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The disciplining role of financial statements : evidence from mergers and acquisitions of privately held targets

Ciao-Wei Chen
University of Iowa

THE DISCIPLINING ROLE OF FINANCIAL STATEMENTS: EVIDENCE FROM MERGERS AND ACQUISITIONS OF PRIVATELY HELD TARGETS

by

Ciao-Wei Chen

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Thesis Supervisor: Professor Daniel Collins
Professor Richard Mergenthaler

Graduate College
The University of Iowa
Iowa City, Iowa

CERTIFICATE OF APPROVAL

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PH.D. THESIS

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This is to certify that the Ph.D. thesis of

Ciao-Wei Chen

has been approved by the Examining Committee for
the thesis requirement for the Doctor of Philosophy degree
in Business Administration at the May 2015 graduation.

Thesis Committee: _____
Daniel Collins, Thesis Supervisor

_____
Richard Mergenthaler, Thesis Supervisor

_____
Paul Hribar

_____
David Mauer

_____
Anand Vijh

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ABSTRACT

This study examines whether the disclosure of private target firms' financial statements disciplines acquiring firms' managers to make better acquisition-investment decisions. The SEC requires public acquiring firms to disclose audited financial statements of targets that meet certain disclosure thresholds. Using hand-collected data, I first document that private targets' financial statements provide value relevant information to market participants. Next, consistent with my predictions, I find that the disclosure of private targets' financial statements is associated with higher acquirer announcement returns, better post-acquisition performance, and lower likelihood of post-acquisition divestitures. Finally, I find the disciplining effect of this disclosure requirement is more pronounced when monitoring by outside capital providers is more costly. In sum, the evidence suggests that the disclosure of private targets' accounting information is informative to market participants, disciplines managers' acquisition decisions, and improves acquisition efficiency.

PUBLIC ABSTRACT

Corporate disclosure regulations are designed to protect investors and facilitate efficient capital allocation in the economy. One important corporate disclosure is audited financial reporting, which improves capital allocation (investment) decisions through its valuation implications and its governance/disciplinary role. In the context of mergers and acquisitions (M&As), the existing studies tend to focus on the valuation implications of the target firm's accounting information. Whether target firms' audited financial statements play a disciplining role in M&As remains unexplored. This study fills this gap.

The Securities and Exchange Commission (SEC) requires public acquiring firms to publicly disclose target firms' audited financial statements when the M&A transaction meets certain disclosure thresholds. Because these financial statements are disclosed after the transaction is completed, they provide the acquiring firms' outside shareholders with a tool, subsequently to the transaction, to monitor the acquiring firms' M&A decisions. Therefore, I posit that this disclosure requirement imposes a disciplinary mechanism on the acquiring firms' managers when they make M&A decisions.

Using this unique setting and hand-collected data from the SEC's EDGAR system, I provide evidence consistent with the hypothesis that the disclosure of private targets' audited financial statements disciplines the acquiring firms' managers in making M&A decisions. Specifically, I find the disclosure of private targets' financial statements is associated with more profitable M&A transactions. Several other alternative explanations cannot explain the main findings.

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CHAPTER 1

THE DISCIPLINING ROLE OF FINANCIAL STATEMENTS: EVIDENCE FROM MERGERS AND ACQUISITIONS OF PRIVATELY HELD TARGETS

1.1 Introduction

Information asymmetry and agency conflicts create financial market frictions and impede the efficient allocation of resources in a capital market (Akerlof, 1970; Jensen and Meckling, 1976). Financial disclosure requirements designed to promote credible disclosure between managers and stakeholders play an important role in mitigating these conflicts (Diamond and Verrecchia, 1991; Bushman and Smith, 2001; Healy and Palepu, 2001; Beyer, et al., 2010). In particular, audited financial statements provide a rich set of credible variables, such as balance sheet and income statement items, that support a wide range of enforceable contractual arrangements and form a basis for outsiders to monitor and discipline managements' investment decisions (Bushman and Smith, 2001; Healy and Palepu, 2001; Bushman et al., 2011; Beyer et al., 2010; Kothari et al. 2010). Despite the importance of audited financial reporting in disciplining managers, there is little empirical research on the disciplining role of financial reporting in the context of mergers and acquisitions, one of the largest corporate investment decisions that trigger agency conflicts (Morck et al., 1990; Jensen, 1986).[1] This study examines whether the mandatory disclosure of a private target's audited financial statements disciplines acquiring firms' acquisition decisions.

[1] Francis and Martin (2010) is one notable exception. They find that acquirers' conditional conservatism provides a disciplining mechanism in acquisition decisions.

The SEC mandates that public acquiring firms disclose audited financial statements of targets that meet certain disclosure thresholds based on the size of the target relative to the acquiring firm (Regulation S-X or 170 CFR §210).[2] I exploit this regulatory requirement to examine whether and how mandatory accounting disclosure is related to the efficiency of acquisition decisions. This setting provides several advantages. First, information asymmetry between acquiring firm's managers and outside shareholders can be high when a public firm acquires a private target. Managers gain access to the private firm's accounting information during the due diligence phase of the acquisition, but such information is generally not publicly available. Agency problems are more likely to be an issue when information asymmetry is high (Smith and Watts, 1992; LaFond and Watts, 2008). Therefore, monitoring by outside shareholders is more important in such cases. Second, the private target firms' audited financial statements become publicly available *after* the acquisitions are consummated. Acquiring firms use the private targets' accounting information to help evaluate the transaction during the due diligence process, whereas outside shareholders of the acquiring firms get access to such information only after the transaction is completed. Therefore, the disclosure of targets' audited financial statements provides outside shareholders with an ex post monitoring tool that can discipline acquiring firms. This feature allows me to examine the disciplining role of targets' financial reporting with respect to acquisition decisions while holding its valuation implications constant. Third, because I focus on the disclosure of private targets' financial statements, I do not rely on empirical measures of financial reporting attributes such as accrual quality and

[2] I describe the details of the SEC disclosure requirements is Section 2.1.

conditional conservatism. Thus, I do not use proxies fraught with measurement errors that sometimes plague prior studies (Dechow et al., 2010).

Mandatory disclosure of private targets' audited financial statements can discipline managers in making acquisition decisions by reducing information asymmetry between acquiring firms' managers and shareholders. Both analytical and empirical research in accounting have consistently demonstrated that corporate disclosure facilitates monitoring and reduces agency problems (Kanodia and Lee, 1998; Bushman and Smith, 2001; Hope and Thomas, 2008; Biddle et al., 2009). In addition, target firms' financial statements contain important information that affects acquisition outcomes (Wangerin, 2012; Skaife and Wangerin, 2013; Raman et al., 2013; Chen et al. 2014; McNichols and Stubben, 2015). Targets' accounting information also helps investors better understand the future growth prospects of the newly combined entity (Collins and Kim, 2014). Therefore, I posit that requiring disclosure of private firms' financial data after deal completion helps acquiring firms' shareholders make better ex-post evaluations of managers' acquisition decisions. To the extent that the availability of private targets' financial information mitigates agency problems, mandatory disclosure of such information disciplines managers to act in shareholders' interests. Thus, I predict that the disclosure of private targets' financial statements is positively associated with acquisition performance.[3]

To test my predictions, I construct a sample of private target acquisitions from 1997 to 2009 using the Securities Data Corporation's (SDC) Mergers and Acquisitions database. I then manually search each acquirer's SEC EDGAR filings to identify whether the acquirer discloses the target firm's audited financial statements. Before testing my

[3] In this paper, I use acquisition outcomes, acquisition performance, and acquisition profitability interchangeably.

hypotheses, I first investigate whether target firms' audited financial statements have information content.[4] This investigation is important because one implicit assumption underlying my main hypothesis is that targets' financial statements convey relevant information to market participants. Specifically, I examine acquirers' abnormal return volatility and abnormal trading volume around the filing date of targets' financial statements (e.g., Beaver, 1968). I observe an upward spike in both abnormal return volatility and abnormal trading volume immediately after the filings of targets' financial statements, suggesting that private targets' financial statements are informative to market participants.

I measure acquisition performance using acquirer's three-day announcement returns, post-acquisition operating performance, and post-acquisition stock performance (Loughran and Vijh, 1997; Chen et al., 2007; Masulis et al., 2007; Francis and Martin, 2010; Harford et al., 2012). Consistent with my predictions about the disciplining and monitoring benefits derived from having access to private targets' financial statements, I find disclosure of private targets' audited financial statements is associated with better post-acquisition operating and stock return performance. Furthermore, acquirers that are required to disclose targets' financial statements are less likely to divest the targets following the acquisitions. These findings suggest that the disclosure of private targets' financial statements is associated with more efficient acquisition decisions.

[4] Information content is defined as a change in expectations about the outcome of an event (Beaver, 1968). Within the context of this study, a private target's financial statement is said to have information content if the availability of the financial statement leads to a change in investors' assessments of the probability distribution of the combined firm's future prices, such that there is a change in equilibrium value of the current market price. See Beaver (1968) for detailed definitions of information content.

Using cross-sectional tests, I also examine acquirer characteristics that are likely to affect the relative benefit gained from disclosing private targets' financial statements. I posit that agency problems in mergers and acquisitions are more likely to manifest in settings where monitoring is more difficult due to information asymmetry or volatile operating environments (Masulis et al., 2009; Francis and Martin, 2010; Duchin and Schmidt, 2013). I use acquirers' daily average bid-ask spreads and acquirers' stock return volatility to proxy for information asymmetry and operating volatility, respectively (Francis and Martin, 2010). I find the association between disclosure and acquisition performance is stronger when the acquirers' bid-ask spreads are higher or when acquirers operate in more volatile operating environments. These cross-sectional findings support my hypothesis that the SEC's disclosure mandate facilitates the monitoring and disciplining of managers' acquisition decisions.

One concern is that my main findings are driven by the relative size of the target firm because transactions that meet the SEC's disclosure thresholds are more likely to have a larger impact on the acquirers' operations. I perform two tests to address this concern. First, I run the three-day announcement return test using a sample intended to minimize the relative size differences between disclosure and non-disclosure firms. Using this sample, I continue to find that the disclosure of private targets' audited financial statements is positively associated with acquisition profitability. Second, I conduct a falsification test using a sample of *public* target acquisitions. For this sample of public targets, the pseudo disclosure indicator variable only captures differences in the relative size of the targets because investors always have access to the public targets' financial statements. If my findings are driven by the relative size of the target instead of disclosure of the target's

financials, I should still find an association between the pseudo disclosure variable and acquisition performance in this sample of public acquisitions. However, I fail to find any association between the disclosure variable and acquisition outcomes using this sample of public acquisitions. Overall, the results from these tests mitigate the concern that relative size of the target firm is driving my results.

The main results are also robust to controlling for other disciplining/monitoring mechanisms suggested in the prior literature. Specifically, I consider (1) the monitoring effect of large blockholders from the target firm created by acquisitions financed with stock (Chang, 1998; Fuller et al., 2002); (2) acquirers' conservative reporting (Francis and Martin, 2010; Kravet, 2014); and (3) the presence of institutional blockholders at the acquiring firms (Chen et al., 2007). Finally, I show that voluntary disclosure does not drive the main findings.

One limitation of this study is that the costs of the disclosure requirement under Regulation S-X are not examined. Information is not costless, and the society is not always better off when more information is available (Stigler, 1964). If all the acquiring firms disclose the financial statements of every private target they acquire, the market will not be able to digest and analyze all the information. In addition, at the firm level, this disclosure mandate can impose proprietary costs that might increase competition from industry peers (Verrecchia, 1983; Wagenhofer, 1990). These costs likely prevent certain firms from voluntarily disclosing the targets' financials, which may explain why the SEC sets certain disclosure thresholds.

My study makes several contributions to the extant literature. First, I contribute to a growing body of research that shows how financial reporting attributes affect managerial

investment decisions (see e.g., Biddle and Hillary, 2006; Biddle et al., 2009; McNichols and Stubben, 2008; Beatty et al., 2010; Francis and Martin, 2010; Kravet, 2014; Balakrishnan et al., 2014). I contribute to this line of research by documenting how SEC mandated accounting disclosure impacts the efficiency of *private* target acquisitions, a largely unexplored area in the existing literature. Given that the stated mission of the SEC is "to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation", my study is also important because it sheds light on how the SEC's disclosure policy regarding business combinations affects resource allocation.[5]

Second, this paper enhances our understanding of the usefulness of private target accounting information in mergers and acquisitions decisions. Prior studies have examined how attributes of public target firms' financial statements affect the due diligence process and the profitability of acquisitions (Wangerin, 2012; Skaife and Wangerin, 2013; Raman et al., 2013; Chen et al., 2014; McNichols and Stubben, 2015). These studies focus on how financial reporting serves an informational role that reduces information uncertainty between the acquiring firm and the target firm. I extend this line of research by showing a disciplining role (or stewardship role) of targets' accounting information in mergers and acquisitions.

Finally, my study contributes more broadly to our understanding of how accounting information about privately held firms affects real decision making in the context of mergers and acquisitions. This is particularly important because privately held firms comprise a large portion of the economy and little is known about the effects of the financial information produced by private firms—primarily because private firms in the

[5] The SEC's mission can be found here: http://www.sec.gov/about/whatwedo.shtml#.

U.S. do not typically provide audited financial statements to the public. Recent studies shed light on the economic importance of privately held firms and the uniqueness of their financial reporting environment (Allee and Yohn, 2009; Minnis, 2011; Lisowsky and Minnis, 2014). These studies examine accounting choices of privately held firms and the cost of debt implications of these firms' financial statements. Using a SEC mandatory disclosure requirement, I show that audited financial statements of private targets play an important disciplining role in mergers and acquisitions.

1.2 Background and Hypothesis Development

1.2.1 SEC Disclosure Requirements

The SEC mandates that public acquirers separately file pre-acquisition historical financial statements of target firms when the acquisition of a significant target has occurred or is probable to occur (Regulation S-X or 170 CFR §210).[6, 7] To measure significance, Rule 1-02 (w) of Regulation S-X requires firms to use three tests. A target is considered significant if:

i. The acquiring company's (including any of its subsidiaries') investments in the target exceed 10 percent of the acquiring company's total assets as of the end of the last fiscal year prior to the acquisition;

[6] Regulation S-X is part of the Securities Act of 1933 and the Securities Exchange Act of 1934. It was announced in Accounting Series Release No. 11 and first appeared in the Code of Federal Regulations in 1941. Regulation S-X lays out the specific format and content of and requirements for financial statements.
[7] All of the transactions in my sample are completed deals. Therefore, private targets' audited financial statements are filed after the acquisitions have occurred. Also note that this disclosure requirement is applicable to both public and private targets.

ii. The acquiring company's (including any of its subsidiaries') proportionate share of the total assets of the target exceeds10 percent of the acquiring company's total assets; or

iii. The acquiring company's (including any of its subsidiaries') share of the target's income exceeds 10 percent of the acquiring company's total income.

Although the definition of "significant" target is based on a 10 percent threshold, the thresholds for determining whether the acquirer must provide the complete financial statements of a significant target are considerably higher. If none of the above thresholds exceed 20 percent, the SEC does not require the disclosure of the target's financial statements. If any of the ratios are between 20 percent and 40 percent, the target's financial statements must be disclosed for the most recent fiscal year. If any of the ratios are between 40 percent and 50 percent, financial statements must be disclosed for the past two fiscal years; if any of the ratios are over 50 percent, the SEC requires disclosure of the target's financial statements for the past three fiscal years (Rule 3-05 (b) of Regulation S-X). Appendix A summarizes these requirements under Regulation S-X.

When an acquisition is a material corporate transaction, the acquirer must disclose details about the transaction in an 8-K. If the transaction meets the disclosure thresholds described above, the acquirer must also file target financial statements no later than the sum of 4 business days and 71 calendar days after consummation of the acquisition (Rule 3-05 (b) of Regulation S-X). The target's audited financial statements are generally filed in an amendment (8-K/A) to the original 8-K announcement. More specifically, the audited financial statements are reported under Item 9.01 of the 8-K amendment and must include

the independent auditor's opinion on the target's financial statements, the balance sheets, the income statements, the cash flow statements, the related footnote disclosures, and the unaudited pro-forma statements of the combined entity. Target financial statements can also be filed in a Form S-4 when the acquiring firm issues equity to finance the acquisition. Figure 1 presents a timeline that depicts the important event dates in this paper. On average, the sample firms complete the transactions 21 days after the acquisition announcement date. In addition, for deals that meet the disclosure requirement under Regulation S-X, the acquiring firms in my sample file the targets' audited financial statements an average of 43 days after the acquisition completion date. I also provide two examples from acquiring firms' 8-K (and 8-K/A) excerpts in Appendix B.

1.2.2 Hypothesis Development

Acquisitions are among the largest and most readily observable forms of corporate investment. These investments tend to highlight, and potentially intensify, the inherent conflicts of interest between managers and shareholders in large public corporations because managers likely pursue personal benefits at the expense of shareholders, particularly when information asymmetry between managers and shareholders is greater. For example, managers can benefit from increased resources under their control, higher compensation, diversification, and/or prestige even if an acquisition is value-destroying for shareholders (Jensen and Mecking, 1976; Morck et al., 1990; Jensen, 1986). Jensen (1986) presents a "free cash flow" theory, whereby managers of firms with high free cash flows and low investment opportunities have incentives to grow beyond their firms' optimal size by making value-destroying acquisitions. The theory suggests that agency problems affect

acquisition outcomes due to poor investment selections, and information asymmetry between managers and shareholders exacerbates these problems.

Monitoring can resolve agency problems, and financial disclosures assist in the monitoring of managers (Bushman and Smith, 2001; Hope and Thomas, 2008; Beyer et al., 2010). Financial disclosures make managers more accountable and enhance investors' ability to link managerial decisions to firm performance. Therefore, investors seek high-quality and complete disclosures about firms' financial performance that reduce information asymmetry between investors and managers (Diamond and Verrecchia, 1991). The prior literature has examined whether financial disclosures are an effective monitoring tool that help reduce agency costs.[8] For instance, financial accounting information is commonly used in compensation contracts (Lambert, 2001). Financial accounting information also contributes to the monitoring role of stock markets by providing firm-specific information (Bushman and Indjejikian, 1993). According to Ball (2006), increased financial transparency causes managers to act more in the interest of shareholders. Kanodia and Lee (1998) analytically show an investor's ability to identify suboptimal investment decisions increases with the precision of the periodic performance report. In other words, enhanced financial disclosure mitigates the overinvestment problem in their model. Overall, research has consistently demonstrated that corporate disclosure facilitates monitoring, thereby allowing capital markets to operate more efficiently.

Publicly traded firms provide disclosure through regulated financial reports, including financial statements, footnotes, management discussion and analysis, and other regulatory filings. In addition, some firms provide voluntary disclosures, such as

[8] See Bushman and Smith (2001), Healy and Palepu (2001), and Beyer et al. (2010) for reviews of this literature.

management forecasts, analysts' presentations and conference calls, press releases, internet sites, and other corporate reports. These disclosure activities enrich firms' information environment and lower the costs of gathering and analyzing information about firms' financial performance, expected future sales, earnings and cash flow forecasts, investment activities, business strategy and risk factors, and industry outlook information (Beyer et al., 2010). For example, Li (2010) shows that forward-looking statements in the Management Discussion and Analysis (MD&A) section of 10-Ks contain useful information about firms' future earnings. Li et al. (2013) find that 10-K disclosures of firms' competitive environment are related to firms' future profitability. Focusing on management earnings forecasts, Goodman et al. (2013) suggest that these forecasts reveal information about management's knowledge of the firm's economic environment and future business prospects. Collins and Kim (2014) find that investors better understand the merger-related transitory component of growth when an acquiring firm provides detailed and complete disclosure about the target's accounting information in both the footnotes and the MD&A section of the financial statements.

In contrast to public firms, private firms operate in unique information environments. Private firms are generally not required to publicly disclose accounting information (with the exception of private firms that issue public debt).[9] Private firms have concentrated ownership structures, and their capital providers often have access to private corporate information and play a more active role in management (Givoly et al., 2010; Hope et al., 2013). Thus, owners and management of private firms are more likely to communicate with each other through private channels. Further, agency problems are much

[9] Four private target firms in my sample have public debt. Removing these four firms does not affect the results. I identify private firms with public debt following the approach in Givoly et al. (2010).

less prevalent among private firms because of concentrated ownership (Badertscher et al., 2013). Therefore, the demand for public information about private firms is lower. Lower demand for public disclosures reduces the likelihood of voluntary disclosures and the likelihood of analyst and business press coverage. As a result, much less is known about the operations, performance, and the future prospects of private firms. This lack of information makes it more difficult for outside parties to assess the synergies and future growth prospects of a newly combined entity when a private firm has been acquired.

Given that less information about private firms is publicly available, disclosure of audited financial information about private targets can be particularly important to outside investors of the acquiring firm. First, private target acquisitions are likely to exacerbate the agency problems due to more severe information asymmetry between the acquiring firm's managers and outside investors. Managers gain access to the private target's information during the due diligence process, whereas the acquirers' investors face higher information gathering costs because less information about private firms is publicly available. When information asymmetry is high, evaluation of managers' investment decisions is more costly and difficult for outside shareholders (Smith and Watts, 1992; LaFond and Watts, 2008; Francis and Martin, 2010). Therefore, self-serving managers have a greater opportunity to engage in value-destroying acquisitions when the acquisition involves a private target because monitoring is more costly and difficult.

Target firms' accounting information plays an important role in the mergers and acquisitions process and, hence, affects acquisition outcomes. Lajoux and Elson (2002) argue that a review of the target's financial statements is the "single most important aspect of due diligence" because it provides the major inputs for target valuation. Prior research

has shown that target firms' financial reporting quality is associated with the likelihood of deal completion, deal premium, method of payment, and acquisition profitability (Skaife and Wangerin, 2013; Raman et al., 2013; Chen et al., 2014; McNichols and Stubben, 2015). Importantly, targets' financial statements provide historical sales and profit figures that help financial statement users decompose the components of the acquiring firm's nominal growth in the acquisition year (Collins and Kim, 2014). Therefore, if target financial information is available to the acquiring firms' shareholders, they are better able to link firm performance to acquisition decisions and assign blame for bad acquisition outcomes. Managers are more likely to face negative consequences such as reduced job security and compensation when outside shareholders have private firm financial information to use in benchmarking post-acquisition performance of the acquirer. If managers know ex ante that target financial statements will be publicly disclosed after the completion of an acquisition, they will be less likely to engage in value-destroying acquisitions. Therefore, required disclosure of private targets' accounting information should discipline managers when they make acquisition decisions.[10]

Based on the discussion above, I predict that the disclosure of accounting information under the SEC's disclosure rules will result in better private target acquisitions because such disclosure requirements increase external scrutiny from outside investors. My first hypothesis is stated in the alternative form:

H1: *Disclosure of a private target's audited financial statements is positively associated with acquisition profitability.*

[10] I do not suggest that management makes acquisition decisions based on the SEC's disclosure requirement. Rather, I argue that when the potential private target firm is large enough to meet the disclosure threshold, management will be more careful in evaluating the target and identifying the potential synergies and value creation from the acquisition.

I also conduct cross-sectional analyses to identify the specific mechanisms through which accounting information affects acquisition profitability. I predict that the relation between the disclosure of private targets' accounting information and acquisition profitability is stronger when monitoring is otherwise more costly and difficult. The agency problems in mergers and acquisitions are more likely present when monitoring is more difficult due to greater information asymmetry or more volatile operating environments (Masulis et al., 2009; Francis and Martin, 2010; Duchin and Schmidt, 2013). Greater information asymmetry for a given firm likely exists when information gathering costs are greater for the firm's investors. In addition, operating volatility can make linking firm performance to managerial decisions more challenging, thereby increasing the difficulty of monitoring. Thus, I expect that private targets' accounting information is particularly important when investors of acquiring firms face greater ex-ante information asymmetry and/or when acquiring firms operate in more volatile environments. I formally state this second set of hypotheses in the alternative form as follows:

H2a: *The effect of disclosure of a private target's audited financial statements on acquisition profitability is more pronounced when greater information asymmetry exists between an acquirer's outside investors and management.*

H2b: *The effect of disclosure of private targets' audited financial statements on acquisition profitability is more pronounced when an acquirer operates in a more volatile environment.*

1.3 Sample Construction, Variable Measurement, and Research Design

1.3.1 Sample Construction

I begin with all completed mergers and acquisitions (both U.S. and international targets) with announcement dates between January 1, 1997 and December 31, 2009 as

identified by the Mergers and Acquisitions database of Securities Data Company (SDC). The sample period begins in 1997 because this is the first full year in which the current SEC disclosure requirements became effective.[11] The sample ends in 2009 because I require post-acquisition data to calculate ex-post measures of acquisition performance (discussed in Section 3.3). Table 1 summarizes the sample selection procedure.

To determine my sample, I start with all completed deals identified by SDC as mergers (M), acquisitions of majority interest (AM), or acquisition of assets (AA). I identify all deals where the target's status is either public or private and specifically exclude subsidiaries. These screens result in 35,792 transactions from the SDC database. Next, I delete firms that make multiple acquisitions in any given year to eliminate the confounding effects of other targets' accounting information. I also remove firms that make additional acquisition(s) within the next three-year window from the sample to eliminate other target firms' effects on the post-acquisition performance measures. As I am interested in private targets, I next delete acquisitions of public targets.[12] Finally, I keep acquisitions with deal value greater than 1 percent of the acquirer's pre-acquisition market value to ensure the deals I examine are economically significant. These additional requirements reduce the sample size to 1,849 acquisitions.[13]

I use this sample to manually search for filings of targets' financial statements in the SEC's EDGAR filing database. For each transaction, I read through the acquirer's 8-K, S-4, or proxy statements to determine whether the firm discloses audited financial

[11] The SEC changed the disclosure threshold from 10 percent to 20 percent in 1996.
[12] In later tests, I use a sample of public target acquisitions to conduct falsification tests. See the details in Section 5.
[13] The sample includes 1,615 U.S. targets and 234 international targets. In robustness check, I delete international targets and all the empirical results remain unchanged.

statements of the private target.[14] I then group all transactions into two categories: "with private target financial information" (*DISC* = 1) and "without private target financial information" (*DISC* = 0). Finally, I use the intersection of Compustat and CRSP to obtain the acquiring firms' accounting data and stock return data to calculate all necessary variables used in the regression models.

1.3.2 Measures of Information Content

To examine the information content of acquirers' disclosure of private targets' audited financial statements, I adopt the research design in prior studies that examine the information content of earnings announcements (Beaver, 1968; Landsman and Maydew, 2002; Collins et al., 2009; Landsman et al., 2012). To help ensure that my market reaction tests only pick up investors' reactions to the disclosure of private target financial statements, I delete acquirers that file targets' financial statements in Form S-4s or Proxy Statements because these forms contain acquirers' accounting information, deal-specific terms, and/or other information. I also delete acquiring firms that file other 8-Ks within a five-day window around the filing date of targets' financial statements to eliminate the impact of other important corporate events.

I measure abnormal return volatility and abnormal trading volume around the filing date of private targets' financial statements. I define abnormal return volatility, $AVAR_{it}$, according to the following formula:

$$AVAR_{it} = u_{it}^2/\sigma_i^2, \quad (1.1)$$

[14] Most of the targets' audited financial statements are reported in the acquiring firms' 8-Ks (84 percent), followed by Form S-4s (12 percent) and Proxy Statements (4 percent).

where $u_{it} = R_{it} - (\alpha_i + \beta_i R_{mt})$, R_{it} is the stock return of firm *i* for day *t*, R_{mt} is the CRSP equal-weighted return for day *t*. α_i and β_i are firm *i*'s market model parameter estimates and σ_i^2 is the variance of firm *i*'s market model adjusted returns, each of which is calculated during the non-event period. The non-event period runs from days *t* - 60 to *t* - 10 and *t* + 10 to *t* + 60 relative to the financial statements filing date, *t* = 0. When the non-event period contains earnings announcements, I exclude 20 trading days around the announcement dates to mitigate the effect of earnings announcements on trading volume. The abnormal trading volume, *AVOL*, is calculated as the following:

$$AVOL_{it} = (V_{it} - \overline{V_i})/\sigma_i, \quad (1.2)$$

Daily volume, V_{it} is shares of firm *i* traded during day *t*, divided by shares outstanding of firm *i* during day *t*. $\overline{V_i}$ and σ_i are the mean and standard deviation in daily trading volume for firm *i* during the non-event period. The non-event period is as previously defined.

1.3.3 Measures of Acquisition Performance

I adopt a number of performance metrics to evaluate the effect of private targets' audited financial statements on acquisition performance. The first measure, *CAR3*, is the acquirer's abnormal announcement-period return over days (-1, 1), where day 0 is the date of initial acquisition announcement by the sample firm. Daily abnormal stock returns are computed using the market model and the value-weighted CRSP index. The estimation window is days (-200, -60) prior to the acquisition announcement date (Chen et al., 2007; Harford et al., 2012). This short-window abnormal return measure reflects market-based assessment of the wealth effect of the acquisition and is commonly used in the literature to capture investors' immediate assessment of expected benefits of the acquisition (Moeller

et al., 2004; Harford et al., 2012; Francis and Martin, 2010). I complement the market reaction measure with post-acquisition long-term operating and stock performance.

The ratio of earnings before extraordinary items to average total assets is used as a measure of operating performance (ROA). I calculate change in ROA (ΔROA) as the difference between the post-acquisition three-year average ROA and the pre-acquisition corresponding measure (Francis and Martin, 2010; Harford et al., 2012). As ROA could be affected by industry-wide factors, I also calculate the industry-adjusted ROA by subtracting the median ROA for all firms with the same two-digit SIC code as the acquiring firm. ΔROA_IND is calculated as the post-acquisition industry-adjusted three-year average ROA minus the pre-acquisition corresponding measure (Chen et al., 2007).[15]

Following Lyon et al. (1999), I control for size, book-to-market, and pre-acquisition stock return in my three-year stock performance measure. Specifically, I sort the population of NYSE/NASDAQ/AMEX firms each month into NYSE size deciles and then further partition the bottom decile into quintiles, resulting in 14 total size groups. I simultaneously sort firms into book-to-market (B/M) deciles. After determining which of the 140 (14 size × 10 B/M) groups the acquirer is in at the month-end prior to the deal completion, I choose from that group the control firm that is the closest match on prior-year stock return and is not involved in any acquisition activity in the prior three years. Three-year buy-and-hold returns, starting from one month after acquisition completion, are then calculated for the sample and control firms. Finally, the three-year buy-and-hold abnormal returns (*BHAR*)

[15] I check my results by using benchmark-adjusted ROA in the spirit of Barber and Lyon (1996). Each acquiring firm is paired with matching firms that are in the same 2-digit SIC industry and have ROA between 90% and 110% of the acquiring firm's ROA one year prior to the acquisition announcement year. The acquirer's benchmark-adjusted ROA is calculated as its ROA minus the median ROA for the matching firms. The results remain both economically and statistically significant when using this alternative operating performance measure.

are the difference between sample firm returns and corresponding contemporaneous control firm returns (Chen et al., 2007).

1.3.4 Research Design

To test the effect of the disclosure of private firms' financial statements on acquisition performance (H1), I estimate the following regression model:

$$PERFORM_{it} = \alpha_0 + \alpha_1 DISC_{it} + \alpha_2 SIZE_{it-1} + \alpha_3 LEV_{it-1} + \alpha_4 ROA_{it-1} + \alpha_5 TOBIN_{it-1} + \alpha_6 DEALSIZE_{it} + \alpha_7 STOCK_{it} + \alpha_8 CASH_{it} + \alpha_9 REL\_SIZE_{it} + \alpha_{10} DIFFIND_{it} + Year\ Dummies + \varepsilon_{it} \quad (1.3)$$

where $PERFORM$ is the acquisition performance measure (i.e., *CAR3*, Δ*ROA*, Δ*ROA_IND*, or *BHAR*). $DISC$ is equal one when the acquiring firm files the target's audited financial statements, and zero otherwise. I control for several firm characteristics that have been shown to affect acquisition outcomes, including firm size (*SIZE*), Tobin's Q (*TOBIN*), profitability (*ROA*), and leverage (*LEV*). I control for acquirer size because prior studies (Moeller et al., 2004) find that acquirer size is negatively associated with acquirer announcement returns. Moeller et al. (2004) argue that managers of larger corporations are more likely to be entrenched and thus are more likely to make more value-destroying acquisitions, consistent with the hubris hypothesis suggested by Roll (1986). I control for acquirer leverage because monitoring by debt holders is expected to encourage managers to make better acquisition decisions (Maloney et al., 1993). I add return on assets measured at the fiscal year end prior to the announcement year to control for mean reversion in operating performance. I include Tobin's Q because prior literature provides evidence that acquirers' investment opportunities impact acquirer returns around the acquisition announcement, but the evidence is mixed on whether the relation is positive or negative.

Moeller et al. (2004) and Dong et al. (2006) find a negative association between acquirer abnormal returns and Tobin's Q, while Harford et al. (2012) find a positive association.

I also control for deal characteristics such as the deal size (*DEALSIZE*), the method of payment (*CASH* vs. *STOCK*), the relative size of the target (*REL_SIZE*), and whether the acquirer and the target are in different two-digit SIC industry classification (*DIFFIND*). I use deal size as a proxy for the target's size. Controlling for target size is important because the disclosure threshold is based on the relative size of the target firm. Therefore, target size might confound the results. I offer no prediction on the association between cash (stock) deals and acquirers' announcement returns. Myers and Majluf (1984) suggest that a bidding firm will offer stock to finance an acquisition when it believes its stock is overvalued. Jensen (2005) also argues that overvalued acquirers engage in poorer acquisitions because of the agency costs of overvalued equity. On the other hand, Chang (1998) and Fuller et al. (2002) find that market reaction to private target acquisitions financed with equity is more positive than acquisitions financed with cash only.[16] Officer et al. (2009) find that stock deals are positively related to acquirer returns because the use of a stock-swap mitigates information asymmetry about the target, especially when the target is difficult to value. For diversification, Morck et al. (1990) suggest that managers pursuing personal benefits will tend to engage in diversifying acquisitions. However, Campa and Kedia (2002) and Villalonga (2004) suggest that diversification does not necessarily results in value destruction. All continuous variables are winsorized at the 1

[16] One explanation offered by Chang (1998) is that private target acquisitions financed with equity tend to create large blockholders from the private firms because private firms' ownership is highly concentrated. These large blockholders have incentives to monitor the acquiring firms' management, leading to better firm performance. I revisit this explanation in Section 5.

percent and the 99 percent level. Complete variable definitions are provided in Appendix C. Equation (1.3) also includes year fixed effects.

1.4 Empirical Results

1.4.1 Descriptive Statistics and Correlations

Table 2, Panel A presents descriptive statistics for the variables included in this study. Acquirers' three-day cumulative abnormal returns (*CAR3*) around the acquisition announcement have a mean of 1.7 percent, which is consistent with prior finding that investors on average react positively to private target acquisitions (Chang, 1998; Fuller et al., 2002; Moeller et al., 2004). The acquirers in my sample, on average, experience declines in both operating and stock performance following the acquisitions. Specifically, the acquirer's return on assets (ΔROA) declines by 5.6 percent, on average, three years after the completion of the acquisition, and the acquirer's three-year buy-and-hold returns (*BHAR*) is lower than a matched firm by an average of 11.5 percent. The mean value of *DISC* is 0.478, which means that approximately half (47.8 percent) of the acquiring firms in my sample file the targets' financial statements with the SEC.

Panel A also provides summary statistics for acquirer and deal characteristics. The mean market value of the acquirers is approximately $619 million, and the average deal value is approximately $74 million.[17] In terms of how the deals are financed, 18 percent of the acquisitions in my sample are classified as all stock deals, 24 percent are classified as all cash deals, with the remainder being a combination of stock and cash. The average size of the deal relative to the market value of the acquirer is 33 percent, while the median is 11

[17] The market value of the acquirer and the deal value are reported in the dollar amounts for descriptive purposes. In the regression models, *SIZE* is the natural logarithm of the market value of the acquirer and *DEALSIZE* is the natural logarithm of the deal value.

percent. In my sample, 44 percent of the acquisitions are inter-industry (diversifying) based on 2-digit SIC code.

Table 2, Panel B provides descriptive statistics of the four measures of acquisition performance for acquisitions with (*DISC* = 1) and without (*DISC* = 0) disclosures of private targets' financial statements. Panel B provides some initial univariate evidence related to my first hypothesis. The results suggest that when the acquiring firms file the targets' financial statements with the SEC, the average market reaction (*CAR3*) to these acquisitions is 2.6 percent, which is higher than the average market reaction of other acquisitions (0.9 percent). The mean difference (1.8 percent) between the two groups is statistically significant at the one-percent level. The acquiring firms that are required to disclose targets' financial statements also experience significantly higher (or less negative) post-merger operating and stock performance. For example, the mean change in industry-adjusted ROA (Δ*ROA_IND*) is -2.5 percent for acquiring firms that are required to disclose targets' financial statements, while the mean change in industry-adjusted ROA is -6.3 percent for acquiring firms that are not required to disclose such information. The difference in Δ*ROA_IND* is statistically significant at the five-percent level. I also observe the same pattern for post-acquisition stock performance, where the mean difference (16.8 percent) between *DISC* = 1 and *DISC* = 0 is statistically significant at the one-percent level. Overall, these univariate results support my first hypothesis. Panel B also suggests that acquisitions with and without disclosure are different in several dimensions. Acquirers that make the disclosure tend to be smaller, less levered, less profitable, and exhibit greater growth relative to acquirers that do not make the disclosure.

The correlations among the regression variables are presented in Table 3. The main variable of interest, *DISC*, is positively correlated with the four performance measures. Specifically, the correlation between *DISC* and *CAR3* is 0.08 and significant at the one-percent level. In addition, *DISC* is positively and significantly correlated with Δ*ROA_IND* and *BHAR* at the five-percent level or better. Table 3 also indicates that *DISC* is negatively correlated with the acquiring firms' size (*SIZE*) but positively correlated with the deal size (*DEALSIZE*) and the relative size (*REL_SIZE*), as expected. These significant correlations further indicate that controlling for the relative size of target is particularly important in my study.

1.4.2 The Information Content of Private Targets' Financial Statements

Before testing the main hypotheses in this study regarding how disclosure of private targets' financial statements disciplines acquisition decisions of acquirers, I first examine whether private targets' financial statements have information content. This examination is important because one implicit assumption underlying my main hypotheses is that private targets' financial statements provide useful information for investors and board of directors to gauge the future growth prospects of the combined entity and the synergies from the acquisition and, more importantly, provides discipline to the managers of acquirers in making their acquisition decisions. As outlined in the previous section, I adopt the research design in prior studies that examine the information content of earnings announcements (Beaver, 1968; Landsman and Maydew, 2002; Collins et al., 2009; Landsman et al., 2012). I calculate abnormal return volatility (*AVAR*) and abnormal trading volume (*AVOL*) for the period t -10 to t + 10 relative to the filing date, t = 0, and plot the results in Figure 2 and Figure 3, respectively.

Figure 2 plots the acquiring firms' daily abnormal return volatility (*AVAR*) in event time around the filings of private targets' audited financial statements. As documented in prior studies (Beaver, 1968; Landsman and Maydew, 2002; Collins et al., 2009), I observe a spike in *AVAR* in the days immediately after the filing of private targets' audited financial statements. Figure 3 presents the analogous daily event-time graph for abnormal trading volume (*AVOL*). Again, there is an upward spike in the days immediately after the filing date. Notice that in both figures, the spike appears at day *t+1* and lasts until day *t+4*. One possible explanation for the persistence in high abnormal return volatility and trading volume is that investors take a few days to process the amount of information that is made publicly available (i.e., the private targets' audited financial statements). The results depicted in Figures 2 and 3 suggest that private targets' financial statements are informative to market participants.

1.4.3 Disclosure and Acquisition Performance

Table 4 reports the results of estimating Equation (3) to test whether the disclosure of private targets' audited financial statements is associated with better acquisition performance (H1). Column (1) reports the estimation results using *CAR3* as an acquisition performance measure, and the results using post-merger operating performance (ΔROA and ΔROA_IND) are reported in columns (2) and (3). Finally, the results of post-merger long-term stock performance are reported in column (4).

The results displayed in Table 4 in general support H1. When *CAR3* is the dependent variable (column 1), the coefficient estimate on *DISC* is positive (0.006) but not statistically different from zero (p-value = 0.128). The non-significant coefficient on *DISC* is due to the inclusion of deal size (*DEALSIZE*) as a control variable. The coefficient on

DEALSIZE is positive and significant at the 10% level. However, from Table 3, *DEALSIZE* is not correlated with *CAR3*, while *DISC* is positively correlated with *CAR3* (and significant at the 1% level). In addition, *DISC* and *DEALSIZE* are positively correlated. Untabulated results indicate that the coefficient on *DISC* is positive (0.009) and significant at the 10% level when *DEALSIZE* is excluded from the regression model. For Δ*ROA* and Δ*ROA_IND* performance measures, the coefficients on *DISC* are 0.035 for Δ*ROA* and 0.033 for Δ*ROA_IND* (both are significant at the 5% level), respectively. The magnitude of the coefficient in column 2 (3) suggest that disclosure of private targets' financial statements is associated with a 3.5% (3.3%) higher operating performance in the three years after the completion of the acquisition. When three-year buy-and-hold abnormal return is the performance measure (column 4), the estimated coefficient on *DISC* is 0.134 and is statistically significant at p-value = 0.067. Thus, acquirers that are required to disclose the targets' financial statements experience a 13.4 percent higher three-year abnormal return than acquirers that do not disclose this information. Taken together, the results reported in Table 4 generally support H1 that the provision of private targets' audited financial statements disciplines managers in making private acquisition decisions, leading to better acquisition outcomes.

1.4.4 Cross-Sectional Results

To test whether the relation between the disclosure of private targets' financial statements and the quality of acquisition decisions varies as a function of ex-ante information asymmetry and operating volatility (H2a and H2b), I add two proxies to Equation (1.3): average daily bid-ask spreads (*SPREAD*) and daily stock return volatility (*STDRET*) of the acquiring firm (Francis and Martin, 2010). *SPREAD* (*STDRET*) is a

dummy variable equal one if the firm's average daily bid-ask spreads (daily stock return volatility) is above the sample median, and zero otherwise. I interact *DISC* with these two variables and expect the coefficient on the interaction terms to be positive.

Table 5, Panel A (Panel B) reports the results when the interacted variable is *SPREAD* (*STDRET*). In Panel A, the coefficient on the interaction term (*DISC*SPREAD*) is positive and significant in columns 2 (at the ten-percent level) and 3 (at the five-percent level), while the coefficient on the interaction term is positive but not significant in columns 1 and 4. In Panel B, the coefficient on the interaction term (*DISC*STDRET*) is significant in columns 2, 3, and 4, as expected. Overall, the results in Panels A and Panel B of Table 5 suggest that the effects of the disclosure requirement is more pronounced when monitoring is costly and difficult, i.e. when acquiring firms exhibit higher ex-ante information asymmetry or when acquiring firms operate in more volatile operating environments.

1.4.5 Goodwill Impairment and Divestitures

I examine post-acquisition goodwill impairments and divestitures to corroborate my main findings. The write-down of goodwill is one way information concerning an acquisition is reflected in financial reporting. Under the purchase method of accounting, all assets of the target firm are recorded at fair values and the excess amount of purchase price over the fair value of the identifiable net assets is recorded as goodwill. Goodwill impairments subsequent to acquisitions are indicative of overpayment, riskier acquisitions, or negative NPV acquisitions (Kravet, 2014).[18] Post-acquisition divestitures also indicate

[18] When testing the likelihood of goodwill impairment, I restrict my sample to acquisitions completed after 2001 so that acquiring firms only use purchase method of accounting.

poorer acquisition-investment decisions (Mitchell and Lehn, 1990; Francis and Martin, 2010). Consistent with H1, I expect acquisitions where private targets' accounting information is disclosed to be associated with a lower likelihood of post-acquisition goodwill write-downs and divestitures. I test this conjecture using the following logit model:

$$Prob(GW\_IMPAIR_{it} = 1 \; or \; DIVEST_{it} = 1)$$
$$= F(\alpha_0 + \alpha_1 DISC_{it} + \alpha_2 SIZE_{it-1} + \alpha_3 LEV_{it-1} + \alpha_4 ROA_{it-1} + \alpha_5 TOBIN_{it-1}$$
$$+\alpha_6 DEALSIZE_{it} + \alpha_6 STOCK_{it} + \alpha_7 CASH_{it} + \alpha_8 REL\_SIZE_{it}$$
$$+\alpha_9 DIFFIND_{it} + \varepsilon_{it}) \quad (1.4)$$

GW_IMPAIR is set to one if the acquiring firm reports goodwill impairment in the fiscal year the acquisition is completed or in any of the three years subsequent to the completion, and zero otherwise. I identify goodwill impairments from Compustat (i.e., GDWLIP > 0). Following Francis and Martin (2010), I identify an acquisition as resulting in a subsequent divestiture if the acquirer makes a divestiture within seven years of the acquisition being completed and the acquired target has the same three-digit SIC code as the divested segment. Other acquirer and deal control variables are as previously defined.

Table 6 reports the results from estimating the logit model in Equation (1.4). Column 1 presents the results when goodwill impairment (*GW_IMPAIR*) is the dependent variable. The coefficient on *DISC* is negative but insignificant (p-value = 0.212), indicating that the disclosure of the private target's financial statements is not associated with a significantly lower probability of goodwill impairment subsequent to the completion of an acquisition. Acquirers' size (*SIZE*) and acquisitions financed by stocks (*STOCK*) are

associated with lower probability of goodwill impairment, while deal size (*DEALSIZE*) is positively related to the incidences of goodwill write-down.

Column 2 of Table 6 presents the results of the divestiture test. The divestiture rate in my sample is 12.5 percent, which is lower than 20.7 percent documented in Francis and Martin (2010). The coefficient on *DISC* is negative and statistically significant (p-value = 0.023), indicating that when the acquiring firms disclose the private targets' financial statements they are less likely to subsequently divest these targets. The marginal effects of the disclosure from the estimation results in column 2 indicate that the disclosure of private targets' financial statements decreases the probability of post-merger divestiture by 3.2 percent. I also find that acquirers' leverage (*LEV*), deal size (*DEALSIZE*), stock acquisitions (*STOCK*), and diversifying acquisitions (*DIFFIND*) affect the probability of post-merger divestiture. Overall, Table 6 suggests that the provision of private targets' financial statements does not affect the probability of post-acquisition goodwill impairment but does reduce the probability of a post-acquisition divestiture.

1.5 Alternative Explanations

1.5.1 The Relative Size of Target Firm

Because the SEC's disclosure thresholds are based on the size of the target relative to the acquirer, the disclosure variable (*DISC*) likely partitions the acquisition sample into relatively large (*DISC = 1*) and relatively small (*DISC = 0*) transactions. In addition, transactions that meet the disclosure thresholds are more likely to have larger impacts on the acquiring firms' performance. Therefore, in spite of controlling for the target's relative size and the overall deal size in my main analyses, it is possible that the relative size of the

target firm is still driving my main results. To address this concern, I perform two sets of additional tests.

First, I construct a separate sample intended to minimize the relative size differences by examining transactions around the disclosure threshold, a research design similar to Gao et al. (2009) and Keys et al. (2010). Specifically, this sample includes only acquisitions with relative size (*REL_SIZE*) between 10 percent and 25 percent ($CAR3_{10,25}$).[19] I use the market reaction around acquisition announcement (*CAR3*) to capture acquisition performance because this measure only involves minimum sample requirements.[20] In addition to this sample, I further reduce the relative size range to 10 percent ($CAR3_{15,25}$) in order to hold the relative size differences at the minimum while retain sufficient number of observations.

I re-run Equation (3) using these samples and *CAR3* as the dependent variable and report the results in Table 7. In the univariate, Panel A suggests that the average market reaction (*CAR3*) is higher when *DISC* = 1 in both samples. The regression results (Panel B) also confirm the univariate evidence. The coefficients on *DISC* suggest that the disclosure of private targets' financial statements is positively associated with acquirers' announcement returns. The magnitude of the effect is between 0.9 percent and 1 percent depending on the sample. Table 7, therefore, provides further evidence supporting H1.

Second, I conduct falsification tests by re-running Equation (3) using a sample of *public* target acquisitions. I identify this sample following the same procedure described in

[19] The relative size is a reasonable proxy for the disclosure activity. When the relative size ratio is below 10 percent, 80 percent of the acquiring firms do not disclose. On the other hand, when the ratio is above 25 percent, 86 percent of the acquiring firms do disclose. In addition, I intend to keep the relative size range small in order to minimize the relative size differences between *DISC*=1 and *DISC*=0 groups. Therefore, I include acquisitions with relative size between 10 percent and 25 percent in this sample.

[20] Specifically, I relax the first two sample selection requirements described in Panel A, Table 1 because other acquisitions are less likely to affect the market reactions around acquisition announcements.

Table 1. For this sample of public targets, the pseudo disclosure indicator variable (*DISC*) only captures differences in the relative size of the targets because investors always have access to the public targets' financial statements. If my findings are driven by the relative size of the target instead of disclosure of the target's financials, I should still find an association between the pseudo disclosure variable (*DISC*) and acquisition performance in this sample of public acquisitions.

Table 8, Panel A reports the mean values of the four acquisition performance measures and other regression variables split by the pseudo disclosure variable (*DISC*). In sharp contrast to the results in Table 2, the mean values of the four performance measures are not statistically different between the two subsamples. In addition, the coefficients on *DISC* in all four columns in Panel B are not statistically different from zero. Therefore, Table 8 provides both univariate and multivariate evidence that a pseudo disclosure variable based on the relative size of the public target is not associated with the performance of acquisition.[21] This provides further evidence that the findings in my main tests are not driven by relative size differences between *DISC*=1 and *DISC*=0 firms.

1.5.2 Monitoring by Large Blockholder of Private Targets

Prior studies suggest that large blockholders from private targets created by acquisitions financed with stock can be one explanation for positive abnormal returns around announcements of private firm acquisitions (Chang, 1998; Fuller et al., 2002).[22]

[21] One concern of using the public sample is that public targets are in general larger than private targets, and, therefore, the public sample is not comparable to the private sample in terms of the targets' size. To mitigate this concern, I also construct a matched sample by matching firms from the two samples on the relative size of the target. I again fail to find any association between *DISC* and the four measures of acquisition performance using this matched sample (results not tabulated).

[22] Because the ownership of the private firm is concentrated, the owners of the private firm can become large blockholders of the acquiring firm when stock is offered in the transaction.

These blockholders have incentives to monitor the management of the acquiring firm, leading to better firm performance. Furthermore, the creation of large blockholders is more likely to take place when the size of the deal is large. As the disclosure of targets' financial statements is based on relative size thresholds, the monitoring effect from the creation of large blockholders is a plausible competing explanation.

To investigate this competing explanation, I run the following regression model:

$$PERFORM_{it} = \alpha_0 + \alpha_1 DISC_{it} + \alpha_2 STOCK\_DEAL_{it} \times DEALSIZE_{it} + \alpha_3 STOC\_DEAL_{it} + \alpha_4 DEALSIZE_{it} + \alpha_5 SIZE_{it-1} + \alpha_6 LEV_{it-1} + \alpha_7 ROA_{it-1} + \alpha_8 TOBIN_{it-1} + \alpha_9 REL_{SIZE_{it}} + \alpha_{10} DIFFIND_{it} + Year\ Dummies + \varepsilon_{it} \quad (1.5)$$

$STOCK\_DEAL$ is a dummy variable equal to one when an acquisition is financed by stock or by a mix of stock and cash. Because larger deals financed by equity are more likely to create large blockholders from the private target, the interaction term $STOCK\_DEAL \times DEALSIZE$ captures the monitoring effect of large blockholders. Other variables are as previously defined. The estimation results of equation (1.5) are reported in Table 9. The coefficients on *DISC* in columns 2, 3, and 4 remain positive and statistically significant, while the coefficients on $STOCK\_DEAL \times DEALSIZE$ are not statistically different from zero in all four columns. The magnitudes of the coefficients on *DISC* are also comparable to those reported in Table 4. Therefore, the inferences are unchanged after controlling for the monitoring from large blockholders created by stock acquisitions.

1.5.3 Other Disciplining Mechanism

Prior studies find that acquirers' conditional conservatism and the presence of institutional investors at the acquiring firms disciplines mangers in making acquisition

decisions (Chen et al., 2007; Francis and Martin, 2010; Kravet, 2014). To mitigate the concern that the results are driven by these two alternative disciplining mechanisms, I include (1) a firm-specific measure of the acquiring firms' conditional conservatism (*C_SCORE*) and (2) the presence of blockholder (*BLOCK*) at the acquiring firm in the regression models. The *C_SCORE* is calculated following Khan and Watts (2009), and *BLOCK* is defined as holdings by institutions with at least five percent of the shares at the end of the fiscal year prior to acquisition announcement year. The results reported in Table 10 Panel A and Panel B indicate that the effect of disclosure of private targets' financial information on acquisition performance is robust to the acquirers' conservative reporting practice and to the presence of institutional blockholders.

1.5.4 Voluntary Disclosure

Another possible alternative explanation is signaling through voluntary disclosure. Disclosure theory suggests that firms have incentives to voluntarily disclose their "types" in order to distinguish themselves from others. To investigate this possibility, I examine how many acquiring firms in my sample voluntarily disclose the targets' financial statements. After reading through the related filings of all 2,567 deals in both my private and public samples, I only find one firm specifically mentions in its 8-K filing that the firm reports the targets' financial statements "at its option" even though the transaction does not meet the disclosure requirements under Regulation S-X. Due to such low probability of voluntary disclosure, I conclude that this is a rare practice. Nevertheless, I further delete acquiring firms that disclose targets' financial statements when the relative size of the target is less than 20 percent to remove possible voluntary disclosures from the sample. All the results remain unchanged after I delete these observations.

1.6 Conclusion

This study uses SEC disclosure requirements under Regulation S-X that make certain private targets' financial statements publicly available to investigate the disciplining effect of audited financial reporting on mergers and acquisitions. For a sample of completed private target acquisitions, I first document that private targets' financial statements are informative to market participants. Next, consistent with my main hypothesis, I find acquiring firms that disclose the targets' audited financial statements experience higher abnormal announcement returns, better post-acquisition long-term performance, and a lower likelihood of post-acquisition divestitures than acquiring firms that do not disclose. Further, the effects of the disclosure are more pronounced when monitoring by outside capital providers is costly and difficult. Taken together, these findings suggest that disclosure of private targets' financial statements plays a disciplining role in mergers and acquisitions by providing useful information for the outside parties to assess and monitor managers' acquisition decisions.

This paper makes several contributions to the extant literature. First, my findings support the SEC's stated mission by showing that the disclosure policy regarding acquisitions of privately held targets is associated with better capital allocation (i.e., acquisition-investment) decisions. Second, my findings suggest targets' accounting information can play a monitoring role in mergers and acquisitions, which is different from prior studies that emphasize how targets' accounting information reduces the information uncertainty of the target firms and, hence, facilitates acquisition decisions (Wangerin, 2012; Skaife and Wangerin, 2013; Raman et al., 2013; Chen et al., 2014; McNichols and Stubben, 2015). Third, this paper contributes to research in accounting on privately held

firms. These firms comprise a significant portion of the economy, but relatively little research examines these firms' financial reporting (Allee and Yohn, 2009; Minnis, 2011). My study extends this line of research by examining the usefulness of private firms' accounting information in acquisitions of privately held targets.

My research is subject to two key caveats. First, my sample does not include firms that engage in multiple acquisitions because including these observations would make it difficult to interpret my long-term performance analyses. Therefore, the inferences from this paper might not generalize to firms that engage in mergers and acquisitions frequently (i.e., serial acquirers). Second, my study only provides evidence on the potential benefits of mandatory disclosure in the context of acquisitions of privately held targets. However, information is not costless. As noted by Stigler (1964): "No society is rich enough to get all the available information." Mandatory disclosure also likely imposes costs on firms, such as proprietary and preparation costs. Therefore, without analyzing both the costs and benefits of this disclosure requirement, my study does not suggest acquiring firms should always disclose private targets' financial statements.

Table 1

Sample Selection and Distribution by Announcement Year

Panel A: Sample Selection Procedure

Number of transactions from SDC	35,792
Less firm-years with multiple transactions	(20,575)
Less firms make another acquisition within three-year window	(7,310)
Less transactions of public targets	(1,078)
Number of transactions before merging with CRSP and COMPUSTAT	6,829
Less observations missing GVKEY and/or PERMNO	(2,743)
Less observations missing acquirers' market value one quarter before acquisition announcement	(592)
Less deal value smaller than 1% of acquirers' market value one quarter before acquisition announcement and deals without deal value	(1,654)
Sample used to search for EDGAR filings of targets' financial information	**1,849**

Panel B: Sample Distribution by Announcement Year

Year	Number of Acquisitions	Percentage of Sample (%)	Median Acquirer Market Value of Equity (million$)	Median Deal Value (million$)	Median Relative Size
1997	301	16.19	109	11	0.13
1998	206	11.30	108	15	0.12
1999	174	9.84	86	13	0.16
2000	170	9.37	114	15	0.09
2001	95	5.15	257	19	0.13
2002	100	5.36	142	12	0.08
2003	87	4.53	92	22	0.17
2004	125	6.72	138	19	0.11
2005	114	6.04	222	20	0.13
2006	148	7.86	195	26	0.13
2007	140	7.44	272	25	0.09
2008	110	5.88	344	30	0.08
2009	79	4.32	170	20	0.10
Total	**1,849**	**100.00**	**141**	**18**	**0.11**

Table 2

Descriptive Statistics

Panel A: Full Sample

Variable	Mean	Std Dev	25th Pctl	50th Pctl	75th Pctl
CAR3	0.017	0.113	-0.028	0.005	0.053
ΔROA	-0.056	0.355	-0.100	-0.013	0.025
ΔROA_IND	-0.043	0.358	-0.095	-0.014	0.041
BHAR	-0.115	1.401	-0.650	-0.088	0.491
DISC	0.478	0.500	0.000	0.000	1.000
SIZE	619.045	1683.80	51.781	172.200	526.089
LEV	0.185	0.197	0.004	0.115	0.319
ROA	-0.037	0.200	-0.043	0.022	0.071
TOBIN	2.010	1.416	1.083	1.462	2.307
DEALVALUE	74.098	253.066	7.002	19.900	52.700
STOCK	0.176	0.381	0.000	0.000	0.000
CASH	0.241	0.428	0.000	0.000	0.000
REL_SIZE	0.333	1.254	0.045	0.111	0.279
DIFFIND	0.435	0.496	0.000	0.000	1.000
SPREAD	2.467	3.081	0.512	1.563	3.206
STDRET	0.041	0.028	0.022	0.035	0.052
C_SCORE	0.146	0.116	0.089	0.127	0.170
BLOCK	0.371	0.483	0.000	0.000	1.000

Table 2

Descriptive Statistics (cont.)

Panel B: Mean Values Split by Disclosure (DISC)

Variable	DISC = 1	DISC = 0	Difference
CAR3	0.026	0.009	0.018***
ΔROA	-0.048	-0.063	0.015*
ΔROA_IND	-0.025	-0.060	0.035**
BHAR	-0.021	-0.189	0.168***
SIZE	4.492	5.469	-0.977***
LEV	0.178	0.211	-0.033***
ROA	-0.067	-0.017	-0.050***
TOBIN	2.787	2.149	0.638***
DEALSIZE	3.332	2.693	0.639***
STOCK	0.225	0.130	0.095***
CASH	0.183	0.295	-0.113***
REL_SIZE	0.424	0.117	0.307***
DIFFIND	0.411	0.457	-0.046*

Note: Panel A presents descriptive statistics for variables used in this study. Panel B reports the mean values of acquisition performance proxies split by *DISC*. Complete variable definitions are provided in Appendix C. In Panel B, ***, **, * indicate the difference in means between the groups is significant at the 0.01, 0.05, and 0.10 level, respectively.

Table 3

Pearson (Spearman) Correlation Above (Below) the Diagonal

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) CAR3		***0.08***	***0.08***	0.02	***0.08***	***-0.14***	0.01	***-0.08***	-0.04	0.00	**0.05**	-0.04	***0.16***	***0.06***
(2) ΔROA	-0.01		***0.67***	***0.15***	0.02	-0.01	***0.19***	***-0.26***	**0.06**	0.02	-0.03	0.02	***-0.09***	-0.03
(3) ΔROA_IND	0.01	***0.57***		***0.15***	**0.05**	-0.04	***0.21***	***-0.29***	***0.07***	0.02	0.01	0.00	***0.12***	-0.03
(4) BHAR	0.03	***0.29***	***0.25***		***0.06***	**0.06**	***0.07***	0.01	0.01	***-0.11***	0.01	0.02	**0.06**	0.00
(5) DISC	***0.08***	0.01	0.02	0.02		***-0.28***	***-0.07***	***-0.12***	***0.07***	***0.21***	***0.12***	***-0.13***	***0.17***	**-0.05**
(6) SIZE	***-0.08***	0.02	-0.04	0.04	***-0.27***		***0.21***	***0.34***	***-0.22***	***0.57***	***-0.19***	***0.16***	***-0.17***	0.00
(7) LEV	0.01	***0.11***	***0.11***	***0.08***	***-0.10***	***0.31***		***-0.07***	***-0.04***	***0.14***	***-0.07***	0.01	0.01	***0.07***
(8) ROA	0.01	***-0.28***	***-0.25***	0.01	***-0.10***	***0.23***	***-0.07***		***-0.17***	***0.14***	***-0.26***	***0.12***	**-0.05**	0.00
(9) TOBIN	-0.03	-0.03	0.01	0.01	***0.08***	***-0.21***	***-0.22***	***0.16***		0.04	***0.17***	***-0.06***	0.02	-0.04
(10) DEALSIZE	0.02	0.02	0.00	***-0.07***	***0.21***	***0.56***	***0.18***	***0.17***	***0.13***		-0.01	0.02	***0.15***	-0.01
(11) STOCK	-0.02	-0.01	0.01	0.00	***0.12***	***-0.20***	***-0.08***	***-0.21***	***0.16***	-0.01		***-0.26***	***0.06***	***-0.06***
(12) CASH	-0.02	-0.01	-0.01	0.03	***-0.13***	***0.17***	-0.01	***0.14***	**-0.05**	0.03	***-0.26***		**-0.05**	-0.02
(13) REL_SIZE	***0.13***	**0.05**	**0.05**	0.03	***0.53***	***-0.24***	***0.08***	***-0.13***	***-0.30***	***0.33***	**0.05**	***-0.13***		-0.01
(14) DIFFIND	**0.04**	**-0.05**	-0.02	-0.01	**-0.05**	0.00	***0.08***	0.02	***-0.07***	0.00	**-0.06**	-0.02	0.03	

Note: Complete variable definitions are provided in Appendix C. Correlation coefficients in bold (bold and italics) are significantly different from zero at the 0.05 (0.01) level.

Table 4

Acquisition Performance

	CAR3	Δ*ROA*	Δ*ROA_IND*	*BHAR*
Intercept	0.029	-0.186**	-0.175**	-0.368
	[0.133]	[0.019]	[0.025]	[0.217]
DISC	**0.006**	**0.035****	**0.033****	**0.134***
	[0.128]	**[0.022]**	**[0.031]**	**[0.067]**
SIZE	-0.012***	0.019**	0.012	0.069**
	[0.000]	[0.041]	[0.200]	[0.030]
LEV	0.016	0.187***	0.213***	0.362
	[0.206]	[0.004]	[0.002]	[0.118]
ROA	-0.018	-0.229***	-0.256***	0.120
	[0.290]	[0.000]	[0.000]	[0.551]
TOBIN	-0.002***	0.003	0.002	0.035
	[0.003]	[0.629]	[0.594]	[0.126]
DEALSIZE	0.006*	-0.015**	-0.009	-0.062
	[0.077]	[0.017]	[0.193]	[0.220]
STOCK	0.005	-0.017	-0.025	0.091
	[0.532]	[0.500]	[0.317]	[0.578]
CASH	0.002	0.024	0.022	0.131
	[0.729]	[0.260]	[0.229]	[0.272]
REL_SIZE	0.010	0.018***	0.017***	0.076*
	[0.250]	[0.000]	[0.006]	[0.096]
DIFFIND	0.013**	-0.013	-0.017	-0.012
	[0.018]	[0.420]	[0.287]	[0.930]
Year Dummies	Yes	Yes	Yes	Yes
Adjusted R-Square	0.050	0.084	0.080	0.031
Number of Observations	1,577	1,419	1,419	954

Note: This table reports the results from tests of acquisition performance (profitability) using four different measures: acquirer announcement returns (*CAR3*), change in operating performance (Δ*ROA*), change in operating performance adjusted for industry median (Δ*ROA_IND*), and post-acquisition long-run stock performance (*BHAR*). Test statistics are based on heteroskedasticity-robust standard errors. The corresponding p-values are reported in the brackets below each coefficient. ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. See the Appendix C for variable definitions.

Table 5

Cross-Sectional Variations in Acquisition Performance

Panel A: Acquirers' Information Asymmetry as Proxied by SPREAD

	CAR3	*ΔROA*	*ΔROA_IND*	*BHAR*
Intercept	0.022	-0.213	-0.199	-0.645
	[0.314]	[0.004]	[0.007]	[0.047]
DISC	0.007	0.010	0.005	0.139
	[0.200]	[0.331]	[0.421]	[0.158]
DISC*SPREAD	**0.002**	**0.052***	**0.053****	**0.104**
	[0.488]	**[0.057]**	**[0.042]**	**[0.297]**
SIZE	-0.008***	0.022**	0.019**	0.092**
	[0.001]	[0.015]	[0.038]	[0.018]
LEV	0.017	0.129**	0.139**	0.329
	[0.273]	[0.023]	[0.016]	[0.138]
ROA	-0.017	-0.234***	-0.261***	0.161
	[0.346]	[0.000]	[0.000]	[0.443]
TOBIN	-0.002***	0.003	0.003	0.046*
	[0.000]	[0.442]	[0.490]	[0.069]
SPREAD	-0.001	0.052	0.029	0.164
	[0.448]	[0.180]	[0.482]	[0.320]
DEALSIZE	0.011**	-0.006	-0.004	-0.079
	[0.008]	[0.314]	[0.429]	[0.113]
STOCK	0.006	-0.040	-0.053	0.067
	[0.516]	[0.158]	[0.087]	[0.687]
CASH	-0.001	0.023	0.019	0.121
	[0.877]	[0.252]	[0.298]	[0.225]
REL_SIZE	0.012	0.004	0.004	0.099
	[0.255]	[0.509]	[0.598]	[0.146]
DIFFIND	0.013*	-0.016	-0.017	-0.006
	[0.066]	[0.268]	[0.231]	[0.947]
Year Dummies	Yes	Yes	Yes	Yes
Adjusted R-Square	0.046	0.101	0.087	0.031
Number of Observations	1,560	1,348	1,348	954

Table 5

Cross-Sectional Variations in Acquisition Performance (cont.)

Panel B: Acquirers' Operating Volatility as Proxied by STDRET

	CAR3	*ΔROA*	*ΔROA_IND*	*BHAR*
Intercept	0.031	-0.085	-0.071	-0.322
	[0.230]	[0.210]	[0.258]	[0.402]
DISC	0.007	0.003	0.004	0.013
	[0.106]	[0.433]	[0.473]	[0.306]
DISC*STDRET	**0.003**	**0.035***	**0.051***	**0.361****
	[0.369]	**[0.064]**	**[0.064]**	**[0.029]**
SIZE	-0.009***	0.010	0.008	0.063
	[0.001]	[0.222]	[0.311]	[0.124]
LEV	0.016	0.137**	0.140***	0.369*
	[0.311]	[0.011]	[0.008]	[0.094]
ROA	-0.019	-0.230***	-0.254***	0.141
	[0.321]	[0.000]	[0.000]	[0.491]
TOBIN	-0.002***	0.000	0.000	0.033
	[0.000]	[0.470]	[0.483]	[0.162]
STDRET	-0.006	-0.062**	-0.079***	-0.175
	[0.507]	[0.025]	[0.003]	[0.264]
DEALSIZE	0.006*	-0.010**	-0.006	-0.071
	[0.066]	[0.042]	[0.279]	[0.153]
STOCK	0.006	-0.034	-0.047	0.079
	[0.536]	[0.212]	[0.110]	[0.637]
CASH	0.000	0.026	0.022	0.109
	[0.845]	[0.142]	[0.153]	[0.272]
REL_SIZE	0.012	0.005	0.005	0.098
	[0.258]	[0.317]	[0.434]	[0.162]
DIFFIND	0.013*	-0.013	-0.015	-0.011
	[0.066]	[0.375]	[0.268]	[0.910]
Year Dummies	Yes	Yes	Yes	Yes
Adjusted R-Square	0.039	0.089	0.086	0.032
Number of Observations	1,560	1,323	1,323	954

Note: This table presents the results of testing the cross-sectional variations in the effect of *DISC* on acquisition performance (profitability). Panel A and B report the cross-sectional results based on two proxies of ex ante agency cost: the average daily bid-ask spreads (*SPREAD*) and the daily stock return volatility (*STDRET*). Test statistics are based on heteroskedasticity-robust standard errors. The corresponding p-values are reported in the brackets below each coefficient. ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. See the Appendix C for variable definitions.

Table 6

The Likelihood of Goodwill Impairment and Divestitures

	GW_IMPAIR		*DIVEST*	
	Coeff	Marginal Effects	Coeff	Marginal Effects
Intercept	-0.984**		-3.180***	
	[0.012]		[0.000]	
DISC	**-0.175**	**-0.027**	**-0.394****	**-0.032****
	[0.212]		**[0.023]**	
SIZE	-0.212**	-0.035**	-0.044	-0.004
	[0.018]		[0.572]	
LEV	0.103	0.264	0.428**	0.035**
	[0.803]		[0.027]	
ROA	0.192	0.036	0.251	0.021
	[0.526]		[0.443]	
TOBIN	-0.041	-0.005	0.008	0.001
	[0.255]		[0.641]	
DEALSIZE	0.319***	0.051***	0.322***	0.026***
	[0.001]		[0.000]	
STOCK	-0.758*	-0.132**	-0.510*	-0.042*
	[0.057]		[0.060]	
CASH	-0.113	-0.024	0.046	0.004
	[0.560]		[0.810]	
REL_SIZE	-0.024	-0.006	-0.069	-0.006
	[0.671]		[0.366]	
DIFFIND	0.039	0.015	-0.773***	-0.064***
	[0.827]		[0.000]	
Year Dummies	Yes		Yes	
Pseudo R-Square	7.03%		10.58%	
Log Likelihood	879.5		1082.9	
Number of Observations	188/670		187/1499	

Note: This table presents the results of testing the effect of *DISC* on the likelihood of post-merger goodwill impairment (column 1) and post-merger divestitures (column 2). The marginal effects are reported next to the coefficient estimates. The corresponding p-values are reported in the brackets below each coefficient. ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. See the Appendix C for variable definitions.

Table 7

Announcement Return Tests
Holding the Economic Significance of the Targets Relatively Similar

Panel A: Mean Values Split by Disclosure (DISC)

Variable	DISC = 1	DISC = 0	Difference
$CAR3_{10,25}$	0.014	0.005	0.009**
$CAR3_{15,25}$	0.016	0.004	0.012**

Panel B: Regression Results

	$CAR3_{10,25}$	$CAR3_{15,25}$
Intercept	-0.005	0.035
	[0.816]	[0.692]
DISC	**0.009****	**0.010***
	[0.024]	**[0.060]**
Controls	Yes	Yes
Year Dummies	Yes	Yes
Adjusted R-Square	0.024	0.036
Number of Observations	1,856	922

Note: This table presents the results of testing the effect of *DISC* on acquirers' abnormal returns around acquisition announcement (*CAR*3) using three samples that hold the economic significance of the targets relatively similar. $CAR3_{10,25}$ contains acquisitions with relative size between 10% and 25%, $CAR3_{15,25}$ contains acquisitions with relative size between 15% and 25%, and $CAR3_{10,20}$ contains acquisitions with relative size between 10% and 20%. Panel A reports the mean values of three-day abnormal returns (*CAR*3) split by *DISC*. Panel B reports results from the regression models. Control variables are omitted for brevity. Test statistics are based on heteroskedasticity-robust standard errors. The corresponding p-values are reported in the brackets below each coefficient. ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. See the Appendix C for variable definitions.

Table 8

Falsification Tests: Public Acquisition Sample

Panel A: Mean Values Split by Disclosure (DISC)

Variable	DISC = 1	DISC = 0	Difference
CAR3	-0.013	-0.014	0.001
ΔROA	-0.011	-0.009	-0.002
ΔROA_IND	-0.006	-0.007	0.001
BHAR	-0.088	-0.142	0.054
SIZE	5.764	7.211	-1.447***
LEV	0.212	0.221	-0.008
ROA	0.000	0.052	-0.052***
TOBIN	1.804	1.662	0.142*
DEALSIZE	5.101	5.039	0.062
STOCK	0.448	0.352	0.096**
CASH	0.180	0.318	-0.138***
REL_SIZE	0.558	0.223	0.335***
DIFFIND	0.294	0.293	0.002

Panel B: Regression Results

	CAR3	*ΔROA*	*ΔROA_IND*	*BHAR*
Intercept	0.033	-0.042	-0.066	-0.391
	[0.133]	[0.324]	[0.332]	[0.306]
DISC	**0.005**	**0.000**	**0.002**	**0.083**
	[0.481]	**[0.995]**	**[0.951]**	**[0.206]**
Controls	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Adjusted R-Square	0.075	0.145	0.123	0.049
Number of Observations	613	558	558	428

Note: This table presents the results of testing the effect of *DISC* on acquisition performance (profitability) using public target acquisitions to control for the size (or materiality) effect. Panel A and B report results from a sample of public target acquisitions that meets all the data requirements (the control group). Panel C reports results from a matched sample based on relative size of the acquisition. Test statistics are based on heteroskedasticity-robust standard errors. The corresponding p-values are reported in the brackets below each coefficient. ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. See the Appendix C for variable definitions.

Table 9

The Monitoring Effect from Large Blockholders

	CAR3	ΔROA	ΔROA_IND	BHAR
Intercept	0.025	-0.173***	-0.166***	-0.325
	[0.209]	[0.009]	[0.010]	[0.294]
DISC	**0.004**	**0.044*****	**0.034*****	**0.156***
	[0.231]	**[0.003]**	**[0.008]**	**[0.076]**
DEALSIZE*STOCK_DEAL	**0.013**	**0.000**	**0.002**	**-0.071**
	[0.128]	**[0.966]**	**[0.431]**	**[0.312]**
STOCK_DEAL	0.012	-0.049	-0.060*	0.080
	[0.187]	[0.147]	[0.075]	[0.766]
DEALSIZE	0.015**	-0.014**	-0.010	0.089*
	[0.025]	[0.031]	[0.166]	[0.094]
Other Controls	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Adjusted R-Square	0.050	0.105	0.108	0.032
Number of Observations	1,577	1,419	1,419	954

Note: This table presents the results of testing the effect of *DISC* on acquisition performance (profitability) after controlling for the monitoring of large blockholders created by stock acquisitions. Test statistics are based on heteroskedasticity-robust standard errors. The corresponding p-values are reported in the brackets below each coefficient. ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. See the Appendix C for variable definitions.

Table 10

Controlling for Other Disciplining Mechanisms

Panel A: Conservative Financial Reporting proxied by C_SCORE

	CAR3	*ΔROA*	*ΔROA_IND*	*BHAR*
Intercept	0.049**	-0.176***	-0.162***	-0.536
	[0.042]	[0.000]	[0.000]	[0.142]
DISC	**0.004**	**0.031****	**0.020***	**0.119****
	[0.147]	**[0.035]**	**[0.064]**	**[0.024]**
C_SCORE	**0.009**	**0.076**	**0.007**	**0.505**
	[0.479]	**[0.269]**	**[0.490]**	**[0.283]**
Other Controls	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Adjusted R-Square	0.038	0.074	0.067	0.033
Number of Observations	1,577	1,419	1,419	954

Panel B: Institutional Investors proxied by BLOCK

	CAR3	*ΔROA*	*ΔROA_IND*	*BHAR*
Intercept	0.023	-0.213***	-0.209***	-0.441
	[0.280]	[0.002]	[0.001]	[0.138]
DISC	**0.007**	**0.042****	**0.043****	**0.134****
	[0.133]	**[0.011]**	**[0.012]**	**[0.035]**
BLOCK	**0.004**	**0.037***	**0.039***	**0.177***
	[0.231]	**[0.077]**	**[0.086]**	**[0.064]**
Other Controls	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Adjusted R-Square	0.043	0.106	0.107	0.032
Number of Observations	1,577	1,419	1,419	954

Note: This table presents the results of testing the effect of *DISC* on acquisition performance (profitability) after controlling for other disciplining mechanisms, i.e., conditional conservatism and institutional investors. In Panel A, conditional conservatism is proxied by the *C_SCORE* from Khan and Watts (2009). In Panel B, the effect of institutional investors is captured by the presence of blockholder (*BLOCK*). Test statistics are based on heteroskedasticity-robust standard errors. The corresponding p-values are reported in the brackets below each coefficient. ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. See the Appendix C for variable definitions.

Figure 1

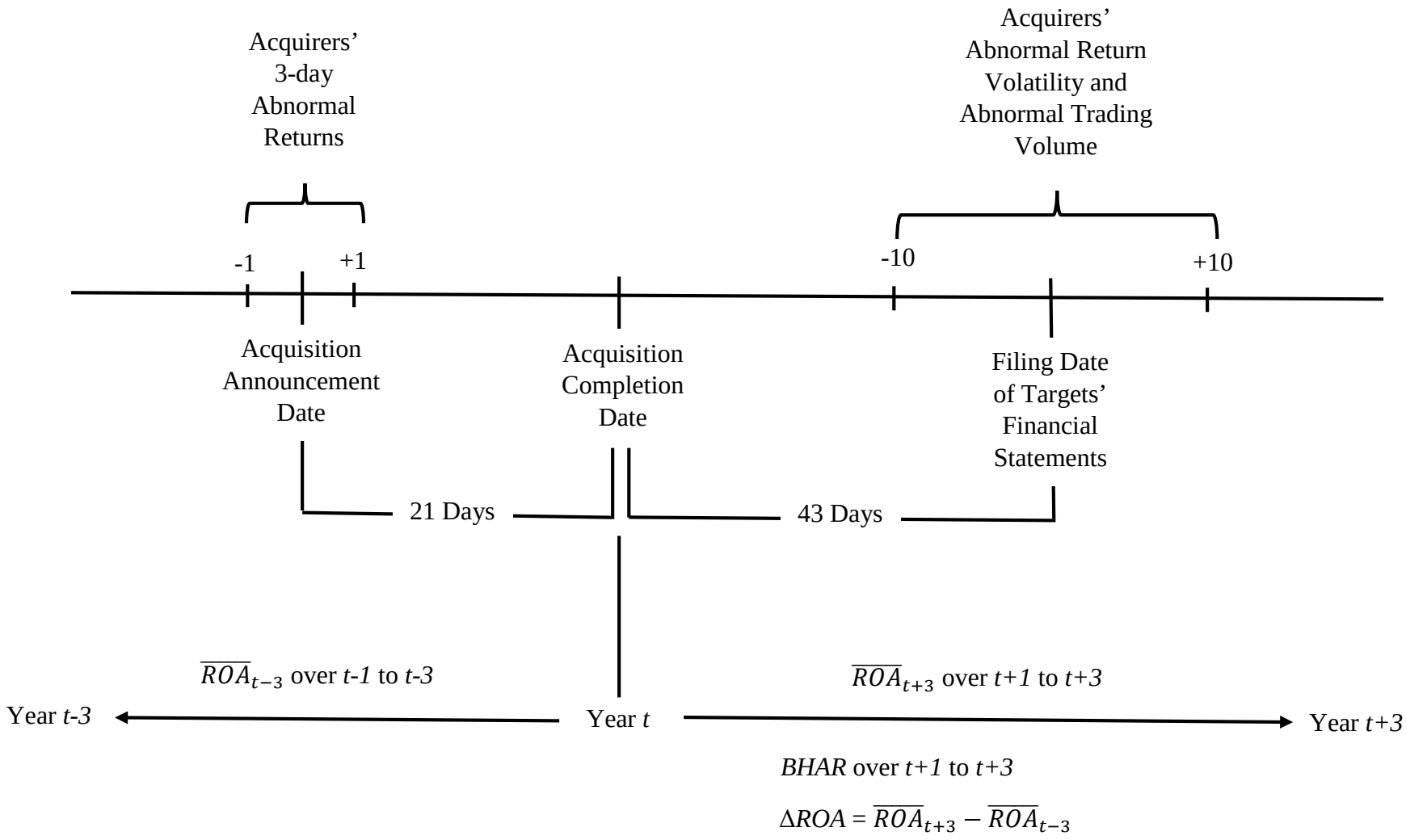
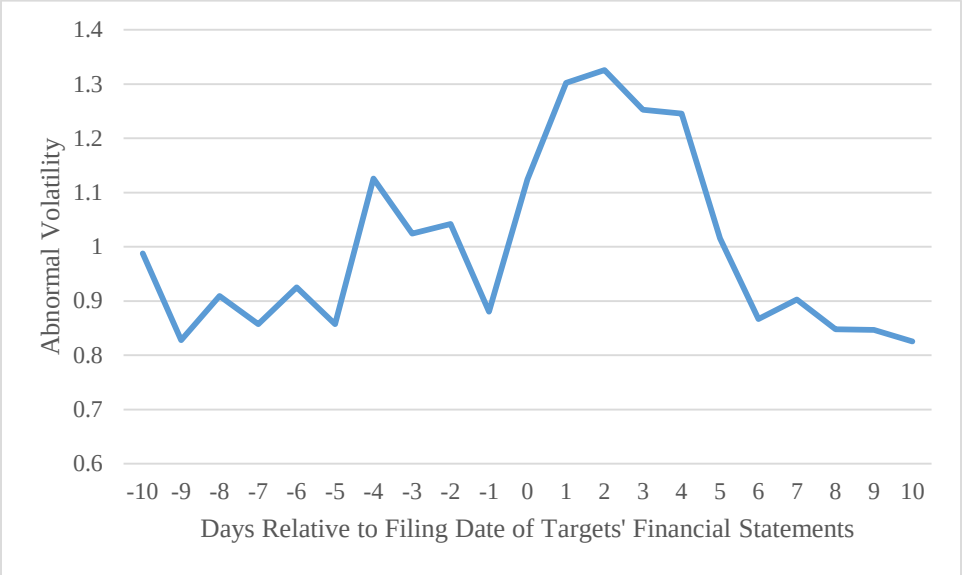

Acquirers' 3-day Abnormal Returns
Acquirers' Abnormal Return Volatility and Abnormal Trading Volume
-1
+1
-10
+10
Acquisition Announcement Date
Acquisition Completion Date
Filing Date of Targets' Financial Statements
21 Days
43 Days
$\overline{ROA}_{t-3}$ over t-1 to t-3
$\overline{ROA}_{t+3}$ over t+1 to t+3
Year t-3
Year t
Year t+3
BHAR over t+1 to t+3
$\Delta ROA = \overline{ROA}_{t+3} - \overline{ROA}_{t-3}$

Figure 2

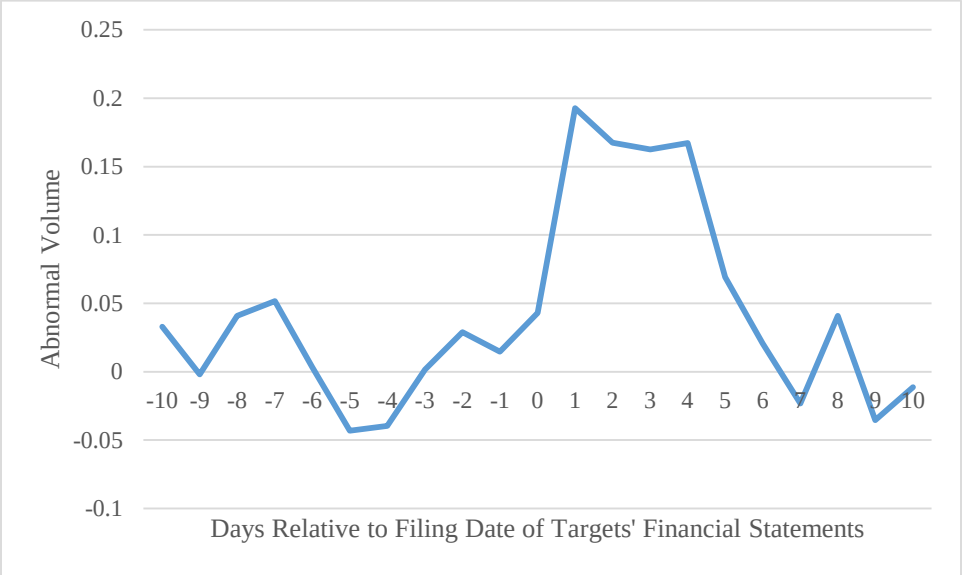
Abnormal Return Volatility around Filings of Targets' Financial Statements



This figure plots acquiring firms' daily abnormal return volatility in event time around the filings of private targets' audited financial statements. Abnormal return volatility on a given firm-day is the square of the firm's market-model residuals on that day divided by the variance of the market-model residuals in the estimation period. The estimation period runs from days t - 60 to t - 10 and t + 10 to t + 60. When the estimation period contains quarterly earnings announcement, I further exclude the 10 days around quarterly earnings announcement.

Figure 3

Abnormal Trading Volume around Filings of Targets' Financial Statements



This figure plots the acquiring firms' daily abnormal trading volume in event time around the filings of private targets' audited financial statements. Abnormal trading volume on a given firm-day is the firm's actual trading volume on that day less its mean daily estimation period trading volume, with the difference scaled by the standard deviation of the firm's daily trading volume in the estimation period. The estimation period runs from days t - 60 to t - 10 and t + 10 to t + 60. When the estimation period contains quarterly earnings announcement, I further exclude the 10 days around quarterly earnings announcement.

APPENDIX A

FINANCIAL STATEMENT PERIODS REQUIRED

If the Greatest of the Three Calculations Described in Section 2.1 of This Paper	**Financial Statement Periods Required**
Does not exceed 20 percent	No financial statements required
Exceeds 20 percent but not 40 percent	Financial statements for the most recent fiscal year (audited) and the latest required interim period (unaudited) that precedes the acquisition.
Exceeds 40 percent but not 50 percent	Financial statements for the two most recent fiscal years (audited) and the latest required interim period (unaudited) that precedes the acquisition.
Exceeds 50 percent	Financial statements for full three years (audited) and the latest required interim period (unaudited) that precedes the acquisition.

APPENDIX B

EXAMPLES OF ACQUIRING FIRMS' 8-K EXCERPTS

The SEC provides guidelines for information to be included in an 8-K report. The following is the excerpt of Item 9.01(a) (or Item 7.01(a) prior to 2004) related to financial statements of business acquired.

"…

Section 9 - Financial Statements and Exhibits

Item 9.01 Financial Statements and Exhibits.

List below the financial statements, pro forma financial information and exhibits, if any, filed as a part of this report.

(a) Financial statements of businesses acquired.

(1) For any business acquisition required to be described in answer to Item 2.01 of this form, financial statements of the business acquired shall be filed for the periods specified in Rule 3-05(b) of Regulation S-X (17 CFR 210.3-05(b)) or Rule 8-04(b) of Regulation S-X (17 CFR 210.8-04(b)) for smaller reporting companies.

(2) The financial statements shall be prepared pursuant to Regulation S-X except that supporting schedules need not be filed. A manually signed accountant's report should be provided pursuant to Rule 2-02 of Regulation S-X (17 CFR 210.2-02).

(3) With regard to the acquisition of one or more real estate properties, the financial statements and any additional information specified by Rule 3-14 of Regulation S-X (17 CFR 210.3-14) or Rule 8-06 of Regulation S-X (17 CFR 210.8-06) for smaller reporting companies.

(4) Financial statements required by this item may be filed with the initial report, or by amendment not later than 71 calendar days after the date that the initial report on Form 8-K must be filed. If the financial statements are not included in the initial report, the registrant should so indicate in the Form 8-K report and state when the required financial statements will be filed. The registrant may, at its option, include unaudited financial statements in the initial report on Form 8-K.

…"

A full 8-K document is available at: https://www.sec.gov/about/forms/form8-k.pdf. On next page, I provide two examples of acquiring firms' 8-K acquisition announcements.

Example 1 (no disclosure):

LSB INDUSTRIES, INC. FORM 8-K (2000-04-05)

Item 7. Financial Statements and Exhibits.

(a) Financial Statements regarding the transaction described herein are not required pursuant to Rule 3-05 of Regulation S-X, as promulgated under the Securities Exchange Act of 1934, as amended ("Regulation S-X"), as none of the conditions of Rule 1-02(w) under Regulation S-X are satisfied to the twenty percent level by the acquisition of Zeller, based upon the Company's audited financial statements for the year ended December 31, 1999, as permitted by Rule 3-05(b)(3).

Example 2 (disclosure):

IHOP CORP. FORM 8-K (2007-12-05)

Item 9.01. Financial Statements and Exhibits.

(a) *Financial Statements of Business Acquired*. Financial statements of the business acquired will be filed by amendment to this Current Report no later than 71 calendar days after the date that this Report is required to be filed.

(b) *Pro Forma Financial Information*. Pro forma financial information will be filed by amendment to this Current Report no later than 71 calendar days following the date that this Report is required to be filed.

IHOP CORP. FORM 8-K/A (2008-2-12)

Item 9.01. Financial Statements and Exhibits.

(a) Financial Statements of Businesses Acquired.

The audited consolidated balance sheets of Applebee's International, Inc. and Subsidiaries as of December 31, 2006 and December 25, 2005 and the related consolidated statements of earnings, stockholders' equity, and cash flows for the years ended December 31, 2006, December 25, 2005, and December 26, 2004, and the notes related thereto, which have been adjusted to reflect certain discontinued operations, are filed as Exhibit 99.1 to this amendment and incorporated herein by reference.

APPENDIX C

VARIABLE DEFINITION

Dependent Variables:	
CAR3	Acquirer cumulative abnormal return measured over three days around the acquisition announcement
ΔROA	Change in ROA. Measured as the difference between the post-acquisition three-year average ROA and the pre-acquisition corresponding measure. ROA is measured as income before extraordinary items scaled by average total assets.
ΔROA_IND	Change in industry-adjusted ROA. Industry-adjusted ROA is calculated by subtracting the median ROA for all firms with the same two-digit SIC code as the acquiring firm. Change in industry-adjusted ROA is calculated the same as change in ROA.
BHAR	Three-year buy-and-hold abnormal returns, following Lyon, Barber, and Tsai (1999) and Chen, Harford, and Li (2007).
Explanatory Variable:	
DISC	A dummy variable that takes the value of one if the private target's audited financial statements are filed with the SEC, and zero otherwise.
Control Variables:	
SIZE	Acquirer size. Measured as the natural logarithm of the acquirer's total assets at the fiscal year end prior to the acquisition announcement.
LEV	Acquirer's pre-acquisition leverage. Measured as the sum of long-term debt and short-term debt deflated by total assets at the fiscal year end prior to the acquisition announcement.
ROA	Acquirer's return on assets for the year ended before the announcement year, measured as income before extraordinary items scaled by total assets.
TOBIN	Acquirers' pre-acquisition Tobin's Q. Measured as the ratio of acquirer's market value of assets to the book value of assets at the fiscal year end prior to the acquisition announcement.
DEALSIZE	Deal size. Measured as the natural logarithm of the deal value.
STOCK	A dummy variable that takes the value of one if the acquisition is financed 100 percent by acquirer's stocks, and zero otherwise.
CASH	A dummy variable that takes the value of one if the acquisition is financed 100 percent by cash, and zero otherwise.

Appendix C (continued)

REL_SIZE	Relative deal size. Measured as the ratio of the deal value to the market value of the acquirer at the end of the quarter prior to announcement.
DIFFIND	A dummy variable that takes the value of one if the acquirer and the target are in different industries based on two-digit SIC code, and zero otherwise.
SPREAD	Acquirer's average daily bid-ask spreads measured at one year prior to the acquisition announcement. Bid-ask spread is calculated as daily bid minus daily ask scaled by price, multiplied by 100.
STDRET	Acquirer's daily stock return volatility measured at one year prior to the acquisition announcement.
C_SCORE	Acquirer's *C_SCORE*. *C_SCORE* is the firm-specific asymmetric timeliness score developed by Khan and Watts (2009).
BLOCK	A dummy variable that takes the value of one if an institutional investor owns more than 5% of the acquirer's shares, and zero otherwise. Institutional ownership is calculated at the end of the fiscal year prior to acquisition announcement.
STOCK_DEAL	A dummy variable that takes the value of one if the acquisition is financed by stock or by a mix of stock and cash, and zero otherwise.

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