Investor Relations Executives in the Top Management Team*

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Abstract

We examine the role of investor relations (IR) executives and find that firms incorporating the IRfunction in their top management team are more likely to beat analysts' estimates and exhibit moredownward earnings guidance. We also provide evidence that these firms manage analysts' expectations rather than manage earnings and are more likely to have lower analyst forecast dispersion, a lower probability of informed trading, and fewer earning restatements, all of which suggest that IR executives tend to reduce information asymmetry. Consistent with this, we also find that firms with IR executives experience less capital constraints and lower litigation risk. Foridentification, we first provide results using a difference-in-difference framework that stock returnvolatility and idiosyncratic volatility are lower in firms with IR executives following the 2008 financial crisis relative to firms without IR executives. We also document a faster decrease in option market implied volatility following the exogenous shock of the 9/11 terrorist attacks in firms with IR executives in the top management team relative to firms without. Overall, the evidence is consistent with IR executives improving the alignment between management and investors.

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Keywords: Investor Relations, Top Management, Analyst, Earnings Guidance, Earnings Management

"Jeffrey Kvaal of Nomura Securities says AT&T's investor-relations team "is very diligent" before earnings releases "about making sure that the comments from the executives are reflected in the commentary from the sell side."" - *The Wall Street Journal, August 5. 2016* -

1. Introduction

This paper examines the effect of investor relations (IR) executive's presence in the top management team on expectation management and on managing firms' risks associated market shocks. IR executives' primary activities consist of shareholder relations, disclosure, valuation, and capital formation. Brown (1994) explains that IR executives have a responsibility to provide fair announcements of corporate news and developments that have an influence on the Investors'decision. In managing the disclosure process, IR executives interact with analysts covering the company and are expected to manage analysts' expectations and to reduce market misconceptionsby delivering investment-related information such as strategy, growth plans, and prospects of the firm. In this study, we first explore the role of IR executives on altering analysts' expectations. Next, we explore whether the IR role is associated with earnings management and various proxiesfor the effectiveness of corporate communications.

Prior papers adopted several proxies for IR activities in corporations. For example, Agarwal, Liao, Taffler, and Nash (2014) use IR Magazine ratings and find that firms with higher ratings earn higher than normal returns and liquidity. Chang, D' Anna, Watson, and Wee (2008) use firms with greater disclosure on a firm's IR web page to evaluate its IR activities. Kirk and Vincent (2014) identify firms that have a staff member who has joined the National Investor Relations Institute (NIRI). Most recently, Hope, Huang, and Moldovan (2017) identify IR officers investigating multiple sources such as LinkedIn, Capital IQs, RelationshipScience,com, and press releases. In our study, we create a proxy for capturing the IR function in the top management team. Most public firms, if not all, have employees dedicated to the role of investor relations, however,

not all firms may put as much emphasis on this function of the company. Our goal is to identify firms which emphasize greater communication with investors as is evident by their elevating their investor relation executive to the top management team. We identify these firms by examining the titles of the five highest-paid executives in each firm. Searching the *titleann* variable available in the ExecuComp database, executives' biographies in the Capital IQ, and other multiple public web-based sources, we identify firms that have a top executive whose current title during the fiscal year is closely related to the IR role.[3]

We find that firms with IR executives more frequently beat the analysts' forecast, which signals better management quality to investors and reduces capital market penalties from significant stock price declines. It also increase managers' job security and reduces pressure from the investment community (Skinner and Sloan, 2002; Bartov, Givoly, and Hayn, 2002; Kasznik and McNichols, 2002). One potentially concerning reason that IR firms may beat analyst forecasts is that these firms may manage earnings more aggressively than other firms. However, we find no evidence of greater earnings management, discretionary based or real activities based, in IR firms. Thus, the evidence suggests IR firms are more likely managing investor expectations than managing earnings.

Prior research on corporate disclosure documents that the quality of corporate communication is negatively associated with information asymmetry (Diamond, 1985; Verrecchia, 2001). Consistent with the prior findings of this literature, we find evidence of lower information asymmetry in firms with IR executives. Specifically, we find that analysts forecasts dispersion, the

[3] *titleann* variable shows top executives' official titles for the fiscal year as listed in firms' proxy statements filed with SEC.

probability of informed trading, and earnings restatements are lower for IR firms than non-IR firms.[4] Transparent disclosure and a better information environment can increase the reputation and integrity of management and enhance corporate prospects, which can both increase the ability to raise capital and reduce the likelihood of corporate litigation. Consistent with this conjecture, we find that IR firms are less likely to experience financial constraints and have lower litigation risk. These results are consistent with theoretical argument linking information asymmetry, and corporate disclosure to capital market outcomes (Healy and Palepu, 2001)

Despite the robustness of our main results to various controls and alternative measures used in our main tests, our results are subject to potential endogeneity concerns. For example, there may be other unobservable factors affecting the outcomes we observe and the firms' decision to appoint IR executives to the top management team. To relieve time invariant omitted variable concerns, we control for firm fixed effects and find our primary results continue to hold. To further reduce concerns of endogenous relations we create a matched sample of non-IR firms that are close to IR firms in size (and industry and year) to reduce concerns that our results are driven by firm size. We also create another matched sample using Propensity Score Matching (PSM) to allow for matching on multiple dimensions. We continue to find our primary results consistently hold using these two types of matched samples.

To help establish a causal inference from our results, we exploit two quasi-natural experiments. First, if IR executives indeed create strong communication channels between management and investors, and these directly cause firms to meet or beat earnings targets and a

[4] Analyst forecasts dispersions are also used as a measure of disagreement among investors in finance literature (Diether, Malloy, and Scherbina, 2002; Dittmar and Thakor, 2007; Thakor and Whited, 2011; and Huang and Thakor, 2013).

greater reduction in information asymmetry and litigation risk, we expect clearer casual effects of effectively managing investors' reactions and market evaluations during exogenous environmental shocks to capital markets. Allen (2002) suggests that the IR activities can rebuild investors' trust and maintain their consistent investment preference for firms by establishing reliable communication mechanisms between investors and management. Contrasting IR executive firms with non-IR firms in a difference-in-difference framework using the 2008 financial crisis as an exogenous shock, we find that firms with IR executives indeed better manage investor reactions as evidenced by a swifter reduction of the increased stock return volatility and idiosyncratic volatility following the 2008 financial crisis. [5] Second, we examine changes in option market volatility around the 9/11 terrorist attack, another exogenous shock to capital markets. We observe a faster decline in the sudden increase in option market volatility that occurred due to the 9/11 terrorist attacks in firms with IR executives in the top management team.

Our study contributes to the literature in accounting and finance in several meaningful ways. First, we introduce a more precise measure of the IR function in public corporations. Prior studies evaluate corporate IR activities based on NIRI membership, *IR Magazine* ratings, IR webpage, and IR managers attending earnings conference calls. Corporate membership in NIRI costs only $625 in the year 2017, and the memberships are open to any individual who is engaged in the practice of IR and/or corporate communication in both publicly traded firms and private firms.[6] Thus, membership may not reflect a strong emphasis on IR. Furthermore, these proxies also do not reveal the level of managerial influence those with an IR award or membership have within a

[5] Prior literature argues that the firm's idiosyncratic volatility of stock returns reflects information asymmetry between management and investors (Dierkens 1991; Ferreira and Laux 2007; Krishnaswami and Subramaniam 1999; Moeller, Schlingemann, and Stulz 2007).
[6] See https://www.niri.org/membership/membership-types-requirements.

firm. Our study uses the presence of IR executives in top management team as more reliable IR measure that not only captures the precise degree of IR activities that firms emphasize but also provides a larger cross-sectional variation in S&P 1500 firms and over a longer time series.[7]

Finally, this paper contributes to the corporate governance literature on a firm's information environment. Prior studies show that the corporate information environment is affected by the structure of the board, characteristics of directors, audit committees, and institutional investors (Karamanou and Vafeas, 2005; Ajinkya, Bhojraj, and Sengupta, 2005; Moyer, Chatfiled, and Sisneros, 1989). Our findings indicate that executives with IR roles can also influence the information environment of the firm.

The rest of this paper proceeds as follows. Section 2 reviews the related literature and hypothesis. Section 3 discusses the sample selections and describes our key variables. Section 4 discusses the empirical findings. Finally, section 5 presents the concluding remarks.

2. Literature Review and Hypothesis Development

"Traditionally, investor-relations executives spent most of their time answering questions from shareholders and their proxies. Now they might be called upon to plot strategies for handling hostile investors, respond to environmental, social and governance concerns or navigate changing regulatory requirements." *- The Wall Street Journal, April 6. 2016 -*

2.1. Investor Relation (IR) Executives

[7] We use *titleann* variables mostly because it is the most precise sources to identify top executives' official titles for the fiscal year as listed in firms' proxy statements filed with SEC.

IR functions in firms have attracted substantial public attention in terms of communicating with investors and creating voluntary disclosure. Mahoney (1991) shows that IR activities mainly consist of shareholder relations, disclosure, valuation, and capital formation. Tuominen (1997) and Craven and Marston (1997) suggest that firms gladly incur the costs of executing IR function to create long-term relationships between the firm and its direct and indirect partners in the financial community. Brown (1994) explains that IR executives have a responsibility to provide a fair announcement of corporate news and developments that influence investors' decision. Kim, Sethuraman, and Steffen (2019) show that IR activities lead to greater information precision and reduction of transparency risk in debt markets, and IR role is more important when market uncertainty is high. Allen (2002) suggests that the IR function needs to be on a corporation's top agenda so it can rebuild investor trust by establishing reliable communication mechanisms between investors and itself. A National Investor Relations Institute (NIRI) 2004 report shows that the IR function is a good tool for effectively communicating to promote transparency and enhance corporate value. Gregory (1997) shows that a successful IR program can have a positive impact on the corporate image by creating a feeling of familiarity and favorability.

Several papers also examine the effects of IR activities in a corporation. Karolyi and Liao (2017) find the positive relation between IR programs, as measured by a corporate's involvement in broker-sponsored conferences and firm performance.[8] Agarwal, Taffler, Bellotti, and Nash (2012) find that more IR activity, as measured by IR Magazine Award's Reports for the years 2000, 2001 and 2002 leads to positive abnormal returns, greater stock liquidity, and greater analyst coverage. Kirk and Vincent (2014) identify professional IR from NIRI membership and find that

[8] Karolyi and Liao (2017) use the BNY Mellon's Global Trends in Investor Relations Survey (IRS) conducted between July 12 and September 10 in 2012.

IR teams facilitate the assimilation of corporate information. Interview IR professionals at 11 small and mid-cap firms and document that IR firms exhibit greater institutional ownership, analyst following, and media coverage. Chapman, Miller, White (2019) and Chapman, Miller, Neilson and White (2020) identify IR officers from earnings conference calls and find that IR teams have lower stock price volatility, lower analyst forecast dispersion, and quicker price discovery. Brown, Call, Clement, and Sharp (2019) survey and interview 610 IR officers and document that IR officers consider private phone calls are more important sources than firms' periodical reports or on-site visits. Hope, Huang, and Moldovan (2017) track the employment history of IR officers using LinkedIn, Capital IQ, and press releases and find that hiring financial analysts as IR officers lead to greater disclosure readability, analyst coverage, institutional investors, and stock liquidity.[9]

2.2. Expectations Management

Prior literature in accounting and finance documents much evidence on the tremendous capital market penalties associated with failing to meet analysts' forecast expectations. Skinner and Sloan (2002) show that even small negative surprises result in a significant stock price decline, which suggests that investors view missing analysts' targets as evidence of firms' substantial underperformance. Graham et al. (2005), based on their survey of 400 corporate executives, find that missing earnings targets increases managers' concerns about reputation and job security, and pressure from the investment community.

On the contrary, meeting or beating analysts' earnings forecast leads to incremental benefits and investors view meeting or beating earnings targets as signaling the good quality of

[9] While this recent paper takes having an IR executives as a given and then look at a specific type of IR executives, our paper examines which firms put more emphasis on the IR role by having them in the top management team.

management. (Bartov, Givoly and Hayn, 2002; Chen, DeFond and Park,2000; Kasznik and McNichols, 2002; and Lopez and Rees ,2000).

Kzsznik and McNichols (2002) document the evidence of a positive market reaction as a reward given to managers for meeting or slightly exceeding analysts' expectations. Hence, managers are often under pressure to meet or beat earning expectations to reduce market uncertainty about the firm's prospects and to avoid this negative impact on shareholder value and a negative assessment of their ability in the managerial labor market.

2.3. Role of the Investor Relation Executive: Expectations Management

As the value of a reliable communication mechanism between firms and their investors has become highly recognized as a key component of corporate practices, the role of the IR function in the top management team has also evolved into one of the central corporate strategies for providing corporate information to the capital market.[10]

Although the minimum disclosure is required for publicly traded firms by the Securities and Exchange Commission (SEC), firms may provide substantially different amounts of additional information to the capital markets. Lang and Lundholm (1996) find that a firm's management often communicates directly with financial analysts to provide corporate information for their evaluations. For example, in addition to documentary reports such as 10-Ks and proxy statements prepared by firms, analysts also gather important corporate information in various ways such as

[10] Edelman (1992, p.1535) notes that when firms are faced with pressure given potential conflicts between firms and investors, top management rigorously seeks to manage investor relations by hiring managers, which signals their commitment to investors' rights.

the conference calls, and formal presentations by a firm's executives (e.g., The Wall Street briefing).

In managing the disclosure process, IR executives interact with analysts covering the company and they are expected to manage analysts' expectations and to reduce market misconceptions by delivering the investment-related information such strategy, growth plans, and prospect of the firm. This leads to our first hypothesis:

Hypothesis 1: Firms with IR executives are more likely to achieve earnings targets by beating analysts' earnings estimates.

Given the substantial interests for expectations management, several studies introduce both analysts' expectations management and earnings management as instruments typically used by managers to achieve analyst forecast targets (Matsumoto, 2002; Burgstahler and Eames 2006). The earnings management studies show that firms reporting earnings that meet or exceed analysts' forecast targets tend to have a great frequency of positive discretionary accruals (Matsumoto, 2002; Dechow et al., 1995). Roychowdhury (2006) suggests that managers may use real activities as part of earnings management. Although managers could use accrual or real activity earnings management to achieve an earnings target, firms are increasingly employing expectation management to achieve the earnings target. Specifically, managers manage analysts' earnings expectation targets downward to avoid the likelihood of missing the analysts' targets. This action is widely used due to increased monitoring, lower litigation costs, and less detriment to firms' long-term value (Graham, Harvey, and Rajgopal 2005; Athanasakou, Strong, and Walker, 2011), and requires a stronger communication mechanism between management and investors. Related

to these reasons for expectation management and to expectations for IR executives to promote transparency in the disclosure process, our second hypothesis arises as follows:

Hypothesis 2a: Firms with IR executives are more likely to manage investors' expectations.

Hypothesis 2b: Firms with IR executives are less likely to manage earnings.

2.4. Role of the Investor Relation Executive: Information Asymmetry

Prior research finds that the quality of corporate communication is negatively associated with information asymmetry and positively associated with corporate disclosure (Diamond, 1985; Verrecchia, 2001). As suggested in the prior studies, firms can increase the amount and quality of corporate information available to investors through communication mechanisms in corporations. We previously argued that IR executives foster effective communication between management and investors. Thus their roles reflect greater corporate information environment to investors. This leads to our third hypothesis:

Hypothesis 3a: Firms with IR executives reduce information asymmetry.

2.5. The Role of Investor Relation Executive: Financial Constraints and Litigation risk.

Firms need to raise funds in the capital markets, and the reputation of management can be associated with the ability to raise the capital (La Porta et al., 2000). One way to build a great reputation among firms is to have a transparent disclosure policy and maintain strong investor relations. Shane and Cable (2002) find that the firm's enhanced information environment leads to easier access to external financing.

Hypothesis 3b: Firms with IR executives reduce financial constraints.

The corporate litigation costs are not trivial and entail large market value losses, legal costs, settlement costs, and reputational losses. We also argue that firms with IR executives can mitigate litigation risk by attempting to effectively relieve hostile investors' concerns.

Hypothesis 3c: Firms with IR executives reduce litigation risk.

3. Data Selections and Key Variables

3.1. Investor Relations Executives

We identify the executive serving in the role of investor relations using the *titleann* variable from Execucomp database.[11] Specifically, *titleann* contains executives' historical titles listed in the proxy statement for the indicated fiscal year.

We restrict our full sample to S&P 1500 firms from the fiscal years 2006 to 2016. Then, we manually search each executive's title associated with the keywords "investor relations," "client relations," "public relations," "communications officer," "external affair," "corporate

[11] We use *titleann* variables because it is the most precise sources to identify top executives' official titles for the fiscal year as listed in firms' proxy statements filed with SEC.

strategy and development," and "customer officer".[12] For an executive whose title is related to public relations, communications officer, external affairs, corporate strategy and development, or customer officer, we further investigate their biographies in capital IQ and available on the firm. The IR role sometimes overlaps with other corporate roles' website to confirm that they indeed serve the function of IR in a top management team.[13] Using this criterion and procedures, we identify 348 unique S&P 1500 firms that have an IR executive. The firm-level descriptive statistics are stated in Table 1.

3.2. Analyst Data

We obtained sell-side analyst data from the Institutional Brokers Estimate System (IBES) database. To create the measure of beating analyst expectations, we use the median consensus analyst forecast from the adjusted summary file in the IBES database. Thus, our dependent variable, *BEAT* is defined as an indicator variable equals one if the actual earnings exceed the latest median consensus forecasts for the fiscal year (Doyle, Jennings, Soliman, 2013).[14] We define *Down guidance* as a proxy for investors' expectation management, and it is an indicator variable equals one, if the first consensus analyst forecast of EPS after the fiscal year-end exceeds the latest

[12] The IR role sometimes overlaps with other corporate roles, such as competitive intelligence, corporate development, and strategic planning (http://www.kornferry.com/institute/investor-relations-officers-201415-survey-ir-leaders-fortune-500#sthash.hN6aICh1.dpuf).

[13] For example, Bruce Bowden in *Nuance* is affiliated with the title of corporate strategy and development. In his biography on the firm's website (http://www.nuance.com/company/company-overview/leadership-team/index.htm), he is responsible for Nuance's investor relations.

[14] We also create an alternative measure that equals one if the actual earnings equal and exceed the latest median consensus forecasts for the fiscal year, and find the similar results.

consensus analyst forecast before the final fiscal year earnings are announced (Das, Kim, Patro, 2011; Thakor and Whited, 2011).[15]

3.3. Measurements of Information Asymmetry

We measure the firm's information asymmetry by using three measures, Analysts' forecast dispersion, probability informed trading and earnings restatement. Analysts' forecast dispersion is computed as the absolute difference between the mean analyst forecast of the annual earnings per share prior to the earnings announcement and the actual earnings in a given year. Lang and Lundholm (1996) argue that analysts' forecasts dispersion reflects corporate information asymmetry. *PIN* is probability informed trading proxy for information asymmetry as calculated in Easley, Hvidkjaer, and O'Hara (2002). A higher PIN value indicates more information asymmetry. *Restatement* is defined as an indicator variable equals 1 if a firm restates its revenue (Hennes, Leone, and Miller, 2008).

3.4. Other Outcome Variables and Controls

We use the standard deviation of a firm's CRSP daily returns and idiosyncratic volatility as measurements of that firm's stock return volatility. Idiosyncratic volatility is computed in the specification of Ang, Hodrick, Xing, and Zhang (2006). To measure earnings management, we use several easements. Our first measure of earnings management is discretionary accruals. In the earnings management literature, discretionary accruals are widely used as a proxy for accrual-based earnings management. Following the literature, we use the modified Jones model (Jones,

[15] Elton, Gruber, and Gultekin (1984) show that downward guidance of analysts' forecasts may be worse at fiscal year-end. We also create an alternative downward guidance measure by comparing the median analyst forecast for the last quarter with the latest analyst forecast before the earnings announcement date, and find the similar results.

1991; and Dechow, Sloan, and Sweeney, 1995), which estimates discretionary accruals from cross-sectional regressions of total accruals on changes in sales and on property, plant, and equipment (PPE) within industries. The *KZ index* is used as a proxy for a firm's financial constraint as described in Kaplan and Zingales (1997). *Lawsuit* is defined as an indicator variable that equals 1 if the firm is the target of a class action lawsuit. We obtained accounting data from Compustat and annual stock return data from CRSP. In the regression models, we control for firm size, leverage, growth opportunities, firm age, profitability, and stock return and return volatility. We also control manager and corporate governance-specific variables such as CEO ownership, institutional ownership, the percentage of independent directors, and board size.

4. Empirical Results

4.1. Beating Earnings Expectations

Severe stock price decline to missing earnings targets and a market reward to achieving earnings target give managers strong incentives to beating analysts' forecasts. We argue that firms with IR executives are more likely to achieve their earnings targets by beating analysts' earnings estimates. The dependent variable, *BEAT,* is defined as an indicator variable that equals one if the difference between the actual earning and the latest median consensus forecast for the fiscal year is greater than zero. Column 1 of Table 2 shows that *IR Executive firm* is positively associated with *BEAT.* Column 3 of Table 2 shows the robustness results using the linear probability model (LPM) controlling for firm fixed effects. The results show that the probability of beating analysts' earnings targets is approximately 11% higher for firms with IR executives. Earnings surprises

exceeding many cents per share may not best represent forecast guidance or earning management as these surprising observations are unlikely to reflect IR executives' efforts to avoid negative earnings surprises. Degeorge, Patel, and Zeckhauser (1999) argue that firms target small positive earnings to avoid the greater uncertainty of earnings outcomes. Thus, for the robustness check, we examine the finer level of earnings surprises using the subsample of firms with earnings surprises between -3 cents and + 3 cents per share (Doyle, Jennings, and Soliman, 2013; Degeorge, Patel, Zeckhauser,1999; Keung, Lin, and Shih, 2009). We find similar results in column 4 of Table 2. Overall, these results indicate that firms with IR executives experience more frequent beating analysts' earnings forecasts.

4.2. Investor Expectation Management

Managers typically use both expectation management and earnings management as possible instruments to achieve earnings targets. Expectation management is widely used due to increased monitoring, lower litigation costs, and maintaining long-term value. Downward earnings guidance may require strong communication channel between management and investors. Table 3 shows that the coefficient of *IR Executive Firm* is positive and statistically significant, which indicates the positive relation between IR executive presence in the top management team and investor expectation management. In column 3, we use LPM with firm fixed effect and find that probability of managing investor's expectation is 7.1% higher for firms with IR executives.

4.3. Earnings Management

Managers might rely on earnings manipulation to increase earnings. In Table 4, we examine the effects of an IR executive's presence in the top management team on various

measurements of earnings management. We create seven measures used to capture accrual-based and real earnings management.

To capture accrual-based earnings management, we use discretionary current accruals, the absolute value of discretionary accruals, and total accruals using the modified Jones (1991) model. To capture real earnings management, we use an abnormal production (*Prod. Transaction mgt.*), and abnormal cash flow from operations (*Cash Flow Transaction mgt.*), and abnormal discretionary expenses (*Exp. Transaction mgt.*) as calculated in Roychowdhury (2006). Firms that manage earnings are more likely to have unusually low *Cash Flow Transaction mgt.*, unusually low *Exp. Transaction mgt., and* unusually high *Prod. Transaction mgt.* We also construct Total Real Earnings by production transaction management minus cash flow transaction management minus discretionary expenses transaction management so that higher values of this comprehensive measure indicate greater real earnings management. Table 4 shows that the coefficients of *IR Executive Firm* in models 2 to 7 are not statically significant, and the signs of these coefficients are consistent mostly with our expectations. Column 1 in Table 4 shows that the coefficient of *IR Executive frim* is negative and marginally significant at a 10 % level suggesting that firms with IR executives tend to have lower discretionary accruals. In summary, the results in Tables 3 and 4 indicate that firms with IR executives tend to manage investor expectation rather than earnings to beat the analysts' estimates.

4.4. Information Asymmetry

In addition to prior findings, we investigate the impact the IR executive on the transparency of the firm's information environment. Other things equal, firms with IR executives are more likely to have greater informative firm environments that can be used to infer the quality of the managers

or corporate governance. Pan, Wang, and Weisback (2015) find that more transparent firms tend to have the market's positive assessment of the firm's prospects and this lower the firm's risk. Lang and Lundholm (1996) find firms with more informative disclosure policies experience less information asymmetry.

We measure the firm's information asymmetry using three measures, Analyst forecast dispersion, probability informed trading and earnings restatement. We expect lower analyst forecast dispersion, lower probability informed trading, and lower earnings restatement for firms with IR executives. All coefficients of information asymmetry measures in Table 5 reveal negative signs, which indicate that firms with IR executives experience less information asymmetry. In other words, the IR executive's presence is associated with a firm's more transparent information environment.

4.5. Financial Constraints and Litigation Risk

Informative environment and strong IR in a firm may affect several corporate outcomes driven by the market's assessment of the quality of firms. For example, a firm's enhanced information environment and reputation of management or directors provide easier access to external financing and lower litigation risk(Shane and Cable, 2002; Malm and Mobbs, 2017; Cao and Narayanamoorthy, 2011). We argue that IR executives may lower the idiosyncratic constraints that a firm face in financing operations and strategic projects. We use a *KZ index* as a proxy for the firm's financial constraint as described in Kaplan and Zingales (1997). Table 6 shows that firms with IR executives experience less difficulty in obtaining external financing.

The cost of corporate litigation is not trivial. Lawsuits lead to large losses in market value, legal costs, potential court penalties or settlement costs, reputational losses, and management time.

We examine if firms with IR executives manage the litigation environment. Specifically, we test our conjecture that firms with IR executives attempt to differentiate IR that can affect the future litigation risk. IR executives can mitigate litigation severity through the communication channel they created. We define lawsuit as an indicator variable that equals 1 if the firm is the target of a class action lawsuit. Table 7 shows that firms with IR executives indeed experience fewer corporate lawsuits.

4.6. Difference-in-Difference Analysis: Stock Return Volatility

Thus, far we see that firms with IR executives more frequently beat earnings expectations by guiding investors' expectations and reduce information asymmetry, financial constraints, and litigation risk. If firms with IR executives effectively manage their IR, we expect a faster decline of risks in these firms following any negative events that affect investors' behaviors.

In this section, using difference-in-difference analysis, we show that firms with IR executives reduce the increase in the firm's volatility following the 2008 financial crisis. We use the standard deviation of a firm's CRSP daily stock returns and idiosyncratic volatility as measurements of a firm's stock return volatility. Idiosyncratic volatility is computed in the specification of Ang, Hodrick, Xing, and Zhang (2006).

In the difference-in-difference model, *2008 Crisis 1 Year* is defined as an indicator variable that equals one if the observation occurs in the fiscal year 2007, and zero if the observation occurs in the fiscal year 2009. The *2008 Crisis 2 Year* is an indicator variable that equals one if the observation occurs in the fiscal year 2006 or 2007, and zero if the observation occurs in the fiscal year 2009 or 2010. The coefficients on the interaction terms between *IR Executive Firm* and *2008 Crisis 1 (2) Year* in model 1 to model 4 of Table 7 are between - 0.413 and - 0.455, and are

statistically significant, suggesting that the increased stock return volatility and idiosyncratic volatility following the 2008 financial crisis are about 41% - 46% lower for firms with IR executives relative to firms without IR executives in the top management team.

In Figure 1, we also observe that the increases in option market implied volatility and stock return volatility are lower for a firm with IR executives following the 9/11 terrorist attacks. The 9/11 attacks represent a clearly exogenous environmental shock to the market that resulted in greater uncertainty. Implied volatility is the daily average of the implied volatility calculated based on the daily price of the thirty-day at-the-money call options on the firm's common stock (Christensen, Prabhala, 1998). Thus, this measure reflects the market's forward-looking evaluation of the firm's risk (Pan, Wang, Weisbach, 2015). Stock return volatility is the standard deviation of CRSP daily stock return within a month. Overall, these results show that firms with IR executives reduce the firm's risk by managing investor reactions.

4.7. Matched Sample

In our previous analysis, we showed that firms with IR executives were more likely to beat analysts forecast targets. However, our results can be mostly driven by the heterogeneous firm size of non-IR executive firms, which may introduce endogenous relations. We repeat our main analysis using a sized and industry matched sample of non-IR executive firms. For each year, we match each IR executive firm with three non-IR executive firms in the same Fama-French 48 Industry classification that is closest in size (market capitalization) to the IR executive firm. We

discard IR executive firms for which we cannot find at least one match such that the absolute value of the difference between its size and the IR executive firm's size is within 30% of the IR executive firm's size.[16] This matched sample allows us to examine all our previous results by minimizing a firm size effect or industry effects. In Table 8, we observe that IR executive firms tend to frequently beat earnings expectations by managing investor expectations. These robustness results confirm our primary findings discussed earlier while mitigating concerns that firm size or other endogenous relations are leading to the relations between IR executives' presence in top management teams and earnings expectations.

5. Conclusion

In this paper, we study the role of IR executives in a top management team for managing investors' expectations and reducing information asymmetry, financial constraints, and corporate litigation. We find that firms with IR executives are more likely to beat analysts' forecasts by investor expectation management instead of earnings management. As creating a greater communication mechanism between management and investors, IR executive firms create a more informative corporate environment as evidence of lower information asymmetry. These firms also experience easier access to external financing and less severe litigation risk. Our results are robust to firm fixed effect models, matched samples, and difference-in-difference model.

[16] When we use the propensity score matched sample, we obtain similar results.

References

Agarwal, V., Liao, A., Taffler, R. and Nash, E., 2008. The impact of effective investor relations on market value. Working paper, Available at SSRN 1102644.

Ajinkya, B., Bhojraj, S. and Sengupta, P., 2005. The association between outside directors, institutional investors and the properties of management earnings forecasts. Journal of Accounting Research, 43(3), pp.343-376.

Allen, C.E., 2002. Building mountains in a flat landscape: investor relations in the post-Enron era. Corporate Communications: An International Journal, 7(4), pp.206-211.

Ang, A., Hodrick, R.J., Xing, Y. and Zhang, X., 2006. The cross-section of volatility and expected returns. The Journal of Finance, 61(1), pp.259-299.

Athanasakou, V., Strong, N.C. and Walker, M., 2011. The market reward for achieving analyst earnings expectations: does managing expectations or earnings matter?. Journal of Business Finance & Accounting, 38(1-2), pp.58-94.

Bartov, E., Givoly, D. and Hayn, C., 2002. The rewards to meeting or beating earnings expectations. Journal of Accounting and Economics, 33(2), pp.173-204.

Benmelech, E. and Frydman, C., 2015. Military CEOs. Journal of Financial Economics, 117(1), pp.43-59.

Brown, L.D., Call, A.C., Clement, M.B. and Sharp, N.Y., 2019. Managing the narrative: Investor relations officers and corporate disclosure☆. Journal of Accounting and Economics, 67(1), pp.58-79.

Brown, L.F., 1995. Getting a grip on investor relations. DIRECTORS AND BOARDS-AMERICAN EDITION-, 19, pp.44-44.

Burgstahler, D. and Eames, M., 2006. Management of earnings and analysts' forecasts to achieve zero and small positive earnings surprises. Journal of Business Finance & Accounting, 33(5-6), pp.633-652.

Cain, M.D. and McKeon, S.B., 2016. CEO personal risk-taking and corporate policies. Journal of Financial and Quantitative Analysis, 51(01), pp.139-164.

Cao, Z. and Narayanamoorthy, G.S., 2011. The effect of litigation risk on management earnings forecasts. Contemporary Accounting Research, 28(1), pp.125-173.

Chang, M., D'Anna, G., Watson, I. and Wee, M., 2008. Does disclosure quality via investor relations affect information asymmetry?. Australian Journal of management, 33(2), pp.375-390.

Chapman, K., Miller, G.S. and White, H.D., 2019. Investor relations and information assimilation. The Accounting Review, 94(2), pp.105-131.

Chapman, K., Miller, G.S., Neilson, J. and White, H.D., 2020. Shareholder Activism and Firm Engagement. Working Paper

Chen, S., DeFond, M.L. and Park, C.W., 2002. Voluntary disclosure of balance sheet information in quarterly earnings announcements. Journal of Accounting and Economics, 33(2), pp.229-251.

Christensen, B.J. and Prabhala, N.R., 1998. The relation between implied and realized volatility. Journal of Financial Economics, 50(2), pp.125-150.

Craven, B.M. and Marston, C.L., 1997. Investor relations and corporate governance in large UK companies. Corporate Governance: An International Review, 5(3), pp.137-151.

Custódio, C., Ferreira, M.A. and Matos, P., 2013. Generalists versus Specialists: Lifetime work experience and chief executive officer pay. Journal of Financial Economics, 108(2), pp.471-492.

Das, S., Kim, K. and Patro, S., 2011. An analysis of managerial use and market consequences of earnings management and expectation management. The Accounting Review, 86(6), pp.1935-1967.

Dechow, P.M., Sloan, R.G. and Sweeney, A.P., 1995. Detecting earnings management. Accounting review, pp.193-225.

Degeorge, F., Patel, J. and Zeckhauser, R., 1999. Earnings management to exceed thresholds. The Journal of Business, 72(1), pp.1-33.

Diamond, D.W., 1985. Optimal release of information by firms. The journal of finance, 40(4), pp.1071-1094.

Dierkens, N., 1991. Information asymmetry and equity issues. Journal of financial and quantitative analysis, 26(2), pp.181-199.

Diether, K.B., Malloy, C.J. and Scherbina, A., 2002. Differences of opinion and the cross section of stock returns. The Journal of Finance, 57(5), pp.2113-2141.

Dittmar, A. and Thakor, A., 2007. Why do firms issue equity?. The Journal of Finance, 62(1), pp.1-54.

Doyle, J.T., Jennings, J.N. and Soliman, M.T., 2013. Do managers define non-GAAP earnings to meet or beat analyst forecasts?. Journal of Accounting and Economics, 56(1), pp.40-56.

Easley, D., Hvidkjaer, S. and O'hara, M., 2002. Is information risk a determinant of asset returns?. The journal of finance, 57(5), pp.2185-2221.

Edelman, L.B., 1992. Legal ambiguity and symbolic structures: Organizational mediation of civil rights law. American journal of Sociology, 97(6), pp.1531-1576.

Elton, E.J., Gruber, M.J. and Gultekin, M.N., 1984. Professional expectations: Accurary and diagonosis of errors. Journal of Financial and Quantitative Analysis, 19(04), pp.351-363.

Ferreira, M.A. and Laux, P.A., 2007. Corporate governance, idiosyncratic risk, and information flow. The Journal of Finance, 62(2), pp.951-989.

Gregory, J.R., 1997. Part III: Measuring and valuing reputations: ROI: Calculating advertising's impact on stock price. Corporate Reputation Review, 1(1), pp.56-60.

Graham, J.R., Harvey, C.R. and Rajgopal, S., 2005. The economic implications of corporate financial reporting. Journal of accounting and economics, 40(1), pp.3-73.

Healy, P.M. and Palepu, K.G., 2001. Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. Journal of accounting and economics, 31(1), pp.405-440.

Hennes, K.M., Leone, A.J. and Miller, B.P., 2008. The importance of distinguishing errors from irregularities in restatement research: The case of restatements and CEO/CFO turnover. The Accounting Review, 83(6), pp.1487-1519.

Hope, O.K., Huang, Z., Moldovan, R., 2017. Economic Consequences of Hiring Wall Street Analysts as Investor Relations Officers. Working paper.

Huang, S. and Thakor, A.V., 2013. Investor heterogeneity, investor-management disagreement and share repurchases. Review of Financial Studies, 26(10), pp.2453-2491.

Hutton, I., Jiang, D. and Kumar, A., 2014. Corporate policies of Republican managers. Journal of Financial and Quantitative Analysis, 49(5-6), pp.1279-1310.

Jones, J.J., 1991. Earnings management during import relief investigations. Journal of accounting research, pp.193-228.

Kaplan, S.N. and Zingales, L., 1997. Do investment-cash flow sensitivities provide useful measures of financing constraints?. The Quarterly Journal of Economics, 112(1), pp.169-215.

Karamanou, I. and Vafeas, N., 2005. The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. Journal of Accounting research, 43(3), pp.453-486.

Karolyi, G.A. and Liao, R.C., 2017. The economic consequences of investor relations: A global perspective. Working paper.

Kasznik, R. and McNichols, M.F., 2002. Does meeting earnings expectations matter? Evidence from analyst forecast revisions and share prices. Journal of Accounting research, 40(3), pp.727-759.

Keung, E., LIN, Z.X. and Shih, M., 2010. Does the stock market see a zero or small positive earnings surprise as a red flag?. Journal of Accounting Research, 48(1), pp.91-121.

Kim, E., Sethuraman, M. and Steffen, T.D., 2019. The Informational Role of Investor Relations Officers: Evidence from the Debt Market. Available at SSRN 3297289.

Kirk, M.P. and Vincent, J.D., 2014. Professional investor relations within the firm. The Accounting Review, 89(4), pp.1421-1452.

Krishnaswami, S. and Subramaniam, V., 1999. Information asymmetry, valuation, and the corporate spin-off decision. Journal of Financial economics, 53(1), pp.73-112.

Lang, M.H. and Lundholm, R.J., 1996. Corporate disclosure policy and analyst behavior. Accounting review, pp.467-492.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R., 2000. Investor protection and corporate governance. Journal of financial economics, 58(1), pp.3-27.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W., 2000. Agency problems and dividend policies around the world. The journal of finance, 55(1), pp.1-33.

Lopez, T.J. and Rees, L., 2002. The effect of beating and missing analysts' forecasts on the information content of unexpected earnings. Journal of Accounting, Auditing & Finance, 17(2), pp.155-184.

Mahoney, W.F., 1991. Investor relations: the professional's guide to financial marketing and communications. New York Inst. of Finance.

Malm, J. and Mobbs, S., 2017. Independent directors and corporate litigation. Working paper, Available at SSRN 2468536.

Malmendier, U. and Tate, G., 2005. CEO overconfidence and corporate investment. The journal of finance, 60(6), pp.2661-2700.

Matsumoto, D.A., 2002. Management's incentives to avoid negative earnings surprises. The Accounting Review, 77(3), pp.483-514.

Mobbs, S. and Yan, X., 2017. CEOs with Law Backgrounds. Working paper.

Moeller, S.B., Schlingemann, F.P. and Stulz, R.M., 2007. How do diversity of opinion and information asymmetry affect acquirer returns?. Review of Financial Studies, 20(6), pp.2047-2078.

Moyer, R.C., Chatfield, R.E. and Sisneros, P.M., 1989. Security analyst monitoring activity: Agency costs and information demands. Journal of Financial and Quantitative Analysis, 24(04), pp.503-512.

NIRI (2016). Definition of Investor Relations. The National Investor Relations Institute. Available at: https://www.niri.org/about-niri

Pan, Y., Wang, T.Y. and Weisbach, M.S., 2015. Learning about CEO ability and stock return volatility. Review of Financial Studies, p.hhv014.

Roychowdhury, S., 2006. Earnings management through real activities manipulation. Journal of accounting and economics, 42(3), pp.335-370.

Shane, S. and Cable, D., 2002. Network ties, reputation, and the financing of new ventures. Management Science, 48(3), pp.364-381.

Skinner, D.J. and Sloan, R.G., 2002. Earnings surprises, growth expectations, and stock returns or don't let an earnings torpedo sink your portfolio. Review of accounting studies, 7(2), pp.289-312.

Sunder, J., Sunder, S.V. and Zhang, J., 2017. Pilot CEOs and corporate innovation. Journal of Financial Economics, 123(1), pp.209-224.

Thakor, A.V. and Whited, T.M., 2011. Shareholder-manager disagreement and corporate investment. Review of Finance, 15(2), pp.277-300.

Tuominen, P., 1997. Investor relations: a Nordic School approach. Corporate Communications: An International Journal, 2(1), pp.46-55.

Verrecchia, R.E., 2001. Essays on disclosure. Journal of accounting and economics, 32(1), pp.97-180.

Table 1. Firm-level descriptive statistics

This table reports summary statistics for various firm-year-level variables for from fiscal years 2006 to 2016. We exclude finance and utility firms. *IR Executive Firm* is an indicator variable equals one if the firm has a C-suit executive whose title is associated with the role of investor relations, and zero otherwise. *BEAT* is an indicator variable equals one if the actual earning is greater than the latest forecast for each fiscal year, and zero otherwise. *Down guidance* is an indicator variable equals one if the first consensus analyst forecast of EPS after the fiscal year-end exceeds the latest consensus analyst forecast before the final fiscal year earnings are announced. *Number of analysts* is the average of the 12-monthly number of earnings forecasts of a particular firm in each fiscal year. *Forecast dispersion* is the standard deviation of analysts' forecast variance in each fiscal year. *Total Market Value* is the natural logarithm of firm value as calculated in Gabaix and Landier (2008). *Market to book* is the ratio of market value of equity to book value of equity. *Stock Return* is the twelve months monthly compounded return during the fiscal year. *ROA* is defined by net income divided by total book assets. *Leverage* is computed by (Year-ending Long-term Debt plus Debt in Current Liabilities) / year-end Total Assets. *Stock volatility* is the standard deviation of daily stock return for 12 months. *Idiosyncratic risk* is computed as described in Hodrick, Xing, and Zhang (2006). *Same brokerage* is the average number of analysts employed by the brokerage houses that employ the firm's analysts. *Discretionary accruals* are computed using the modified Jones (1991) model. | *Discretionary accruals* | is an absolute value of discretionary accruals are computed using the modified Jones (1991) model. *Total accruals* are computed by the change in current assets minus the change in cash and short term investments minus the change in current liabilities plus the change in debt in current liabilities minus depreciation all scaled by beginning year total assets. *Total Real Earnings* are computed by production transaction management minus cash flow transaction management minus discretionary expenses transaction management as calculated in Roychowdhury (2006). *Cash Flow Transaction mgt.* is an abnormal cash flow from operations, which is calculated as the actual cash flow from operations minus the predicted value based on the estimation model in Roychowdhury (2006). *Exp. Transaction mgt.* is abnormal discretionary expenses, which is calculated as the actual discretionary expenses (advertising, R&D, and SG&A) minus the predicted value based on the estimation models in Roychowdhury (2006). *Prod. Transaction mgt.* is an abnormal production, which is calculated as the actual production costs (COGS and changes in inventory) minus the predicted value based on the estimation model in Roychowdhury (2006). *Lawsuit* is an indictor variable equals 1 if the firm is the target of a class action lawsuit. Source: Stanford Law School Securities Litigation database. *Firm Age* is the number of years a firm is listed in CRSP. *Institutional Holdings* is the percent ownership form institutions. *Board Size* is the number of directors on the board. *R&D Intensity* is computed as R&D divided by total assets. *Restatement* is an indicator variable equals 1 if a firm restates its revenue. *KZ index* is an index of financial constraints as calculated in Kaplan and Zingales (1997). *PIN* is probability informed trading proxy for information asymmetry as calculated in Easley, Hvidkjaer, and O'Hara (2002). *Independent director* is the percent of board members for whom this directorship is their only directorship. *CEO ownership* is the percent of common shares outstanding held by the CEO, including fully exercised stock options.

Firm level sample statistics (Fiscal year 2006-2016)

	N	Mean	Std. dev.	p25	Median	p75
IR Executive Firm	9,234	0.062	0.242	0	0	0
BEAT	9,234	0.619	0.486	0	1	1
Down Guidance	9,234	0.269	0.444	0	0	1
Number of Analysts	9,234	7.080	4.376	3.776	6.211	9.471
Same Brokerage	9,234	12.62	8.398	6	11	17
Discretionary Accruals	9,234	0.034	2.476	-0.069	0.006	0.087
| Discretionary Accruals |	9,234	0.345	0.873	0.029	0.077	0.251
Total Accruals	9,234	-0.038	0.066	-0.069	-0.037	-0.008
Total Market Value ($ mil)	9,234	1145	3317	1054	2480	7767
Market to Book	9,234	1.679	1.125	0.940	1.340	2.041
Stock Return	9,234	0.083	0.441	-0.124	0.121	0.333
ROA	9,234	0.051	0.114	0.026	0.059	0.097
Leverage	9,234	0.197	0.176	0.026	0.181	0.303
Stock volatility	9,234	0.865	0.972	0.325	0.559	1.019
Idiosyncratic risk	9,234	0.542	0.765	0.209	0.361	0.622
CEO ownership	9,234	2.102	5.774	0.104	0.338	1.120
Firm age	9,234	3.108	0.637	2.639	3.045	3.714
Institutional holdings	9,234	0.828	0.193	0.726	0.845	0.945
Total Real Earnings	8,910	0.231	1.323	-0.078	0.076	0.379
Cash Flow Transaction mgt.	8,910	-0.111	1.104	-0.198	-0.044	0.069
Exp. Transaction mgt.	8,910	0.166	0.587	-0.002	0.094	0.277
Prod. Transaction mgt.	8,910	-0.231	1.323	-0.379	-0.076	0.078
Independent directors	8,842	0.761	0.126	0.667	0.778	0.875
Board size	8,842	9.013	2.096	7	9	10
R&D intensity	8,842	0.000	0.000	0	0.000	0.000
Forecast dispersion	8,842	0.092	0.282	0.024	0.043	0.084
Restatement	8,540	0.060	0.238	0	0	0
Lawsuit	8,540	0.034	0.168	0	0	0
KZ index	8,540	0.760	1.331	0.197	0.641	1.070
PIN	6,612	0.101	0.041	0.074	0.097	0.122

Table 2. Achieving Earnings Target

The table shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on the likelihood of beating analysts' consensus of EPS estimates. The dependent variable *BEAT* is an indicator variable equals one if the actual earning is greater than the latest forecast for each fiscal year, and zero otherwise. Results of Colum 4 are obtained by the sub sample of firms with earnings surprises between -3 cents per share and +3 cents per share (see, Doyle, Jennings, Soliman, 2013). *IR Executive Firm* is an indicator variable equals one if the firm has a C-suit executive whose title is associated with the role of investor relations, and zero otherwise. All other independent variables are described in the Appendix. Standard errors are clustered at the firm level and t-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

	Dependent Variable: BEAT			
	Full Sample			[-0.03, +0.03]
	Logit	LPM	LPM	LPM
VARIABLES	(1)	(2)	(3)	(4)
IR Executive Firm	0.292***	0.071***	0.120***	0.140***
	(2.78)	(2.81)	(3.01)	(3.18)
Controls	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	No	No
Firm F.E.	No	No	Yes	Yes
Observations	9,234	9,234	9,234	4,827
R-squared / Pseudo	0.2362	0.2422	0.2131	0.2102

Table 3. Managing Investor Expectations

The table shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on the likelihood of guidance of analysts' estimates. The dependent variable *Down guidance* is an indicator variable equals one if the first consensus analyst forecast of EPS after the fiscal year-end exceeds the latest consensus analyst forecast before the final fiscal year earnings are announced. *IR Executive Firm* is an indicator variable equals one if the firm has a C-suit executive whose title is associated with the role of investor relations, and zero otherwise. All other independent variables are described in the Appendix. Standard errors are clustered at the firm level and t-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

	Dependent Variable: Down guidance		
	Logit	LPM	LPM
VARIABLES	(1)	(2)	(3)
IR Executive Firm	0.268**	0.071***	0.074***
	(2.39)	(2.71)	(3.01)
Controls	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Industry F.E.	Yes	Yes	No
Firm F.E.	No	No	Yes
Observations	9,234	9,234	9,234
R-squared / Pseudo	0.210	0.2202	0.2003

Table 4. Managing Earnings

The table shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on the earnings management. *Discretionary accruals* is computed using the modified Jones (1991) model. | *Discretionary accruals* | is the absolute value of discretionary accruals are computed using the modified Jones (1991) model. *Total accruals* are computed by a change in current assets minus the change in cash and short-term investments minus the change in current liabilities plus the change in debt in current liabilities minus depreciation all scaled by beginning year total assets. *Total Real Earnings* are computed by production transaction management minus cash flow transaction management minus discretionary expenses transaction management as calculated in Roychowdhury (2006). *Cash Flow Transaction mgt.* is an abnormal cash flow from operations, which is calculated as the actual cash flow from operations minus the predicted value based on the estimation model in Roychowdhury (2006). *Exp. Transaction mgt.* is abnormal discretionary expenses, which is calculated as the actual discretionary expenses (advertising, R&D, and SG&A) minus the predicted value based on the estimation models in Roychowdhury (2006). *Prod. Transaction mgt.* is an abnormal production, which is calculated as the actual production costs (COGS and changes in inventory) minus the predicted value based on the estimation model in Roychowdhury (2006). *IR Executive Firm* is an indicator variable equals one if the firm has a C-suit executive whose title is associated with the role of investor relations, and zero otherwise. All other independent variables are described in the Appendix. Standard errors are clustered at the firm level and t-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

	Dependent Variable						
	Discretionary Accruals	| Discretionary Accruals |	Total Accruals	Total Real Earnings	Prod. Transaction mgt.	Cash Flow Transaction mgt.	Exp. Transaction mgt.
	OLS	OLS	OLS	OLS	OLS	OLS	OLS
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
IR Executive Firm	-0.121*	-0.010	-0.018	-0.016	-0.009	-0.041	0.022
	(-1.66)	(-0.22)	(-0.45)	(-0.17)	(-0.19)	(-0.40)	(0.32)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9,234	9,234	9,234	8,910	8,910	8,910	8,910
R-squared	0.1102	0.1319	0.1922	0.1211	0.1745	0.1920	0.1847

Table 5. Information Asymmetry

The table shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on the measures of information asymmetry. *Forecast dispersion* is the standard deviation of analysts' forecast variance in each fiscal year. *Restatement* is an indicator variable equals 1 if a firm restates its revenue, Hennes, Leone, and Miller (2008). *PIN* is probability informed trading proxy for information asymmetry as calculated in Easley, Hvidkjaer, and O'Hara (2002). *IR Executive Firm* is an indicator variable equals one if the firm has a C-suit executive whose title is associated with the role of investor relations, and zero otherwise. All other independent variables are described in the Appendix. Standard errors are clustered at the firm level and t-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

	Dependent Variable		
	Forecast dispersion	PIN	Restatement
	OLS	OLS	LPM
VARIABLES	(1)	(2)	(3)
IR Executive Firm	-0.012*	-0.008**	-0.049**
	(-1.87)	(-2.57)	(-2.03)
Controls	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes
Observations	8,842	6,612	8,842
R-squared	0.0722	0.1880	0.1054

Table 6. Financial Constraints and Litigation Risk

The table shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on the measures of a firm's financial constraints and firm's litigation risk. *KZ index* is an index of financial constraints as calculated in Kaplan and Zingales (1997). *Lawsuit* is an indictor variable equals 1 if the firm is the target of a class action lawsuit. *IR Executive Firm* is an indicator variable equals one if the firm has a C-suit executive whose title is associated with the role of investor relations, and zero otherwise. All other independent variables are described in the Appendix. Standard errors are clustered at the firm level and t-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

	Dependent Variable	
	KZ Index	Lawsuit
	OLS	LPM
VARIABLES	(1)	(2)
IR Executive Firm	-0.100**	-0.051**
	(-2.26)	(-2.42)
Controls	Yes	Yes
Year F.E.	Yes	Yes
Firm F.E.	Yes	Yes
Observations	8,540	8,540
R-squared	0.0905	0.0192

Table 7. Stock Return Volatility

The table shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on firm risk pre- and post 2008 crisis periods. *Stock Volatility* is defined as standard deviation of daily stock return for 12 months. *Idiosyncratic Risk* is calculated as described in Ang, Hodrick, Xing, and Zhang (2006). *IR Executive Firm* is an indicator variable equals one if the firm has a C-suit executive whose title is associated with the role of investor relations, and zero otherwise. *2008 Crisis 1 Year* is an indicator variable equals one if the observation occurs in the fiscal year 2007, and zero if the observation occurs in the fiscal year 2009. *2008 Crisis 2 Year* is an indicator variable equals one if the observation occurs in the fiscal year 2006 or 2007, and zero if the observation occurs in the fiscal year 2009 or 2010. All other independent variables are described in the Appendix. Standard errors are clustered at the firm level and t-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

	Dependent Variable			
	Stock Volatility		Idiosyncratic Volatility	
	OLS	OLS	OLS	OLS
VARIABLES	(1)	(2)	(3)	(4)
IR Executive Firm	-0.137	0.099	0.023	0.126
	(-0.44)	(0.71)	(0.09)	(1.30)
2008 Crisis 1 Year	0.456***		0.048	
	(3.61)		(0.57)	
IR Exe. Firm X 2008 Crisis 1 Year	-0.478**		-0.413**	
	(-2.06)		(-1.99)	
2008 Crisis 2 Year		0.649***		0.180**
		(8.22)		(2.62)
IR Exe. Firm X 2008 Crisis 2 Year		-0.455***		-0.413***
		(-3.00)		(-3.77)
Contorls	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes	Yes
Observations	1,698	3,363	1,710	3,389
R-squared	0.5192	0.4200	0.3644	0.2666

Table 8. Matched Sample: Firm Size

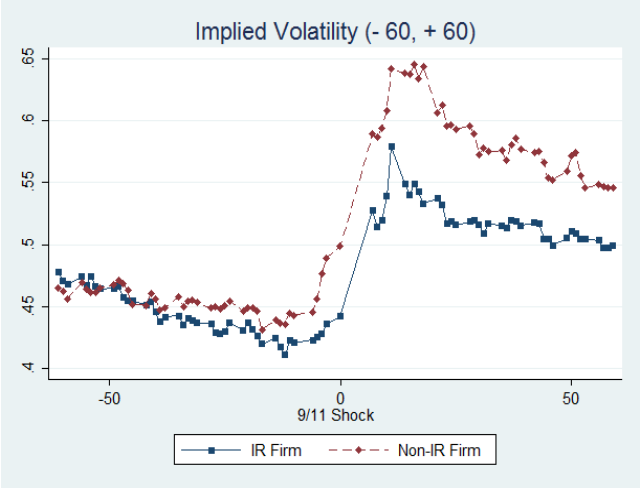
This table shows robustness results when controlling for firm size effects. For each year we match each IR Executive firm with three control firms in the same Fama-French 48 Industry classification that is closest in size (market capitalization) to the IR Executive firm. We discard IR Executive Firms that we are not able to find at least one match such that the absolute value of the difference between its size and the IR Executive firm's size is within 30% of the IR Executive firm's size. Panel A shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on the likelihood of beating analysts' consensus of EPS estimates, the likelihood of guidance of analysts' estimates, and the earnings management. The dependent variable *BEAT* is an indicator variable equals one if the actual earning is greater than the latest forecast for each fiscal year, and zero otherwise. The dependent variable *Down guidance* is an indicator variable equals one if the first consensus analyst forecast of EPS after the fiscal year-end exceeds the latest consensus analyst forecast before the final fiscal year earnings are announced. *Discretionary accruals* is computed using the modified Jones (1991) model. | *Discretionary accruals* | is the absolute value of discretionary accruals are computed using the modified Jones (1991) model. *Total accruals* are computed by a change in current assets minus the change in cash and short term investments minus the change in current liabilities plus the change in debt in current liabilities minus depreciation all scaled by beginning year total assets. *Total Real Earnings* are computed by production transaction management minus cash flow transaction management minus discretionary expenses transaction management as calculated in Roychowdhury (2006). *Cash Flow Transaction mgt.* is an abnormal cash flow from operations, which is calculated as the actual cash flow from operations minus the predicted value based on the estimation model in Roychowdhury (2006). *Exp. Transaction mgt.* is abnormal discretionary expenses, which is calculated as the actual discretionary expenses (advertising, R&D, and SG&A) minus the predicted value based on the estimation models in Roychowdhury (2006). *Prod. Transaction mgt.* is an abnormal production, which is calculated as the actual production costs (COGS and changes in inventory) minus the predicted value based on the estimation model in Roychowdhury (2006). Panel B shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on a variety of measures of information asymmetry. *Forecast dispersion* is the standard deviation of analysts' forecast variance in each fiscal year. *Restatement* is an indicator variable equals 1 if a firm restates its revenue, Hennes, Leone, and Miller (2008). *PIN* is probability informed trading proxy for information asymmetry as calculated in Easley, Hvidkjaer, and O'Hara (2002). Panel C shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on a measure of financial constraints and litigation risk. *KZ index* is an index of financial constraints as calculated in Kaplan and Zingales (1997). Lawsuit is an indictor variable equals 1 if the firm is the target of a class action lawsuit. Panel D shows estimated coefficients from regressions of the effect of the presence of investor-relations executive on firm risk pre and post 2008 crisis periods. *Stock Volatility* is defined as standard deviation of daily stock return for 12 months. *Idiosyncratic Risk* is calculated as described in Ang, Hodrick, Xing, and Zhang (2006). *IR Executive Firm* is an indicator variable equals one if the firm has a C-suit executive whose title is associated with the role of investor relations, and zero otherwise. All other independent variables are described in the Appendix. Standard errors are clustered at the firm level and t-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

Panel A	Dependent Variable						
	BEAT	BEAT	Down guidance	Down guidance	Discretionary Accruals	Total Accruals	Total Real Earnings
	Logit	LPM	Logit	LPM	OLS	OLS	OLS
VARIABLES	(1)	(2)	(3)	(4)	(5)	(7)	(8)
IR Executive Firm	0.282**	0.114***	0.451***	0.086***	-0.153	-0.001	-0.023
	(2.07)	(3.34)	(3.27)	(3.06)	(-1.15)	(-0.24)	(-0.14)
Other Controls (Table 2, 3, 4)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	No	Yes	No	No	No	No
Firm F.E.	No	Yes	No	Yes	No	No	Yes
Observations	794	806	755	767	710	674	696
R-squared / Pseudo	0.107	0.0466	0.241	0.1810	0.0553	0.1458	0.1088

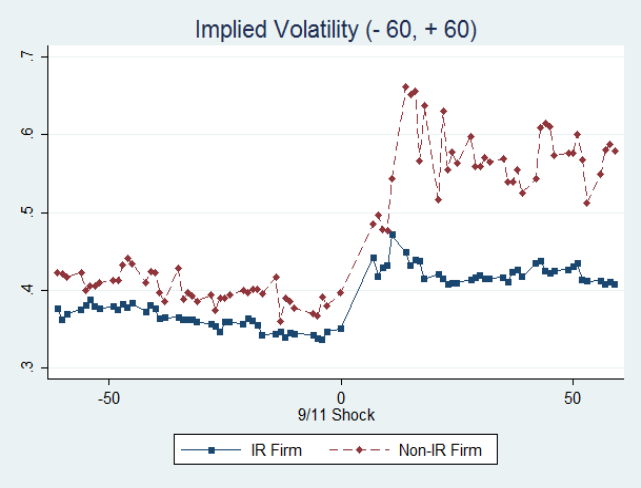
Panel B	Dependent Variable		
	Forecast dispersion	PIN	Restatement
	OLS	OLS	LPM
VARIABLES	(1)	(2)	(3)
IR Executive Firm	-0.013*	-0.014***	-0.051*
	(-2.00)	(-3.24)	(-1.79)
Other Controls (Table 5)	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes
Observations	770	408	770
R-squared	0.1549	0.1774	0.0702

Panel C	Dependent Variable	
	KZ Index	Lawsuit
	OLS	LPM
VARIABLES	(1)	(2)
IR Executive Firm	-0.169**	-0.047*
	(-2.43)	(-1.85)
Other Controls (Table 6)	Yes	Yes
Year F.E.	Yes	Yes
Firm F.E.	Yes	Yes
Observations	733	557
R-squared	0.1093	0.0620

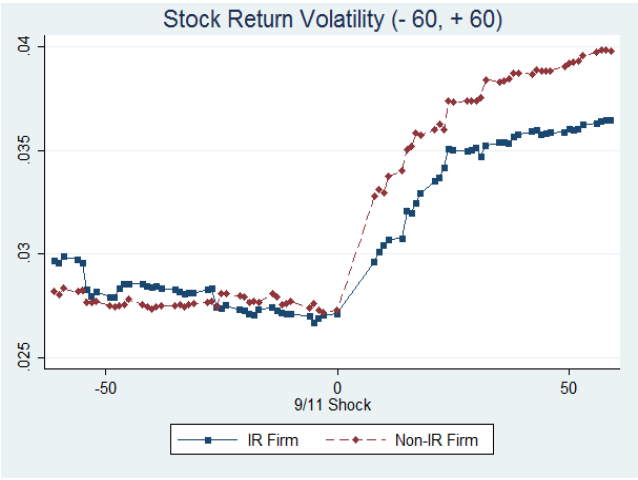
Panel D	Dependent Variable			
	Stock Volatility		Idiosyncratic Volatility	
	OLS	OLS	OLS	OLS
VARIABLES	(1)	(2)	(3)	(4)
IR Executive Firm	0.106	0.187	0.173	0.225
	(0.32)	(0.95)	(0.72)	(1.54)
2008 Crisis 1 Year	0.709**		0.369	
	(1.96)		(1.39)	
IR Exe. Firm X 2008 Crisis 1 Year	-0.770**		-0.567*	
	(-2.00)		(-2.05)	
2008 Crisis 2 Year		0.860***		0.373**
		(3.07)		(2.60)
IR Exe. Firm X 2008 Crisis 2 Year		-0.638**		-0.494***
		(-2.62)		(-2.90)
Other Controls. (Table 7)	Yes	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes	Yes
Observations	178	349	179	346
R-squared	0.6431	0.4353	0.5389	0.3378



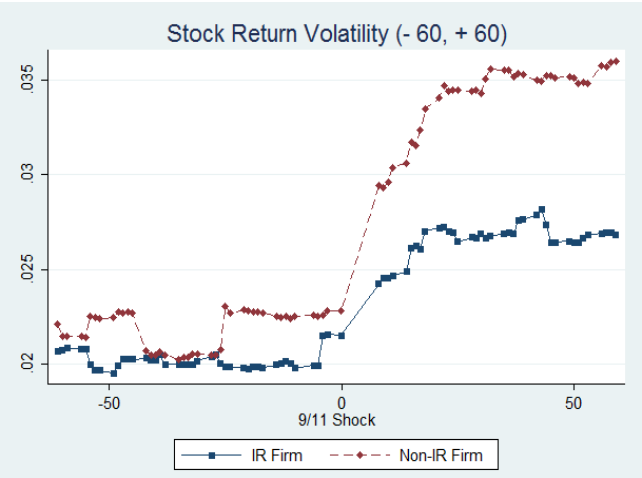
Average Implied Volatility in IR Firms and Non-IR Firms



Median Implied Volatility in IR Firms and Non-IR Firms



Average Stock Return Volatility in IR Firms and Non-IR Firms



Median Stock Return Volatility in IR Firms and Non-IR Firms

Figure 1. Investor-relation role in top executives & Volatility around the 9/11 Shock

Appendix

Variable	Definition
IR Executive Firm	Indicator variable equals one if the firm has a C-suit executive whose title is associated with the role of investor relations, and zero otherwise.
BEAT	Indicator variable equals one if the actual earning is greater than the latest forecast for the fiscal year, and zero otherwise.
Down Guidance	Indicator variable equals one if the first consensus analyst forecast of EPS after the fiscal year-end exceeds the latest consensus analyst forecast before the final fiscal year earnings are announced, and zero otherwise.
Number of Analysts	Average of the 12-monthly number of earnings forecasts of a particular firm in each fiscal year. *Forecast dispersion* is the standard deviation of analysts' forecast variance in each fiscal year.
Same Brokerage	Average number of analysts employed by the brokerage houses that employ the firm's analysts.
Discretionary Accruals	Earnings management using the modified Jones (1991) model
| Discretionary Accruals |	Absolute value of discretionary accruals is computed using the modified Jones (1991) model.
Total Accruals	Change in current assets minus the change in cash and short-term investments minus the change in current liabilities plus the change in debt in current liabilities minus depreciation all scaled by beginning year total assets.
Total Real Earnings	Production transaction management – cash flow transaction management – discretionary expenses transaction management: Roychowdhury (2006)
Cash Flow Transaction mgt.	Abnormal cash flow from operations, which is calculated as the actual cash flow from operations minus the predicted value based on the estimation model in Roychowdhury (2006).
Exp. Transaction mgt.	Abnormal discretionary expenses, which is calculated as the actual discretionary expenses (advertising, R&D, and SG&A) minus the predicted value based on the estimation models in Roychowdhury (2006).
Prod. Transaction mgt.	Abnormal production, which is calculated as the actual production costs (COGS and changes in inventory) minus the predicted value based on the estimation model in Roychowdhury (2006).
Total Market Value	Natural logarithm of firm value as calculated in Gabaix and Landier (2008)
Leverage	Book leverage
Stock Return	Twelve monthly compounded return during the fiscal year.
ROA	Net Income / Book Assets
Stock Volatility	Standard deviation of daily stock return for 12 months
Idiosyncratic Risk	Idiosyncratic volatility as calculated in Ang, Hodrick, Xing, and Zhang (2006)

Market to Book	(Market value of common stock + total debt + preferred stock – deferred taxes and investment tax credit) / Book Assets
Institutional Holdings	Percent ownership of institutions
KZ Index	Index of financial constraints as calculated in Kaplan and Zingales (1997)
PIN	Proxy for information asymmetry as calculated in Easley, Hvidkjaer, and O'Hara. (2002)
R&D Intensity	R&D/Assets
Lawsuit	Indictor variable: equals 1 if the firm is the target of a class action lawsuit. Source: Stanford Law School Securities Litigation database.
Firm Age	Number of years a firm is listed in CRSP.
Board Size	Number of directors on the board at year-end.
Restatement	Gao Restatement data is released by the Government Accountability Office which provides information on firms that restated their revenues: from Hennes, Leone, and Miller (2008).