Received 3 October 2017
Revised 8 January 2018
3 April 2018
Accepted 17 April 2018

How Facebook influences non-professional investors' affective reactions and judgments

The effect of disclosure platform and news valance

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Abstract

Purpose – The use of social networking websites by companies to disclose corporate news and by investors to collect information for investment purposes is increasing rapidly. However, the role of investors' affective reactions to corporate disclosures on social networking websites is under-researched. This paper aims to examine how the disclosure platform (disclosing news on a company's Facebook Web page or the corporate investor relations Web page) and news valence (positive or negative) jointly influence investors' affective reactions to corporate news and stock price change judgments.

Design/methodology/approach – The authors conduct an experimental study using 364 participants from Amazon's Mechanical Turk website as a proxy for reasonably informed investors.

Findings – Results show that the disclosure platform influences investors' affective reactions and stock price change judgments when the corporate news is negative, but not when the corporate news is positive. In addition, investors' affective reactions mediate the influence of the disclosure platform on investors' stock price change judgments when the corporate news is negative rather than positive.

Originality/value – This paper extends the theory on affective reactions to a social networking context by showing that differences in disclosure platforms and news valence influence investors' affective reactions to corporate news. In addition, the study's theory and findings have significant implications for researchers, company managers and public relations specialists, capital market participants, regulators and investor education organizations and users of social networking websites.

Keywords Facebook, Investors, Affective reactions, News valence

Paper type Research paper

The authors are thankful to Fatima Alali, Sumatra Chakravarty, Lisa Eiler, James Gong, Paul Griffin, Richard Lu, Devin Shanthikumar, Myungsoo Son, Isho Tama-Sweet and participants at the California State University Fullerton Brown Bag, the 2015 ABO Research Conference and the 2016 Haskell and White Academic Conference for their helpful comments and suggestions. The authors appreciate the research assistance received from Megan Le and Amit Pandey. The authors are grateful to California State University, Fullerton, and California State University, San Marcos, for financial support.

Journal of Financial Reporting and Accounting
Vol. 17 No. 1, 2019
pp. 80-103

1985-2517
DOI 10.1108/JFRA-10-2017-0092

1. Introduction

Many companies currently use social media, particularly social networking websites such as Facebook, to communicate with their stakeholders, including customers and investors (Kortekaas and Warwick-Ching, 2013; Kouri and Needham, 2013; Schoeff, 2013; Wang *et al.*, 2016; Zhou *et al.*, 2015)[1]. This study examines how investors' affective reactions to corporate news and stock price change judgments differ when investors receive corporate news on a social networking website (Facebook) as compared to a traditional website (the corporate investor relations website)[2]. Further, the paper examines how this influence of the disclosure platform (Facebook versus corporate investor relations website) varies according to the valence of the corporate news (positive versus negative).

The use of social networking websites as disclosure platforms allows companies to provide real-time information to stakeholders (Aquila, Payne and Sullivan and Cromwell, LLP, 2013), interact with stakeholders (Fuhrmann, 2011) and identify stakeholders' reactions to corporate news through their comments, likes and sharing of the news. Therefore, companies that communicate with stakeholders via social media platforms, particulaly social networking websites, are deemed more innovative (Savio and Raroque, 2012), can reach a broader audience (Corbin, 2012), engage and interact with stakeholders (Savio and Raroque, 2012), increase transparency (Waters *et al.*, 2009) and reduce ambiguity (Kaplan and Haenlein, 2010). Despite the widespread use of social networking websites as venues for corporate disclosure, the costs and benefits of such use are not yet fully understood (Curtis *et al.*, 2010).

Prior anecdotal evidence (Greenfield, 2014; Pressman, 2013; Russolillo, 2012) and research that uses archival methodology (Curtis *et al.*, 2014; Lee *et al.*, 2015) reveal that information disclosed on social networking websites can exert a significant influence on stock prices. A number of recent studies in accounting examine the effect of disseminating corporate news through social networking websites on investors' judgments and decisions (Cade, 2016; Lee *et al.*, 2015). These studies, however, focus mainly on Twitter, as it was one of the earliest social networking websites that companies used as a disclosure platform (Boyd and Crawford, 2012), and do not compare Twitter to more traditional websites, such as the corporate investor relations website. In addition, these accounting studies focus on investors' cognitive reactions to corporate disclosures.

The current study focuses on investor reactions to corporate disclosures made on Facebook, the largest social networking website, with over two billion active monthly users (Statista.com, 2017b) and one of the most heavily used disclosure platforms by companies (Statista.com, 2017a). In addition, the paper compares investor reactions to corporate news disclosed on Facebook versus a more traditional platform, the corporate investor relations page, to improve our understanding of the unique influence of social networking websites on investors' judgments. Further, this study extends prior theory and findings on affective reactions (Mercer, 2005; Zajonc, 1980) by examining how the disclosure platform and news valence jointly influence investors' affective reactions to corporate news. As a result, this study increases our understanding of the costs and benefits associated with using social networking websites as corporate disclosure platforms.

To extend the theory on affective reactions (Slovic *et al.*, 2002; Zajonc, 1980), this paper investigates the determinants of investors' affective reactions to corporate news in a social networking context. This study suggests that a company's Facebook page will be more engaging for investors than will the corporate investor relations page (Short *et al.*, 1976). Over time, Facebook users will automatically associate news received on Facebook with strong affective reactions (Chen and Bargh, 1997; Srull and Wyer, 1980). As a result, corporate news will be more likely to exert a strong influence on investors' affective

reactions and investment judgments when the news is encountered on the company's Facebook page rather than on its corporate investor relations page. Further, prior research (Ito *et al.*, 1998) suggests that investors will pay more attention to corporate news when the news is negative rather than positive. Thus, the study predicts that the effect of disclosing corporate news on the company's Facebook page, rather than on its corporate investor relations page, on investors' affective reactions and stock price change judgments will be stronger when corporate news is negative as compared to positive. In addition, it is expected that investors' affective reactions will mediate the influence of the disclosure platform and the news valence on investors' investment judgments (Aspara and Tikkanen, 2010; Zajonc, 1980).

These predictions are tested using an online experiment in which 364 members of Amazon's Mechanical Turk website, who reported having prior investment experience, participated as a proxy for reasonably informed non-professional investors. Consistent with the study's predictions, the study finds that, given negative corporate news, investors experience more negative affective reactions and make more negative stock price change judgments when they receive the news on the company's Facebook page rather than the corporate investor relations page. Given positive corporate news, however, investors experience similar affective reactions and make similar stock price change judgments whether they receive the news on Facebook or the corporate page. In addition, investors' affective reactions mediate the influence of the disclosure platform on investors' stock price change judgments when corporate news is negative but not when it is positive.

This paper contributes to the literature in many important ways. First, the study's theory and findings extend psychology research on individuals' affective reactions (Slovic *et al.*, 2002; Zajonc, 1980) to a social networking context by illustrating that the disclosure platform (social networking website versus a traditional website) influences investors' affective reactions to the news and investment judgments and that this influence is asymmetric for positive and negative news. Second, the study contributes to the growing literature on corporate disclosures on social media (Cade, 2016; Snow, 2015) by examining Facebook, rather than Twitter, as a disclosure platform, comparing Facebook to traditional disclosure platforms and focusing on investors' affective, rather than cognitive, reactions to corporate news.

This study should be informative for researchers as they attempt to understand the benefits and costs of using social networking websites as disclosure platforms because the findings reveal the high cost of disseminating negative news on social networking websites. Company managers and public relations specialists should benefit from this study as they select disclosure platforms and determine the content of the news to be shared on each platform, as the results suggest that social networking websites are appropriate for disclosing relatively simple news stories that do not impose a heavy burden on investors' cognitive abilities. In addition, this paper should be informative for capital market participants as they estimate future stock returns because the theory and findings suggest that adopting social networking websites as disclosure frameworks strengthens investor reactions to bad news, which is likely to increase the volatility of stock returns. Moreover, regulators and investor education organizations can apply the findings of this paper to the design of publications and programs that train non-professional investors to overcome the influence of the disclosure platform on their judgments. Finally, the study's findings can motivate users of social networking websites to reflect on their own judgmental processes and understand how they react to the news that they receive on these websites.

The remainder of the paper is organized as follows. Section 2 provides the literature review. Section 3 concerns theory and hypothesis development. Section 4 presents the

research method, including the experimental procedures and participants. Section 5 provides the results, and Section 6 includes the discussion, implications and conclusion.

2. Literature review

Investors' use of social media, especially social networking websites, to collect information for investment purposes is increasing. A 2013 survey of 472 investors shows that 75 per cent of participants believe that the role of social media, including social networking websites, is increasing in regard to their decision-making (Brunswick Group, 2014). Companies recognize this trend and have increased their social media spending over the past several years (Barnes and Lescault, 2012).

Recently, accounting research, using both archival and experimental methodologies, started to study companies' use of social networking websites to disseminate financial and nonfinancial corporate news and how investors and market participants react to such use. In the following two sections, studies that use archival methodology are presented first, followed by studies that use experimental methodology.

2.1 Social networking websites as disclosure platforms: archival studies

Accounting studies that use archival methodology to examine corporate disclosures on social networking websites focus mainly on Twitter and, to a lesser extent, on Facebook as a disclosure platform for corporate news (Jung *et al.*, 2016; Karabulut, 2013; Lee *et al.*, 2015; Wang *et al.*, 2016; Zhou *et al.*, 2015). Jung *et al.* hypothesize and find that companies strategically disseminate quarterly earnings news through Twitter, as companies are less likely to tweet earnings news when the news is bad rather than good and as the magnitude of bad news increases.

Lee *et al.* (2015) show that corporate presence on social networking websites reduces the magnitude of negative market reactions to product recall announcements. Further, using data from Twitter, the authors document that the magnitude of negative market reactions to product recalls decreases with the number of related tweets made by the company and increases with the number of related tweets made by other users.

Karabulut (2013) finds a positive association between the Gross National Happiness Index published by Facebook, as a measure of investor sentiment, and daily stock returns and trading volume in the US stock market. That association, however, is temporary and reverses in the subsequent weeks. Wang *et al.* (2016) document that 58 per cent of the S&P 500 companies have Facebook pages that they actively use to disclose financial and non-financial corporate news and that this use is positively associated with the number of analysts who follow the company and is negatively associated with individual investors' holdings of the company's stock.

Zhou *et al.* (2015) compare the corporate use of Facebook and Twitter for 9,861 publicly traded companies. The results indicate that corporate disclosures represent a higher percentage of the total number of messages shared by the companies on Facebook as compared to Twitter. In addition, users respond more slowly to corporate messages but are more engaged with these messages (i.e. spend a longer time reacting to them) when the messages are posted on Facebook as compared to Twitter.

2.2 Social networking websites as disclosure platforms: experimental studies

Accounting studies that use experimental methodology to examine investors' reactions to corporate disclosures on social networking websites focus on Twitter as a disclosure platform (Cade, 2016; Snow, 2015). In an experimental study, Cade examines how investor perceptions about a company's reputation and the attractiveness of the company as an

investment are influenced by two-way communications between the company and other investors via Twitter. The study shows that using an active strategy to address negative comments raised about the company on Twitter, either by explaining why these comments are unwarranted or by redirecting attention to other positive aspects of the company's performance, mitigates the influence of these negative comments more than does a passive strategy, whereby the company does not respond to the negative comments.

Snow (2015) investigates how disclosure platform (Twitter/corporate investor relations page) and news type (good/bad) influence investors' perceptions of the news and investment judgments. Although the interaction between disclosure platform and news type is insignificant, the study shows that posting corporate news on Twitter rather than on the corporate investor relations page results in lower assessments of argument quality, lower perceived usefulness and a less favorable attitude toward the news. The disclosure platform, however, did not significantly influence perceptions of the source credibility of the news, the attractiveness of the company as an investment or investors' investment recommendations.

To conclude, prior accounting studies that examine corporate use of social networking websites as disclosure platforms and investors' reactions to that use focus mainly on Twitter as a disclosure platform. More specifically, experimental studies (Cade, 2016; Snow, 2015) examine investors' cognitive reactions to corporate news disclosed on Twitter. These experimental studies do not investigate Facebook even though it is the largest social networking website and is heavily used as a corporate disclosure platform. Further, these experimental studies do not examine investors' affective reactions to corporate news disclosed on social networking websites even though affective reactions exert a significant influence on investors' judgments and decisions (Mercer, 2005; Slovic *et al.*, 2002).

This study fills in these gaps in the literature by examining how the disclosure platform (Facebook compared to the traditional investor relations page) and the news valence (positive compared to negative) jointly influence reasonably informed non-professional investors' affective reactions to corporate news and their stock price change judgment[3].

3. Theory and hypotheses development

3.1 Investors' affective reactions to corporate news

Affective reactions refer to a range of related phenomena, including emotions, feelings and moods (Frijda, 2006; Slovic *et al.*, 2002; Wyer and Srull, 1986). Prior research suggests that individuals sometimes use a processing strategy, whereby judgments are more likely to be based on the feelings and sensations prompted by the act of information processing than on the content of the information processed (Mercer, 2005; Strack, 1992; Wanke *et al.*, 1997).

Further, Aspara and Tikkanen (2010) suggest that an individual's strong positive affective reactions toward a company lead to positive expectations of the financial returns of the company's stock. In addition, if investors' feelings about a company are favorable, they are inclined to perceive the risks as low and the returns as high; thus, as Zajonc (1980) suggests, the general affective view of a company will guide perceptions of risk and return. Therefore, affective reactions tend to amplify the implications of relevant information, which, in turn, lead to more extreme subsequent judgments (Adaval, 2003). In an experimental study, Adelaar *et al.* (2003) show that the presentation format of a message (e.g. text, images, video) elicits different emotional responses (i.e. affective reactions) from participants and that these emotional responses, in turn, result in different impulse-buying intentions.

Prior research, however, does not examine how the disclosure platform (social networking website compared to a traditional website) can influence investors' affective reactions to corporate news and, thus, investors' judgments. This concern gains more

importance as more companies use social networking websites to disseminate their news. The current study holds the expectation that the disclosure platform will influence investors' affective reactions to corporate news, and that this effect will be asymmetric for positive and negative news. It also is expected that investors' affective reactions to the corporate news will influence investors' stock price change judgments.

3.2 Influence of disclosure platform on investors' affective reactions and investment judgments

This paper argues that corporate news will be more engaging for investors when they encounter corporate disclosures on Facebook than on the corporate investor relations page for a number of reasons. First, users are likely to spend more time on, and to be more familiar with, Facebook as compared to any specific corporate investor relations page. Second, Facebook allows more social interaction compared to a traditional corporate investor relations page. Facebook allows a user to interact with other users by exchanging messages, reacting to their posts (e.g. commenting on, liking, sharing) and viewing these users' reactions to someone else's posts in real time. These social interaction features will increase the effectiveness of communications on Facebook and strengthen users' engagement with the information that they receive on Facebook as compared to a traditional investor relations page (Short *et al.*, 1976).

Over time, users' reactions to news received on Facebook will become automatic such that merely viewing the Facebook page layout will attract users' attention, increase their engagement with the news and strengthen their affective reactions to its content (Bargh *et al.*, 2012; Chen and Bargh, 1997; Schneider and Shiffrin, 1977; Srull and Wyer, 1980). Stronger affective reactions are expected to lead investors to make more extreme stock price change judgments.

3.3 Influence of news valence on investors' affective reactions and investment judgments

Prior literature has established that the valance of corporate news influences investors' judgments and decisions (Luo, 2009). Research has documented negative consequences for companies and investors when the company discloses negative news (Desai *et al.*, 2006; Files and Swanson, 2009; Jones and Weingram, 1996). Many companies choose to release negative news early to warn investors about unfavorable corporate performance (Field *et al.*, 2005; Kasznik and Lev, 1995). Psychology research has documented that negative information more strongly affects individuals' evaluations than does positive information (Kahneman and Tversky, 1979; Kanouse and Hansen, 1971; Skowronski and Carlston, 1989). Further, Taylor (1991) suggests that negative news causes greater use of individuals' cognitive and affective reactions. Individuals react more strongly to negative events than to positive ones (Ito *et al.*, 1998). Moreover, investors' relevance ratings of negative information are higher than those of positive information (Cianci and Falsetta, 2008).

Therefore, this study predicts that investors will heighten attention to corporate news when that news is negative rather than positive. Increased investor attention to corporate news will allow the platform used to disclose the news to exert a stronger influence on investors' affective reactions and judgments. Therefore, when investors receive negative corporate news, they will pay close attention to the news, and their affective reactions and judgments will be strongly influenced by the platform used to disclose the news. More specifically, investors will experience more negative affective reactions to the news, and will make more negative stock price change judgments, when the news is disclosed on the company's Facebook page rather than on its corporate investor relations page. In contrast, when investors receive positive corporate news, they will not pay close attention to the

news, and their affective reactions and judgments will be less strongly influenced by the platform used to disclose the news.

Based on the previous arguments, there is an expectation that the difference in investors' affective reactions to the news and their stock price change judgments, which results from receiving the news on the company's Facebook page rather than on its corporate investor relations page, will be greater when the corporate news is negative rather than positive. It also is expected that investors' affective reactions will mediate the joint influence of the disclosure platform and the news valence on investors' stock price change judgments.

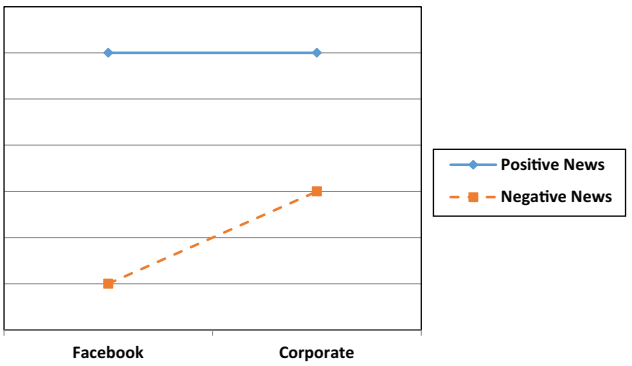
Based on the previous discussion, this paper makes the following hypotheses:

H1. The influence of the disclosure platform on investors' stock price change judgments (which involves triggering more extreme stock price change judgments when corporate news is disclosed on Facebook rather than on the corporate investor relations page) will be greater when corporate news is negative rather than positive.

H2. The influence of the disclosure platform on investors' affective reactions (which involves triggering more extreme affective reactions when corporate news is disclosed on Facebook rather than on the corporate investor relations page) will be greater when corporate news is negative rather than positive.

H3. Investors' affective reactions will mediate the influence of the disclosure platform and news valence on investors' stock price change judgments.

A graphical representation of these predictions is presented in Figure 1.



Notes: Figure 1 displays the predicted effects of the news valence and disclosure platform on investors' stock price change judgments (*H1*) and affective reactions (*H2*). *H1* (*H2*) predicts an ordinal interaction that can be tested using contrast weights, such as +2, +2, −3, −1 for positive news/Facebook, positive news/ corporate page, negative news/Facebook and negative news/ corporate page, respectively. This interaction predicts that the influence of the disclosure platform on investors' affective reactions and stock price change judgments will be stronger when corporate news is negative compared to positive

Figure 1.
Predictions: investors' stock price change judgments and affective reactions

4. Research method

4.1 Experimental design

The study uses a 2 × 2 between-subjects design. The first manipulated factor is the news valance of the press release, whereby half of the participants received positive news, and the other half received negative news. The second manipulated factor is the disclosure platform, whereby half of the participants viewed the press release on the company's Facebook page, and the other half viewed the press release on its corporate investor relations page. Participants were randomly assigned to one of four experimental conditions:

(1) Positive news – Facebook page

(2) Positive news – Corporate investor relations page

(3) Negative news – Facebook page

(4) Negative news – Corporate investor relations page

4.2 Participants

To obtain a broad demographic-based sample of nonprofessional investors, the study recruited participants using Mechanical Turk. This website, launched in 2005, allows employers/requesters and workers/participants to meet at an Internet labor market. Workers complete human intelligence tasks (HITs) in return for monetary payments. Mechanical Turk has become a popular participant pool for researchers because it is easily accessible and is at least as representative of the US population as are more traditional participant pools (Paolacci *et al.*, 2010). In addition, recent research demonstrates that participants recruited from Mechanical Turk exhibit similar honesty preferences and exert similar or greater effort, compared to participants from traditional pools who participate in experimental accounting studies (Farrell *et al.*, 2017). This study follows prior literature (Farrell *et al.*, 2017; Koonce *et al.*, 2015; Krische, 2015; Rennekamp, 2012) and uses participants recruited from Mechanical Turk to proxy for reasonably informed, non-professional investors.

On Mechanical Turk, access to the experimental task was restricted to individuals who live in the USA, have previously completed at least 50 HITs and have achieved an acceptance rate (by requesters) of at least 95 per cent of the HITs that they completed. In addition to the screening criteria used on Mechanical Turk, there were a number of qualification questions at the beginning of the experimental task on Qualtrics to which individuals responded. These individuals were allowed to proceed with the experimental task only if they met all of the following qualification criteria:

- completion of or current enrollment in at least one business or economics class;
- having bought or sold the common stock of an individual company in the past; and
- having one or more years of investment experience[4].

A total of 364 participants completed the experimental study[5].

They received a payment of $0.75 for an average of 9.5 min of their time, resulting in an effective hourly wage of $4.75.

The mean participant age was 37.43 years, with a mean of 7.31 years of investment experience and 16.17 years of work experience. A total of 238 participants (65.38 per cent) were male, 197 participants (54.12 per cent) had completed a financial statement analysis task and 268 participants (73.63 per cent) reported buying or selling stock in the past 12 months. Participants had completed or were currently enrolled in a mean of 5.13 business

and economics classes, 2.42 accounting classes and 2.34 finance classes. These demographic characteristics suggest that the participants were a good proxy of reasonably informed non-professional investors who have appropriate knowledge and experience to participate in the experimental task.

4.3 Experimental procedures

After passing the qualification questions at the beginning of the experimental task, participants were asked to assume the role of a member of a local investment club and to evaluate and make investment judgments regarding one publicly traded company, Astor, Inc., an online real-estate market company. Next, participants were provided with the company's background information, which was adapted from a real-world company. To ensure that each participant was actively involved with the case materials, a reading comprehension check question was posed after displaying Astor's background information. Only those participants who responded correctly to the reading comprehension check question were allowed to continue with the study.

Next, participants were randomly assigned to the experimental conditions. In the Facebook experimental conditions, participants saw the press release posted on Astor's Facebook page. In the corporate investor relations page experimental conditions, participants saw the press release posted on Astor's investor relations page. For the disclosure platform manipulation, the HTML code for a company's Facebook page and a corporate page were altered to display Astor's name, logo and press release. The size of Astor's logo, the font size and the page size were held constant across conditions. To eliminate distractions, advertisements were removed from the pages. In adition, participants saw screenshots of the pages, rather than the actual pages, to ensure that the links included in each page were not clickable.

It is important to note that there was no manipulation of the social interaction features available on Facebook, such as allowing participants to react to the corporate news or to read other users' comments on the news. Participants in the study saw only a screenshot of Astor's page on either Facebook or the corporate investor relations website. Rather than manipulating the social interaction features available on Facebook, the study focused on examining the associations created in participants' memories about Facebook. In other words, the study investigated whether participants who are primed by using the Facebook page layout react differently to the corporate news as compared to participants who are not primed (i.e. who see the corporate investor relations page instead). Further, manipulating the social interaction features available on Facebook (i.e. making those features available to participants in the Facebook conditions but not to participants in the corporate investor relations website conditions) would strengthen the disclosure platform manipulation and help support the hypotheses.

The news valance of the press release was manipulated to be positive or negative. The press release included two news items that were meant to influence participants' expectations about Astor's future performance: the rate of downloading and using Astor's new mobile app by new users (met expectations/fell short of expectations) and the success of negotiations to acquire another online real-estate market's company (successful/unsuccessful). The press release was designed based on a sample of corporate news posted by companies on their Facebook pages[6]. Further, the press release reminded participants of the company's profile in all four experimental conditions.[7]. After reading the press release, participants answered questions about their expectations for Astor's stock price in the future, affective reactions, manipulation checks, usage of social networking websites, and other demographics.

4.4 Independent variables

The two between-subjects factors are the news valence of the press release (positive or negative) and the disclosure platform used to disclose the press release (Facebook or the corporate investor relations page).

4.5 Dependent variables

The study measures participants' stock price change judgment by asking them to assess the potential that the company's stock price will appreciate or decline in the near future. The responses are measured on a 15-point Likert scale for which 1 represents "extremely likely to decline (decrease)," 8 represents "not likely to change" and 15 represents "extremely likely to appreciate (increase)".

4.6 Process variables

The study measures participants' affective reactions by asking them the extent to which they disagree or agree with each of four statements: "Astor's press release made me feel": (1) good, (2) pleased, (3) bad and (4) disappointed. Responses are measured on an 11-point Likert scale for which 1 represents "strongly disagree" and 11 represents "strongly agree." A factor analysis shows that these four questions load on one factor, which explains 88 per cent of the common variance in the four questions. This factor is termed the affect factor[8].

5. Results

5.1 Manipulation checks

First, to assess whether participants attended to the disclosure platform manipulation, participants were asked whether the company shared its press release on its Facebook page or its corporate investor relations page. In total, 95 per cent of participants correctly recalled the platform where the news release was posted. Second, to assess whether participants attended to the news valence manipulation, they were asked the question, "Astor's press release revealed _____ information about the company's financial performance in the future." Participants responded on an 11-point scale for which 1 represents "extremely negative," 6 represents "neutral" and 11 represents "extremely positive." Participants in the positive news condition perceived the news to be significantly more positive than did participants in the negative news condition (means of 8.85 and 4.27 for the positive and negative news conditions respectively, $t = 23.51$, $p < 0.01$, one-tailed)[9]. These results suggest that the experimental manipulations were effective[10].

5.2 Familiarity with the disclosure platform

The study posits that investors are likely to be more familiar with Facebook than any specific corporate investor relations website; as a result, corporate news will be more engaging for investors and will trigger stronger reactions when it is viewed on a Facebook page rather than a corporate investor relations page. To test this argument, participants were asked how often they visit Facebook and companies' investor relations websites. Participants responded on a 5-point scale for which 1 = not at all, 2 = monthly, 3 = weekly, 4 = once a day and 5 = multiple times a day. The results reveal that participants visit Facebook significantly more often than all corporate investor relations websites (means of 3.65 and 2.11 for Facebook and corporate investor relations websites, respectively; $t = 51.17$, $p < 0.01$, one-tailed). These results are consistent with the study's argument that investors are more familiar with Facebook than with any specific corporate investor relations website.

5.3 Tests of Hypotheses

5.3.1 Test of H1. *H1* predicts that the effect of the disclosure platform (i.e. eliciting more extreme stock price change judgments when corporate news is disclosed on the company's Facebook page rather than on its corporate investor relations page) will be greater when the corporate news is negative rather than positive. Panel A of Table I presents means (standard errors) of investors' stock price change judgments and stock price change judgments adjusted for the effect of having a Facebook account[11]. A graphical representation of adjusted stock price change judgments is presented in Figure 2.

Because *H1* predicts an ordinal interaction between the news valence and the disclosure platform, contrast coding was used to test the hypothesis. Using contrast codes enhances statistical power compared to the interaction's being tested in conventional analysis of

News valence	Disclosure platform	*n*	Stock price change judgments	Stock price change judgments: adjusted
Panel A: means [standard errors] of investors' stock price change judgments and stock price change judgments adjusted for the effect of having a Facebook account				
Positive	Facebook	88	11.57 (0.28)	11.57 (0.27)
Positive	Corporate	92	11.75 (0.27)	11.72 (0.27)
Negative	Facebook	92	5.51 (0.27)	5.54 (0.27)
Negative	Corporate	92	6.18 (0.27)	6.19 (0.27)

Panel B: analysis of covariance of investors' stock price change judgments adjusted for the effect of having a Facebook account

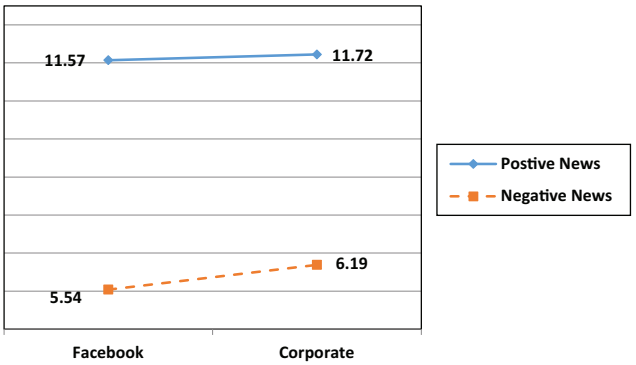
Source of variation	SS	df	MS	*F*-Statistic	*p*-value
News valence	3027.81	1	3027.81	464.67	<0.01
Disclosure platform	14.41	1	14.41	2.21	0.14
News valence * disclosure Platform	5.65	1	5.65	0.87	0.35
Facebook account	58.42	1	58.42	8.97	<0.01
Error	2,339.27	359	6.52		

Panel C: Planned contrast coding for H1 and follow-up simple effect tests, using investors' stock price change judgments adjusted for the effect of having a Facebook account

Source	df	*F*-statistic	*p*-value
Overall test: the effect of disclosing corporate news on Facebook rather than on the corporate investor relations page (i.e., more extreme stock price change judgments) will be stronger when the news is negative compared to positive. Contrast weights (2, 2, −3, −1)	1	436.85	<0.01*
Follow-up simple effect tests			
Effect of disclosure platform, given positive news	1	0.15	0.70**
Effect of disclosure platform, given negative news	1	2.96	0.04*
Effect of news valence, given Facebook	1	250.32	<0.01*
Effect of news valence, given corporate page	1	215.30	<0.01*

Notes: Participants received a press release that revealed either positive or negative news about the company. The press release was disclosed either on the company's Facebook page or on its corporate investor relations page. After reading the press release, participants were asked to make stock price change judgments by assessing the potential that the company's stock price would appreciate or decline in the future. The responses were measured on a 15-point scale, for which 1 represents "extremely likely to decline (decrease)," 8 represents "not likely to change," and 15 represents "extremely likely to appreciate (increase)." We use stock price change judgments, adjusted for the effect of having a Facebook account, to test *H1*. *One-tailed *p*-values given our directional hypotheses; **two-tailed *p*-value

Table I.
Test of *H1*: Investors' stock price change judgments



Notes: Figure 2 displays the observed pattern of adjusted least square means of participants' stock price change judgments (Panel A of Table I). This pattern is tested using the planned contrasts presented in Panel C of Table 1. See Table I for a description of the measurement of participants' stock price change judgments

Figure 2.
Results: adjusted stock price change judgments

variance (ANOVA), without increasing the associated Type I error rates (Buckless and Ravenscroft, 1990). Consistent with the study's predictions, *H1* was tested using the following set of contrast weights: +2, +2, −3, −1 for Positive news/Facebook, Positive news/Corporate investor relations page, Negative news/Facebook and Negative news/Corporate investor relations page, respectively. These contrast weights predict that the impact of the disclosure platform on investors' stock price change judgments will be greater when the news is negative rather than positive. Further, with the use of these contrast weights, the study predicts that the impact of news valence on investors' stock price change judgments will be significant for both Facebook and the corporate investor relations page.

Panel C of Table I reveals that the +2, +2, −3, −1 contrast is significant, using investors' stock price change judgments, adjusted for the effect of having a Facebook account, as the dependent variable ($F = 436.85$, $p < 0.01$, one-tailed). Further, when the news was positive, disclosing the news on Facebook rather than on the corporate page did not affect investors' stock price change judgments ($F = 0.15$, $p = 0.70$, two-tailed). In contrast, when the news was negative, disclosing the news on Facebook rather than on the corporate page resulted in more negative stock price change judgments ($F = 2.96$, $p = 0.04$, one-tailed). In addition, when the news was positive rather than negative, investors predicted more favorable stock price change judgments for both Facebook ($F = 250.32$, $p < 0.01$, one-tailed) and the corporate page ($F = 215.30$, $p < 0.01$, one-tailed). Overall, these results support the ordinal interaction between news valence and disclosure platform, as predicted in *H1*[12].

5.3.2 Test of H2. *H2* predicts that the effect of the disclosure platform (i.e. triggering more extreme affective reactions to corporate news when it is disclosed on Facebook rather than on the corporate investor relations page) will be greater when the news is negative rather than positive. Panel A of Table II presents means (standard errors) of the affect factor and the affect factor adjusted for the effect of having a Facebook account.[13] A graphical representation of the adjusted affect factor is illustrated in Figure 3.

Similar to *H1*, *H2* was tested using the +2, +2, −3, −1 contrast. Panel C of Table II reveals that the +2, +2, −3, −1 contrast is significant when using the affect factor, adjusted

News valence	Disclosure platform	*N*	Affect factor	Affect factor: adjusted
Panel A: means (standard errors) of investors' affective reactions and affective reactions adjusted for the effect of having a Facebook account				
Positive	Facebook	88	0.76 (0.07)	0.76 (0.07)
Positive	Corporate	92	0.74 (0.07)	0.74 (0.07)
Negative	Facebook	92	−0.82 (0.07)	−0.81 (0.07)
Negative	Corporate	92	−0.65 (0.07)	−0.65 (0.07)

Panel B: analysis of covariance of the affect factor adjusted for the effect of having a Facebook account

Source of variation	SS	df	MS	*F*-Statistic	*p*-value
News valence	198.02	1	198.02	441.46	<0.01
Disclosure platform	0.48	1	0.48	1.07	0.30
News valence * disclosure platform	0.83	1	0.83	1.85	0.17
Facebook account	1.93	1	1.93	4.29	0.04
Error	161.03	359	0.449		

Panel C: planned contrast coding for H2 and follow-up simple effect tests using the affect factor adjusted for the effect of having a Facebook account

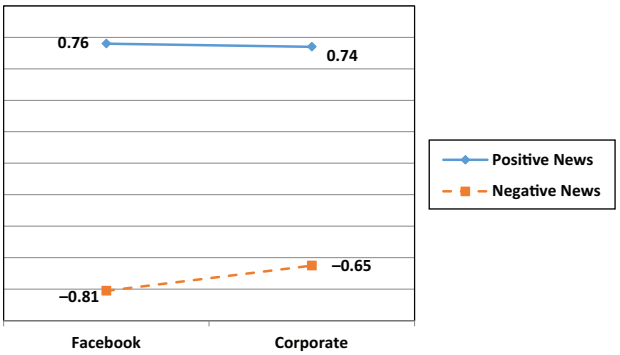
Source	df	*F*-statistic	*p*-value
Overall test: the effect of disclosing corporate news on Facebook rather than on the corporate investor relations page (i.e., more extreme affective reactions) will be stronger when the news is negative compared to positive. Contrast weights (2, 2, −3, −1)	1	415.40	<0.01*
Follow-up Simple Effect Tests			
Effect of disclosure platform, given positive news	1	0.05	0.82**
Effect of disclosure platform, given negative news	1	2.90	0.04*
Effect of news valence, given Facebook	1	247.72	<0.01*
Effect of news valence, given corporate page	1	195.46	<0.01*

Notes: See Table I for a description of the news valence and disclosure platform manipulations and the stock price change judgments. After reading the press release and making stock price change judgments, we measured participants' affective reactions to the news included in the press release by asking them whether they disagreed or agreed to four statements: "Astor's press release made me feel": (1) good, (2) pleased, (3) bad and (4) disappointed. Responses were measured on an 11-point scale for which 1 represents "strongly disagree" and 11 represents "strongly agree." A factor analysis revealed that these four questions load on one factor, which we call the affect factor. We use the affect factor, adjusted for the effect of having a Facebook account, to test *H2*. *One-tailed *p*-values given our directional hypotheses; **two-tailed *p*-value

Table II.
Test of *H2*: Investors' affective reactions

for the effect of having a Facebook account, as the dependent variable ($F = 415.40$, $p < 0.01$, one-tailed). Further, when the news was positive, disclosing the news on Facebook rather than on the corporate page did not influence investors' affective reactions ($F = 0.05$, $p = 0.82$, two-tailed). In contrast, when the news was negative, disclosing the news on Facebook rather than on the corporate page resulted in more negative affective reactions ($F = 2.90$, $p = 0.04$, one-tailed). In addition, when the news was positive rather than negative, investors experienced more favorable affective reactions for both Facebook ($F = 247.72$, $p < 0.01$, one-tailed) and the corporate page ($F = 195.46$, $p < 0.01$, one-tailed). Overall, these results support the ordinal interaction between the news valence and the disclosure platform, predicted in *H2*[14].

5.3.3 Test of H3. Tests of the first two hypotheses support the prediction that the impact of the disclosure platform (Facebook versus the corporate investor relations page) on investors' affective reactions and stock price change judgments is greater when the

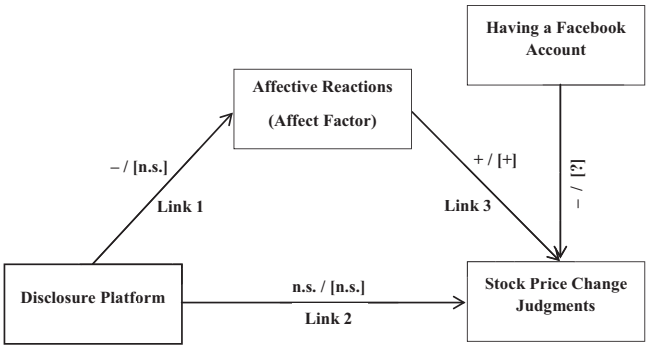


Notes: Figure 3 displays the observed pattern of adjusted least square means of participants' adjusted affective reactions (i.e., the adjusted affect factor) (Panel A of Table II). This pattern is tested using the planned contrasts presented in Panel C of Table II. See Table II for a description of the measurement of the adjusted affect factor

Figure 3.
Results: affective reactions (adjusted affect factor)

corporate news is negative rather than positive. More specifically, the study documents that the disclosure platform influences investors' affective reactions and stock price change judgments only when the corporate news is negative. *H3* predicts that investors' affective reactions will mediate the influence of the disclosure platform and news valence on investors' stock price change judgments.

Based on these predictions and the findings of testing the first two hypotheses, *H3* was tested using a two-group structural equation model that estimates separate regression coefficients for each of the positive and negative news conditions (Elliott *et al.*, 2012; Muller *et al.*, 2005). The model, illustrated in Figure 4, includes the independent variable (disclosure platform),



Notes: Figure 4 presents the structural equations model used to test *H3*. For each link, the predicted sign in the negative news condition is listed first, followed by the predicted sign in the positive news condition, listed in parentheses

Figure 4.
H3: Predictions

mediator (affect factor) and dependent variable (stock price change judgments). In addition, the model includes a covariate, having a Facebook account, which was found to influence the dependent variable (price change judgments). The following are predictions for the links in the model:

- Link 1 is expected to be significant and negative in the negative news condition and insignificant in the positive news condition.
- Link 2 is expected to be insignificant in both the negative news and the positive news conditions.
- Link 3 is expected to be significant and positive in both the negative and positive news conditions.

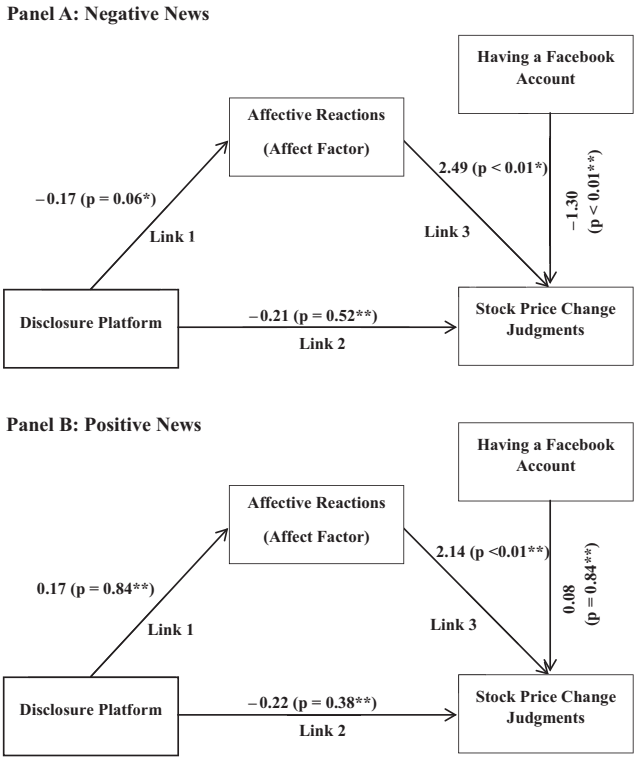
These predictions are illustrated in Figure 4.

The model appears to be a good fit ($\chi^2/df = 1.18$; CFI = 0.996)[15]. Further, the regression coefficients are consistent with the study's predictions. Panels A and B of Figure 5 present results for the negative and positive news conditions, respectively. Consistent with expectations, the link between the disclosure platform and investors' affective reactions (i.e. Link 1) is significant and negative in the negative news condition (coefficient = −0.17, p = 0.06, one-tailed), while that link is insignificant in the positive news condition (coefficient = 0.17, $p = 0.84$, two-tailed). In addition, the link between investors' affective reactions and their stock price change judgments (i.e. Link 3) is significant and positive in both the negative news condition (coefficient = 2.49, $p < 0.01$, one-tailed) and the positive news condition (coefficient = 2.14, $p < 0.01$, two-tailed). Further, as expected, the relationship between the disclosure platform and investors' stock price change judgments (i.e. Link 2) is insignificant for both the negative news condition (coefficient = −0.21, $p = 0.52$, two-tailed) and the positive news condition (coefficient = −0.22, $p = 0.38$, two-tailed)[16]. These results support the prediction that investors' affective reactions mediate the influence of the disclosure platform and the news valence on investors' stock price change judgments[17],[18].

5.4 Supplemental analysis

5.4.1 Credibility of corporate news. One potential alternative explanation for the results is that the news valence and the disclosure platform may jointly influence investors' perceptions of the credibility of the corporate news rather than investors' affective reactions to the corporate news. To examine this alternative explanation, participants were asked to complete the statement, "Astor's press release is _____," using an 11-point scale for which 1 represents "not at all believable" and 11 represents "extremely believable." Untabulated analyses reveal that participants' ratings of the credibility of the corporate news did not differ significantly between the experimental conditions (ANOVA, model's overall $F = 1.50$, $p = 0.21$). In addition, the +2, +2, −3, −1 contrast for Positive news/Facebook, Positive news/Corporate investor relations page, Negative news/Facebook, and Negative news/Corporate investor relations page, respectively, is insignificant ($F = 0.25$, $p = 0.61$, two-tailed)[19]. Therefore, it can be concluded that investors' perceptions of the credibility of the corporate news cannot explain the observed results.

5.4.2 Investor expectations about the valence of news shared on specific platforms. An alternative explanation for the results is that investors form expectations about the valence of news that companies are likely to share on specific platforms and react more strongly when these expectations are violated rather than confirmed (Clor-Proell, 2009, and Burgoon and Burgoon, 2001, for a discussion of the expectancy violations theory). Investors may recognize that, consistent with Jung *et al.*'s (2016) findings, companies are more likely to



Notes: Figure 5 presents the observed coefficients, followed by the *p*-values, in parentheses, for the structural equations model used to test *H3*. Panel A (B) presents the results for the negative (positive) news condition. See Table I for a discussion of the news valence and disclosure platform manipulations. In addition, Table I (2) presents descriptive statistics for investors' stock price change judgments (affective reactions)

Figure 5.
H3: Results

disclose positive rather than negative corporate news on social networking websites, such as Facebook and Twitter. Therefore, investors may be likely to react more strongly to negative news when it is disclosed on Facebook rather than on the corporate investor relations page because sharing negative news on Facebook violates investors' expectations.

The study argues that if investors form expectations about the valence of corporate news disclosed on different platforms, these expectations are unlikely to drive the observed results for two reasons. First, expectancy violations theory would predict that investors will react less strongly to positive corporate news when it is disclosed on Facebook rather than on the corporate investor relations website because investors expect corporate news that is posted on Facebook, but not the corporate website, to be mainly positive. The results, however, are inconsistent with this prediction, as the disclosure platform does not influence investor

reactions to positive news. Second, investor reactions to the violations of their expectations are mediated mainly by their cognitive reactions, such as their assessments of the credibility of the company's management and investors' perceived need to acquire additional information (Clor-Proell, 2009). In this study, investors' reactions to the combination of disclosure platform and news valence are mediated by their affective reactions to the news. For these reasons, one could argue that the study's results are unlikely to be driven by investors' expectations about the valence of the news that companies disclose through specific disclosure platforms.

6. Discussion, implications and conclusion

In this study, the research question concerns the joint influence of the disclosure platform and the valence of corporate news on investors' affective reactions to corporate news and their stock price change judgments. The results show that the disclosure platform influences investors' affective reactions and stock price change judgments when corporate news is negative but not when corporate news is positive. Further, the results reveal that investors' affective reactions mediate the influence of the disclosure platform on investors' stock price change judgments only when corporate news is negative.

This paper extends prior theory and research on individuals' affective reactions by exploring two determinants of investors' affective reactions in a social networking context. The results show that the influence of the disclosure platform on investors' affective reactions to corporate news depends on the valence of the news. Further, this study extends the research on corporate disclosures on social media by examining Facebook, rather than Twitter, as a disclosure framework, comparing Facebook to a traditional disclosure framework (the corporate investor relations website) and investigating investors' affective, rather than cognitive, reactions to corporate disclosures.

This study has many important implications for researchers, company managers and public relations specialists, capital market participants, regulators and investor education organizations and users of social networking websites. First, researchers in accounting, finance, marketing, public relations and related fields should benefit from the theory and findings to develop a better understanding of the costs and benefits of disclosing corporate news on social networking websites. The results show that it is more costly to disseminate negative corporate news on social networking websites, compared to traditional websites, because social networking websites trigger stronger affective reactions to negative news. The findings also suggest that researchers should consider both cognitive and affective reactions when examining the influence of social networking websites on individuals' reactions to news.

Second, company managers and public relations specialists should find the results informative when deciding which disclosure platforms to use to communicate with stakeholders and what news to disclose on each platform. The findings suggest that individuals react to news in a more emotional (i.e. affective) manner when they encounter the news on social networking websites rather than on traditional websites. Therefore, company managers and public relations specialists may prefer to use social networking websites to communicate simple news stories that do not require extensive cognitive effort to comprehend. Selecting the appropriate types of news to be disseminated through different disclosure platforms should improve companies' ability to manage their public images. Further, the results show that negative, but not positive, news triggers more extreme affective reactions and judgments when disclosed on social networking websites rather than traditional websites. This can provide an explanation for Jung *et al.*'s (2016) finding that companies are more likely to disclose positive rather than negative news on social networking websites.

Third, capital market participants, such as financial analysts and experienced investors, can benefit from the paper's findings by adjusting their expectations of how non-professional

investors react to corporate news in the age of social networking websites. Given the widespread use of social networking websites to share corporate news and collect investment information, market participants can expect more extreme, non-professional investor judgments to negative news, which will contribute to increasing stock return volatility. Such improved understanding of how non-professional investors react to news can help market participants to make better investment decisions. Fourth, regulators and investor education organizations can benefit from the findings when designing publications and training programs that aim at protecting the interests of non-professional investors[20]. For example, investor education publications and programs can train investors to identify and overcome the influence of the disclosure platform (social networking website versus traditional website) on investors' own judgments. In other words, these programs and publications can educate investors to react to corporate news in the same manner, regardless of the platform used to disclose the news. Finally, this paper's theory and findings can help users of social networking websites to gain insight into their own judgmental processes, which can enable these users to overcome the influence of disclosure platform on their reactions to the news.

The previous implications of this study suggest that the theory and findings have potential economic and technological impacts. The possible economic impact of this paper arises from its potential to influence companies' use of different disclosure frameworks and the ways that investors react to the news. These factors can have an impact on capital market participants' estimates of future stock returns and investment decisions that, in turn, affect the allocation of resources in the economy. The potential technological impact of this study can be realized when the users of social networking websites understand how the type of the disclosure platform shapes their reactions to news stories. This can influence users' attitudes toward, and tendency to use, social networking websites and, therefore, the speed at which these websites grow and evolve.

This research is subject to the limitations and challenges that are common to experimental studies. For example, participants are presented with only a subset of the information that they can typically access when making a real-life investment decision. In addition, to test the predicted influence of the manipulated variables on participants' judgments, an experimental study must hold constant or abstract away from other relevant factors that can affect participants' judgments. Further, because the results are obtained using participants from the USA, differences in economic, social or political conditions across countries may limit the generalizability of the results to some regions of the world. For example, the use of social networking websites as corporate disclosure platforms may be limited in countries where companies rely to a great extent on banks as sources of capital. Therefore, investors' attention and reactions to corporate news shared on social networking websites may be limited in these countries.

In addition, in countries in which internet censorship is common, investors may have low confidence in the news they read on social networking websites, which will dampen investors' reactions to that news. Therefore, limited investor attention or low investor confidence is likely to reduce the influence of the disclosure platform on investors' judgments, which means that investors can experience similar affective reactions and make similar investment judgments whether the news is disclosed on a social networking website or a traditional website. As a result, the joint influence of the disclosure platform and the news valence documented in this paper may not hold in countries where banks are a main source of capital or where internet censorship is common.

Finally, this paper addresses a number of gaps in the extant literature and highlights other gaps that can be addressed in future research. With regard to the extant literature, this research extends the theory on affective reactions by highlighting the differential influence of disclosure

platforms on investors' affective reactions. This paper also extends accounting research on social networking websites by investigating Facebook, rather than Twitter, as a disclosure platform and focusing on investors' affective, rather than cognitive, reactions to corporate news. With regard to opportunities for future research, this paper highlights the importance of examining the influence of the disclosure platform on other types of investment judgments, such as the perceived riskiness of the company. Further, future studies can examine factors, such as the source of the news (i.e. the company itself versus third parties), that are likely to influence investors' and other stakeholders' reactions to corporate news disclosed on social networking websites. In addition, it would be interesting to examine the influence of disclosing news on other social networking websites, such as Twitter or LinkedIn, on the affective reactions and judgments and decisions of investors and other stakeholders. Finally, future research can replicate this study, using investors from other countries, especially countries with different economic, social, or political conditions as compared to the USA.

Notes

1. According to Kaplan and Haenlein (2010: p. 61), social media is "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content." Kaplan and Haenlein also explain that social networking websites, one type of social media, are "applications that enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending e-mails and instant messages between each other; and these personal profiles can include any type of information, including photos, video, audio files, and blogs" (63). This study focuses on social networking websites but includes prior research on social media, in general, because the arguments and findings of that research apply to social networking websites.
2. The corporate investor relations website is a traditional way for companies to disseminate information and establish their presence on the Internet (Bollen *et al.*, 2006).
3. This study focuses on Facebook because there is an expectation that corporate news will trigger stronger affective reactions when shared on Facebook rather than on Twitter. Compared to Twitter, Facebook has significantly more active users (Statista.com, 2017b), longer average time spent by each user (Bennett, 2014; Stewart, 2016), and a much higher character limit for posts made by users (Buck, 2012). These differences suggest that users will be more engaged with corporate news when they encounter it on Facebook than on Twitter, consistent with Zhou *et al.*'s (2015) findings. More user engagement, in turn, is expected to trigger stronger affective reactions to corporate news shared on Facebook rather than Twitter.
4. To reduce the salience of the qualification criteria, the related questions were asked among other questions, which concerned the highest degree earned and previous work experience, before participants could start the experimental task.
5. Two additional participants quit the study before responding to demographic questions and were excluded from the analysis. If these two participants are included in the analysis, results are inferentially identical to those reported in the study.
6. A sample of companies' Facebook pages were searched to identify the types of corporate news that they disclose. Some companies posted news about charitable contributions (e.g., Exxon Mobil, Wells Fargo, Bank of America, Coca-Cola), products and ads (e.g., Apple, Walmart, AT&T, Microsoft, Intel, Conoco Phillips), investments and new projects (e.g., Citigroup, Phillips 66), and financial news and links to annual reports (e.g., IBM, Proctor & Gamble, Ford Motor, Conoco Phillips).
7. A pilot study was conducted with 239 participants, recruited from Mechanical Turk, who did not subsequently participate in the main experiment. The main purpose of the pilot study was to ensure that the experimental manipulations were well understood by participants. Based on the pilot study, the case materials were modified before conducting the main experiment.

8. Results of testing the hypotheses are inferentially identical to the results reported in the next section if the affect factor is constructed based on two questions only ("Astor's press release made me feel good/bad"), similar to prior research, e.g., Mercer (2005).

9. The mean response for each of the positive and negative news conditions is significantly different from the mid-point of the scale, equal to 6, suggesting that participants did not perceive the news included in the press release to be neutral (for the positive news condition: $t = 25.14$, $p < 0.01$, two-tailed; for the negative news condition: $t = -10.92$, $p < 0.01$, two-tailed).

10. When responses from participants who fail one or both of the manipulation checks are excluded from the analyses, results are inferentially identical to the results reported in this section. Thus, the responses from participants who fail the manipulation checks are not excluded.

11. In the demographic questions, participants were asked whether they had a Facebook account. Analyses revealed that having a Facebook account had a significant influence on participants' stock price change judgments, as seen in Panel B of Table 1. This finding is consistent with the study's theory that argues that prior experience with Facebook will influence investors' reactions to corporate news received on that website. Therefore, H1 was tested using participants stock price change judgments adjusted for the effect of having a Facebook account as the dependent variable, as illustrated in Panel C of Table 1. The results of testing H1 are inferentially identical if the unadjusted stock price change judgments are used as the dependent variable.

12. H1 is also supported using alternative sets of contrast weights, such as +3, +2, −4, −1 for Positive news/Facebook, Positive news/Corporate investor relations page, Negative news/Facebook, and Negative news/Corporate investor relations page, respectively. This alternative set of contrast weights allows for a significant effect of disclosure platform, given positive news.

13. Consistent with the paper's theory, analyses reveal that having a Facebook account exerts a significant influence on participants' affective reactions (i.e., affect factor), as illustrated in Panel B of Table 2. Therefore, we test H2, using the affect factor, adjusted for the effect of having a Facebook account, as the dependent variable, as illustrated in Panel C of Table 2. The results of testing H2 are inferentially identical if the unadjusted affect factor is used as the dependent variable.

14. H2 is also supported using alternative sets of contrast weights, such as +3, +2, −4, −1 for Positive news/Facebook, Positive news/Corporate investor relations page, Negative news/Facebook, and Negative news/Corporate investor relations page, respectively. This alternative set of contrast weights allows for a significant effect of disclosure platform, given positive news.

15. For a model to be a good fit, χ^2/df should be less than 3, and CFI should be at least 0.95 (Elliott *et al.*, 2012; Iacobucci, 2010; Marsh *et al.*, 2004).

16. The results of testing H1 reveal that, when corporate news is negative, the total effect of the disclosure platform on investors' stock price change judgments is significant. Further, results of testing H3 show that, when investors' affective reactions (i.e., the mediator) are included in the model, the residual effect of the disclosure platform on investors' stock price change judgments becomes insignificant in the negative news condition. These findings reveal that investors' affective reactions mediate the influence of the disclosure platform on investors' stock price change judgments when corporate news is negative. Mediation cannot be established, however, when corporate news is positive because, as revealed by the results of testing H1 and H2, the disclosure platform does not influence investors' affective reactions or stock price change judgments when corporate news is positive.

17. In addition, Panels A and B of Figure 5 show that the link between having a Facebook account and investors' stock price change judgments is significant and negative when corporate news is negative (coefficient = −1.30, $p < 0.01$, two-tailed), while that link is insignificant when corporate news is positive (coefficient = 0.08, $p = 0.84$, two-tailed). This finding provides further support to

the prediction that the influence of disclosure platform on investors' judgments will be stronger when corporate news is negative rather than positive.

18. Results of testing H2 show that having a Facebook account influences investors' affective reactions. If we modify our SEM model by adding a link between having a Facebook account and the affect factor, the results would be inferentially identical to the results reported in this section.

19. Inferentially identical results are obtained when controlling for the effect of having a Facebook account on perceptions of the credibility of corporate news: The analysis of covariance (ANCOVA) model is insignificant (overall $F = 1.25$, $p = 0.29$), and the $+2, +2, -3, -1$ contrast is insignificant ($F = 0.29$, $p = 0.59$, two-tailed).

20. Examples of regulators and organizations that are involved in investor education include the Security and Exchange Commission and the Financial Industry Regulatory Authority in the United States and the Financial Services Authority and the Department for Work and Pensions in the United Kingdom.

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