IMPACT OF INVESTOR RELATIONS

ON M&A OUTCOMES

By

HENRY GEORGE KIRN, JR.

Bachelor of Arts in Business Administration Franklin & Marshall College Lancaster, PA 1993

> Master of Business Administration Columbia Business School New York, NY 2001

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Dissertation Approved:

Dr. Ramesh P. Rao

Dissertation Adviser

Dr. Gregory W. Eaton

Dr. Sandeep Nabar

Dr. Rathindra Sarathy

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Abstract: Per Marston (1996, p. 477), investor relations (IR) is "the link between a company and the financial community, providing information to help the financial community and the investing public to evaluate a company." Through IR activities such as company presentations to and meetings with investors, firms provide information about their strategies, results, and prospects to their investor base. Research has identified that IR impacts positively a variety of dependent variables, including valuation, analyst coverage, and corporate reputation. However, IR has been less successful in impacting valuation in times when investor confidence is low. As the announcement of M&A activity may be associated with significant investor uncertainty in a company's updated prospects for the period following the deal, I examine whether (1) the quantity of IR activities prior to the announcement of a deal, (2) investor rankings of company IR quality, or (3) the presence or absence of a conference call with investors in conjunction with the announcement of a deal impact (a) the cumulative abnormal returns of acquiring companies' shares in the immediate period surrounding the announcement of the deal, or (b) the likelihood that the potential acquiring company is able to close the deal successfully. I find a positive relationship between a conference call after an acquisition announcement and the likelihood that a company would complete the deal but did not find a significant positive relationship between IR efforts and acquiring company stock returns surrounding an acquisition announcement.

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CHAPTER I

INTRODUCTION

In recent decades, as companies have increased their focus on managing relationships with the investment community, investor relations (IR) has emerged from a side job of CFOs and public relations employees to a significant stand-alone function facing an increasing burden from growing regulatory requirements and investor demands (Laskin, 2014). Per Marston (1996, p. 477), IR is "the link between a company and the financial community providing information to help the financial community and the investing public to evaluate a company." Companies undertake IR activities in the hope of achieving a higher multiple for their stocks, lowering volatility, and growing their investor bases.

IR has generally been shown to impact a variety of corporate and stock outcomes. Research supports that IR is positively related to share price performance (Agarwal, Liao, Taffler, & Nash, 2008; Jiao, 2011; Bushee & Miller, 2012). Additionally, IR can also lead to a lower cost of capital (Ly, 2010; Bushee & Miller, 2012; Vlittis & Charitou, 2012), a greater level of analyst following (Lang & Lundholm, 1996; Francis, Hanna, Philbrick, 1997; Brennan & Tamarowski, 2000; Chang, D'Anna, Watson, & Wee, 2009), and increased consistency in analyst estimates (Farragher, Kleiman, & Bazaz, 1994; Lang & Lundholm, 1996). These positive outcomes are likely explained by information risk theory, which stipulates that liquidity and valuation multiples are positively related to the amount of reliable information to which investors have access (Agarwal et al., 2008; Agarwal, Taffler, Belloti, & Nash, 2016; Johnson, 2004).

In the context of mergers and acquisitions, IR has also been shown to have an impact on corporate and stock outcomes. Bidders that use an outside IR firm are more likely to complete an acquisition, while targets with an outside consultant receive a significantly higher premium (58%) than peers (Upton, 2018). Additionally, while not a universal finding in all regions, research generally supports a higher abnormal return for bidders that hold a conference call following the announcement of an acquisition (Fraunhoffer, Kim, & Schiereck, 2018; Kimbrough & Louis, 2011).

Both Fraunhoffer et al. (2018) and Kimbrough and Louis (2011) find that a bidder holding a conference call after the announcement of a deal is generally associated with positive abnormal returns surrounding the deal, but research has not yet examined whether pre-established IR activities before the announcement impact abnormal returns surrounding a deal. While existence of an external IR firm is not significantly associated with abnormal returns for bidders' shares (Upton, 2018), conference calls ahead of the announcement may prime the pump for better returns when a bidder announces a deal. Established IR in the form of a "Best Investor Relations" ranking in the annual *Institutional Investor (II)* magazine poll may indicate that a company provides a higher quantity and quality of information to investors, which may also lead to higher levels of investor trust in the company and its capabilities. Thus, by increasing investor trust and appetite for an acquisition, more

conference calls ahead of a deal and a high ranking in the II poll may lead to improved returns when a company announces an acquisition.

While Upton (2018) finds that use of an external IR firm is positively associated with the likelihood of a bidder completing an acquisition, that study does not review whether prior actions (conference calls ahead of the deal or II ranking) have a positive impact on completion of a deal. If preannouncement IR activities are associated with higher returns upon announcement of an acquisition, that market signal of a positive market return may also indicate a higher likelihood of completing the deal. Research has not reviewed whether holding a conference call following the announcement of a deal is associated with a higher likelihood of a bidder completing an acquisition.

In this paper, I examine whether prior IR characteristics (frequency of IR conference calls in the year prior to the announcement date and a high ranking in the "Best Investor Relations" in the most recent annual *Institutional Investor* poll before announcement of the deal) impact the cumulative abnormal returns surrounding the announcement of an acquisition. When I was publishing sell-side equity research analyst, I often discussed companies' merger and acquisition (M&A) strategies and capabilities with management teams (including IR directors) prior to announcement of a deal. These discussions prior to an M&A announcement often informed the resulting model, price target, and opinion changes that followed a company's M&A announcement. Prior IR activities may be important for stock and corporate outcomes in that they may lend additional credibility to an acquirer's updated prospects following the M&A announcement. Prior activities may serve to provide some level of information about an acquirer's M&A capabilities, including strategic rationale, debt capacity, and ability to integrate an acquisition. This information may be

useful to investors as they analyze an acquirer's prospects in the wake of an acquisition announcement. Also given time constraints, even if an acquirer does engage in some IR activities (such as a conference call) following an M&A announcement, some of the company's current and potential investors may be unable to participate in a conference call immediately following an announcement. These prior IR activities may be particularly important for investors given tight time constraints. In addition to reviewing the impact of IR activities on returns surrounding an acquisition announcement, I study whether those prior IR activities impact the likelihood that a bidder completes the acquisition.

While research has begun to examine whether holding conference calls following an acquisition announcement impacts returns surrounding the announcement (Fraunhoffer et al, 2018; Kimbrough & Louis, 2011), research has not yet examined whether holding a conference call in the near-term aftermath of an M&A announcement impacts the likelihood that a bidder ultimately closes the deal. Perhaps a conference call explaining the rationale of the acquisition that was just announced impacts investors' attitudes toward a deal and leads to less proclivity for investors to try to stop the deal. As investors in both the bidder and target (if public) may be listening, perhaps a post-announcement conference call also causes target shareholders to be less likely to be against the deal. Accordingly, I examine whether holding a conference call following the acquisition announcement impacts the likelihood that a bidder completes the deal.

This study adds to current research literature for both investor relations and M&A. To both streams of literature, it contributes insight into the impact of prior and concurrent investor relations activities on investor reaction to corporate M&A announcements. This study also provides additional understanding into how IR activities and interactions with

shareholders may affect the likelihood that public companies are ultimately able to complete announced acquisitions. For IR literature, it adds to the knowledge of how IR activities or the investor perception of IR influence investor reactions to announcements in general. For M&A literature, it contributes to a better understanding of antecedents of acquiring companies' share price performance and likelihood of closing an announced acquisition.

The study also extends existing disclosure literature as investor relations is a form of disclosure. As public companies are required to disclose material information in their SEC filings, they generally announce significant M&A deals in press releases contained in SEC filings (Kimbrough & Louis, 2011). They often hold a conference call following the M&A announcement press release. The conference calls add to the information environment surrounding the deals by providing additional details and forward-looking statements that were not contained in the corresponding press releases. While Regulation FD prohibits companies from disclosing previously undisclosed material nonpublic information in these investor calls, these calls may also add to investor understanding of the business environment and rationale for an M&A deal.

Research on the relationship between concurrent investor relations activities and stock returns for bidders upon the announcement of M&A deals is mixed. This study appears to be the first to examine whether prior established IR activities (transcripts in the year before the announcement) or investor perceived IR quality (*Institutional Investor* IR ranking) are associated with abnormal returns for bidders' shares surrounding acquisition announcements. Additionally, as prior studies have found inconsistent results on the relationship between holding an IR conference call following an acquisition announcement and share price reaction, the study represents a more recent examination of this relationship.

This research also has broad practical implications as companies are required to provide information to their investor bases. Companies hope that their IR activities lead to favorable corporate and stock outcomes, including share price performance and corporate objectives. As M&A activities may represent critical events for companies, IR may be more important in this context than in a general business context. Shareholder resistance and poor share performance following an acquisition announcement may represent a particularly unfavorable outcome that management teams are eager to avoid. As such, a better understanding of the role of IR in M&A is useful in organizing efforts to communicate about M&A with investors.

CHAPTER II

LITERATURE REVIEW

According to Laskin (2014), IR is a relatively new discipline, dating generally back to the time frame following World War II. In the 1950s and 1960s, IR was characterized by public relations specialists who focused on investors; but by the 1970s, professional investors tended to bypass these public relations specialists by going directly to CFOs (Laskin, 2014). The IR function matured in the 1980s as IR departments were in place in 16% of Fortune 500 companies in 1984 and 56% as of the end of 1994 as shareholder resolutions that were unfavorable to management caused companies to establish such departments (Rao & Sivakumar, 1999). However, despite increased attention to the activities of IR personnel that arose from the accounting scandals of the early 2000s, IR is only now starting to become a focus for public relations research (Chandler, 2014).

There are two rival academic views of the potential for the IR function to affect corporate valuation in general. Under efficient markets theory, IR is not be expected to affect stock prices as the function merely repackages information that investors already possess (Merton, 1987; Peasnell, Talib, & Young, 2011). Despite the predictions of efficient markets theory, most recent research (Agarwal et al, 2008; Bushee & Miller, 2012; de Jong, de Jong, Mertens, & Roosenboom, 2007) suggests that effective IR can

drive higher corporate valuation because better communication allows investors to model and value companies more accurately and leads to an enhanced corporate reputation. Conducting IR activities is a costly process. Companies incur substantial expenses, including employment of IR personnel, hosting investors at conferences and site visits, traveling to meet investors, and production of IR materials. As rational entities, they only incur these expenses if they expect to realize benefits from them. Empirical evidence indicates that effective IR leads to better outcomes, including more analysts following the stock (Lang & Lundholm, 1996; Francis et al., 1997; Brennan & Tamarowski, 2000; Chang et al. 2009), lower disparity of analyst forecasts (Farragher et al., 1994; Lang & Lundholm, 1996), an improved overall corporate reputation (de Jong et al., 2007), and a lower cost of capital (Ly, 2010; Bushee & Miller, 2012; Vlittis & Charitou, 2012).

Support for the relationships between IR and positive corporate and stock outcomes can be found in the information assimilation literature. As the vast amount of information available to investors may be more than they can absorb quickly, companies' IR may help investors to process available information most efficiently. Chapman, Miller, and White (2019) describe assimilation as "synthesizing information (e.g., relating firm press releases back to firm strategy and/or industry conditions), summarizing information, correcting misinformation, and clarifying details" (Chapman et al., 2019, p. 106). Chapman et al. (2019) find that IR efforts to help investors obtain and understand company-related information are successful. Companies that employ IR officers have lower stock volatility, narrower analyst forecast ranges, more accurate analyst forecasts, and faster price discovery than their peers that did not employ IR officers. Additionally, these relationships are stronger for companies whose IR officers have been in place for more time. On the other hand, Chapman et al.

(2019) find that when the IR officer changes, the effects reverse themselves as forecasts widen and became less accurate and stock volatility increases. They attribute the relationships between IR and the various outcomes to the role that investor relations plays in helping market participants in assimilating information. Similarly, Reyes (2018) also attributes the positive relationship between news coverage and stock price reaction to M&A announcements to faster assimilation of M&A information by professional investors, who may represent a higher percentage of investors aware of a low news-coverage deal (and may be more likely to view the deal negatively).

Supporting the view that IR can impact valuation and other corporate objectives, Bushee, Gerakos, and Lee (2018) use a corporate jet data set to find that companies who fly to meet investors on private roadshows have more analyst forecast changes, larger abnormal stock price movements, and shareholder ownership changes in the region of the roadshow than other types of flights. Similarly, Cheng, Du, Wang, and Wang (2016) find that analyst visits to corporate sites of Chinese listed firms lead to more accurate forecasts while Brockman, Subasi, and Uzmanoglu (2017) find that companies who participate in investor conferences are rewarded with greater liquidity for their shares than for their peers who do not participate.

Agarwal et al. (2016) find that both large and small companies with higher IR quality (as measured by *IR Magazine* "Best Overall IR" award nominations) receive higher stock multiples than their peers that did not receive nominations. Similarly, they find that increases in IR quality lead to more analyst coverage and more liquidity for shares. A one place increase in *IR Magazine* "Best Overall IR" award nominations equates to a 6.7% and 15.8% improvement in the market capitalization of large and small companies, respectively. Similarly, Karolyi and Liao (2017) find that companies whose IR programs are more active

have higher Tobin's Q ratios. Ly (2010) discovers that shares of Japanese companies that were members of the Japanese Investor Relations Association (a proxy for IR activity) have a lower bid-ask spread than non-member peers.

The potential value of an effective IR function is further demonstrated in Bushee and Miller (2012), who study small- and mid-cap companies that engage outside IR firms to create a new IR strategy. Compared with a control set of companies matched to the IR hiring companies, the companies that hired IR firms receive more media coverage, analyst coverage, and professional institutions owning their shares. They also find that companies that initiate a new IR strategy also receive a higher stock multiple as measured by the bookto-price ratio.

There are several links between IR and stock outcomes. Improved disclosure could be a link as Cheynel (2013) finds that companies that make voluntary disclosures have a lower cost of capital than peers that do not disclose. Similarly, increased analyst coverage could also be a link as Bassen et al. (2010) support analyst coverage as a link between investor relations and stock outcomes. Research supports the notion that stocks of companies that present at investor conferences (another form of IR activity) are rewarded with positive abnormal returns (Karolyi & Liao, 2017).

Research in 1996 by Lang and Lundholm shows that IR is a consistent factor impacting security analyst actions as analysts use their direct company interactions as first-hand information. Companies that are more forthcoming in disclosures tend to have more securities analysts covering their stocks. Additionally, they find that more disclosure leads to a wider set of potential investors, a lower cost of capital, more accurate and less volatile analyst forecasts, and fewer forecast changes. A previous study in 1994 also finds more

consistency in analyst earnings per share forecasts for companies with high IR quality ratings (as determined by Financial Analysts Federation Corporate Information Committee ratings) than for low IR quality companies (Farragher et al., 1994).

Francis et al. (1997) find that companies that make presentations to securities analysts tend to benefit from more analyst coverage relative to before making the presentation, as well as relative to peer companies. This study finds similar increases in analyst coverage for both small- and large-cap companies, but unlike Lang and Lundholm (1996) they did not find that the presentations led to less dispersion or more accuracy in analyst forecasts. Accordingly, the investor presentations may provide only a limited benefit to security analysts (Francis et al., 1997).

The finding that an effective IR function impacts equity valuation positively is not universal. One of the first studies of IR effectiveness, Dennis (1973), reviews whether a company's employment of an outside IR firm has an impact on its common stock. The study finds no evidence that employment of independent IR firms has any effect on the client company's share price.

Additionally, the potential for an effective IR function to have a positive impact on corporate valuation may not hold true for all time frames. For the period following the Enron scandal, Peasnell et al. (2011) did not find that companies with strong IR reputations were able to avoid a general market decline in management and financial reporting credibility. Thus, a strong IR function may not provide a safeguard to companies during periods characterized by broad-based falls in investor confidence (Peasnell et al., 2011).

IR in an M&A Context

As the announcement of an acquisition is associated with significant investor uncertainty, acquisition announcements may be a high leverage time frame for IR. Research has begun to examine the relationship between IR and M&A outcomes. Supporting the value of IR to M&A, Bushee and Miller (2012) find that companies that make a significant M&A deal are more likely to begin an IR program. Similarly, interviews of corporate managers indicate that they seek investor support for acquisitions (Hendry, Sanderson, Barker, & Roberts, 2006), while surveys of IR officers indicate that they are likely to reach out to sell-side and buy-side analysts after significant M&A deals (Brown, Call, Clement, & Sharp, 2019). Finally, Green, Jame, Markov, and Subasi (2014) find that companies that finance acquisitions with equity attend more investor conferences than peer companies.

Upton (2018) studies the relationship between use of IR specialists and cumulative abnormal returns of stocks on deal announcements. She examines whether employment of an external IR firm affects a series of deal outcomes, including cumulative abnormal returns for IR employing bidders' shares surrounding the deal announcement, higher premiums for IR employing target firm, higher likelihood of deal completion for IR employing bidders, lower likelihood of deal completion for IR employing targets that do not want to be acquired, and increased ability to impact timing of deal completion for IR employing bidders and targets.

Upton (2018) uses datasets including IR firms' client lists and Thomson Financial's Securities Data Company (SDC) database of successful/unsuccessful acquisitions announced by public bidders between 2007 and 2011. In order to be included in the study, the deal had to be worth more than \$1 million, the bidder could not own more than 10% of the target before the transaction and had to propose to own over 50% of the target following the

transaction, and the deal had to be worth more than 1% of the bidder's market cap. Roughly 23% of bidders in the study used an IR firm, compared with 9% of targets. The average deal size was \$433 million, and bidders ultimately completed 89% of announced deals in the sample. Upton matched IR and non-IR bidders based on a propensity score matching method.

Upton (2018) obtains mixed results. The hypothesis that shares of bidders that employed an external IR firm would enjoy higher cumulative abnormal returns (CARs) surrounding the deal is not supported. While the study does not support that bidder shares would benefit from IR, the matched sample supports the hypothesis that bidders that had an outside IR firm are more likely to complete the acquisition. Ninety-two percent of bidders employing IR firms complete deals, above the 88% for bidders that did not employ an IR firm. For targets, Upton finds that targets that have an outside IR consultant receive a 55.8% higher premium than peers that do not have an outside consultant (Upton, 2018).

Kimbrough and Louis (2011) and Fraunhoffer et al. (2018) review the effect of IR conference calls on the day of or day after an announcement of M&A deals on stock price reaction. Kimbrough and Louis (2011) review U.S.-based M&A deals from 2002 to 2006. To include the deal in the study, Kimbrough and Louis (2011) require the deal to be worth at least 10% of the bidder's market cap; a press release announcing the deal; and no missing data on the payment type (stock/cash), transaction value, and date of announcement in Compustat. Additionally, announcements about deals that had already been completed are excluded from the study. The final sample includes 1,228 deals.

Kimbrough and Louis (2011) find that conference calls are more often held for larger transactions and stock financed transactions. After controlling for the likelihood of a conference call following an M&A deal via inverse Mills' ratio, they find that CARs for the

three days commencing with the announcement date for stocks of bidders that hold conference calls are significantly higher than for bidders that do not hold calls. As subsequent share price performance for conference call holding bidders is not worse than that of bidders that do not hold calls, it appears that these gains are not temporary in nature. Kimbrough and Louis (2011) also estimate the abnormal accruals for bidders as of the quarter before announcing the acquisition. Based on this analysis, bidders that hold conference calls for acquisitions to be funded with stock have lower abnormal accruals prior to the acquisition than peers that do not hold calls. As companies that manage earnings prior to deals are not more likely to hold calls, the authors argue that conference calls are held to provide information to investors, rather than just to build up the stock. Finally, Kimbrough and Louis (2011) also perform a small sample content analysis of conference calls. The analysis supports the notion that conference calls disclose more information and are more forward looking than press releases.

The finding that conference calls lead to higher cumulative abnormal returns following an M&A announcement is not universal. Fraunhoffer et al. (2018) review transactions from France, Germany, Spain, Switzerland, and the U.K. from 2008 to 2012. Duplicate transactions and transactions with missing returns and accounting data are excluded from the analysis. The transactions for which nondiscrete variables are at the top 1% and bottom 1% of values are winsorized and excluded from the analysis. The final dataset is comprised of 2,518 transactions, of which 216 are associated with a conference call on the announcement date or the following day.

Similar to Kimbrough and Louis (2011), Fraunhoffer et al. (2018) review the factors that are associated with the likelihood of holding a conference call. Factors that are evaluated for

the likelihood of a call include transaction value, the ratio of the total transaction value to the bidder's market cap, whether the target is public, whether the consideration is all cash, whether the target is headquartered in a different country from the acquirer, whether the bidder and target are in the same industry, the bidder's market cap, the bidder's leverage, the bidder's industry, and whether the economy is in a crisis year (2008-2010). Transaction value (+), whether the target is public (+), whether the target is in the same industry as the bidder (+), bidder's market cap (+), and crisis year (-) are significantly related to the likelihood of a call. As in the Kimbrough and Louis (2011) study, larger deals are more likely to be accompanied by a conference call (Fraunhoffer et al., 2018).

Fraunhoffer et al. (2018) use the conference call date as day 0 and review the CARs for two time frames: (1) 230 days before the call to 31 days before the call, and (2) 10 days before the call to 10 days after the call. The study controls for self-selection bias. While the CAR for stocks of bidders that held a conference call is 1.7% higher than nonconference call bidders from day 0 to day 2 in this study, that result is somewhat weaker than the 6.5% found in the three-day period around the deal in the Kimbrough and Louis (2011) study, it is nonetheless positive overall. The study only finds favorable share price reaction to conference calls in the U.K. and France. Additionally, the abnormal returns are only observed for bidders in certain industries (technology, industrials, and materials), while energy, finance, and healthcare bidders are not rewarded for holding a call (Fraunhoffer et al., 2018).

Mama and Bassen (2017) review European data to determine whether IR quality is related to the ways that companies use their cash. The study finds that in general, higher quality IR firms are less likely to hoard cash, while lower quality IR firms are more likely to

use cash on capital expenditures that detract from shareholder value. The study does not find a significant relationship between IR quality and level of M&A activity. IR can also impact target outcomes in an M&A context. Koch, Lefanowicz, and Robinson (2012) find that target firms that release quarterly guidance receive higher acquisition premiums, but only if the bidder does not provide guidance.

My study appears to be the first to review the relationship between key IR activities (conference calls) prior to announcements and returns for bidders' shares surrounding acquisition announcements. It also appears to be the first study to examine whether a high degree of investor perceived IR quality (*Institutional Investor* IR ranking) results in abnormal returns for bidders' shares surrounding acquisition announcements. Additionally, as prior studies find inconsistent results on the relationship between holding an IR conference call following an acquisition announcement and share price reaction, the proposed study is a more recent examination of this relationship. To my knowledge, it is also the first study to review whether IR activity and IR quality lead to a higher likelihood of bidders successfully closing announced acquisitions.

Hypothesis Development

The announcement of an M&A deal may be a particularly important time for IR. Deals come with significant amounts of investment information that investors seek to understand in order to value stocks. Additionally, the time frame surrounding announcements may be characterized by significant uncertainty concerning the rationale for deals. By helping investors to understand the rationale for potential deals before announcements, IR may expedite the information assimilation process. Armed with better insight into a more effective IR firm's prospects and rationale for potential deals before announcements,

investors should be able to identify stock buying opportunities more quickly than if they needed to do this investigation following acquisition announcements.

Another reason that stocks of more active IR companies should outperform peers in an M&A context is that assessing the potential effects of a proposed acquisition on an acquiring firm's stock price is a costly process. Analyst time is limited, and using that time to evaluate one stock may come at an opportunity cost of analyzing other stocks for the portfolio. By providing IR activities more frequently or more effectively, firms create a more robust information environment (Wang, Lin, & Yen 2016). In so doing, firms may help to lessen the time that analysts have to spend on their stock, thus reducing the effective overall cost of owning or purchasing the stock. In an M&A context, by reducing the investor cost of analyzing the potential valuation of an announced acquisition, more effective IR acquirers may be less expensive to own than less-effective acquirers. Thus, stocks of more active IR companies should outperform the stocks of peers following an acquisition announcement.

IR activities prior to a deal announcement may also "prime the pump" for investor appetite for an M&A deal. As a sell-side equity research analyst, I often discussed company M&A strategies and capabilities with management teams (including IR directors) and used these insights in evaluating a company's updated prospects following an acquisition announcement. To the extent that investors understand ahead of time the rationale and potential strategic and earnings contribution of an acquisition, they may be less likely to object to an acquisition and more likely to favor it. IR should be able to assist investors in understanding a company's ability to finance an acquisition, integrate an acquired entity, and drive positive returns from a deal. The resulting increased investor understanding may lead to

more favorable investor sentiment concerning a company's potential acquisition and thus improved returns upon a deal announcement.

In addition to the rationale for a deal, key uncertainties in an acquiring company's stock may also include the likelihood and time frame for closing the acquisition and potential synergies and earnings contributions from the acquired entity. While IR activities prior to the deal announcement would be unlikely to include information concerning deal time lines, synergies, and ultimate earnings accretion, following an announcement, company management would likely have a much clearer view on these crucial elements than outside investors would be able to glean from their research. Thus, IR activities in the aftermath of the deal announcement may assist investors in understanding key elements that will affect their revised estimation of the stock's fair value following the deal announcement.

Another possible benefit from IR activities prior to the announcement of a deal is that IR may be considered a two-way communication process (Chapman et al., 2019). When investors discuss potential M&A opportunities with a company, they can communicate to the company characteristics of an M&A deal that they would favor and those that that they would not. By understanding deal characteristics to which investors would likely object, management can avoid deals that would be harshly received by the investment community. Additionally, companies with increased IR activities in the period before deal announcement may be armed with a better understanding of likely objections and thus able to more precisely anticipate and respond to these objections in the post M&A announcement time frame.

In summary, IR leads to better information, which lowers the informational uncertainty to investors in general. In a similar way, IR should lower informational uncertainty to investors

in an M&A context as well. Based on information risk theory, which stipulates that liquidity and valuation multiples are positively related to the amount of reliable information to which investors have access, stocks of acquirers to which investors have better information should outperform lower information peers (Agarwal et al., 2008; Agarwal et al., 2016; Johnson, 2004). Thus, I propose the following.

- H1: Cumulative abnormal returns in the five days surrounding an acquisition announcement should be higher/less bad for acquirers with higher scores in *Institutional Investor* IR poll.
- H2: Cumulative abnormal returns in the five days surrounding an acquisition announcement should be higher/less bad for acquirers that conduct more investor conference calls in the year before the announcement of a deal.
- H3: Cumulative abnormal returns in the five days surrounding an acquisition announcement should be higher/less bad for acquirers that conduct one or more investor conference calls in the period from the day of the announcement to two days following the announcement.

In addition to leading to more favorable stock price outcomes, IR should also have positive implications to the likelihood that a firm successfully closes an announced acquisition. There are several reasons that IR activities should be positively associated with increased likelihood of acquisition close.

First, if proposed Hypotheses 1 through 3 are supported, then IR activities lead to stronger abnormal stock price returns around the time of the announcement of an acquisition. These returns might provide a market-based signal that the proposed acquisition is a positive event for the acquiring company. One reason an acquisition might be terminated is that investors communicate objections to the acquisition to the acquirer's management team. The aforementioned market-based signal of stock return outperformance might cause investors to be less likely to object to announced acquisitions for acquirers that are better at IR or do more IR activities prior to or immediately following an acquisition. In addition to not receiving investor pressure to terminate an announced acquisition, management teams of firms whose stocks have outperformed following an acquisition announcement might be more committed to completing that announced acquisition successfully. If a management team believes that the outperformance in its stock is at least partially due to the acquisition announcement, then it might see terminating the acquisition as a potential catalyst for the stock outperformance to reverse. Such a management team might be more likely to respond with a higher offer if another company made a higher bid for the proposed target instead of terminating the proposed acquisition. Thus, if IR activities influence cumulative abnormal stock returns surrounding an acquisition, they might also influence the likelihood that an acquirer ultimately completes the acquisition successfully.

As outlined before, IR may provide firms insights on potential acquisition targets or deal characteristics to which investors object. Firms with more IR activities may have better insights on those acquisitions that would carry a likely negative response. As a result, firms with more IR activities may be better able to avoid those acquisitions that might cause their stock to underperform. In this way, IR activities prior to an M&A announcement might lead to a higher percentage of good deals (accompanied by stock outperformance) and a lower percentage of bad deals (accompanied by stock underperformance). Assuming that companies are more likely to work to complete deals that investors favor, IR activities might positively influence the likelihood that a company successfully completes an announced acquisition.

Additionally, informational asymmetry might provide a challenge to investors trying to value the stock following an acquisition announcement. Given the cost (including time and research resources) of valuing a deal, investors may advocate for management to terminate

an acquisition if they do not expect the resulting potential stock benefit to outweigh the cost of evaluating it. IR activities prior to and immediately following an M&A announcement may eliminate some of the informational asymmetry surrounding the deal. The resulting lessened informational asymmetry might be a way that IR lowers the acquiring company's stock ownership costs to investors, who are no longer required to do as much work to evaluate a potential acquisition. Since the costs of evaluating a deal are lessened, investors may be less likely to try to force the acquiring company's management to terminate an acquisition.

An acquiring company's IR efforts may also influence the likelihood of successful completion of an acquisition by influencing target shareholders. If target shareholders are influenced by the acquirer's IR efforts, they may be more likely to advocate for the company to complete the sale. There are several reasons to expect that an acquirer's IR efforts could influence target shareholders. In the case of stock deals, target shareholders receive stock as a form of compensation. IR may influence these shareholders to recommend the target's management and board of directors to approve the sale to the acquirer if the target shareholders believe that the expected future value of the acquirer's shares plus other considerations related to the deal are above the future value of the target's shares without this sale. Even if the form of consideration is not stock based, the acquirer may have shareholders in common with a public target. Information provided by the acquirer's IR efforts may influence these shareholders to expect the combined return to their portfolio from a successfully completed transaction to be above the return from the two companies separately. In that case, the shareholders in common to the two companies might advocate that the target complete the sale to the acquirer. Thus, an acquirer's IR efforts might also affect the

likelihood that it successfully completes the acquisition by influencing the target

shareholders. Thus, I propose the following.

- H4: The likelihood of successfully closing an acquisition is higher for acquirers with higher scores in *Institutional Investor* IR poll.
- H5: The likelihood of successfully closing an acquisition is higher for acquirers that conduct more investor conference calls in the year before the announcement of a deal.
- H6: The likelihood of successfully closing an acquisition is higher for acquirers that conduct one or more investor conference calls in the period from the day of the announcement to two days following the announcement.

CHAPTER III

RESEARCH DESIGN AND EMPIRICAL METHODOLOGIES

Sample Selection and Data Sources

The study investigates the relationships between IR and corporate and stock outcomes in an acquisition context. To examine these relationships, I use a sample of acquisitions made by U.S. domiciled, publicly traded firms between July 1, 2012 and June 30, 2018. The sample acquisitions were obtained from the SDC U.S. Mergers & Acquisitions database. The study time frame begins in July 2012 - 2011 is the first year for which I have access to a complete list of investor call transcripts on CapitalIQ — and ended in June 2018 to allow ample time for acquirers to have completed or cancelled the acquisition by the time the study is conducted (early 2020). Several requirements are necessary for an acquisition to be considered in the sample. First, the acquirer must be included in the S&P 500 as of the most recent July 1, domiciled in the U.S., and traded on a U.S. exchange for at least one calendar year prior to the acquisition announcement. I view the S&P 500 as appropriate as it represents roughly 80% of the market capitalization of U.S. stocks (S&P Dow Jones Indices, 2020). Second, the transaction size must be at least \$10 million and represent at least 10% of the acquiring firm's market capitalization at the time of acquisition. Third, the acquirer must be seeking control (over

50%), but not already over 10% of the target prior to the announcement. Fourth, as in Upton (2018), the proposed transaction must not be a bankruptcy acquisition, reverse takeover, liquidation, or restructuring. As in Kimbrough and Louis (2011), the transaction must not be completed as of the announcement date. Finally, the data to calculate the control variables and the CAR must be available. The above steps are outlined in Table 1, yielding a final sample size of 227 acquisition announcements.

Sample Details	Number of Transactions
Acquisitions listed in SDC U.S. Mergers & Acquisitions database	9,323
Removed: Not in S&P 500	(5,951)
Removed: Transaction value	(1,650)
Removed: Percentage of market cap sought	(1,356)
Removed: Percentage of target stock already owned	(105)
Removed: Restructuring transaction	(18)
Removed: Acquisition of assets as part of a bankruptcy	(4)
Removed: Duplicate transaction in database	(1)
Removed: Negative equity book value/controls at extreme levels	(10)
Observations included in the final sample	227

Table 1. Details of Sample Selection Procedures

Dependent Variables

The two dependent variables used in this study are cumulative abnormal returns surrounding the acquisition announcement date and whether the acquirer completed the announced acquisition. The first dependent variable is the CAR surrounding the announcement date. I expect companies that conduct more IR conference calls in the year prior to the deal, conduct more conference calls immediately following the deal announcement, and rank in the top three companies in the *Institutional Investor* "Best IR" buy-side poll for their sector to enjoy better CARs than their less active or less successful counterparts. Like Upton (2018), CAR is measured for the five-day period starting with two trading days prior to the acquisition announcement date and concluding with the second trading day following the acquisition announcement date. Consistent with Brown and Warner

(1985), abnormal returns for each day during the five-day period surrounding the acquisition announcement is calculated as follows.

$$AR_{it} = R_{it} - R_{mt}$$

where for each stock *i*, AR_{it} is the abnormal return of stock *i* on day *t*, R_{it} is the return of stock *i* on day *t*, and R_{mt} is the return of the CRSP value weighted index on day *t*. The return for the stock is calculated based on the stock price at the end of the day, plus per share dividends paid on the day, divided by the closing stock price from three days prior to the acquisition announcement. After the abnormal return for each day during the five-day period is calculated, the CAR for each stock *i*, CAR_{*i*,*k*,1} is calculated as the summed abnormal returns over the event time as follows.

$$CAR_i[-2,+2] = \sum_{t=k}^{l} AR_{it}$$

where for each stock *i*, CAR*i* [-2, +2] is the summed daily abnormal returns from day minus two (k = 1) to day plus two (l = 5), with day zero as the date of acquisition announcement. I obtained cumulative abnormal return data from Eventus.

To evaluate the first three hypotheses, I use the following regression equation.

$$CAR_{i}[-2, +2] = \beta_{0} + \beta_{1}$$
 Investor Relations_i + Controls_i + ε_{i}

where for each stock *i*, CAR*i* [-2, +2] is the return over day minus two to day plus two, with day zero as the date of acquisition announcement; β_1 *Investor Relations*^{*i*} indicates one of the three investor relations related independent variables (pre-announcement investor relations conference calls for the 365 days prior to the announcement, post-announcement investor relations conference calls for the announcement date and the two subsequent business days, and whether the company was ranked by buy-side investors as in the top three IR teams in its sector in the most recent poll conducted by *Institutional Investor* prior to the announcement). The *Controls*^{*i*} variable in the equation represents the various controls as described in the control variables discussion later in this section.

The second dependent variable is the likelihood of the acquirer ultimately completing the announced acquisition, available from the SDC database. The underlying variable is binary in nature: 0 if the acquirer ultimately completes the announced acquisition, 1 if not. As noted previously, if the acquirer has already completed the acquisition when the announcement is made, the transaction is excluded from the sample.

To test the second set of hypotheses, in which likelihood of completing the deal is the dependent variable, I use the following regression equation.

$$Completion_i = \beta_0 + \beta_1 Investor Relations_i + Controls_i + \varepsilon_i$$

where for each stock *i*, *Completion*^{*i*} represents the expected percentage likelihood of completing the deal; β_1 *Investor Relations*^{*i*} indicates one of the three investor relations related independent variables (pre-announcement investor relations conference calls for the 365 days prior to the announcement, post-announcement investor relations conference calls for the announcement date and the two subsequent business days, and whether the company was ranked by buy-side investors as in the top three IR teams in its sector in the most recent poll conducted by *Institutional Investor* prior to the announcement). The *Controls*^{*i*} variable in the equation represents the various controls as described in the control variables discussion later in this section.

Independent Variables

To measure the quantity of IR activity for companies with acquisitions that meet the above requirements, I review and identify the companies' investor conference call activity in

the conference call transcript database in CapitalIQ. I count the number of investor conference call transcripts in CapitalIQ for the 365 days prior to the acquisition announcement (*Callsbefore*) and the announcement date through two trading days following the announcement (*Callafter*). Using the count of the transcripts in the 365 days prior to the announcement, I proxy for the activity levels in advance of the deal that could lead to favorable reactions to an acquisition announcement. Using the count of transcripts for the announcement date and the two trading days following, I proxy for the activities that explain the specific rationale and expected outcomes from the acquisition immediately in the wake of the announcement.

The most recent "Best Investor Relations" results conducted by *Institutional Investor* magazine is used as a proxy for investor perceived quality of a company's IR prior to the acquisition announcement (*Top3II*). This annual poll of buy-side investors is conducted from May to June. For deals announced between January and June, I use the poll conducted in the prior calendar year. For deals announced between July and December, I use the poll conducted in that calendar year. The annual *Institutional Investor* magazine survey is a binary category. A company is considered to have a high degree of IR perceived quality if it is ranked in the top three positions in its sector in the most recent poll conducted before the acquisition announcement. Alternatively, the company is not considered to have a high degree of IR perceived quality prior to the acquisition announcement.

Control Variables

Several deal-related control variables are included in the regression model used in the study. The first deal-related control variable (*Public*) is whether the target is public or private. Consistent with Fraunhoffer and colleagues (2018), the model contains this variable

as prior literature indicates that public targets have historically been associated with a lower stock return for the bidder. Public company shares have more liquidity than private companies. Bidders pay higher premiums for public companies as a result (Fraunhoffer et al., 2018; Conn, Cosh, Guest, & Hughes, 2005; Fuller, Netter, & Stegemoller, 2002).

As in prior studies on M&A, the model also controls for the form of consideration offered by the acquirer to the target. Prior research supports that cash acquisitions generally lead to positive stock returns for acquirers, while stock acquisitions lead to negative stock returns (Kimbrough & Louis, 2011). Accordingly, the model used in this study includes the following indicator variables (Form of consideration: *Stock* or *Cash*).

Similar to Kimbrough and Louis (2011), the model also includes a variable (*Foreign*) to represent whether the target is domestic or foreign. As foreign targets may be less familiar to domestic investors, acquisitions of foreign targets are likely to be accompanied by higher investor informational needs and lower investor uncertainty. Accordingly, all else equal, acquirer stock returns on acquisitions of foreign targets are expected to be lower than for domestic targets.

The model also includes a variable to indicate whether the announced acquisition is a diversifying deal (*Diversify*). As defined in Upton (2018), a diversifying deal is defined as one in which the target does not share the same two-digit SIC code as the acquirer. Diversifying deals may be associated with more uncertainty than acquisitions in the same industry for two reasons. First, they are less likely to be as well understood by the acquirer's investor base, which logically already has some knowledge of the acquirer's industry. Second, potential synergies between companies in separate industries may be more difficult

for investors to estimate, as compared with synergies between companies in the same industry.

In addition to the aforementioned control variables related to M&A, the regression model includes several general control variables based on prior literature (Agarwal et al., 2016; Bushee & Miller, 2012; Chapman et al., 2019; Koch et al., 2012). These control variables include the acquirer's industry, log of firm market capitalization, market-to-book ratio, leverage, and return on equity. Each of these variables is expected to have a potential impact on deal returns.

CHAPTER IV

RESULTS AND DISCUSSION

In this section, I present my study's sample descriptive statistics and the results of each of the hypothesis tests.

Descriptive Statistics and Correlations

As described in the sample selection section, my sample consisted of 227 acquisition announcements that met the study's criteria. Table 2 depicts the distribution of announcements by year in the sample. Table 3 shows the means, medians, standard deviations, the minimum and maximum values for the continuous numeric variables, and the distributions of the discrete variables in the sample. Table 4 contains the correlation coefficients for the variables in the study. Variable definitions are shown in Appendix.

Years	Transactions	Percent of Sample
FY Ended June 30, 2013	37	16.3
FY Ended June 30, 2014	27	11.9
FY Ended June 30, 2015	42	18.5
FY Ended June 30, 2016	42	18.5
FY Ended June 30, 2017	37	16.3
FY Ended June 30, 2018	42	18.5
Total	227	100.0

Table 2. M&A Announcements Included in the Sample by Year

Reviewing the distribution of the dependent variables as shown in Table 3, the sample's mean cumulative abnormal return is 0.0089 or 0.89% for the five-day period

beginning two days prior to the acquisition announcement and concluding two days following the announcement (dependent variable for Hypotheses 1-3). The highest cumulative abnormal return observed in the sample was a 37.65% abnormal return over the five-day period and the lowest was a -19.15% abnormal return. For the set of hypotheses concerning completion of the deal (Hypotheses 4-6), 197 of the 227 announced acquisitions in the study (86.8% of observations) were completed.

Reviewing the descriptive statistics for the independent variables of interest in the study, 44 of the acquirers (19.4% of the sample) had a top three position in the most recent annual "Best IR" poll conducted by *Institutional Investor* magazine prior to the announcement date (independent variable for Hypotheses 1 and 4). The remaining 183 acquirers in the sample (80.6%) were not ranked in the top three companies in the most recent "Best IR" poll. Additionally, each of the acquirers in the sample conducted at least four investor conference calls in the 365 days prior to the announcement. The mean number of investor conference calls conducted by an acquirer was 8.34, and the most calls any acquirer in the sample conducted was 21 (independent variable for Hypotheses 2 and 5). Finally, 193 of the acquirers (85%) held at least one investor conference call between the announcement date and two trading days following the announcement date, while 15% of acquirers in the sample did not hold a call (independent variable for Hypotheses 3 and 6).

Reviewing the control variables, the mean natural log of acquirer market capitalization was 9.8306, equating to mean acquirer market capitalization of \$32,017 million. The minimum and maximum natural logs of acquirer market capitalization were 7.6413 and 12.4898, respectively, equating to market capitalization \$2,083 million and \$265,611 million, respectively.

The mean acquirer market-to-book ratio (as calculated by the market capitalization four weeks prior to the acquisition announcement divided by the most recent equity book value for the most recent fiscal year concluded prior to the acquisition announcement) was 3.70x, ranging from a low of 0.40x to a high of 12.70x. The mean acquirer leverage ratio (as calculated by total liabilities divided by total assets for the most recent fiscal year concluded prior to the acquisition announcement) was 0.62, ranging from a low of 0.00 to a high of 0.97. Mean acquirer return on equity was 0.16, ranging from a low of -0.26 to a high of 0.80.

Reviewing the sample transactions, cash was the most common form of consideration observed in the sample (128 or 56.4% of observations), followed by mixed consideration (83 or 36.6% of observations). The remaining 16 observations (7% of the sample) consisted of stock consideration only. Roughly three quarters of the acquisitions involved a public target (175 or 77.1% of observations), while the remaining 52 targets in the sample (22.9%) were private. Roughly one quarter of the observations (62 or 27.3% of observations) were diversifying deals (target's two-digit SIC code was different from the acquirer's). Finally, 45 of the acquisitions in the sample (19.8% of observations) involved a target not domiciled in the U.S, while the remainder involved a domestic U.S. target.

Panel A Continuous Variables							
Variable Name	N	Mear	n Med	lian	SD	Minimum	Maximum
Dependent Variab	ole						
ĊAR	227	0.008	9 0.00)46	0.0750	-0.1915	0.3765
Independent Varia	nhle						
Callsbefore	227	8 339	2 8.00	000	3 0778	4 0000	21,0000
Cumsberoie	227	0.557	2 0.00	,000	5.0770	1.0000	21.0000
Control Variables							
LogMV	227	9.830	6 9.67	753	0.9728	7.6413	12.4898
AcqMtB	227	3.703	5 3.08	383	2.4206	0.3951	12.6957
Lev	227	0.621	4 0.63	327	0.1595	0.0000	0.9693
ROE	227	0.156	9 0.14	451	0.1412	-0.2586	0.8030
Panel B. Discrete	Variable	s					
Variable Na	ne	N	Number	Percer	nt		
Dependent Variab	ole						
Complete		227	197	86.8			
Indonandant Varia	hlas						
Top3II	ibies	227	4.4	10.4			
Collefter		227	102	19.4 95.0			
Callanel		221	195	85.0			
Control Variables							
Formofconsider	ation	227					
Cash			128	56.4			
Stock			16	7.0			
Mixed			83	36.6			
Public		227	175	77.1			
Diversify		227	62	27.3			
Foreign		227	45	19.8			

Table 3. Descriptive Statistics

See Appendix for the variable definitions.

To review the effect of industry as a control variable, I grouped acquirers by their major SIC divisions. Acquirers in the sample represented eight of the 10 major SIC industry divisions. Manufacturing (109 observations or 48% of the sample) was the most represented classification, followed by Finance, Insurance, & Real Estate (31 observations or 13.7% of the sample), Transportation & Public Utilities (30 observations or 13.2% of the sample), and Services (22 observations or 9.7% of the sample).

Industry ^a	Count	Percentage of Total
Agriculture, Forestry, & Fishing	3	1.3
Construction	1	0.4
Finance, Insurance, & Real Estate	31	13.7
Manufacturing	109	48.0
Mining	14	6.2
Services	22	9.7
Transportation & Public Utilities	30	13.2
Wholesale Trade	17	7.5
Total	227	100.0

Table 4. Industry Information

^a Companies were assigned to industries as follows: Agriculture, Forestry, & Fishing -SIC codes 0-999, Construction - 1500-1799, Finance, Insurance, & Real Estate – 6000-6799, Mining – 1000-1499, Manufacturing - 2000-3999, Services – 7000-8999, Transportation & Public Utilities - 4000-4999, and Wholesale Trade - 5000-5199.

In Table 5, I present the correlation matrix for the variables analyzed in the study. The significance of the correlations is indicated in the matrix. Based on Cohen (1988), relationships between 0.1 and 0.23 are considered weak, between 0.24 and 0.36 are considered moderately strong, and above 0.37 are considered strong. I begin by discussing the relationship between the independent IR variables. I continue by discussing the correlations between the independent IR variables and the dependent variables. Finally, I discuss the correlations between the aforementioned independent and dependent variables and the control variables.

The independent IR variables Top3II and Callsbefore are weakly negatively correlated (-0.1853), a relationship that is statistically significant at the 0.01 level. This relationship is somewhat surprising, as intuitively a company holding more conference calls might be expected to be more likely highly ranked by investors. Correlation between Top3II and Callafter were relatively uncorrelated (-0.0128), and this relationship was not statistically significant even at the 0.10 level. In my sample, companies with a Top3II ranking were slightly less likely to conduct a conference call following the announcement of an acquisition. Finally, Callsbefore and Callafter were also relatively uncorrelated (-0.0866).

While correlation was low and not statistically significant, acquirers that conducted more conference calls before an announcement were slightly less likely to conduct a conference call in the days following the acquisition announcement.

I now review the correlations between the independent IR variables and the dependent variables (CAR and Complete). Reviewing the relationships between the independent variables and the first dependent variable (CAR) used in Hypotheses 1-3, Top3II was weakly positively correlated with CAR (0.1569), a relationship that was significant at the 5% level. Callsbefore was slightly negatively correlated with CAR (-0.0271), but the relationship was not significant even at the 10% level. Callafter had a slightly negative correlation with CAR (-0.0301), also not significant at the 10% level.

Reviewing the relationships between the independent IR variables and the dependent variable (Complete) used in Hypotheses 4-6, Callafter had a moderately strong positive correlation with Complete (0.3101) that is significant at the 1% level. Top3II had a weak negative correlation (-0.2364) with Complete that is also significant at the 1% level. Callsbefore had a slightly positive correlation with Complete (0.0204), but the relationship is not significant at the 10% level. CAR and Complete are relatively uncorrelated (0.0050), and this correlation is not significant at the 10% level.

Including the control variables, there are only two strong correlations in the matrix. Both Top3II with LogMV (-0.4865) and AcqMtB with ROE (0.5504) are significant at the 1% level. CAR only had a significant relationship with LogMV (-0.2017), a weak negative correlation. Complete had a moderately strong (0.3047) relationship with LogMV that was significant at the 1% level. Complete also had weak relationships with Cash (0.3047), Public (-0.1508), and Foreign (-0.1322), all significant at the 5% level.

Between the control variables and the independent variables, other than the previously noted strong relationship between Top3II and LogMV, there are only three significant relationships that qualify as at least weak using the Cohen (1988) criteria. There is a moderately strong correlation between Callsbefore and LogMV (0.3236), significant at the 1% level. Additionally, the weak correlations of Callsbefore with Public (-0.1626) and Callafter with Foreign (-0.1938) are significant at least at the 5% level. The weak correlation between Top3II and Public (0.1082) is not significant even at the 10% level. Given the relatively low correlations between the IR variables and control variables, multicollinearity does not appear to be a significant concern for this study.

	CAR	Complete	Callsbefore	Callafter	Top3II	LogMV	AcqMtB	Lev	ROE	Cash	Stock	Public	Diversify	Foreign
CAR		0.0050	-0.0271	-0.0301	0.1569**	-0.2017***	0.0200	0.0570	-0.0539	-0.1086	-0.0850	0.0422	0.0806	-0.0822
Complete			0.0204	0.3101***	-0.2364***	0.3047***	0.0521***	-0.0726	0.0732	0.3047***	-0.0450	-0.1508**	0.0932	-0.1322**
Callsbefore				-0.0866	-0.1853***	0.3236***	0.0548	0.0712	0.0076	-0.0219	-0.0536	-0.1626**	0.0774	0.0045
Callafter					-0.0128	0.0048	0.0892	-0.0013	0.0020	0.0043	0.0191	0.0062	-0.0198	-0.1938***
Top3II						-0.4865***	-0.0120	0.0265	-0.0884	-0.0632***	-0.0044	0.1082	-0.0255	-0.0202
LogMV							0.1266	-0.0911	0.1005	0.2092^{***}	-0.0167	-0.2618***	0.0935	-0.0152
AcaMtB								0.2343***	0.5504***	-0.1169	0.1087	-0.1087	-0.0791	-0.1429**
Lev									0.2167***	-0.0537	0.0036	-0.0949	0.0204	-0.0293
ROE										-0.1369**	0.0938	-0.1446**	-0.1627**	-0.0692
Cash											-0.3131***	-0.1835***	0.1603**	0.0362
Stock												0.1501**	-0.1302	0.0358
Public													-0.1129	-0.1234
Diversify														-0.0320
Foreign														

Table 5. Correlation Matrix for Variables Used in the Study

Note: The symbols *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels. All variables are defined in Appendix.

Event Study Results – Stock Price Abnormal Returns

In this section, I discuss the abnormal returns around acquirer announcement dates for the study's sample. Table 6 depicts the abnormal returns surrounding the announcement found in this sample. Table 6 Panel A shows the daily event window abnormal returns compared with a value weighted index for each day in the five-day period measured in this sample (-2, +2). Notably, mean abnormal returns were positive for four of the five days, indicating that investors generally considered the acquisition announcements as positive events. Mean abnormal returns on days -2 (two trading days before the acquisition announcement) and day 0 (announcement date) were positive and statistically significant. Mean abnormal returns on days -1 and +1 were also positive, but not statistically significant. Returns on day +2 were negative, but not statistically significant.

Table 6 Panel B shows the sample's mean five-day (-2, +2) cumulative abnormal return surrounding the acquisition announcement at day 0. Five-day cumulative abnormal returns were used as the dependent variable for each of the observations. The sample's mean cumulative abnormal return was 0.89%, and the precision-weighted cumulative average abnormal return was 0.77%, also implying that, on average, investors saw the acquisitions to be positive developments for the acquiring companies. The Patell-Z test statistic of 1.639 indicates that the mean cumulative abnormal return was significant at the 10% level. The finding of positive abnormal returns surrounding acquisition announcements is consistent with prior studies, including Kimbrough and Louis (2011) and Upton (2018).

Panel A Daily Event Window Market Model Abnormal Returns; Value Weighted Index						
						Generalized
Day	N	Mean Abnormal Retur	n Positive: Nega	tive Pat	ell Z	Sign Z
-2	227	0.19%	120:107	1.	558*	1.076
-1	227	0.18%	107:120	0.	727	-0.650
0	227	0.56%	117:110	1.	644*	0.677
1	227	0.07%	111:116	0.	037	-0.119
2	227	-0.12%	98:129**	-1.	192	-1.845**
Panel B 5-Day Cumulative Market Model Abnormal Returns; Value Weighted Index						
		Mean Cumulative	Precision	Positive:	Patell	Generalized
Day	N	Abnormal Return	Weighted CAAR	Negative	Z	Sign Z
(-2,+2)	227	0.89%	0.77%	121:106	1.639*	1.208
The symbols * ** and *** denote statistical significance at the 0.10, 0.05, 0.01 levels, respectively.						

Table 6. Abnormal Returns Surrounding Acquisition Announcement

sigr

Regression Results and Discussion

Hypotheses 1, 2, and 3 related to the impact of investor relations on stock price abnormal returns surrounding the announcement of an acquisition. I used pooled ordinary least squares regression analysis to test Hypotheses 1, 2, and 3 for which CAR was the dependent variable. Hypotheses 4, 5, and 6 related to the impact of investor relations on the likelihood that a company would complete an announced acquisition. I used logistic regression analysis to test Hypotheses 4, 5, and 6 for which Complete was the dependent variable.

Model Results

Hypothesis 1 relates to the impact of a top three buy-side ranking in the *Institutional* Investor magazine "Best Investor Relations" poll on cumulative abnormal returns for the five days surrounding an acquisition announcement. I predicted that stocks of companies ranked by buy-side investors in the top three companies in a sector in the most recent "Best IR" poll should have better cumulative abnormal returns than companies not ranked in the top three companies in a sector. Regression results are depicted in Table 7. In the reduced model, the

regression coefficient for Top3II of -0.0149 in the opposite direction as predicted in the hypothesis and the corresponding *t*-statistic of -2.38 is significant at the 5% level. In the full model, the coefficient for Top3II of -0.0038 is also in the opposite direction as predicted in the hypothesis, but the corresponding *t*-statistic of -0.53 is not significant at the 10% level. I find no significant relationship between Top3II and CAR in the full model. Accordingly, Hypothesis 1 is not supported.

	Reduced Form Model	Full Regression Model
Top3II	-0.0149	-0.0038
	(-2.3800)**	(-0.5300)
Industry		
Agriculture, Forestry, & Fishing		-0.0550
		(-1.4000)
Construction		0.0052
		(0.0800)
Finance, Insurance, & Real Estate		0.0013
		(0.0800)
Manufacturing		0.0332
		$(2.4700)^{**}$
Mining		-0.0277
		(-1.3300)
Services		0.0180
		(0.9900)
Transportation & Public Utilities		0.0044
		(0.2600)
LogMV		-0.0136
		(-2.1300)**
AcqMtB		0.0013
		(0.5000)
Lev		0.0306
		(0.8900)
ROE		-0.0673
		(-1.5400)
Cash		0.0088
		(1.6200)
Stock		0.0170
		(1.6500)
Public		-0.0006
		(-0.0900)
Diversify		-0.0079
		(-1.3900)
Foreign		0.0014
		(0.2200)
Intercept	-0.0002	0.1207
	(-0.0400)	$(1.7200)^*$
Model Statistics		
N	227	227
Adjusted R^2 (%)	2.0279	7.0926
F-statistic	5.6780**	2.0149**

 Table 7. Regression Results for Hypothesis 1 Regression of Top3II Ranking on Announcement CARs

t statistics in parentheses.

The symbols *, **, and *** denote statistical significance at the 0.10, 0.05, 0.01 levels, respectively.

To better understand the results, I conducted a series of robustness checks. First, I included the cross between Top3II and Callsbefore as there is likely to be a relationship between the number of investor conference calls that a company conducts and buy-side

investor rankings of its IR function. The coefficient for Top3II in this model, including the cross variable, was similar to the coefficient obtained in the full regression model without the cross variable and the corresponding *t*-statistic remained not significant at the 10% level.

As another robustness test, I also reviewed the data set to determine whether the relationship between Top3II and CAR was stronger for companies in which the relative size of the deal (transaction value divided by the market capitalization of the acquirer four weeks prior to the deal announcement) was larger (Relsize). I divided the announcement data set into two, a larger relative deal size group (the companies above the sample's median Relsize) and a smaller relative size deal size group (the companies at or below the median Relsize). This division reflects the likelihood that the importance of an acquisitions and investor reactions to it may be impacted by the relative size of the transaction to the company. When reviewing the full model as described in the hypothesis test by Relsize cohort, the Top3II variable was not significant for either the larger relative deal size or smaller deal size cohort.

I also reviewed the model to determine whether the cumulative abnormal return from 90 days before the deal announcement to three days prior to the deal announcement (CARbefore) impacted the relationship between Top3II and CAR. CARbefore accounts for the possibility that the acquisition was already embedded into the stock price prior to the announcement. Similar to the process described above for the relative size of the deal, I divided the data set into two cohorts, a higher CARbefore cohort (the companies above the sample's median CARbefore) and a lower CARbefore cohort (the companies at or below the median CARbefore). Similar to the results obtained when reviewing the model split by Relsize, the Top3II variable was not significant for either the higher CARbefore or lower CARbefore cohort.

As a final robustness check, I reviewed the relationship between Top3II and CAR for only the companies below \$50 billion of market capitalization. The purpose of this analysis was to determine whether investor rankings were more significant in determining cumulative abnormal returns surrounding an acquisition announcement for smaller companies in the S&P 500. As the companies below \$50 billion of market cap are smaller than the largest companies in the S&P 500, they might be slightly less likely to be in portfolios and a Top 3 ranking in the annual *Institutional Investor* "Best Investor Relations" poll might mean more to those companies. When reviewing the full regression model for only those companies, the coefficient for Top3II in the opposite direction as predicted by the hypothesis, and the corresponding *t*-statistic is significant at the 10% level. When only reviewing companies below \$50 billion of market cap, stocks of companies highly ranked by buy-side investors in the "Best Investor Relations" poll had lower cumulative abnormal returns surrounding the announcement of an acquisition than their unranked peers.

Hypothesis 2 relates to the impact of investor conference calls in the 365 days prior to the announcement of an acquisition on cumulative abnormal returns for the five days surrounding the acquisition announcement. I predicted that stocks of companies that conduct more investor calls should have better cumulative abnormal returns than stocks of companies that do fewer calls. Regression results are depicted in Table 8. In the reduced model, the regression coefficient for Callsbefore of -0.0007 is in the opposite direction as predicted in the hypothesis, but the corresponding *t*-statistic of -0.41 is not significant at the 10% level. In the full model, the coefficient for Callsbefore of -0.0000 is also slightly in the opposite direction as predicted in the model, but the corresponding *t*-statistic of -0.01 is again not

significant at the 10% level. Accordingly, I find no significant relationship between

Callsbefore and CAR, and Hypothesis 2 is not supported.

	Reduced Form Model	Full Regression Model
Callsbefore	-0.0007	-0.0000
	(-0.4100)	(-0.0100)
Industry		
Agriculture, Forestry, & Fishing		-0.0590
		(-1.5200)
Construction		0.0065
		(0.1000)
Finance, Insurance, & Real Estate		0.0023
		(0.1400)
Manufacturing		0.0339
		$(2.5100)^{**}$
Mining		-0.0279
		(-1.3400)
Services		0.0181
		(0.9900)
Transportation & Public Utilities		0.0056
		(0.3300)
LogMV		-0.0153
		(-2.6100)***
AcqMtB		0.0015
		(0.5800)
Lev		0.0056
		(0.8600)
ROE		-0.0695
		(-1.6000)
Cash		0.0087
		(1.5900)
Stock		0.0170
		(1.6600)
Public		-0.0005
		(-0.0800)
Diversify		-0.0080
		(-1.4100)
Foreign		0.0014
		(0.2200)
Intercept	0.0144	0.1393
	(1.0000)	$(2.2900)^{**}$
Model Statistics		
N	227	227
Adjusted $R^2(\%)$	-0.3710	6.9677
F-statistic	0.1648	1.9957**

 Table 8. Regression Results for Hypothesis 2 Regression of Pre-Announcement
 Calls on Announcement CARs

t statistics in parentheses. The symbols *, **, and *** denote statistical significance at the 0.10, 0.05, 0.01 levels, respectively.

I performed the same robustness checks for Hypothesis 2 as I did for Hypothesis 1. Inclusion of 1) the cross between Top3II and Callsbefore as a variable, 2) dividing the data set into Relsize cohorts, and 3) dividing the data set into CARbefore cohorts does not materially impact the results found in the full model tested in the hypothesis above. The coefficients for Callsbefore remain generally similar to the coefficient obtained in the full regression model without the cross variable, and the corresponding *t*-statistics remain not significant at the 10% level. When including the observations for only those companies below \$50 billion of market capitalization in the full regression model, the *t*-statistic corresponding to the Callsbefore coefficient also remains not significant at the 10% level.

Hypothesis 3 relates to the impact of a conference call following an acquisition announcement (days 0, 1, 2) on cumulative abnormal returns for the five days surrounding the acquisition announcement. I predicted that stocks of companies that hold investor calls following acquisition announcements should have better cumulative abnormal returns than companies that do not hold calls. Regression results are depicted in Table 9. In the reduced model, the regression coefficient for Callafter of 0.0070 is in the direction predicted in the hypothesis, but the corresponding *t*-statistic of 0.45 is not significant at the 10% significance level. In the full model, the coefficient for Callafter of 0.0044 is also in the direction predicted in the hypothesis, but the corresponding *t*-statistic of 0.63 is again not significant at the 10% level. In the full model, I find no significant relationship between Callafter and CAR. Accordingly, Hypothesis 3 is not supported.

	Reduced Form Model	Full Regression Model
Callafter	0.0070	0.0044
	(0.4500)	(0.6300)
Industry		
Agriculture, Forestry, & Fishing		-0.0598
		(-1.5500)
Construction		0.0059
		(0.0900)
Finance, Insurance, & Real Estate		0.0025
		(0.1500)
Manufacturing		0.0340
		$(2.5400)^{**}$
Mining		-0.0266
		(-1.2700)
Services		0.0194
		(1.0600)
Transportation & Public Utilities		0.0055
		(0.3300)
LogMV		-0.0152
		(-2.7500)***
AcqMtB		0.0016
		(0.6200)
Lev		0.0297
		(0.8700)
ROE		-0.0703
~ .		(-1.6200)
Cash		0.0087
		(1.6100)
Stock		0.0169
		(1.6500)
Public		-0.0004
		(-0.0600)
Diversity		-0.0079
F :		(-1.3900)
Foreign		0.0022
T	0.007	(0.3400)
Intercept	0.0067	0.1353
Madel Statistics	(0.9500)	(2.2300)
Wodel Statistics	227	227
N	227	227
Adjusted K ² (%)	-0.3530	/.1430
F-statistic	0.2047	2.0227

 Table 9. Regression Results for Hypothesis 3 Regression of Post-Announcement Calls on Announcement CARs

t statistics in parentheses.

The symbols *, **, and *** denote statistical significance at the 0.10, 0.05, 0.01 levels, respectively.

As I did for Hypotheses 1 and 2, I tested whether dividing the data set into cohorts grouped by Relsize and CARbefore would materially impact the results found in the full model tested in Hypothesis 3. Dividing the data set into Relsize cohorts and dividing the data set into CARbefore cohorts does not materially impact the results found in the full model tested in the hypothesis above. The coefficients for Callafter remained generally similar to the coefficient obtained in the full regression model, and the corresponding *t*-statistics remained not significant at the 10% level. Additionally, reviewing the full regression model for only those companies below \$50 billion of market capitalization, the *t*-statistic corresponding to the Callafter coefficient remained not significant at the 10% level.

Hypothesis 4 relates to the impact of investor conference calls in the 365 days prior to the announcement of an acquisition on the likelihood that a company would complete its announced acquisition. I predicted that stocks of companies ranked by buy-side investors in the top three companies in a sector in the most recent *Institutional Investor* magazine "Best IR" poll would be more likely to complete announced acquisitions than companies not ranked in the top three companies in a sector. Regression results are depicted in Table 10. In the reduced model, the regression coefficient for Top3II of -0.7049 is in the opposite direction as predicted in the hypothesis, and the corresponding *t*-statistic of 11.42 is significant at the 1% level. In the full model, the coefficient for Top3II of -0.3539 is also in the opposite direction as predicted in the hypothesis, but the corresponding *t*-statistic of 1.34 is not significant at the 10% level. In the full model, I find no significant relationship between Top3II and Complete. Accordingly, Hypothesis 4 is not supported.

	Reduced Form Model	Full Regression Model
Top3II	-0.7049	-0.3539
1	(11.4200)***	(1.3400)
Industry		
Agriculture, Forestry, & Fishing		11.3734
0 / 0		Unstable
Construction		11.6080
		Unstable
Finance, Insurance, & Real Estate		-7.1387
		Unstable
Manufacturing		-6.6968
		Unstable
Mining		-6.2266
		Unstable
Services		10.9874
		Unstable
Transportation & Public Utilities		-6.1473
		Unstable
LogMV		-0.5175
		(2.9000)
AcqMtB		-0.0142
		(0.0200)
Lev		2.2160
		(1.8800)
ROE		-1.2214
		(0.3700)
Cash		0.4884
		$(3.95)^{**}$
Stock		0.0607
		(0.0200)
Public		-0.8194
		(3.0100)
Diversify		0.1817
		(0.4000)
Foreign		-0.5993
		(5.0000)**
Intercept	5.5739	13.0619
	$(56.9400)^{-1}$	Unstable
Model Statistics	225	225
N \mathbf{P}^2 (2())	227	227
Entropy R^2 (%)	6.0300	24.4000
χ^2	10.6977***	43.2466***

Table 10. Regression Results for Hypothesis 4 Regression of Top3II Ranking on Completion of Deal

 χ^2 statistics in parentheses The symbols *, **, and *** denote statistical significance at the 0.10, 0.05, 0.01 levels, respectively.

I performed similar robustness tests for Hypothesis 4 as I did for Hypotheses 1 and 2. I tested whether including the cross between Top3II and Callsbefore, dividing the sample into Relsize cohorts, and dividing the sample into CARbefore cohorts would impact relationships found in the full model tested in the hypothesis. None of these revisions to the model had a material impact on the relationship between Top3II and Complete. The coefficients are generally similar to those found in the full model tested in the hypothesis and remain not significant at the 10% level.

However, when reviewing the full regression model for only those companies with market capitalizations under \$50 billion, the coefficient for Top3II is significant at the 10% significance level, but in the opposite direction as predicted by the hypothesis. The companies that were under \$50 billion of market capitalization that were highly ranked by buy-side investors in the "Best Investor Relations" poll were less likely to complete an announced deal than their unranked peers.

Hypothesis 5 relates to the impact of investor conference calls in the 365 days prior to the announcement of an acquisition on the likelihood that a company would complete its announced acquisition. I predicted that stocks of companies that do more investor calls would be more likely to complete announced acquisitions than companies that do fewer calls. Regression results are depicted in Table 11. In the reduced model, the regression coefficient for Callsbefore of -0.0193 is in the opposite direction as predicted in the hypothesis but is not significant at the 10% level. In the full model, the coefficient for Callsbefore of 0.1405 is in the direction as predicted in the hypothesis but is also not significant at the 10% level. Accordingly, Hypothesis 5 is not supported.

	Reduced Form Model	Full Regression Model
Callsbefore	-0.0193	0.1405
	(0.0900)	(2.6700)
Industry		
Agriculture, Forestry, & Fishing		10.8467
		Unstable
Construction		12.0288
		Unstable
Finance, Insurance, & Real Estate		-7.1871
		Unstable
Manufacturing		-6.7654
		Unstable
Mining		-6.3688
		Unstable
Services		11.0986
		Unstable
Transportation & Public Utilities		-5.9618
		Unstable
LogMV		-0.9289
		(11.3900)***
AcqMtB		-0.0030
		(0.0000)
Lev		1.7656
		(1.1600)
ROE		-1.5781
		(0.5700)
Cash		0.4417
		(3.2300)
Stock		0.0402
Public		(0.0100)
		-0.854/
Diversify		(3.3600)
		0.2130
		(0.5400)
Foreign		0.5981
Intercept	2.0442	(4.9300)
	2.0442	10.3074
Madel Statistics	(13.0300)	Unstable
	777	227
Entropy $P^2(0/)$	221 0.0500	221
Entropy κ (%)	0.0000	<i>L3.L</i> 000 <i>11</i> 78 <i>16</i> ***
λ	0.0930	44./040

 Table 11. Regression Results for Hypothesis 5 Regression of Pre-Announcement

 Calls on Completion of Deal

 χ^2 statistics in parentheses

The symbols *, **, and *** denote statistical significance at the 0.10, 0.05, 0.01 levels, respectively.

I performed similar robustness tests for Hypothesis 5 as I did for Hypotheses 1, 2, and 4. The robustness tests did not yield significantly different results from the full model tested in Hypothesis 5. Inclusion of 1) the cross between Top3II and Callsbefore as a variable, 2) dividing the data set into Relsize cohorts, and 3) dividing the data set into CARbefore cohorts did not materially impact the results found in the full model tested in the hypothesis above. The coefficients for Callsbefore remained generally similar to the coefficient obtained in the full regression model without the cross variable, and the corresponding *t*-statistics remained not significant at the 10% level. Finally, when reviewing the full regression model for only those companies below \$50 billion of market capitalization, the *t*-statistic corresponding to Callsbefore was also not significant at the 10% level.

Hypothesis 6 relates to the impact of conference calls following acquisition announcements (days 0, 1, 2) on the likelihood that companies would complete their announced acquisitions. I predicted that companies that hold investor calls following acquisition announcements would be more likely to complete announced acquisitions than companies that do not hold investor calls. Regression results are depicted in Table 12. In the reduced model, the regression coefficient for Callafter of 0.9288 is in the direction predicted in the hypothesis and the corresponding *t*-statistic of 18.25 is significant at the 1% level. In the full model, the coefficient for Callafter of 1.1754 is in the direction as predicted in the hypothesis, and the corresponding *t*-statistic of 16.20 is also significant at the 1% level. I find a significant positive relationship between Callafter and Complete. Accordingly, Hypothesis 6 is supported.

	Reduced Form Model	Full Regression Model
Callafter	0.9288	1.1754
	(18.2500)***	$(16.2000)^{***}$
Industry		
Agriculture, Forestry, & Fishing		10.6257
		Unstable
Construction		11.5084
		Unstable
Finance, Insurance, & Real Estate		-6.8886
		Unstable
Manufacturing		-6.4092
		Unstable
Mining		-6.0880
		Unstable
Services		11.4098
		Unstable
Transportation & Public Utilities		-6.0291
		Unstable
LogMV		-0.7073
		$(7.7800)^{***}$
AcqMtB		0.0540
		(0.1900)
Lev		2.2612
		(1.7100)
ROE		-1.9181
		(0.7500)
Cash		0.4569
		(3.0800)
Stock		0.0677
		(0.0200)
Public		-0.6748
		(2.1800)
Diversify		0.2685
		(0.7200)
Foreign		-0.3908
		(1.7300)
Intercept	1.4084	14.2002
	(41.9700)***	Unstable
Model Statistics		
N	227	227
Entropy R^2 (%)	9.5800	33.2000
χ^{2}	16.9805***	58.8581***

Table 12. Regression Results for Hypothesis 6 Regression of Post-Announcement Calls on Completion of Deal

 χ^2 statistics in parentheses The symbols *, **, and *** denote statistical significance at the 0.10, 0.05, 0.01 levels, respectively.

As for Hypotheses 4 and 5, I tested whether dividing the data set into cohorts grouped by Relsize and CARbefore would materially impact the results found in the full model tested in Hypothesis 3. I also tested the relationships found when only including the observations for

companies below \$50 billion of market capitalization. In each of these robustness tests, the coefficient for Callafter remained in the same direction as predicted by Hypothesis 6, and the corresponding *t*-statistic was significant at the 5% level.

Discussion

Research has shown IR to have a positive impact on numerous corporate and stock outcomes, including share price performance (Agarwal, 2008; Jiao, 2011; Bushee & Miller, 2012), cost of capital (Ly, 2010; Bushee & Miller, 2012; Vlittis & Charitou, 2012), analyst following (Lang & Lundholm, 1996; Francis et al., 1997; Brennan & Tamarowski, 2000; Chang et al. 2009), and consistency in analyst estimates (Farragher et al., 1994; Lang & Lundholm, 1996). Additionally, research has shown some positive relationships between IR characteristics and M&A outcomes, including cumulative abnormal returns surrounding acquisition announcements (Fraunhoffer et al., 2018; Kimbrough & Louis, 2011) and completion of M&A deals (Upton, 2018).

My study was designed to provide additional insight into the specific IR characteristics and activities that might yield positive outcomes for acquiring companies. I expected that more conference calls ahead of deals and better investor ratings of companies' IR functions would lead to higher levels of investor trust (and improved returns) when companies announce acquisitions. I endeavored to learn whether actions prior to announcements of deals in the form of investor calls in the year before announcements of acquisitions or investor perceptions of companies' IR functions would lead to improved outcomes for acquiring companies. I also expected that holding investor conference calls following announcements of acquisitions would provide better information to investors who might be more likely to buy shares following announcements, pressuring acquiring companies' share prices higher

and leading to a higher probability that acquisitions were ultimately completed. Accordingly, I also sought to determine whether activities immediately following acquisition announcements in the form of investor calls would be beneficial for acquirers.

In my study, I hypothesized that investor relations activities in the form of conference calls before and after deal announcements and IR quality in the form of buy-side investor ratings would have a positive influence on the cumulative abnormal returns surrounding deal announcements and companies' ability to complete announced acquisitions. Only one of the six hypotheses (Hypothesis 6) was fully supported in this study. Holding investor calls following deal announcements was associated with a higher likelihood of completing the deals. Consequently, companies seeking to complete announced acquisitions should consider hosting at least one investor conference call following the announcement.

Surprisingly, investor ratings of company IR functions appeared to have a negative influence on both cumulative abnormal returns surrounding acquisition announcements and the likelihood that companies would ultimately complete acquisitions. In both Hypothesis 1 and Hypothesis 4, the coefficient for Top3II was in the opposite direction as predicted by the hypothesis. While the *t*-statistic corresponding to Top3II in both hypotheses was not significant in the full model, when reviewing only the observations for companies smaller than \$50 billion of market capitalization, the *t*-statistic was significant at the 10% level. This finding implies that stocks of companies under \$50 billion of market capitalization that have an investor relations function that is highly rated by investors underperform their less highly rated peers upon announcements of acquisitions. Those companies are also less likely to complete their acquisitions.

There are several potential reasons for the inverse relationship between IR ratings and returns and the lack of relationship between IR activities and returns surrounding a deal. First, perhaps the reason for the outperformance is surprise. It is possible that investors better understand the potential acquisitions of companies which conduct more IR activities, or which are perceived by investors to have higher IR quality. In this case, investors may have a better general understanding that these companies will make an acquisition before they announce it. As acquisitions tend to be associated with share outperformance surrounding the announcement, companies for which an acquisition is expected may already have that acquisition embedded in the stock price. Companies that have lower rated IR functions may be more likely to surprise investors to the positive when announcing an acquisition, and their stocks may be more likely to outperform upon announcement.

Also, IR is generally associated with higher multiples (Ly, 2010; Bushee & Miller, 2012; Vlittis & Charitou, 2012). Accordingly, there may generally be less upside remaining to shares of companies that conduct more or higher quality IR activities. While I tried to control for the effect of valuation multiples by including a market to book control variable in each of the models, there may be some impact from the higher IR companies already receiving more full valuations.

As mentioned above, IR ratings were negatively associated with likelihood of completing an announced acquisition for companies below \$50 million of market capitalization. This result was somewhat surprising as conducting IR calls after deal announcements was associated with higher likelihood of companies completing acquisitions. It is possible that the investors who rate companies' investor relations functions highly do so because they hold a two-way dialogue with the company. Across my sample, nearly 87% of the deals were

completed, so most announced deals were completed. However, if a company announces a deal that the investor base does not approve, representatives of better-rated IR functions may be more likely to obtain more information about why buy-side investors do not approve of the deal. Armed with better information from its IR function, the management team and board of directors of a highly rated IR company may be more likely to terminate a poorly received acquisition than their less highly rated IR peers.

CHAPTER V

CONCLUSION

While only one of the study's six hypotheses was fully supported, my study adds to our understanding of investor relations. Completing an announced acquisition is a significant goal for management teams and a significant corporate outcome for research to examine. This is the first study to support the notion that IR activities in the period immediately following an acquisition announcement are associated with an increased likelihood of completing the deal. As such, the study adds to our understanding of IR and more generally to the understanding of antecedents to completion of mergers. Additionally, given the importance of completing an acquisition to company executives and boards, the finding that post-deal IR conference calls are associated with a higher likelihood of successful completion of a deal has clear implications for practice.

The study has several limitations. First, the data set was limited to the S&P 500. By their inclusion in this key index, the companies in my sample might be generally more closely followed by investors than companies with smaller market capitalization or non-U.S. companies. As a result, there may be less difference in their IR efforts than among companies not included in the S&P 500, for which investor interest and IR efforts may vary more greatly.

Second, the results in the *Institutional Investor* magazine "Best Investor Relations" poll may be impacted by investor perceptions of the questions. As a result, the poll may not accurately reflect IR quality. Poll results could be more reflective of a company's stock performance during the prior year, wide inclusion of its stock in more portfolios, aggressiveness with which the IR team seeks a high ranking in the poll, or popularity of specific IR individuals than of the quality of the company's investor relations activities during the prior year.

Third, public investor conference calls for which there are transcripts may provide fewer new insights into merger and acquisition activity than other IR activities. Companies may be more hesitant to discuss their acquisition plans and strategy in public forums than they are in meetings or calls with individual investors. As executives might be fearful that their comments might be misunderstood or perceived by investors to be different from the company's other public statements, they may choose to avoid discussing acquisition plans in as much detail as they would in a longer form, unrecorded conversation with an investor.

Finally, IR is only one channel through which investors can gain understanding of company activities. There are other ways investors can gain information on a company, most notably through the company's own disclosures or from disclosures, IR activities of other relevant companies (such as competitors, suppliers, and customers), and their own proprietary industry research. The information gleaned from these sources outside IR might also impact how investors view acquisitions and thus the share price reaction to acquisition announcements.

Future research could expand the study to companies outside the S&P 500. There may be a more significant relationship between IR and outcomes for companies with smaller market

capitalizations that are likely to be less widely followed by professional investors than the large cap S&P 500 companies. IR may serve a more important role in information gathering for investors in those companies that are not included in the primary U.S. large cap index. Smaller companies and companies outside the U.S. may need to rely more on their IR function to inform and attract potential investors. S&P 500 companies may exhibit less variation in IR requirements and activities among companies, so studying these non-S&P 500 companies could provide a larger difference between high IR activity companies and low IR activity companies.

Additionally, research can examine the impact of IR activities following a deal on returns in subsequent periods. As companies move from announcements of acquisitions to completion and integration of the acquired entities, investors continue to have informational needs. A review of the role of IR in the post-announcement phase may provide insights into both IR's role and M&A returns.

Besides conference calls and investor ratings, research could also examine other IR activities and characteristics that might influence acquisition outcomes. Review of in-person conferences, site visits, and one-on-one meetings and calls might add more insight into how IR can affect investor views, stock performance, and corporate outcomes. A review of those variables might also provide a better understanding of the ways that investors gain information about prospective investments.

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APPENDICES

VARIABLE DEFINITIONS

Dependent Variables

Acquirer cumulative abnormal return CAR (-2,+2) "CAR"	Cumulative abnormal return for the acquiring company's stock for the 5 days surrounding the acquisition announcement, in which the acquisition date is day 0. Like Upton (2018), the returns are calculated using the market model estimated from 240 days to 41 days before the announcement. The market return is the CRSP value-weighted index return.
Completed deal "Complete"	Binary variable indicating whether the acquisition was ultimately completed by the announcing company - 0 if the acquirer completed the acquisition, 1 otherwise.
Independent Variables	
Preannouncement investor conference calls "Callsbefore"	Number of investor conference calls held by the acquirer in the 365 days prior to the acquisition announcement. This variable is represented by the number of transcripts in the CapitalIQ transcript database.
Post-announcement investor conference call "Callafter"	Binary variable indicating whether the acquiring company held at least one investor conference call between the acquisition announcement date and the two business days following the announcement date (0 if the acquiring company held a call, 1 otherwise).
Institutional Investor "Best IR" buy side poll rank "Top3II"	Binary variable indicating whether the acquiring company ranked in the top 3 places in its sector in the most recent annual "Best Investor Relations" poll conducted by <i>Institutional Investor</i> magazine prior to the announcement.
Control Variables	
Acquirer industry "Industry"	Companies were assigned to industries as follows: Agriculture, Forestry, & Fishing - SIC codes 0-999, Construction - 1500-1799, Finance, Insurance, & Real Estate – 6000-6799, Mining – 1000- 1499, Manufacturing - 2000-3999, Services – 7000-8999, Transportation & Public Utilities - 4000-4999, and Wholesale Trade - 5000-5199.
Acquirer firm size "LogMV"	Log of the market value of equity (USD in millions) four weeks before the acquisition announcement date (from CRSP).

Acquirer market-to-book ratio "AcqMtB"	Acquirer market value of equity four weeks before the acquisition announcement date (from CRSP) divided by the book value of equity in the most recent fiscal year end prior to the announcement date (from Compustat).
Acquirer leverage "Lev"	Book value of acquirer's liabilities (from CRSP) divided by the book value of total assets (from CRSP) as of the most recent fiscal year end before the acquisition announcement.
Acquirer return on equity "ROE"	Acquirer's income excluding extraordinary items for the most recently completed fiscal year before the announcement (from CRSP) divided by the book value of equity as of the most recently completed fiscal year before the announcement (from CRSP)
Form of consideration (cash) "Cash"	Indicator variable - 0 if the announced form of consideration consisted of only cash, 1 otherwise.
Form of consideration (stock) "Stock"	Indicator variable - 0 if the announced form of consideration consisted of only stock, 1 otherwise.
Form of consideration (mixed) "Mixed	Indicator variable - 0 if the announced form of consideration consisted of both cash and stock, 10 otherwise. Item is not included in the model as each observation was Cash, Stock, or Mixed.
Public vs private target "Public"	Binary variable indicating whether the target was public or private - 0 if the target was publicly traded, 1 otherwise.
Diversifying deal "Diversify"	Binary variable indicating whether the target was in the same industry as the acquirer as represented by the two digit SIC code in Thomson Financial SDC - 0 if diversifying, 1 if same industry.
Foreign vs. domestic target "Foreign"	Binary variable indicating whether the target was based in a foreign country or the U.S 0 if foreign, 1 if U.S.
Relative size of transaction to acquiring company "Relsize"	Transaction value divided by the market capitalization of the acquirer four weeks prior to the deal announcement. This variable is only used in the robustness tests for each hypothesis.
Acquirer cumulative abnormal return CAR (-90,-3) "CARbefore"	Cumulative abnormal return for the acquiring company's stock for the period starting 90 days before the deal announcement to three days prior to the deal announcement. Like Upton (2018), the returns are calculated using the market model estimated from 240 days to 41 days before the announcement. The market return is the CRSP value-weighted index return. This variable is only used in the robustness tests for each hypothesis.

VITA

Henry George Kirn, Jr.

Candidate for the Degree of

Doctor of Philosophy

Dissertation: IMPACT OF INVESTOR RELATIONS ON MERGER AND ACQUISITION OUTCOMES

Major Field: Business Administration

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Business Administration at Oklahoma State University, Stillwater, Oklahoma in December, 2020.

Completed the requirements for the Master of Business Administration at Columbia Business School, New York, NY in 2001.

Completed the requirements for the Bachelor of Arts in Business Administration at Franklin & Marshall College, Lancaster, PA in 1993.

Experience:

Aksamit Resource Management [2016] – Advisor to the Founder & Chairman Societe Generale [2014-2016] – Director, Equity Research UBS LLC [2007-2012] – Director, Equity Research Lehman Brothers Inc. [2003-2007] – Associate, Equity Research Lehman Brothers Inc. [2001-2003] – Associate, Investment Banking SEI Investments Corporation [1997-1999] – Business Manager Deloitte & Touche LLP. [1993-1997] – Senior Accountant

Professional Accreditations:

Chartered Financial Analyst (CFA) Charterholder (active) Certified Public Accountant (CPA), Commonwealth of Pennsylvania (active) FINRA Series 7, 63, 87 licenses (expired)

Professional Memberships: Southwestern Finance Association Southern Finance Association American Accounting Association