock performance, i.e. the stock volatility, trading volume, and stock return around mergers and acquisitions in particular. It examines whether the stock volatility, trading volume, and stock return

of acquiring firms significantly change over time with either the deal being completed or withdrawn. The ANOVA analysis utilizes the HSD (Honestly Significant Difference) test to show which means differ and by how much they differ over the preannouncement, transaction and post transaction periods.

### 4.6. H4 Sample and Methodology

H4 examines management's disclosure practices over the M&A process in high versus low investor sentiment conditions. Specifically, H4-1 extends the examination of H1-1 under the two conditions; H4-2 extends the examination of H1-2 under the two conditions; and H4-3 extends the examinations of H2 under these two conditions. Thus, the sample selection for H4-1 is the same as for H1-1. The sample selection for H4-2 is the same as for H1-2. The sample selection for H4-3 is the same as for H2.

The research utilizes the monthly index of stock market valuation expectation from Michigan consumer sentiment index to as a proxy of investor sentiment. The Michigan consumer sentiment index is produced by the University of Michigan Survey Research Center based on surveys on consumers' financial conditions, expectations about the economy, and tendency to buy major household goods etc. This index is one of the most widely followed measures of consumer and investor sentiment in the U.S. (Alimov and Mikkelson (2012)). Lemmon and Portniaguina (2006) uses this index to analyze the relationship between investor sentiment and the small stock premium. Bergman and Roychowdhury (2008) use this index to examine how firms utilize corporate disclosure as a means of influencing investor sentiment. Alimov and Mikkelson (2012) use this index to test whether the practice of IPO issuers in favorable sentiment periods are different from those in unfavorable sentiment periods. In H4-1 and H4-2, investor sentiment index values

are matched with corresponding announcement date. In H4-3, the average sentiment condition is calculated for each firm during their specific transaction period. I conduct analysis under two various market conditions, i.e., high sentiment market condition (matched deal sentiment index value greater than the sample mean sentiment index value) and low market condition (matched deal sentiment index value) to assess prevailing market conditions.

#### 4.7. H5 Sample and Methodology

This study performs the textual analysis of news content of M&A press releases. The sample of textual analysis is the same as the sample for the M&A news update frequency study. I follow the sample selection criteria as following: (1) The U.S. mergers and acquisitions announced between January 1, 2005 and December, 30, 2014; (2) The transaction value is at least \$1 million; (3) The acquirer is a publicly traded company with data available in CRSP to obtain the daily stock price and related information, and with data available in Compustat to obtain its accounting related data; (4) The target is a public company with data available in Compustat in order to obtain its accounting related data.

Qualitative data require additional steps of translating text into quantitative measures, which are then used as inputs into traditional methods (Loughran and McDonald, 2016). As Loughran and McDonald (2016) argue, using word list (dictionary) that share common sentiments (e.g. positive, negative) is the most prevalent way in textual analysis. The use of dictionaries to measure tone has several advantages: researcher subjectivity can be avoided; the method scales to large samples; it can be replicated by other researchers since the dictionaries are publicly available (Loughran & McDonald, 2016). In this study, I use one of the most extensively used word lists

(dictionaries) by accounting and finance researchers: Loughran and McDonald (2011) (e.g. Liu and McConnell (2013), Ahern and Sosyura (2014), Huang (2014)). In addition, I use the word lists generated by Diction (e.g. Davis et al (2012), Davis and Tama-Sweet (2012), Rogers et al. (2011)) for a robustness test.

The press releases on plan announcement, M&A news update, as well as deal resolution are obtained from Factiva database. Particularly, following Ahern and Sosyura (2014), I use word lists developed in Loughran and McDonald (2011) to classify the positive words and negative words for primary results. The lists are obtained from the web page of Bill McDonald. Loughran and McDonald (2011) list is developed from the textual analysis in an economic setting, thus is especially suitable for management's financial disclosure analyzed in this study. I use DICTION, a dictionary based software program that determines the tone of a verbal message, to identify the optimistic and pessimistic of management disclosure according to the word lists developed in Loughran and McDonald (2011). DICTION generates the average number of words per 500 words sample that are classified as optimistic, and the average number of words per 500 words sample that are classified as pessimistic based on the word list developed by Loughran and McDonald (2011).

DICTION itself also provides a general understanding of the tone of a given text through five Master Variables: Activity, Optimism, Certainty, Realism and Commonality. In addition to the Loughran and McDonald (2011) word list describing optimistic and pessimistic, I also obtain the value of Optimism as a Master Variable in DICTION for the robustness check. (The definition of Optimism in DICTION: language endorsing some person, group, concept or event or highlighting their positive entailments.) I assess the net optimism of the news content by taking the difference between the optimism and pessimism scores developed by Loughran and McDonald (2011) in each text file. In addition to that, I use the master variable Optimism generated by DICTION as a robustness assessment. I first compare the difference of M&A news release tone for plan announcement, M&A news update, and plan resolution. Second, I test the following equation for the effect of tone on stock return around resolution.

 $Ab \ Ret_{resolution} = \beta_0 + \beta_1 \ Ab \ Ret_{announcement} + \beta_2 \ Ab \ Ret_{transaction\_avg} + \beta_3 Net \ Opt_{announcement} + \beta_4 Net \ Opt_{transaction\_avg} + Controls + Industry + Year + \varepsilon.$ (3)

Third, I examine whether the disclosure tone differs between completed deals and abandoned deals. Lastly, I examine whether the magnitude of tone would has an effect on the market attention. The magnitude of tone is the absolute value of tone used in the M&A news normalized by the median. It represents how strong the sentiment management uses in news releases. I expect that the greater the magnitude, the higher the market attention.

#### 4.8. Data Verification

Some prior studies verify the sample selection for withdrawal deals (e.g. Levi et al. (2010)). Similarly, I verify the number of withdrawal deals in my study by comparing it with prior studies. In all hypothesis tests, I start the sample with U.S. mergers and acquisitions transactions announced over 2005 to 2014 from SDC. I limit the transactions to be public acquirers with status of completion or withdrawal and the transaction value is at least one million dollars. These criteria result in an initial sample of 11,640 deals. The sample is then merged with stock price data from CRSP to obtain stock information for public acquirers. This results in a sample of 8,321 M&A transactions. In testing H1-1, H4-1, which do not need target firms' information, my final sample size is 8,321 M&A transactions. Out of the 8,321 transactions, 8,067 transactions are completed (97%), and 254 transactions are withdrawn (3%). This result suggests that the withdrawal rate is around 3% for public acquirers with both public/private targets.

In testing all other hypotheses, which require target firms' accounting information, I continue merging the 8,321 transactions with target financial accounting data from Compustat. This merge results in 891 observations, which suggests that out of 8,321 M&A transactions, only 891 are public acquirers with public targets. Out of the 891 transactions, 784 transactions are completed (88%), and 107 transactions are withdrawn (12%). This result suggests that the withdrawal rate is around 12% for public acquirers with public targets, which is consistent with prior study. For example, Levi et al. (2010) find that about 13% of the acquisition bids are withdrawn for bids made by U.S. public acquirers for U.S. public targets over the period 1997-2007.

Overall, the above finding illustrates that the withdrawal rate is much higher for public targets than for non-public targets, which is consistent with prior literature. Kau et al. (2008) suggest that deals with private targets face fewer obstacles, and hence, be completed more often.

### Chapter 5 - Results

# 5.1. H1-1 Results

H1-1 examines whether management strategically times its M&A disclosures. Table 1 Panel A presents the sample to test the hypothesis H1-1. The sample starts with U.S. mergers and acquisitions announced over the period from 2005 to 2014 from SDC. I limit the transactions to be public acquirers with the status of completion or withdrawal and the transaction value is at least \$1 million to make sure that the results are not driven by small and illiquid stocks. These criteria result in an initial sample of 11,640 M&A deals. The sample is then merged with stock price data from CRSP and results in a sample of M&A 8,321 deals.

### [Insert Table 1 here]

Table 2 summarizes the descriptive statistics of 8,321 observations for the timing effect of hypothesis 1-1. First, for H1-1a regarding management's disclosure timing for M&A plans, Panel A of Table 2 presents the announcement frequency of mergers and acquisitions plan on different weekdays. There are differences of the announcement frequency of mergers and acquisitions plan on different weekdays. The highest frequency is on Monday (26%) and the lowest on Friday (13%). The plan announcement made on Mondays is twice as much of that made on Fridays. The frequency of the M&A plan announcement from Monday to Friday is also presented in Figure 3 Panel A. The findings indicate that the announcement frequency of M&A plan almost decreases monotonically over weekdays from Monday to Friday over the years 2005 - 2014. The result is consistent with the major result of DellaVigna and Pollet (2009) and deHaan et al. (2015) that the announcement timing of firms' news release is important in that managers likely disclose the good news in the early weekdays of a week. That is, Panel A of Table 2 and Diagram A of Figure 3 are

inconsistent with H1-1a. Such results indicate that management perceives a M&A plan to be a good news such that it is more likely to announce the M&A plan in early weekdays of a week.

# [Insert Table 2 and Figure 3 here]

Second, for H1-1b and H1-1c regarding management's disclosure timing for M&A resolutions, Panel B and C of Table 2 report the announcement frequency of mergers and acquisitions completion and withdrawal on different weekdays when the market favors and disfavors the M&A deals respectively. Note that if the 3-day average abnormal return around the plan announcement is greater (smaller) than zero, it suggests that the market reacts positively (negatively) to the proposed deal and that the market favors (disfavors) the M&A plan. Among my sample of 8,321 M&A deals planned, 4,625, 56%, (3,696, 44%) deals received positive (negative) market reactions when their plans are announced and are thus classified as favorable (unfavorable) M&A deals. This is close to the frequency of favorable/unfavorable M&A plans reported in Luo (2005). The results in Panel B and C of Table 2 show that there are no monotonically increasing or decreasing patterns for management's disclosure timing for M&A resolutions. It is in line with my assumption that the M&A resolution announcement likely reflects different nature of news for the management to disclose rather than do simply earnings announcements or M&A plan announcements.

The M&A resolution announcement frequency over a week can also be found in Diagrams B and C of Figure 3, which illustrate different patterns of completion vs. withdrawals for favorable versus unfavorable M&A deals. Specifically, Diagram B of Figure 3 indicates that when market favors the deals, the frequency pattern for the completion resolution announcements and that of withdrawal resolution announcements are significantly different, that is, the frequency variation of the withdrawal announcement is much larger than that of the completion announcement over weekdays. Similarly, Diagram C of Figure 3 indicates that when market does not favor the deals, the frequency pattern of the withdrawal announcements also differs significantly from that of the completion announcements. These results indicate that management likely adopts different timing strategies to announce the resolutions of M&As, depending on whether the resolutions are completion or withdrawal in general.

Moreover, comparing management's announcements for completed transactions under the favorable versus unfavorable conditions indicate the following differences: when the market favors the deal, for completed transactions (i.e., good news), the announcement volume made on early weekdays is higher than that made on later weekdays. When the market disfavors the deal however, for completed transactions (i.e., bad news), disclosure volume is in an increasing trend from Wednesday to Friday in particular. This result is inconsistent with my H1-1b.

Comparing management's announcements for withdrawal transactions under the favorable versus unfavorable conditions show management's disclosure timing patterns are significantly different. When the market favors the deal, for withdrawal transactions (i.e., bad news), there is no certain pattern found on the management disclosure timing. The disclosure volume is high in the middle of a week (Wednesday). When the market disfavors the deal however, for withdrawal transactions (i.e., good news), disclosures made on early weekdays (i.e., Monday and Tuesday) are higher than those made on later weekdays. Overall, the disclosures made on Mondays are no longer at the highest level in the withdrawal announcement frequency in particular, in the sense that the management becomes cautious in announcing an M&A withdrawal for withdrawal transactions. The findings suggest that management would like to time lower market attention for unfavorable transactions after learning from the market's reaction. This result is inconsistent with my H1-1c.

Overall, management's announcement timing of M&A events is strategic. The disclosure timing frequencies are different between plan announcements and resolution announcements. Management's announcement timing differs between whether the market favors or does not favor the M&A deals, and whether the M&A deals are completed or withdrawal. The significantly different patterns for the timing of withdrawal announcements indicate the complicated nature of withdrawals for managers to consider in their strategic announcements.

# 5.2. H1-2 Results

H1-2 examines the market attention to management's strategic timing. Table 1 Panel B presents the sample to test the hypothesis H1-2. I start with U.S. mergers and acquisitions announced in the periods from 2005 to 2014 from SDC. The sample also limits the transactions to be public acquirers with status of completion or withdrawal and the transaction value is at least \$1 million. These criteria result in an initial sample of 11,640 M&A deals. The sample is then merged with stock price data from CRSP and results in a sample of 8,321 M&A deals. I then merge the sample with acquirer and target financial accounting data from Compustat and obtain 891 observations. The sample is further merged with analyst data from IBES for the M&A plan announcement, completion, and withdrawal, resulting in a final sample of 720, 624, and 77 respectively.

The results of H1-2a, which is about the market attention to M&A plan announcements, are presented in Panel A and Panel B of Table 3. Correlation analysis in Panel A shows that the attention of market participants to mergers and acquisitions plan announcement is lower on Friday (a negative correlation = -0.097) but higher on other weekdays (a positive correlation = 0.097). An OLS estimates of the attention of market participants in Panel B carries a statistically significantly

negative sign on the M&A plan announcement on Fridays (coefficient = -0.123, t = -2.2). The result implies that announcements made on Friday attract lower market attention than announcements made on other weekdays do. It provides evidence that market participants can be distracted before the weekend and pay significantly less attention when the mergers and acquisitions plan is announced on Friday than on other weekdays. My H1-2a is not supported.

# [Insert Table 3 here]

The results of H1-2b, which is about the market attention to M&A completion, are presented in Panel A and Panel B of Table 4. The correlation analysis in Panel A shows that the attention of market participants to mergers and acquisitions completion announcement made on Friday maintain a negative sign (correlation = -0.050), but a positive sign for announcement made on other weekdays (correlation = 0.050). The regression analysis in Panel B shows that the coefficient estimate of the M&A completion announced on Friday is not statistically significant, while maintains a negative sign (coefficient = -0.028, t = -0.7). In the analysis for attention to completion, I add a variable FavorDeal which proxies for whether the market favors the original proposed plan based on the abnormal return around plan announcement (FavorDeal = 1 if 3-day average abnormal returns around plan announcement is greater than zero, otherwise = 0). The interaction term of whether the market favors the deal or not and the completion news announced on Friday is negative, while not statistically significant, suggesting that whether the market favors the deal or not, the completion news announced on different weekdays would receive similar attention. If the market favors the original bid, market attention is indifferent to the completion of the transaction announcement if it is announced on Friday or on other weekdays. This result is consistent with my H1-2b.

[Insert Table 4 here]

The results of H1-2c, which is about the market attention to M&A withdrawal, are presented in Panel A and Panel B of Table 5. The correlation analysis in Panel A shows that the attention of market participants to mergers and acquisitions withdrawal announcement made on Friday carries a positive sign (correlation = 0.099), but a negative sign for announcement made on other weekdays (correlation = -0.099). The regression analysis in Panel B shows that the coefficient estimate of the M&A withdrawal announced on Friday maintains a positive sign, while not statistically significant (coefficient = 0.121, t = 1.19). Similar to the analysis for attention to completion, in the analysis for attention to withdrawal, I add a variable FavorDeal which proxies for whether the market favors the original proposed plan based on the abnormal return around plan announcement. The interaction term of whether the market favors the deal or not and the withdrawal news announced on Friday is negative, while not significant, suggesting that whether the market likes the deal or not, the withdrawal news announced on different weekdays would receive similar attention. If the market favors the original bid, market attention is indifferent to the transaction withdrawal announcement whether it is announced on Friday or on other weekdays. This result is consistent with my H1-2c.

### [Insert Table 5 here]

Overall, the findings on the hypothesis H1-2 indicate that the market attention to the M&A plan announcement is significantly lower if the bid is announced on Friday than on other weekdays. However, the market participants seem indifferent to the different timing of M&A resolution announcement. That is, market pays similar attention to M&A completion and withdrawal announcement regardless whether they are made on Friday or other weekdays. The association between market attention and the resolution announcement on Friday is not as strong as the association between market attention and the plan announcement on Friday. From the management

perspective, it is less likely for management to take advantages of the general rule of lower market attention toward the end of week when managers announce the resolution news, regardless whether it is a completion or withdrawal. Therefore, management's strategic announcement of M&A completion or withdrawal, through its choices of announcement on different days of a week, may not be very effective in attracting or distracting the market attention.

# 5.3. H2 Results

H2 examines acquiring firms' news update between M&A plan and M&A resolution period. Table 1 Panel C presents the sample to test the hypothesis H2. The sample starts with U.S. mergers and acquisitions transactions announced in the period from the year 2005 to 2014 from SDC. I also limit the transactions to be public acquirers with status of completion or withdrawal and the transaction value is at least \$1 million. These criteria result in an initial sample of 11,640 M&A deals. The sample is then merged with stock price data from CRSP and results in a sample of 8,321 deals. I then merge the sample with acquirer and target financial accounting data from Compustat and obtain 891 observations. To compare the M&A news update frequency between completion and withdrawal deals, the sample for completion and withdrawal firms are matched on industry (first 2 digits of SIC code) and firm size (total assets), which further reduce the sample to 598 deals, with 491 completed and 107 withdrawn.

Table 6 presents the results for Hypothesis 2-1. Panel A in this table shows that on average, the total 491 firms with a completion resolution release a number of 2.15 news, while the total 107 firms with a withdrawal release a number of 1.89 news. The mean value of M&A news stories update for a completion is higher than that for a withdrawal during the transaction period. Panel B in this table reports the t-test results comparing the M&A news update volume between completed
and withdrawal firms. The correlation coefficient estimates obtained from three methods are not statistically significant. The average news update for a completion firm is similar to that for a withdrawal firm, consistent with my H2-1a. Overall, the results indicate that the information uncertainty in the transaction period is comparable for a completion as it is for a withdrawal resolution.

I conduct a further analysis by dividing the sample into two subsamples. The first includes 263 firms with a favorable market reaction to the announced plan. The results of this subsample are reported in Panel C and D of Table 6. In the condition that the market favors the original planned bid, M&A news update frequency for the 219 completion firms (2.18) is very similar to that for the 44 withdrawal firms (2.16). The second subsample includes 335 firms with unfavorable market reactions to the announced plans. Panel E and F of Table 6 report the results for the subsample results. Similar patterns are observed in the condition that investors do not favor the bid. Under this condition, M&A news update frequency for the 272 completion firms is higher (2.14) than that for the 63 withdrawal firms (1.70), while the difference is not statistically significant. These results are consistent with predictions of H2-1b and H2-1c. Through comparing the results in Panel C and E, it is observed that the news update frequencies for both completion and withdrawal firms with a positive market reaction (Panel C and D) are relatively higher than the frequencies for firms with a negative market reaction (Panel E and F). Management facing favorable market reactions seems to update their news more compared to when facing unfavorable market reactions, no matter the transaction is completed or abandoned.

#### [Insert Table 6 here]

Table 7 reports the results of H2-2. Panel A of Table 7 presents the M&A news update's effect on stock returns around the deal resolution (including both completion and withdrawal) for

891 firms in general. The acquirer's M&A news update frequency alone has a statistically significant positive effect on the abnormal return around resolution (coefficient = 0.0003, t =2.33) directly, which is consistent with H2-2a. This finding provides support to prior literature that financial news stories assist in incorporating new information to the stock price and adding value to the firm. However, this effect depends on the abnormal return around the plan announcement as the interaction term suggests. The interaction of news update frequency and abnormal return around plan announcement is negatively significant (coefficient = -0.021, t= -2.08). As the abnormal return around the plan announcement gets smaller (i.e., M&A news being less favorable to the market), the positive effect of the acquirer's M&A news update frequency on the abnormal return around resolution is larger.

Following Luo (2005), I control the post-announcement information content through the average abnormal returns of acquiring firms during the transaction period. Note that the average post-announcement abnormal return is not significantly correlated with the abnormal return around plan announcement (variance inflation for abnormal return around plan announcement = 1.79, variance inflation for average post-announcement abnormal return =1.06). Therefore, there is no significant multicollinearity issue between these two variables. The coefficient estimates of control variables are intuitive following the M&A news update around the resolution. The risk loadings are positive on small-sized firms, low book-to-market ratio companies, and high leveraged corporations. These results are consistent with the existing literature (e.g., Fama and French (1996) and Zhang (2006)) that there exists a co-variation between abnormal stock returns and the firm-level information uncertainty about the news stories update, size, book-to-market ratio, and the level of leverage.

I further the analysis by testing the effect of news update frequency on returns for completion firms and withdrawal firms separately. The results are reported in Panel B and C in Table 7 respectively. For completion firm, the M&A news update alone has a positive effect on the abnormal return around resolution, but not statistically significant (coefficient = 0.0002, t =1.56), which is inconsistent with H2-2b. This effect also depends on the abnormal return around the plan announcement. The interaction of news update and abnormal return around plan announcement is negatively significant (coefficient = -0.018, t = -1.79). As the abnormal return around the plan announcement gets smaller (i.e. M&A news being less favorable to the market), the positive effect of the acquirer's M&A news update frequency on the abnormal return around resolution becomes greater. For withdrawal firms, the coefficient estimate of news update volume alone is positively significantly related to stock returns around resolution (coefficient = 0.0019, t = 2.39), consistent with my H2-2c. This result suggests that management can reduce the information asymmetry through releasing more news, thus improve the stock performance even the transaction is failed. Note that the coefficient estimate of the interaction term, abnormal return around the plan announcement\*news update in the transaction period, is nonsignificant (coefficient = -0.015, t = 0.31). It suggests that the effect does not depend on the abnormal return around the plan announcement.

Overall, management updates the M&A news similarly for both completion and withdrawals deals. However, for completion deals, news updates do not matter to firm value through stock returns. In contrast, for withdrawal deals, news updates do add value to acquirer's stock returns.

## [Insert Table 7 here]

## 5.4. H3 Results

H3 examines the communication pattern change of acquiring firms during the M&A process. Table 1 Panel C presents the sample to test H3. The sample starts with U.S. mergers and acquisitions transactions announced in the period from the year 2005 to 2014 drawn from SDC. I limit the transactions to be public acquirers with status of completion or withdrawal and the transaction value is at least \$1 million. These criteria result in an initial sample of 11,640 deals. The sample is then merged with stock price data from CRSP and results in a sample of 8,321 deals. I then merge the sample with acquirer and target financial accounting data from Compustat and obtain 891 observations. The average transaction period in the sample is about 120 days.

Table 8 Panel A reports the descriptive statistics of acquiring firms' voluntary disclosure volume of financial news wires during the pre-transaction, transaction, and post-transaction periods. The mean number of financial news disclosed during the transaction period is 3.51 which is relatively higher than the number of financial news disclosed before (mean=3.17) and after the transaction (mean=3.26).

## [Insert Table 8 here]

The results of ANOVA analysis to Hypothesis 3 are presented in Table 9. This table demonstrates the dynamics of strategic disclosures around the mergers and acquisitions process. Panel A of this table reports the comparison between management strategic disclosure volume during the preannouncement, transaction, and post-acquisition periods. The management strategic disclosure volume is the Factiva search volume of financial performance news update made by the acquiring firms. The differences between means are statistically non-significant in the preannouncement, transaction and post-acquisition periods. The findings support H3-a. Firms

likely maintain a consistent level of voluntary disclosure to improve the stock price performance around the mergers and acquisitions completion (see Lang and Lundholm (2000)).

## [Insert Table 9 here]

Panel B, C and D in Table 9 reports the findings for H3-b. Panel B reports the acquiring firms' stock volatility comparison over the M&A process. The analysis shows that stock volatility is statistically significantly greater during the post transaction period compared to the transaction period and the preannouncement period. The increased stock volatility after the mergers and acquisitions resolution is associated with the prior research that document constant stock volatility change after important events, such as stock splits and CEO turnover (Ohlson and Penman (1985), Clayton et al. (2005)). Post the major event, the uncertain nature and prospects of a new strategy/policy for the acquiring firms may lead to increased uncertainty such as the firm's future cash flows. In Panel C, the ANOVA analysis shows that the trading volume of acquiring firms over the transaction period is statistically significantly greater than the trading volume in the preannouncement and post transaction period. The increased trading volume over the transaction period is likely associated with the impact of news updates made by the market in general, not the acquiring firms' news release specifically. Panel D reports the abnormal stock returns comparison over the M&A process. The stock returns are not significantly different during the preannouncement, transaction, and post-transaction periods.

Although the management's voluntary disclosure levels are maintained consistent over the process of mergers and acquisitions, the stock volatility and trading volume changes. To further understand the reason, I explore the issue by taking into consideration of other media' effect. Panel E in Table 9 reports the disclosure volume of financial news wires about the acquiring firms made by all media. Although this measure is not the voluntary disclosure made by the acquiring firm, it

reflects the general market information environment for the acquiring firm, and can be related to acquiring firms' stock performance during the mergers and acquisitions process. The disclosure pattern observed in Panel B is similar to that in Panel A in Table 8. There is an average of 8.59 news wires about acquiring firms' financial performance during the transaction period, which is higher than the average news wires before or after the transaction.

Panel E in Table 9 presents the comparison among financial performance news update from all the press release wires that are generated by acquirer itself and other resources. The news update during the transaction period is statistically significantly greater than that in preannouncement period. This result suggests that although the acquiring firms maintain a consistent financial news release pattern, the news stories in the market originated from this mergers and acquisitions event is greater during the transaction period. In other words, the market is likely paying more attention to the acquiring firm which is under the transaction. The overall media news update may contribute to the information flow and thus stock activities of the acquiring firms.

The major finding in this subsection is that the higher the disclosure volume of financial news wires about the acquiring firms made by all media over the transaction period, the higher the trading volume for acquiring firms. However, the abnormal returns shown in Panel D are not statistically significant over the transaction period on average, when the news update reflecting the general market information environment is higher in that period. As long as the acquiring firms' voluntary disclosure pattern remains the same as shown in Panel A, the stock abnormal returns eventually keep constant over the mergers and acquisitions process as shown in Panel D.

#### 5.5. H4 Results

H4 investigates management's disclosures on M&A under high versus low investor sentiment conditions. Specifically, the hypothesis H4-1 extends the examination of H1-1 under the two sentiment conditions with a total sample of 8,321 M&A deals. The hypothesis H4-2 extends the examination of H1-2 under the two sentiment conditions with a sample of 720 deals for plan announcement, 624 deals for completion, and 77 deals for the withdrawal. H4-3 extends the examinations of H2 under these two sentiment conditions with a total sample of 891 deals.

## [Insert Figure 4 here]

Figure 4 reports the finding for the hypothesis H4-1a and H4-1b about the M&A plan and resolution announcement timing on different weekdays under the investors' high/low sentiment conditions. Investors' sentiment is set to be high when the matched deal sentiment index value is greater than mean of the monthly sentiment index value in the sample used in this study over 2005 to 2014. Otherwise, investor sentiment is set to be low. There are 4,682 M&A deals made under the high sentiment condition whereas 3,639 M&A deals made under the low sentiment condition.

For the M&A plan announcement shown in Diagram A of Figure 4, there is a general decrease of announcement frequency from early weekdays to late weekdays under both high and low investor sentiment conditions. The finding supports H4-1a, and is consistent with the result in H1-1 as well as major result of DellaVigna and Pollet (2009) and deHaan et al. (2015). The announcement timing of firms' M&A news release is important that managers likely disclose the good news in the early weekdays of a week since management perceives a M&A plan to be a good news.

Diagram B of Figure 4 presents resolution announcement timing. Comparing the timing of the completion versus withdrawal announcements under the two sentiment conditions shows that firms' announcement timing for an M&A completion does not have the same pattern as their announcement timing for an M&A withdrawal in both high and low sentiment conditions. Comparing different types of M&A resolutions in each of sentiment conditions show that the timing patterns of completion announcements under the high vs. low sentiment conditions are not different, but the pattern of withdrawal announcements under the high vs. low sentiment conditions are different. Therefore, the finding is consistent with H4-1b for completion firms, while not for withdrawal firms. Moreover, if firms experience a relatively low market sentiment, the announcements are made more evenly over the weekdays, with the exception that the announcements made on Monday are still relatively higher than those made on other weekdays. The findings suggest that management seems to more actively time the disclosure practices when the market outlook is optimistic, while less strategically time the release when the market outlook is pessimistic.

H4-2 examines the variation of market attention to announcements made on different weekdays under high investor sentiment and low investor sentiment conditions. Tables 10, 11 and 12 report the findings for M&A plan announcement, completion announcement and the withdrawal announcement respectively. As shown in Table 10, the coefficient estimates of an M&A Announcement on Friday (coefficient estimate = -0.115, t = -1.46), investors' sentiment around plan announcement (coefficient estimate = 0.025, t = 0.25), and the interaction term of these two variables (coefficient = -0.017, t = -0.15) are not statistically significant. These results are consistent with H4-2a, and suggest that the investor sentiment condition has no significant effect on the market attention to plan announcement made on Fridays. The similarly nonsignificant results are observed in Table 11 for market attention to an M&A completion announcement. In Table 12, Announcement on Friday (coefficient estimate = 0.161, t = 1.61), the coefficient estimates of the variable Investor Sentiment at withdrawal (coefficient estimate = 0.115, t= 1.08) and the interaction terms of these two variables (coefficient estimate = -0.149, t= -0.91) are still not statistically significant. That is, market pays similar amount of attention to the withdrawal news released on different weekdays during a high investor sentiment period as during a low investor sentiment period. The findings in Table 11 and 12 are consistent with H4-2b.

## [Insert Tables 10, 11 and 12 here]

H4-3a tests the difference of M&A news update frequency toward a completion and a withdrawal under high vs. low investor sentiment conditions. H4-3b examines the impact of M&A news update on stock returns. Table 13 reports the results for H4-3a. The sample for withdrawal firms are matched with completion firms by firm size and industry. Under high sentiment conditions the average M&A news update volume of completion firms (2.55) is higher than that of withdrawal firms (1.96). Similar pattern is observed under low market sentiment condition. The average M&A news update frequency of completion firms (1.86) is higher than that of withdrawal firms (1.83). M&A news update volume with an optimistic market outlook is relatively higher than that with a pessimistic outlook. The t-test statistic on the M&A news update frequency between completed and abandoned deals suggest that there is no difference between the news update toward a completion or a withdrawal under both high and low market sentiment conditions. These results are consistent with H4-3a.

### [Insert Table 13 here]

H4-3b tests the impact of M&A news update frequency on the stock return under high or low investor sentiment situations. Table 14 Panel A reports the partial correlation between acquirer's M&A news update and investors' sentiment conditions. For completion firms, there is a statistically significantly negative association between M&A news stories update and the market sentiment conditions (correlation= -0.102, p-value= 0.01); that is the higher the sentiment, the lower level of M&A news update. For withdrawal firms, this association is not statistically significant (correlation= 0.058, p-value= 0.55), suggesting that management of withdrawal firms updates its news unconditional on the market conditions. Whether the market outlook is optimistic or pessimistic has no significant effects on the M&A news update practices of firms that finally abandon the proposed transactions.

## [Insert Table 14 here]

Table 14 Panel B and C show the findings of M&A news update frequency's effect on stock valuation with market sentiment factor taken into consideration. Panel B in this table reports the effects of M&A news update frequency on resolution return under a high sentiment situation. The coefficient estimate of M&A news update frequency is positive, while the estimate is not statistically significant (coefficient = 0.0002, t= 1.07), suggesting that under the high sentiment condition, acquirer firms' news update do not have significant impact on the stock return at the resolution. Note that the coefficient estimate of the interaction term, abnormal return around the plan announcement\*news update in the transaction period under the high sentiment condition, is nonsignificant (coefficient = 0.012, t = 0.89). It suggests that the effect does not depend on the abnormal return around the plan announcement when market sentiment is high. Panel C in this table reports the results of the regression under a low sentiment situation. The coefficient of M&A news update frequency is positive and statistically significant (coefficient = 0.0008, t=3.11). This finding is inconsistent with H4-3b. When a proposed bid experiences a negative outlook of the market, acquirer firm's new information injected to market brings in benefits. Under a low sentiment condition, the more news released to the market, the higher of acquirer's abnormal return at the deal resolution. This effect depends on the abnormal return around the plan announcement under a low investor sentiment condition, however. With a pessimistic outlook of the market, as

the abnormal return around the plan announcement gets smaller, the positive effect of the acquirer's M&A news update frequency on the abnormal return around resolution (coefficient = -0.039, t = -2.46) is larger.

These results support the projection that firm-level information uncertainty matters only when it is associated with the market uncertainty. The findings are consistent with Bergman and Roychowdhury (2008) and Cooper et al. (2015). With unfavorable market conditions, management is likely to disclose more in order to mitigate the negative effect of prevailing market sentiment. It suggests that management changes their disclosure levels depending on the prevailing levels of market uncertainty such as the market sentiment.

## 5.6. H5 Results

H5 examines the disclosure tone of M&A news release over the process. The sample starts with U.S. mergers and acquisitions transactions announced in the period of the year from 2005 to 2014 drawn from SDC. I also limit the transactions to be public acquirers with status of completion or withdrawal and the transaction value is at least \$1 million to make sure that the results are not driven by small and illiquid stocks. These criteria result in an initial sample of 11,640 M&A deals. The sample is then merged with stock price data from the CRSP and results in a sample of 8,321 M&A deals. I then merge the sample with acquirer and target financial accounting data from Compustat and obtain 891 observations. Out of the 891 transactions, I found 697 transactions having plan announcement press release available, 571 transactions having M&A news update available, and 631 transactions having the M&A deal resolution (either a completion or withdrawal) press release available.

Table 15 reports the descriptive statistics of disclosure tone value for the M&A plan announcement, transaction update, and the resolution periods. Panels A and B in this table report the net optimism tone values developed from Loughran & McDonald dictionary and Optimism generated from DICTION respectively for both completed and withdrawn transactions. In Panel A of Table 15, the net optimism tone value for plan announcement news is the highest (1.98), the tone value for resolution announcement is the second highest (0.52), and the tone value for transaction update news is the lowest (-0.9). Similar pattern for mean optimism value is observed in Panel B too. Panels C and D in this table report the tone value for completed firms only. Similar tone value pattern is observed for completion firms as for all firms. Panels E and F report the tone value for the withdrawn transactions only. Different from the tone value observed in Panels A, B, C and D, the optimism tone value in Panel E is the greatest for plan announcement (2.4), second greatest for transaction update news (-0.37), and the lowest for withdrawal news announcement (-1.85). Similar pattern is observed in Panel F as well for withdrawal deals. As argued early, management intends to complete the transaction. Therefore, it is understandable that firms tend to use more optimism tone in the initial public announcement than in later news update and resolution. So is the tone value the highest for plan announcement. When it comes to a withdrawn deal, regardless whether the market favors or disfavors the bid, since the outcome does not meet management's original expectations, one can expect that the tone used in the withdrawal press release is more pessimistic than the tone used in plan announcement and M&A news update.

I also compare the mean values of tone in Panel C and Panel E to see directly how disclosure tones differ between completed deals and withdrawn deals. For plan announcement, the mean value for completed deals in Panel C (1.93) is lower than the mean value for withdrawal deals in Panel E (2.4), while a little bit higher for completed deals in Panel D (51.90) than that for

withdrawal deals in Panel F (51.89). For M&A news update, the mean value for completed deals in Panel C (-0.97) is lower than the mean value for withdrawal deals in Panel E (-0.37), while higher for completed deals in Panel D (51.39) than that for withdrawal deals in Panel F (51.24). Thus, the sentiments used in plan announcement and M&A news update by withdrawn firms and completed firms are mixed. In contrast, in Panel C, the mean value for resolution (completion) is 0.79, while the mean value for resolution (withdrawal) in Panel E is -1.85. The tone is more pessimistic for withdrawal announcement than that for completion announcement. Similar pattern is observed by comparing the mean value for resolution (completion) in Panel D (51.57) and the mean value for resolution (withdrawal) in Panel F (50.94) using the optimism value generated from DICTION.

## [Insert Table 15 here]

Table 16 reports the test results of H5-1 on tone comparison between plan announcement, update, and the M&A resolution. Panels A and B in this table report the comparison for all firms. Panels C and D report the comparison for completion firms, and Panel E and F for withdrawal firms. Panel A uses the tone value developed from Loughran and McDonald word list. As the analysis in Panel A suggest, the mean value of tone for plan announcement is statistically greater than the tone for news update (mean difference = 2.879) and resolution announcement (mean difference = 1.456) at the 5% level. Panel B of Table 16 uses the tone value developed from DICTION master variable and finds comparable patterns. Similar results are observed in Panel C and D for completion firm, and Panel E and F for withdrawal firms. In Panel C of this table, the mean value of tone for plan announcement is statistically greater than the tone for news update I and F for withdrawal firms. In Panel C of this table, the mean value of tone for plan announcement (mean difference = 2.896) and resolution announcement (mean difference = 1.139) at the 5% level. In Panel E, the mean value of tone for plan announcement is statistically greater than the tone for news update (mean difference = 1.139) at the 5% level.

news update (mean difference =2.767) and resolution announcement (mean difference =4.250) at the 5% significant level. The findings further support the outcome observed in the univariate analysis. The result is inconsistent with H5-1. Management starts the M&A transaction with an optimistic outlook, thus is more likely to have positive sentiment in the M&A plan announcement. The finding is consistent with prior literature, such as Huang et al. (2014) who argue that management strategically uses disclosure tones to influence investors' perception prior to major corporate transactions, such as M&A and SEOs. Huang et al. (2014) find that tone value in earning announcement is significantly positively associated with undertaking M&A activities in the immediate future.

### [Insert Table 16 here]

Table 17 reports the press release tone's effect on acquirer's stock return around the M&A resolution (both completion and withdrawal). Panel A in this table uses the net optimism value from Loughran & McDonald word list, whereas Panel B uses the optimism value from DICTION. In Panel A, both the disclosure tone for plan announcement (coefficient = 0.0002, t = 1.1), and disclosure tone for M&A news update (coefficient = -0.0001, t = -0.69) are not statistically significant. Similar results are observed in Panel B. The outcome is consistent with H5-2. Therefore, there is no significant effect of tone values on abnormal stock returns around the M&A resolution for both net optimism value from Loughran & McDonald word list and optimism value from DICTION.

### [Insert Table 17 here]

Table 18 reports the disclosure tone's impact on the acquirer's stock return for completed transactions. Panel A uses the net optimism value from Loughran & McDonald word list. Panel B uses the optimism value from DICTION. In Panel A, both the disclosure tone for plan

announcement (coefficient=0.0001, t=0.75), and disclosure tone for M&A news update (coefficient=0.0001, t=0.46) carry positive signs, but not statistically significant. Panel B in this table reports similar results. The findings from both panels suggest that the tone for both plan announcement and news update tend to have a positive effect on the abnormal stock return around completion, while they are not statistically significant.

## [Insert Table 18 here]

Table 19 reports the disclosure tone's effect on acquirer's stock return for withdrawal firms. Panel A uses the net optimism value from Loughran & McDonald word list. Panel B uses the optimism value from DICTION. The impact of tone for plan announcement on resolution return is statistically significantly positive in Panel A at the 10% level (coefficient = 0.002, t = 1.98), and maintains a positive sign in Panel B, while not statistically significant (coefficient = 0.004, t = -1.58). It suggests that the optimistic outlook used in the original plan announcement brings in benefit to the return around the M&A deal withdrawal. In contrast, acquirer's news update tone value carries a negative sign, while not significant in both Panel A (coefficient=-0.001, t= -1.09) and Panel B (coefficient=-0.0022, t= -1.06) in Table 19. For withdrawal firms, positive tones used during the transaction period not seem to affect the acquirer's resolution return, or might have potential detrimental effect.

Overall, the findings on the news disclosure tone on resolution indicate that in general, investors' reaction in stock market around the resolution of the deal is not significantly affected by the tone management no matter how firms strategically use the disclosure tone. There might be some benefits of optimistic tone used in plan announcement for finally abandoned deals.

## [Insert Table 19 here]

Table 20 reports the results for H5-3, which compares the M&A news update tone difference between the completion and withdrawal transactions using the matched samples. The sample for completion and withdrawal transactions are matched by industry and size, and result in 250 completed deals and 52 withdrawal deals. Panels A and B of Table 20 present the mean value of news release tone and t-test comparison for the completed and withdrawal transactions using net optimism value from Loughran & McDonald word list. Panels C and D in this table use the optimism value from DICTION for the mean value of tone and the t-test analysis. In Panel B, the results of t-test are not statistically significant (pooled t-statistic = -0.53). Similar insignificant results are found in Panel D (pooled t-statistic = 0.08). The findings are consistent with H5-3 and suggest that there is no difference for the tone used in the M&A news update between completed and withdrawal transactions. The outcome of the M&A news update.

## [Insert Table 20 here]

H5-4 examines the effect of tone magnitude on the market attention. Tables 21 and 22 report the impact of the tone magnitude of an M&A plan announcement on the market attention, and the impact of the tone magnitude of an M&A completion announcement on the market attention respectively. Tone magnitude is measured as the absolute value of tone used in the M&A news normalized by the median. It represents the strength of sentiment that management uses in the M&A press release.

With respect to the tone magnitude of an M&A plan announcement, Panel A in Table 21 reports the partial correlation coefficient estimates between market attention (measured as analysts' speed to incorporate the announcement information into forecast) and the tone magnitude for plan announcement using both proxies from Loughran and McDonald and DICTION. There is a

negative association between the tone magnitude and market attention for both tone magnitude proxies, inferring that the stronger the tone used in the news for initial announcement is, the lower attention might be paid by the market, in specific, the analysts. Note that the coefficient estimates of the partial correlation, however, are not statistically significant. To further understand this relation, Panel B and Panel C report the regression estimates of the effect of the tone magnitude on the market attention using both the Loughran and McDonald and DICTION proxies. In Panel B, the loading on tone magnitude is negative, but the estimate is not statistically significant (coefficient estimate = -0.006, t = -0.74). Panel C reports similar findings (coefficient estimate of tone magnitude = -0.017, t = -1.2). The market seems not to buy the sentiment information embedded in the plan announcement. The result indicates that the magnitude of tone used in the proposed deal announcement does not significantly attract the market's attention.

## [Insert Table 21 here]

With respect to the tone magnitude of an M&A completion announcement, Panel A of Table 22 reports the partial correlation coefficient estimates between market attention and the tone magnitude for the M&A completion announcement. Panel B and Panel C in the table report the regression analysis of the effect of tone magnitude on the market attention using both the Loughran and McDonald and DICTION proxies. The tone magnitude around completion in Panel B (coefficient estimate = 0.012, t = 1.32) and Panel C (coefficient estimate = -0.006, t= -0.4) are both not statistically significant. The magnitude of sentiment used in completion announcement does not bring in responsiveness from the market.

Overall, the results in Table 21 and Table 22 are not consistent with H5-4 and suggest that the market does not pay much attention to the qualitative information in the M&A news release. With the assumption in the hypothesis that the stronger tone used in news release, the more information delivered to the market, I expected that the market would have greater reaction to the M&A news release which contains greater magnitude of sentiment. However, the findings in Tables 21 and 22 seem to be counter-intuitive. With a deeper thinking on the proxy used for market reaction, the findings seem to make sense however. This study uses the analysts' speed to revise their earnings forecast upon the M&A news release as the measure for the market attention. The intuition is that financial analysts are professional and sophisticated investors compared to the general public. They may pay relatively less attention to the textual information in the news release, rather focus on the quantitative information such as the size of stock price/earnings revisions. The sentiment strength (either positive or negative) would not substantially affect the professional investors' judgement on the price revisions.

## [Insert Table 22 here]

#### **Chapter 6 - Conclusion**

The study examines the strategic disclosure practices of acquiring firms around mergers and acquisitions activities. Using firms' press releases obtained from Factiva, this study examines various aspects of acquiring firms' M&A voluntary disclosure practices (i.e., timing, disclosure level, and disclosure sentiment (tone)) around the whole process of M&A, from the plan announcement, transaction period, to deal resolution.

With respect to the disclosure timing, the findings reinforce the evidence of deHaan et al. (2015) and DellaVigna and Pollet (2009) that management strategically chooses the timing in announcing M&A news. In addition, it extends prior studies by exhibiting that for different events during the M&A process, the disclosure timing is different. Specifically, the M&A plan announcement timing is different from that of the resolution announcement. Firms are more likely to announce the proposed deal on early weekdays than on later weekdays to take advantage of various market attention. In contrast, no monotonic increasing or decreasing patterns are observed for management's disclosure timing for M&A resolutions. This study also supports the view that managers learn from the market or listen to the market (see Luo (2005), Liu and McConnell (2013)). Management may strategically choose the timing for the M&A resolutions depending on the nature of resolutions (completions or withdrawals) and market's favorability of the proposed deals (favor or does not favor).

Regarding the disclosure levels, it is observed that the M&A news stories update of an M&A completion is comparable to that of an M&A withdrawal. Consistent with prior studies (Fang and Peress (2009), Griffin et al. (2011)) that higher news distribution brings in greater firm valuation through reducing the information asymmetry, I find that for withdrawal firms, the news update level positively affects the stock returns around resolution, while this effect is not obvious

for the completed deals. In terms of the general communication patterns, I find that acquiring firms likely maintain a consistent level of voluntary disclosures during the M&A process. Correspondingly, firms' stock returns remain consistent during this process.

When taking into consideration of the macroeconomic factors, such as investor sentiment, I find that investment sentiment does not significantly influence management's strategic disclosure behaviors in the M&A process. However, news updates significantly influence firms' stock returns at M&A resolution in the low sentiment condition but not in the high sentiment condition. This finding is consistent with the view that with a low investor sentiment condition, the pessimistic outlook on market generally results in undervalued firms. Management can increase the disclosure levels to correct the low-sentiment induced mispricing.

Lastly, with respect to the disclosure tone, this study finds that the tone of M&A news varies for different announcements. Disclosure tone generally is not associated with the stock returns at resolution, and the market does not pay much attention to the qualitative information in the M&A news release.

This research adds value to the literature by examining management's voluntary disclosure practices around M&A process in a holistic picture. Given the large degrees of flexibility that management has in the press release, this study illustrates the complexity of M&A related voluntary disclosures. In contrast to the management earnings forecast or cash flow forecast, management voluntary disclosure related to mergers and acquisitions takes a more dynamic pattern. The information flow during the M&A process often is not one way directed. Management may listen to the market's reaction, then adjust disclosure behaviors based on the feedback. Moreover, rather than purely investigating the disclosure behaviors of management, this study also takes the macroeconomic market conditions into consideration. The findings imply that management strategically participates in M&A voluntary disclosure activities.

This study creates a unique dataset through manually collecting data of M&A related news releases and obtains empirically plausible results, while is not without limitations. For example, although this study covers mergers and acquisitions transactions over 2005 through 2014, with certain restrictions placed on the dataset, the number of observations for some tests is still limited. In the future research, covering a longer time period and collecting recent data would help show the robustness (e.g., the statistical significant level of the coefficient of the tone magnitude of plan announcement effect on the market attention). Using updated longer time period data might need to incorporate additional features in the study. The realism and tractability is a trade-off for any empirical research. In addition, this study uses conventional methodologies and measures in the existing literature to address the research questions. The least square estimates reported in this study are also reasonably precisely estimated. Utilizing alternative methodologies and measures is not a concern in this study. It should be noted, however, that some of the research questions in the investigation are large questions that deserve further analysis from different aspects. There are the avenues for future study.

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# APPENDIX



A1. Figures and Tables

Notes: The figure presents the deal value for all proposed transactions and withdrawal transactions over 2005-2014.







Notes: The figure shows the announcement frequency of M&A plan on different weekdays for public acquirers over years 2005 - 2014.




Notes The figure shows the announcement frequency of M&A resolution on different weekdays for public acquirers over 2005 - 2014 when the market favors the deal.

Figure 3. Announcement timing effect (H1-1)

Panel C. M&A resolution announcement timing when market not favor the deal (year 2005-2014)





Notes: The figure shows the announcement frequency of M&A resolution on different weekdays for public acquirers over 2005 - 2014 when the market does not favor the deal.











# Table 1. Sample selection summary

		Number of observations
Panel A. Sample for H1-1, H4-1		
Mergers and acquisitions announced in 2005-2014 from SDC (public acquirer with status of completion or withdrawal and deal value greater than \$1		
million)	Step1	11640
Step1 data merged with stock price data from CRSP	Step2	8321
Panel B. Sample for H1-2, H4-2		
Mergers and acquisitions announced in 2005-2014 from SDC (public acquirer with status of completion or withdrawal and deal value greater than \$1		
million)	Step1	11640
Step1 data merged with stock price data from CRSP	Step2	8321
Step2 data merged with acquirer Compustat data	Step3	8072
Step3 data merged with target Compustat data	Step4	891
Step4 data merged with analyst data from IBES at plan announcement	Step5	720
Step4 data merged with analyst data from IBES at completion	Step6	624
Step4 data merged with analyst data from IBES at withdrawal	Step7	77
Panel C. Sample for H2, H3, H4-3, H5		
Mergers and acquisitions announced in 2005-2014 from SDC (public acquirer with status of completion or withdrawal and deal value greater than \$1		
million)	Step1	11640
Step1 data merged with stock price data from CRSP	Step2	8321
Step2 data merged with acquirer Compustat data	Step3	8072
Step3 data merged with target Compustat data	Step4	891

Panel A. Weekday announcement frequency of mergers and acquisitions plan					
			Plan Frequency	Percentage	Total
Monday			2185	26%	
Tuesday			1714	21%	
Wednesday			1654	20%	
Thursday			1684	20%	
Friday			1084	13%	
Total			8321		8321
Panel B. Weekday announcement frequency of mergers and acquisitions completion and withdrawal when market favors M&A deal					
	Completion		Withdrawal		
Monday	Frequency 1098	Percentage 0.24	Frequency 29	Percentage 25%	Total
Tuesday	945	0.21	24	21%	
Wednesday	824	0.18	31	27%	
Thursday	806	0.18	11	9%	
Friday	836	0.19	21	18%	
Total	4509		116		4625
Panel C. Weekday announcement frequency of mergers and acquisitions completion and	withdrawal when ma	rket not favor M&	A deal		
	Completion		Withdrawal		
Monday	Frequency 851	Percentage 0.24	Frequency 32	Percentage 23%	Total
Tuesday	698	0.20	34	25%	
Wednesday	643	0.18	20	14%	
Thursday	675	0.19	25	18%	
Friday	691	0.19	27	20%	
Total	3558		138		3696

# Table 2. Timing effect descriptive statistics (H1-1)

Notes: This table shows the M&A news release frequency for plan, completion and withdrawal made on different weekdays over 2005-2014.

Panel A. Partial correlation between M&A plan announcement on Friday/other weekdays and attention of market participants (ANALYST_SPD)						
	Friday		Other weekdays			
ANALYST_SPD	-0.0974		0.0974			
_p-value	0.0099	***	0.0099	***		
Panel B. OLS estimates of M&A attention of market participants (ANALYST_SPD) on the	e plan announceme	ent on Frie	lay (=1) and other w	eekdays (	=0)	
Variable	Coefficient		t value		$\Pr >  t $	
Intercept	0.4932		2.05	**	0.0411	**
Announcement on Friday	-0.1229		-2.2	**	0.0283	**
Size	-0.0225		-2.3	**	0.0221	**
Book-to-market	0.0141		0.28		0.7767	
Leverage	0.0070		0.08		0.9397	
CAR	0.1731		0.62		0.5351	
Relative size	0.2584		2.48	**	0.0134	**
Same industry	-0.0087		-0.21		0.8324	
Tender offer	0.0068		0.14		0.8899	
Acquirer termination fee	-0.0692		-1.54		0.1246	
Consideration_stock	-0.0094		-0.19		0.8482	
No. of Observations	720					
Adj R-Sq	0.0198					

#### Table 3. Timing effect of plan announcement on market attention (H1-2)

Notes: This table reports market attention to M&A plan announcement. ANALYST\_SPD is speed with which equity analysts impound mergers and acquisitions plan or resolution news into their future forecasts. Announcement on Friday (indicator, =1 if announcement is on Friday, otherwise=0). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise =0). Tender offer (indicator, =1 if it is a tender offer, otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Panel A. Partial correlation between M&A completion announcement on Friday/other weekdays and attention of market participants (ANALYST_SPD)							
	Friday	Other weekdays					
ANALYST_SPD	-0.0497	0.0497					
p-value	0.2196	0.2196					
Panel B. OLS estimates of M&A attention of market participants (ANALYST_SPD) of	on						
completion announcement on Friday (=1) and other weekdays (=0)							
Variable	Coefficient	t value		$\Pr >  t $			
Intercept	0.2877	1.25		0.2103			
Friday	-0.0283	-0.7		0.4857			
FavorDeal	0.0106	0.37		0.712			
FavorDeal*Friday	-0.0022	-0.04		0.9697			
Size	-0.0109	-1.56		0.1188			
Book-to-market	0.0190	0.59		0.5556			
Leverage	0.0427	0.66		0.511			
CAR	-0.5781	-1.62		0.1057			
Relative size	0.1945	2.53	**	0.0117	**		
Same industry	0.0154	0.54		0.5917			
Tender offer	-0.0078	-0.22		0.8228			
Acquirer termination fee	-0.0235	-0.74		0.4593			
Consideration_stock	-0.0342	-0.95		0.3419			
No. of Observations	624						
Adj R-Sq	0.0041						

#### Table 4. Timing effect of completion announcement on market attention (H1-2)

Notes: This table reports market attention to M&A completion announcement. ANALYST\_SPD is speed with which equity analysts impound mergers and acquisitions plan or resolution news into their future forecasts. Announcement on Friday (indicator, =1 if announcement is on Friday, otherwise=0). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise=0). Tender offer (indicator, =1 if it is a tender offer, otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Panel A. Partial correlation between M&A withdrawal announcement on Friday/other weekdays and attention of market participants (ANALYST_SPD)					
	Friday	Other weekdays			
ANALYST_SPD	0.0990	-0.0990			
p-value	0.395	0.395			
Panel B. OLS estimates of M&A attention of market participants (ANALYST_SPD) o	n withdrawal announcement on Fr	iday (=1) and other weekdays (	(=0)		
Variable	Coefficient	t value	$\Pr >  t $		
Intercept	0.2505	0.82	0.4161		
Friday	0.1209	1.19	0.2396		
FavorDeal	-0.0485	-0.7	0.4882		
FavorDeal*Friday	-0.0714	-0.41	0.6835		
Size	0.0164	0.68	0.5001		
Book-to-market	0.1083	0.92	0.363		
Leverage	-0.0576	-0.42	0.6776		
CAR	-0.1521	-0.22	0.8246		
Relative size	0.2365	1.06	0.2971		
Same industry	-0.0071	-0.08	0.9344		
Tender offer	0.0223	0.24	0.8084		
Acquirer termination fee	-0.0932	-0.82	0.4193		
Consideration_stock	-0.0268	-0.31	0.7566		
No. of Observations	77				
Adj R-Sq	0.0481				

Table 5.	Timing effect	of withdrawal	announcement	on market a	attention (	H1-2	)

Notes: This table reports market attention to M&A withdrawal announcement. ANALYST\_SPD is speed with which equity analysts impound mergers and acquisitions plan or resolution news into their future forecasts. Announcement on Friday (indicator, =1 if announcement is on Friday, otherwise=0). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise=0). Tender offer (indicator, =1 if it is a tender offer, otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Panel A. Mean of M&A news update made by Acquirer				
Status	Mean	Low 95%	High 95%	N
Completed	2.15	1.84	2.47	491
Withdrawn	1.89	1.30	2.48	107
Panel B. T-test of difference in news update made by acquirer b/w completion and withdrawa	վ			
Method	t Value	$\Pr >  t $		
Pooled	0.71	0.4764		
Satterthwaite	0.79	0.4335		
Cochran	0.79	0.4339		
No. of observations	598			
Panel C. Mean of M&A news update made by Acquirer when market favors transaction				
Status	Mean	Low 95%	High 95%	Ν
Completed	2.18	1.65	2.71	219
Withdrawn	2.16	1.12	3.20	44
Panel D. T-test of difference in news update made by acquirer b/w completion and withdrawa	al when market favors transa	action		
Method	t Value	$\Pr >  t $		
Pooled	0.03	0.9764		
Satterthwaite	0.03	0.9741		
Cochran	0.03	0.9741		
No. of observations	263			
Panel E. Mean of M&A news update made by Acquirer when market disfavors transaction				
Status	Mean	Low 95%	High 95%	Ν
Completed	2.14	1.74	2.53	272
Withdrawn	1.70	0.98	2.41	63
Panel F. T-test of difference in news update made by acquirer b/w completion and withdrawa	l when market disfavors tra	nsaction		
Method	t Value	$\Pr >  t $		
Pooled	0.98	0.3297		
Satterthwaite	1.07	0.2881		
Cochran	1.07	0.289		
No. of observations	335			

#### Table 6. Difference in M&A news update frequency between completion and withdrawal (H2)

Notes: This table reports difference in news update frequency between M&A completion and withdrawal.



Variable	Coefficient	t Value		Pr >  t	
Intercept	0.0097	1.75	*	0.0807	*
Acquirer's M&A News Update Frequency (Update)	0.0003	2.33	**	0.0201	**
Acquirer's 5-day avg. abnormal return around plan announcement (AR)	0.0226	0.65		0.5187	
Update*AR	-0.0213	-2.08	**	0.038	**
Acquirer's avg. abnormal return during transaction	-0.2635	-2.49	**	0.0128	**
Size	-0.0008	-3.8	***	0.0002	***
Book-to-market	-0.0016	-1.49		0.136	
Leverage	0.0057	2.79	***	0.0054	***
Tender offer	-0.0017	-1.45		0.1469	
Acquirer termination fee	-0.0007	-0.64		0.5213	
Consideration_stock	-0.0003	-0.23		0.8202	
Relative size	-0.0014	-0.61		0.5401	
Same industry	-0.0005	-0.58		0.5639	
No. of Observations	891				
Adj R-Sq	0.056				
Panel B. DV: Acquirer's 5-day average abnormal return around completion					
Variable	Coefficient	t Value		$\Pr >  t $	
Intercept	0.0033	0.57		0.5671	
Acquirer's M&A News Update Frequency (Update)	0.0002	1.56		0.1185	
Acquirer's 5-day avg. abnormal return around plan announcement (AR)	0.0751	2.24	**	0.0253	**
Update*AR	-0.0178	-1.79	*	0.0744	*
Acquirer's avg. abnormal return during transaction	-0.1678	-1.44		0.1507	
Size	-0.0006	-3.17	***	0.0016	***
Book-to-market	-0.0014	-1.39		0.1645	
Leverage	0.0065	3.27	***	0.0011	***
Tender offer	-0.0012	-1.04		0.2969	
Acquirer termination fee	-0.0002	-0.21		0.8316	
Consideration_stock	0.0001	0.12		0.9016	
Relative size	-0.0017	-0.76		0.4446	
Same industry	-0.0005	-0.55		0.5814	
No. of Observations	784				
Adj R-Sq	0.0586				

 Table 7. Acquirer's M&A News Update Effect on Stock Returns around Resolution/Completion/Withdrawal (H2)

 Panel A. DV: Acquirer's 5-day average abnormal return around deal resolution

Variable	Coefficient	t Value		$\Pr >  t $	
Intercept	0.0184	0.71		0.48	
Acquirer's M&A News Update Frequency (Update)	0.0019	2.39	**	0.0195	**
Acquirer's 5-day avg. abnormal return around plan announcement (AR)	-0.3575	-2.17	**	0.0336	**
Update*AR	-0.0150	-0.31		0.7543	
Acquirer's avg. abnormal return during transaction	-0.5282	-1.73	*	0.0884	*
Size	-0.0014	-1.14		0.2571	
Book-to-market	-0.0024	-0.34		0.7326	
Leverage	0.0019	0.21		0.8357	
Tender offer	-0.0149	-2.01	**	0.0479	**
Acquirer termination fee	0.0017	0.26		0.7991	
Consideration_stock	-0.0059	-1.2		0.2339	
Relative size	-0.0072	-0.58		0.5624	
Same industry	-0.0030	-0.57		0.5697	
No. of Observations	107				
Adj R-Sq	0.0965				

Panel C. DV: Acquirer's 5-day average abnormal return around withdrawal

Notes: This table reports effect of M&A news update on resolution stock return. Dependent variable -Acquirer's 5-day average abnormal return around resolution/completion/withdrawal is acquirer's 5-day average value-weighted abnormal returns around resolution/completion/withdrawal. Acquirer's M&A News Update Frequency (Update) is M&A news update volume by acquirer during transaction period. Acquirer's 5-day avg. abnormal return around plan announcement (AR) is acquirer's 5-day average value-weighted abnormal return around plan announcement. Acquirer's average value-weighted abnormal return around plan announcement (AR) is acquirer's 5-day average value-weighted abnormal return around plan announcement. Acquirer's average value-weighted return during transaction period (from 2 days after plan announcement to 2 days before resolution). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise =0). Tender offer (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

# Table 8. Descriptive statistics of financial performance news frequency in preannouncement, transaction and post transaction period (H3)

Panel A. Disclosure volume of financial performance news made by acquiring firms						
	Mean	Median	Std	Ν		
			Dev			
Pre transaction period	3.17	2	3.24	891		
Transaction period	3.51	3	3.50	891		
Post transaction period	3.26	2	3.49	891		



Panel B. Disclosure volume of financial performance news made by all media						
	Mean	Median	Std	Ν		
			Dev			
Pre transaction period	7.16	4	10.35	891		
Transaction period	8.59	5	11.87	891		
Post transaction period	7.57	4	11.11	891		



Notes: This table reports descriptive statistics of financial news update volume in preannouncement, transaction and post transaction periods.

Panel A. The Factiva financial performance press release ma	de by acquirer			
Group comparison	Difference between means	Significance at the 5% level	Lower 95% CL	Higher 95% CL
transaction - post transaction	0.2469		-0.1325	0.6264
transaction - pre announcement	0.3345		-0.045	0.7139
post transaction - transaction	-0.2469		-0.6264	0.1325
post transaction - pre announcement	0.0875		-0.2919	0.467
pre announcement - transaction	-0.3345		-0.7139	0.045
pre announcement - post transaction	-0.0875		-0.467	0.2919
Panel B. Stock volatility for acquiring firms				
post transaction - transaction	0.0004	***	0.0003	0.0005
post transaction - pre announcement	0.0004	***	0.0003	0.0006
transaction - post transaction	-0.0004	***	-0.0005	-0.0003
transaction - pre announcement	0.0000		-0.0001	0.0002
pre announcement - post transaction	-0.0004	***	-0.0006	-0.0003
pre announcement - transaction	0.0000		-0.0002	0.0001
Panel C. Trading volume for acquiring firms				
transaction - pre announcement	343950	***	236857	451043
transaction - post transaction	383091	***	297487	468695
pre announcement - transaction	-343950	***	-451043	-236857
pre announcement - post transaction	39141		-47258	125540
post transaction - transaction	-383091	***	-468695	-297487
post transaction - pre announcement	-39141		-125540	47258
Panel D. Abnormal returns for acquiring firms				
pre announcement - transaction	0.0001		-0.0003	0.0005
pre announcement - post transaction	0.0002		-0.0002	0.0005
transaction - pre announcement	-0.0001		-0.0005	0.0003
transaction - post transaction	0.0000		-0.0003	0.0003
post transaction - pre announcement	-0.0002		-0.0005	0.0002
post transaction - transaction	0.0000		-0.0003	0.0003
Panel E. The Factiva financial performance update by overal	l press release wires			
transaction - post transaction	1.0168		-0.2195	2.2532
transaction - pre announcement	1.4242	***	0.1879	2.6606
post transaction - transaction	-1.0168		-2.2532	0.2195
post transaction - pre announcement	0.4074		-0.8289	1.6438
pre announcement - transaction	-1.4242	***	-2.6606	-0.1879
pre announcement - post transaction	-0.4074		-1.6438	0.8289

# Table 9. ANOVA analysis on the group means over preannouncement, transaction and post transaction periods (H3)

Notes: This table reports financial performance news release pattern comparison and stock performance comparison during pre-transaction, transaction, and post-transaction periods.

Panel A. Partial correlation between M&A plan announcement on Friday/o	other weekdays and attent	ion of market participants (A	NALYST_S	PD)	
	Friday	Other weekdays			
ANALYST_SPD	-0.0974	0.0974			
p-value	0.0099	0.0099			
Panel B. OLS estimates of M&A attention of market participants (ANALY	(ST_SPD) on the plan and	nouncement on Friday (=1) a	nd other wee	kdays (=0)	
Variable	Coefficient	t value		$\Pr >  t $	
Intercept	0.4679	1.78	*	0.0758	*
Announcement on Friday	-0.1146	-1.46		0.1447	
Investor sentiment at plan announcement	0.0249	0.25		0.8009	
Announcement on Friday*Investor sentiment at plan announcement	-0.0171	-0.15		0.8774	
Size	-0.0224	-2.28	**	0.0232	**
Book-to-market	0.0140	0.28		0.779	
Leverage	0.0066	0.07		0.9431	
CAR	0.1719	0.61		0.5398	
Relative size	0.2577	2.47	**	0.0138	**
Same industry	-0.0084	-0.2		0.8378	
Tender offer	0.0060	0.12		0.9027	
Acquirer termination fee	-0.0688	-1.53		0.1275	
Consideration_stock	-0.0104	-0.21		0.8327	
No. of Observations	720				
Adj R-Sq	0.0168				

Table 10, Thing effect of plan announcement on market attention under mgn/low investor sentiment conditions (n	ie 10.	лел	e 10	<b>U.</b> J	п	ning	епе	ect (	ы ры	an a	nnou	ncem	ient	on	mar	кет	atter	ition	una	er n	ign/	/10W	inves	stor	sentin	ient	conal	tions	(H4	ŧ	4
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Note: This table reports market attention to M&A plan announcement under high/low investor sentiment conditions. ANALYST\_SPD is speed with which equity analysts impound mergers and acquisitions plan or resolution news into their future forecasts. Announcement on Friday (indicator, =1 if announcement made on Friday, otherwise=0). Investor sentiment at plan announcement (indicator, =1 if investor sentiment for acquirer's plan announcement greater than sample average sentiment, otherwise=0). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise=0). Tender offer (indicator, =1 if is a tender offer, otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Panel A. Partial correlation between M&A completion announcement on Friday/other weekdays and attention of market	t participants (AN	ALYST_SPD)				
	Friday	Other				
		weekdays				
ANALYST_SPD	-0.0497	0.0497				
_p-value	0.2196	0.2196				
Panel B. OLS estimates of M&A attention of market participants (ANALYST_SPD) on completion announcement on						
Friday (=1) and other weekdays (=0)						
Variable	Coefficient	t value	P	r >  t		
Intercept	0.3186	1.35	0.	1767		
Announcement on Friday	-0.0196	-0.42	0.	6748		
Investor sentiment at completion	-0.0223	-0.36	0.	7153		
Announcement on Friday*Investor sentiment at completion	-0.0138	-0.23	0.	8165		
Size	-0.0109	-1.55	0.	1208		
Book-to-market	0.0191	0.59	0.	5544		
Leverage	0.0422	0.65	0.	5165		
CAR	-0.5753	-1.61	0.	1076		
Relative size	0.1958	2.54	* 0.	0112	*	
Same industry	0.0158	0.55	0.	5825		
Tender offer	-0.0083	-0.24	0.	8124		
Acquirer termination fee	-0.0233	-0.74	0.	4616		
Consideration_stock	-0.0354	-0.99	0.	3238		
No. of Observations	624					
Adj R-Sq	0.0042					

Table 11.	Timing effect of	f completion announce	ement on market at	tention under high/low	investor sentiment (H4-2)
	<b>a</b>				

Notes: This table reports market attention to M&A completion announcement under high/low investor sentiment conditions. ANALYST\_SPD is speed with which equity analysts impound mergers and acquisitions plan or resolution news into their future forecasts. Announcement on Friday (indicator, =1 if announcement made on Friday, otherwise=0). Investor sentiment at completion (indicator, =1 if investor sentiment for acquirer's completion greater than sample average sentiment, otherwise=0). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise=0). Tender offer (indicator, =1 if at ender offer, otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Panel A. Partial correlation between M&A withdrawal announcement	nt on Friday/other weekdays	and attention of market participa	nts (ANAL	YST_SPD)	
	Friday	Other weekdays			
ANALYST_SPD	0.0990	-0.0990			
p-value	0.395	0.395			
Panel B. OLS estimates of M&A attention of market participants (A	NALYST_SPD) on withdrav	val announcement on Friday (=1	) and other	weekdays (=0)	
Variable	Coefficient	t value		Pr >  t	
Intercept	-0.3159	-0.91		0.3685	
Announcement on Friday	0.1609	1.61		0.1149	
Investor sentiment at withdrawal	0.1149	1.08		0.2858	
Announcement on Friday*Investor sentiment at withdrawal	-0.1492	-0.91		0.3654	
Size	0.0314	1.36		0.1799	
Book-to-market	0.2077	2.05	**	0.0469	**
Leverage	0.0119	0.09		0.9317	
CAR	0.0995	0.17		0.8624	
Relative size	0.3491	2.03	**	0.0489	**
Same industry	0.0256	0.36		0.7225	
Tender offer	-0.0725	-0.84		0.4077	
Acquirer termination fee	-0.1507	-1.55		0.1289	
Consideration_stock	-0.0361	-0.49		0.6274	
No. of Observations	77				
Adj R-Sq	0.3034				

Table 12. Timing effect of withdrawa	announcement on market attention u	nder high/low investor	sentiment (H4-2)

Notes: This table reports market attention to M&A withdrawal announcement under high/low investor sentiment conditions. ANALYST\_SPD is speed with which equity analysts impound mergers and acquisitions plan or resolution news into their future forecasts. Announcement on Friday (indicator, =1 if announcement made on Friday, otherwise=0). Investor sentiment at completion (indicator, =1 if investor sentiment for acquirer's completion greater than sample average sentiment, otherwise=0). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise=0). Tender offer (indicator, =1 if it is a tender offer, otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Table 15. Difference in the news update between wite A completion and	withdrawar under ingiviow investor s	citilitent conditions (i	<b>11-</b> -3)	
Panel A. Mean of MA news update made by Acquirer under high investor se	entiment			
Status	Mean	Low 95%	High	
		CL	95% CL	Ν
Completed	2.5502	1.9302	3.1702	209
Withdrawn	1.9592	1.0193	2.899	49
Panel B. T-test of difference in news update made by acquirer b/w completion	on and withdrawal under high investor sentime	nt		
Method	t Value	$\Pr >  t $		
Pooled	0.86	0.3913		
Satterthwaite	1.05	0.2967		
Cochran	1.05	0.2981		
No. of observations	258			
Panel C. Mean of MA news update made by Acquirer under low investor se	ntiment			
Status	Mean	Low 95%	High	
		CL	95% CL	Ν
Completed	1.8617	1.5507	2.1727	282
Withdrawn	1.8276	1.0502	2.605	58
Panel D. T-test of difference in news update made by acquirer b/w completiv	on and withdrawal under low investor sentime	nt		
Method	t Value	Pr >  t		
Pooled	0.09	0.9304		
Satterthwaite	0.08	0.9353		
Cochran	0.08	0.9354		
No. of observations	310			

Table 13. Difference in the news upda	ate between M&A completion ar	nd M&A withdrawal under high/lov	w investor sentiment conditions (H4-3)
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Notes: This table reports difference in M&A news update frequency toward M&A completion and withdrawal under high/low investor sentiment conditions.

Completion firms         Withdrawal firms           Acquirer M&A         Acquirer. M&A	
Acquirer M&A Acquirer. M&A	
1	
Mean sentiment index value-0.10170.0579	
p value 0.0044 *** 0.5539	
No. of observations         784         107	
Panel B. Regression of News Update on Resolution Return - High Sentiment situation (University of Michigan Consumer Sentiment Index-stock)	
Dependent Variable: Acquirer 5-day average abnormal return around resolution	
Variable     Coefficient     t Value $Pr >  t $	
Intercept 0.0068 1.25 0.2132	
Acquirer's M&A News Update Frequency (Update)0.00021.070.2861	
Acquirer's 5-day avg. abnormal return around plan announcement (AR)-0.1380-2.65***0.0084	***
Update*AR 0.0123 0.89 0.3723	
Acquirer's avg. abnormal return during transaction-0.3494-2.07**0.0395	**
Size -0.0006 -1.96 * 0.0513	*
Book to market -0.0010 -0.48 0.6337	
Leverage 0.0084 2.7 *** 0.0074	***
Relative size -0.0004 -0.1 0.9213	
Same industry -0.0016 -1.11 0.2694	
Tender offer -0.0028 -1.79 * 0.0742	*
Acquirer termination fee -0.0007 -0.47 0.6378	
Consideration_stock 0.0019 1.15 0.2525	
No. Observations 383	
Adj R-Sq 0.0677	
Panel C. Regression of News Update on Resolution Return - Low sentiment situation (University of Michigan Consumer Sentiment Index-stock)	
Dependent Variable: Acquirer 5-day average abnormal return around resolution	
Variable Coefficient t Value $Pr >  t $	
Intercept 0.0110 1.66 * 0.0972	*
Acquirer's M&A News Update Frequency (Update) 0.0008 3.11 *** 0.002	***
Acquirer's 5-day avg. abnormal return around plan announcement (AR)0.04710.950.3441	
Update*AR -0.0385 -2.46 ** 0.0143	**
Acquirer's avg. abnormal return during transaction -0.2359 -1.7 * 0.0907	*
-0.0011 -3.71 *** 0.0002	***
Book to market -0.0017 -1.2 0.2303	
Leverage 0.0041 1.45 0.1486	
Relative size -0.0038 -1.17 0.2445	
Same industry 0.0011 0.83 0.4083	
Tender offer -0.0014 -0.73 0.4644	
Acquirer termination fee -0.0012 -0.84 0.4039	
Consideration_stock -0.0021 -1.4 0.1617	
No. Observations 508	
Adj R-Sq 0.0603	

# Table 14. Relationship between M&A news update and resolution returns under different investor sentiment conditions (H4-3)

Notes: This table reports effect of M&A news update on resolution stock return under high/low investor sentiment conditions. Dependent variable -Acquirer's 5-day average abnormal return around resolution is acquirer's 5-day average value-weighted abnormal returns around resolution. Acquirer's M&A News Update Frequency (Update) is M&A news update volume by acquirer during transaction period. Acquirer's 5-day average value-weighted return during transaction period (from 2 days after plan announcement to 2 days before resolution). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise =0). Tender offer (indicator, =1 if it is a tender offer otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Panel A. Descriptive statistics of disclosure tone (Net_Optimism from Loughran & McDonald word list)									
	Mean	Median	Std Dev	Ν					
Announcement	1.98	1.87	3.42	697					
Update	-0.90	-1.07	3.42	571					
Resolution	0.52	0.00	4.30	631					
Panel B. Descriptive statistics of disclosure tone (C	Optimism from DICTION)								
<b>`</b>	Mean	Median	Std Dev	Ν					
Announcement	51.90	51.73	1.48	697					
Update	51.37	51.18	1.70	571					
Resolution	51.51	51.41	1.94	631					
Panel C. Descriptive statistics of disclosure tone (N	Jet Optimism from Loughran & Mo	Donald word list) for completion	firms						
<b>I</b>	Mean	Median	Std Dev	N					
Announcement	1.93	1.87	3.36	618					
Undate	-0.97	-1.08	3.42	504					
Resolution	0.79	0.57	4.21	568					
Panel D. Descriptive statistics of disclosure tone (0	Optimism from DICTION) for comr	letion firms							
	Mean	Median	Std Dev	Ν					
Announcement	51.90	51.72	1.48	618					
Undate	51.39	51.18	1.75	504					
Resolution	51.57	51.45	1.94	568					
Resolution									
Panel E. Descriptive statistics of disclosure tone (N	Net_Optimism from Loughran & Mo	Donald word list) for withdrawa	firms						
	Mean	Median	Std Dev	Ν					
Announcement	2.40	1.91	3.88	79					
Update	-0.37	-0.83	3.41	67					
Resolution	-1.85	-2.08	4.41	63					
Panel F. Descriptive statistics of disclosure tone (C	ptimism from DICTION) for withd	rawal firms							
`````````````````````````````````	Mean	Median	Std Dev	Ν					
Announcement	51.89	51.83	1.48	79					
Update	51.24	51.10	1.33	67					
Resolution	50.94	50.73	1.88	63					

Table 15. Descriptive statistics of disclosure tone for plan announcement, update and resolution announcement (H5)

Note: This table reports the descriptive statistics for M&A news tone.

Panel A. Mean tone (Net_Optimism from Loughran & McDonald) comp	arison			
Group comparison	Difference between means	Significance at the 5% level	Lower 95% CL	Higher 95% CL
announcement - resolution	1.4564	***	0.9746	1.9381
announcement - update	2.8791	***	2.3842	3.3739
resolution - announcement	-1.4564	***	-1.9381	-0.9746
resolution - update	1.4227	***	0.9164	1.9291
update - announcement	-2.8791	***	-3.3739	-2.3842
update - resolution	-1.4227	***	-1.9291	-0.9164
Panel B. Mean tone (Optimism from DICTION) comparison				
announcement - resolution	0.3954	***	0.17474	0.61607
announcement - update	0.52891	***	0.30225	0.75558
resolution - announcement	-0.3954	***	-0.61607	-0.17474
resolution - update	0.13351		-0.09843	0.36545
update - announcement	-0.52891	***	-0.75558	-0.30225
update - resolution	-0.13351		-0.36545	0.09843
Panel C. Mean tone (Net Optimism from Loughran & McDonald) comp	arison for completion firms			
Group comparison	Difference between means	Significance at the 5% level	Lower 95% CL	Higher 95% CL
announcement - resolution	1.1394	***	0.637	1.6419
announcement - update	2.8961	***	2.3773	3.4149
resolution - announcement	-1.1394	***	-1.6419	-0.637
resolution - update	1.7566	***	1.2277	2.2856
update - announcement	-2.8961	***	-3.4149	-2.3773
update - resolution	-1.7566	***	-2.2856	-1.2277
Panel D. Mean tone (Optimism from DICTION) comparison for complet	ion firms			
announcement - resolution	0.33398	***	0.09861	0.56936
announcement - update	0.5119	***	0.26886	0.75493
resolution - announcement	-0.33398	***	-0.56936	-0.09861
resolution - update	0.17791		-0.06988	0.42571
update - announcement	-0.5119	***	-0.75493	-0.26886
update - resolution	-0.17791		-0.42571	0.06988
Panel E. Mean tone (Net Optimism from Loughran & McDonald) comp	arison for withdrawal firms			
Group comparison	Difference between means	Significance at the 5% level	Lower 95% CL	Higher 95% CL
announcement - update	2.767	***	1.2348	4.2993
announcement - resolution	4.2499	***	2.6916	5.8083
update - announcement	-2.767	***	-4.2993	-1.2348
update - resolution	1.4829		-0.1362	3.102
resolution - announcement	-4.2499	***	-5.8083	-2.6916
resolution - update	-1.4829		-3.102	0.1362
Panel F. Mean tone (Optimism from DICTION) comparison for withdray	wal firms			
announcement - update	0.6565	***	0.0417	1.2713
announcement - resolution	0.9508	***	0.3255	1.5761
update - announcement	-0.6565	***	-1.2713	-0.0417
update - resolution	0.2943		-0.3553	0.9439
resolution - announcement	-0.9508	***	-1.5761	-0.3255
resolution - update	-0.2943		-0.9439	0.3553

# Table 16. ANOVA analysis on the mean tone of news for plan announcement, M&A news update and resolution announcement (H5-1)

Notes: This table reports the M&A news disclosure tone comparison for plan announcement, M&A news update and resolution announcement over 2005-2014.

#### Table 17. Effect of M&A news tone on stock returns around resolution (H5-2)

Panel A. Press release tone's effect on stock return around resolution (Net\_Optimism from Loughran & McDonald)

DV: Acquirer. 5-day average abnormal return around deal resolution					
	Coefficient	t Value		$\Pr >  t $	
Intercept	0.0048	0.95		0.3432	
Acquirer's 5-day avg. abnormal return around plan announcement	-0.0322	-1		0.3191	
Acquirer's average abnormal return during transaction	-0.5428	-3.44	***	0.0006	***
Acquirer's plan announcement tone	0.0002	1.1		0.2732	
Acquirer's news update tone	-0.0001	-0.69		0.4924	
Size	-0.0008	-2.99	***	0.003	***
Book-to-market	-0.0015	-1		0.3201	
Leverage	0.0060	2.24	**	0.0256	**
Relative size	-0.0001	-0.03		0.9743	
Same Industry	-0.0001	-0.04		0.9643	
Tender offer	-0.0015	-1.11		0.2666	
Acquirer termination fee	-0.0008	-0.65		0.5138	
Consideration_stock	0.0000	0.01		0.9909	
No. of Observations	506				
Adj R-Sq	0.0619				
Panel B. Press release tone's effect on stock return around resolution (Optimism from DICTION)					
DV: acquirer 5-day average abnormal return around deal resolution					
Intercept	-0.0115	-0.52		0.6037	
Acquirer's 5-day avg. abnormal return around plan announcement	-0.0347	-1.07		0.283	
Acquirer's average abnormal return during transaction	-0.5454	-3.43	***	0.0007	***
Acquirer's plan announcement tone	0.0001	0.33		0.7386	
Acquirer's news update tone	0.0002	0.52		0.6047	
Size	-0.0008	-3	***	0.0029	***
Book-to-market	-0.0016	-1.01		0.3109	
Leverage	0.0059	2.23	**	0.0265	**
Relative size	0.0007	0.22		0.8268	
Same Industry	-0.0001	-0.05		0.9572	
Tender offer	-0.0019	-1.25		0.2115	
Acquirer termination fee	-0.0007	-0.62		0.5357	
Consideration_stock	0.0000	0.03		0.9755	
No. of Observations	506				
Adj R-Sq	0.0605				

Notes: This table reports effect of M&A news update tone on resolution stock return. Dependent variable -Acquirer's 5-day average abnormal return around resolution is acquirer's 5-day average valueweighted abnormal returns around resolution. Acquirer's M&A News Update Frequency (Update) is M&A news update volume by acquirer during transaction period. Acquirer's 5-day average value-weighted abnormal return around plan announcement. Acquirer's avg. abnormal return during transaction period (from 2 days after plan announcement to 2 days before resolution). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Size (acq\_size) if the acquirer and target firm have the same two-digit SIC code, otherwise=0). Acquirer termination fee (indicator, =1 if to consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

#### Table 18. Effect of M&A news tone on stock returns around completion (H5-2)

Panel A. Press release tone's effect on stock return around completion (Net\_Optimism from Loughran & McDonald) DV: acquirer 5-day average abnormal return around deal completion Coefficient t Value Pr > |t|Intercept 0.0051 1.03 0.3019 Acquirer's 5-day avg. abnormal return around plan announcement 0.0330 1.06 0.2891 Acquirer's average abnormal return during transaction -0.4389 -2.73 \*\*\* 0.0066 \*\*\* Acquirer's plan announcement tone 0.0001 0.75 0.4564 Acquirer's news update tone 0.0001 0.46 0.6431 Size -0.0009 -3.47 \*\*\* 0.0006 \*\*\* Book-to-market -0.0013 -0.9 0.3668 \*\* \*\* Leverage 0.0059 2.32 0.0208 Relative size -0.0030 -1.010.3153 Same Industry 0.0001 0.1 0.9168 Tender offer -0.0016 -1.26 0.2083 Acquirer termination fee 0.0000 0.03 0.9762 Consideration\_stock -0.0005 -0.410.6792 No. of Observations 454 Adi R-Sa 0.0826 Panel B. Press release tone's effect on stock return around completion (Optimism from DICTION) DV: acquirer 5-day average abnormal return around deal completion Coefficient t Value Pr > |t|Intercept -0.0167 -0.8 0.4213 Acquirer's 5-day avg. abnormal return around plan announcement 0.0295 0.95 0.3423 \*\*\* Acquirer's average abnormal return during transaction -0.4480 -2.77 0.0059 \*\*\* 0.58 Acquirer's plan announcement tone 0.0002 0.563 Acquirer's news update tone 0.0002 0.59 0.5533 \*\*\* \*\*\* Size -0.0009 -3.51 0.0005 Book-to-market -0.0013 -0.920.3589 \*\* \*\* Leverage 0.0058 2.28 0.0232 0.3116 Relative size -0.0029 -1.01 Same Industry 0.0000 0.02 0.9874 Tender offer -0.0023 -1.58 0.1158 Acquirer termination fee 0.0001 0.06 0.9534 Consideration stock -0.0005 -0.37 0.7144 No. of Observations 454 0.0824 Adj R-Sq

Notes: This table reports effect of M&A news update tone on completion stock return. Dependent variable -Acquirer's 5-day average abnormal return around completion is acquirer's 5-day average valueweighted abnormal returns around completion. Acquirer's M&A News Update Frequency (Update) is M&A news update volume by acquirer during transaction period. Acquirer's 5-day average value-weighted abnormal return around plan announcement. Acquirer's avg. abnormal return during transaction is acquirer's 5-day average value-weighted return during transaction period (from 2 days after plan announcement to 2 days before resolution). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise=0). Tender offer (indicator, =1 if it is a tender offer otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Table 19. Effect of M&A news tone on stock returns around withdrawal (H5-2)					
Panel A. Press release tone's effect on stock return around withdrawal (Net_Optimism from	Loughran & McDonald)				
DV: acquirer 5-day average abnormal return around deal withdrawal					
	Coefficient	t Value		$\Pr >  t $	
Intercept	-0.0011	-0.03		0.9755	
Acquirer's 5-day avg. abnormal return around plan announcement	-0.4313	-2.58	**	0.0167	**
Acquirer's average abnormal return during transaction	-0.5634	-0.98		0.336	
Acquirer's plan announcement tone	0.0015	1.98	*	0.0603	*
Acquirer's news update tone	-0.0010	-1.09		0.2877	
Size	-0.0002	-0.12		0.9092	
Book-to-market	-0.0078	-0.85		0.4066	
Leverage	0.0091	0.58		0.5686	
Relative size	0.0297	2.17	**	0.0409	**
Same Industry	-0.0043	-0.7		0.4904	
Tender offer	-0.0156	-1.89	*	0.072	*
Acquirer termination fee	-0.0057	-0.65		0.5215	
Consideration stock	-0.0016	-0.27		0.7859	
No. of Observations	52				
Adj R-Sq	0.4977				
Panel B. Press release tone's effect on stock return around withdrawal (Optimism from DIC)	TION)				
DV: acquirer 5-day average abnormal return around deal withdrawal	*				
	Coefficient	t Value		Pr >  t	
Intercept	-0.0767	-0.51		0.6154	
Acquirer's 5-day avg. abnormal return around plan announcement	-0.5602	-3.48	***	0.002	***
Acquirer's average abnormal return during transaction	-0.8085	-1.29		0.2094	
Acquirer's plan announcement tone	0.0037	1.58		0.128	
Acquirer's news update tone	-0.0022	-1.06		0.2988	
Size	0.0004	0.23		0.8202	
Book-to-market	-0.0107	-1.07		0.2965	
Leverage	0.0087	0.54		0.593	
Relative size	0.0262	1.64		0.1149	
Same Industry	-0.0085	-1.36		0.1882	
Tender offer	-0.0208	-2.34	**	0.0283	**
Acquirer termination fee	0.0030	0.36		0.7215	
Consideration_stock	-0.0029	-0.48		0.6332	
No. of Observations	52				
Adj R-Sq	0.4806				

Notes: This table reports effect of M&A news update tone on withdrawal stock return. Dependent variable -Acquirer's 5-day average abnormal return around withdrawal is acquirer's 5-day average valueweighted abnormal returns around withdrawal. Acquirer's M&A News Update Frequency (Update) is M&A news update volume by acquirer during transaction period. Acquirer's 5-day avg. abnormal return around plan announcement (AR) is acquirer's 5-day average value-weighted abnormal return around plan announcement. Acquirer's avg. abnormal return during transaction is acquirer's average value-weighted return during transaction period (from 2 days after plan announcement to 2 days before resolution). Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise =0). Tender offer (indicator, =1 if it is a tender offer otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Panel A. Mean of M&A news update tone (Net_Optimism from Loughran & Mc	Donald)			
Status	Mean	Low 95% CL	High 95% CL	Ν
Completed	-0.9773	-1.4358	-0.5188	250
Withdrawn	-0.6901	-1.5021	0.122	52
Panel B. T-test of difference in news update tone b/w completion and withdrawa	l (Net_Optimism from Loug	hran & McDonald)		
Method	t Value	$\Pr >  t $		
Pooled	-0.53	0.5972		
Satterthwaite	-0.62	0.5398		
Cochran	-0.62	0.5404		
No. of observations				
Panel C. Mean of M&A news update tone (Optimism from DICTION)				
Status	Mean	Low 95% CL	High 95% CL	Ν
Completed	51.3152	51.1053	51.5251	250
Withdrawn	51.2946	50.9068	51.6823	52
Panel D. T-test of difference in news update tone b/w completion and withdrawa	l (Optimism from DICTION	)		
Method	t Value	$\Pr >  t $		
Pooled	0.08	0.9342		
Satterthwaite	0.09	0.9256		
Cochran	0.09	0.9257		
No. of observations				

# Table 20. Difference in M&A news update tone between completion and withdrawal (H5-3)

Notes: This table reports difference in M&A news update tone between completion and withdrawal.

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#### Table 21. Effect of tone magnitude of plan announcement on market attention (H5-4)

Notes: This table reports market attention to tone magnitude of M&A plan announcement. ANALYST\_SPD is speed with which equity analysts impound mergers and acquisitions plan or resolution news into their future forecasts. Tone magnitude is the absolute value of net optimism tone minus the median of net optimism tone. Size (acq\_size) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator = 1 if the acquirer and target firm have the same two-digit SIC code, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

Panel A. Partial correlation between M&A completion announcement tone magnitude and attention of	market participants (A	NALYST_SPD)			
	Tone		Tone Magnitude		
ANALYST_SPD	0.0805		-0.0102		
p-value	0.1791		0.8645		
Panel B. OLS estimates of tone magnitude of completion announcement effect on market attention					
(ANALYST_SPD) - Net Optimism from Loughran & McDonald				D . H	
Variable	Coefficient	t value		Pr >  t	
Transmittada	0.5738	2.25	**	0.025	**
Tone magnitude	0.0124	1.32		0.1890	
Size	0.0038	0.23		0.8154	
Book-to-market	0.0820	0.85		0.395	
Leverage	-0.1799	-1.19		0.2358	
CAR	1.7445	1.91	*	0.0576	*
Relative size	0.0598	0.35		0.7303	
Same industry	-0.0083	-0.14		0.889	
Tender offer	0.0727	1.03		0.3028	
Acquirer termination fee	0.0978	1.43		0.1535	
Consideration_stock	-0.0668	-0.92		0.3601	
No. of Observations	299				
Adj R-Sq	0.0357				
Panel C. OLS estimates of tone magnitude of completion announcement effect on market attention (A	NALYST_SPD) - Net	Optimism from DICTIO	N		
Variable	Coefficient	t value		$\Pr >  t $	
Intercept	0.5993	2.35	**	0.0193	**
Tone magnitude	-0.0058	-0.4		0.6925	
Size	0.0077	0.46		0.644	
Book-to-market	0.0848	0.88		0.3809	
Leverage	-0.1833	-1.21		0.2293	
CAR	1.5958	1.75	*	0.0811	*
Relative size	0.0661	0.38		0.7037	
Same industry	-0.0042	-0.07		0.9436	
Tender offer	0.0585	0.84		0.4023	
Acquirer termination fee	0.1001	1.46		0.1463	
Consideration stock	-0.0685	-0.93		0.3523	
No. of Observations	299				
Adj R-Sq	0.0296				

Table 22. Effect of tone magnitude of completion announcement on market attention (	H5-4)
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Notes: This table reports market attention to tone magnitude of M&A completion announcement. ANALYST\_SPD is speed with which equity analysts impound mergers and acquisitions plan or resolution news into their future forecasts. Tone magnitude is the absolute value of net optimism tone minus the median of net optimism tone. Size ( $acq\_size$ ) is the natural log of the acquirer's market value of equity. Leverage (lev) is acquirer's total liability/total asset. Book-to-market (btm) is acquirer's common equity/market value of equity. CAR is the two day cumulative abnormal returns around announcement date. Relative size is ratio of the target's market value of equity to the acquirer's market value of equity. Same Industry (indicator =1 if the acquirer and target firm have the same two-digit SIC code, otherwise =0). Tender offer (indicator, =1 if it is a tender offer, otherwise=0). Acquirer termination fee (indicator, =1 if acquirer needs to pay a termination fee upon withdrawal, otherwise=0). Stock consideration (indicator, =1 if consideration is stock only, otherwise=0). The \*\*\*, \*\*, \* refer the significant level at the 1%, 5% and 10% levels.

# **A2. Variable Definitions**

- Attention: measured by ANALYST\_SPD, speed with which equity analysts impound mergers and acquisitions plan or resolution news into their future forecasts
- Acquirer's size: natural log of the acquirer's market value
- Acquirer's M&A News Update Frequency (Update): M&A news update volume by acquirer during transaction period
- Acquirer's 5-day average abnormal return around plan announcement (AR): acquirer's 5-day average value-weighted abnormal return around plan announcement
- Acquirer's 5-day average abnormal return around resolution/completion/withdrawal: acquirer's 5-day average value-weighted abnormal returns around resolution/completion/withdrawal
- Acquirer's average abnormal return during transaction: acquirer's average value-weighted return during transaction period (from 2 days after plan announcement to 2 days before resolution)
- Announcement on Friday: indicator variable, =1 if announcement made on Friday, otherwise=0
- Book-to-market = acquirer's common equity / market value of equity
- CAR: two day cumulative abnormal returns around announcement date
- Favor Deal: indicator variable, =1 if 3-day average abnormal returns around plan announcement is greater than zero, otherwise=0
- Leverage = acquirer's total liability /total asset

- Relative size: ratio of the target's market value of equity to the acquirer's market value of equity
- Stock deal: indicator variable, =1 if the consideration is stock only, otherwise=0
- Same Industry: indicator variable, =1, if the acquirer and target firm have the same two-digit SIC code, otherwise =0
- Sentiment: indicator variable, =1 if matched deal sentiment index value greater than sample mean sentiment index value, otherwise=0
- Tender: indicator variable, =1 if tender offer, otherwise =0
- Termination fee: indicator variable, =1 if acquirer needs to pay a termination fee upon deal withdrawal, otherwise=0
- Tone magnitude: absolute value of net optimism tone median of net optimism tone