

## Investor affect, investor status and the influence of analyst reports\*

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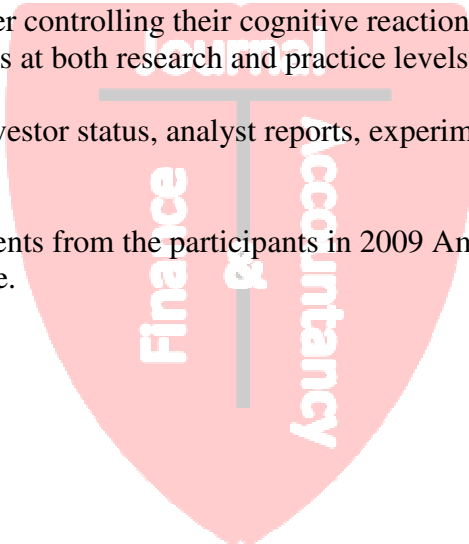
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### ABSTRACT:

This study examines whether and how the information in financial analysts' research reports influences nonprofessional investors' affective reactions and how such reactions differ by investors' status (current or prospective investors). The results from an experiment show that investors feel more positive when they receive a favorable analyst report than when they receive an unfavorable report, and such a difference in feelings is more significant for current investors than for prospective investors. Moreover, investors' affective reactions significantly influence their investment decisions after controlling their cognitive reactions. The results of the study may provide important implications at both research and practice levels.

Keywords: Investor affect, investor status, analyst reports, experiment, investor judgments and decisions.

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## INTRODUCTION

This study examines whether and how the information in financial analysts' research reports influences nonprofessional investors' affective reactions and how such reactions differ by investors' status (current or prospective investors). This examination is motivated by two reasons. First, there are only few experimental studies about the influence of analyst reports on nonprofessional investors' decision-making, and most of the studies focus on the role of investors' cognitive reactions in their use of the reports (e.g., Hirst et al. 1995; Krishnan and Brooker 2002; Chang et al. 2008; Kadous et al. 2009). While investors' decision-making is influenced by their cognitive reactions as well as affective reactions, no studies have examined the role of investors' affective reactions in their use of analyst reports. Such an examination can answer the call for more understanding of investor behaviors from psychological perspectives (Koonce and Mercer 2005). Second, there is limited research on the effect of investor status on investor information use (Cianci and Falsetta 2008), and none of it has examined the influence of investor status on their use of analyst reports. An understanding of whether and how the information in analyst reports influences the judgments of different types of investors is important because it may help analysts better align their reports to meet the information needs of its intended audience.

Based on prior research on affect (e.g., Finucane et al. 2000; MacGregor et al. 2000; Kida and Smith 1995; Mercer 2005), this study hypothesizes that nonprofessional investors will feel more positive if they receive a favorable analyst report than an unfavorable report. Based on prior research on investor status (e.g., Hodge and Pronk 2006; Cianci 2008; Cianci and Falsetta 2008), this study further expects that the difference in affective reactions will be more significant for current investors than for prospective investors: Compared to prospective investors, current investors will feel more positive if a favorable analyst report confirms their beliefs in the investment and feel more negative if an unfavorable report indicates the possibility of a negative outcome. This study finally predicts that investors' affective reactions will significantly influence their investment decisions after controlling their cognitive reactions.

To test the hypotheses, this study conducted a 2 x 2 between-subject experiment, crossing the conclusion in an analyst report (favorable vs. unfavorable) and investors' status (current vs. prospective investors). An experimental approach is used for at least two reasons. First, the approach allows studying the underlying cognitive and affective processes by which the information in analyst reports influences investors' decisions. Second, it is difficult to obtain archival data sets related to prospective investors (Harris and Jackson 2011), and an experimental approach can complement research when archival data is not easily available (Libby et al. 2002).

This study focuses on nonprofessional investors because evidence on nonprofessional investors' information use and decision making is very important (Cianci and Falsetta 2008). Nonprofessional investors are a significant group in the current market: Approximately 41 million nonprofessional investors own nearly 34 percent of all shares outstanding (Bogle 2005). However, due to their lack of experience and knowledge, nonprofessional investors may not properly use financial and nonfinancial information to make their investment decisions (Frederickson and Miller 2004). As a result, regulators, academic and practitioners have shown growing interest in understanding whether and how these investors use information to make investment-related decisions (Cianci and Kaplan 2010).

The results of the experiment generally support the hypotheses that nonprofessional investors feel more positive when they receive a favorable analyst report than when they receive

an unfavorable report, and such a difference in feelings is more significant for current investors than for prospective investors. Moreover, investors' affective reactions significantly influence their investment decisions after controlling their cognitive reactions.

The results of this study may have important implications for research. First, the results illustrate the important role of investor affect in their use of analyst reports to make decisions. These results, combined with those from prior research (e.g., Hirst et al. 1995; Krishnan and Booker 2002; Chang et al. 2008; and Kadous et al. 2009), indicate that investors experience not only cognitive reactions but also affective reactions when using analyst reports. Thus, it implies that even though investors invoke cognitive reactions to recognize an analyst's biased incentives, their affective reactions to a favorable analyst report may lead them to ignore their attributions and respond positively. This implication may explain an unexpected finding in prior research (e.g., Hirst et al. 1995) that investors rely on a favorable analyst report and judge high investment potential for a target firm even though they recognize that the analyst has incentives to be optimistic. The results of this study also suggest that investors, especially current investors, may over-rely on their affective reactions when making investment decisions, such that they may overlook or ignore other important financial or nonfinancial information (i.e., information that alerts about analyst incentives). This suggestion is consistent with that from finance research (e.g., Aspara and Tikkanen 2011; Finucane 2002; Statman et al. 2008) that investors may be driven by their affective reactions towards investment returns or outcomes while ignoring risks, conflicts of interests, or underlying causes of these returns/outcomes. Second, the results of the study provide more evidence on the importance of investor status in their use of information. Specifically, while prior studies (Hodge and Pronk 2006; Cianci 2008; Cianci and Falsetta 2008) find that investors' status (current or prospective investors) influences their use of management disclosures, this study shows that current investors and prospective investors also respond to analyst reports differently.

The results of this study may also have important implications at the practical level. First, the finding on the significance of investor affect is consistent with one explanation for investors' dysfunctional behaviors in the recent investment scandals (e.g., Madoff Scandal) whereby investors are driven by their affective reactions towards investment returns or outcomes while ignoring important information about risk or conflicts of interests. Second, the results provide analysts some insights into the information needs and use of different types of investors. Such insights may help analysts tailor their reports so that the type of information in their reports can be better aligned with their intended audience in order to enhance the report usefulness.

The study is organized as follows: The next section summarizes prior relevant research and develops the study's hypotheses. Subsequent sections describe the experiment and provide the experimental results. The last section summarizes and concludes the paper.

## **LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### **Experimental Studies on the Influence of Analyst Reports**

Analysts' research reports typically contain their forecasts of a company's performance and/or their investment recommendations (Frankel and Li 2004; Hirst et al. 1995). Archival research has shown that analysts' research reports are informative to the market (Givoly and Lakonishok 1979; Lys and Sohn 1990) because the reports are viewed to be timely (e.g., an

analyst report can be released whenever the analyst obtains the information or insight), or to have superior content (Francis et al. 2002; Chang et al. 2008).

Several experimental studies examine how and why factors, including characteristics of analysts, analyst reports and investors, jointly influence nonprofessional investors' use of analyst reports to make judgments and decisions. Specifically, Hirst et al. (1995) examine how three factors, the source of an analyst report (an analyst with or without an investment-banking relationship with the target company), the report's conclusion (favorable or unfavorable), and the strength of the arguments supporting the conclusion (strong or weak), jointly influence investors' use of the analyst report to make stock performance judgments. They find that when given an favorable analyst report, investors attribute the reason of the report more to the analyst's incentives if the analyst has an investment-banking relationship with the target firm (i.e., IB analyst) than if he/she does not. However, investors do not incorporate these attribution differences into their stock performance judgments in that they still judge the stock of the target firm to have high potential and ignore the argument strength regardless of whether the favorable report comes from an IB analyst. Hirst et al. (1995) also shows that when given an unfavorable analyst report, investors judge a lower stock potential and are influenced by the argument strength in the report. Built on Hirst et al. (1995), Krishnan and Booker (2002) examine how an investor's current stock position (paper gain or paper loss), the type of analyst recommendations (favorable or unfavorable) and the strength of the supporting arguments in recommendations (strong or weak) jointly influence the investor's decision to buy/sell stock. They find that current investors tend to commit the disposition error, (i.e., sell winning stock too soon and hold losing stock too long), while the type and strength of analyst recommendations can help reduce the error. Specifically, investors who are in a favorable market condition and have a gain position are least likely to sell the stock when provided with a strong analyst recommendation and most likely to sell when there is no analyst recommendation. In contrast, investors who are in an unfavorable market condition and have a loss position are most likely to sell the stock when provided with a strong analyst recommendation as against a weak analyst recommendation, and least likely to sell when there is no analyst recommendation. Chang et al. (2008) similarly examine the joint effect of an investor's current stock position (paper gain or paper loss) and the type of analyst forecasts (favorable or unfavorable) on the investor's use of analyst forecasts in relative to their use of management forecasts. They argue that investors' decisions to use analyst forecasts or management forecasts depend on their expectations of the motives of the analyst and management. Since analysts have motives to issue favorable forecasts, Chang et al. (2008) find that unfavorable forecasts have a greater effect than favorable forecasts especially when an analyst forecast confirms the earlier management forecast. Kadous et al. (2009) examine how investors form beliefs about the credibility of an analyst from his/her forecast accuracy (i.e., how close the analyst's forecast is to realized earnings) and forecasting boldness (i.e., how far the analyst's forecast is from the consensus analyst forecast). They find that if an analyst issues a bold and accurate forecast, investors are likely to infer the analyst to have highest credibility and consequently most willing to rely on the analyst's future research reports.

### **Conclusion in an Analyst Report and Investor Affect**

It is important to note that all the prior experimental studies have focused on the role of investors' cognitive reactions in using analyst reports. That is, these studies argue and find that investors cognitively attribute analyst reports to different reasons and/or infer analyst credibility

when using the reports to make judgments and decisions. However, research (Aspara and Tikkanen 2011; Finucane et al 2000; MacGregor et al. 2000; Mercer 2005; Statman et al. 2008) has shown that investors' decisions are also influenced by their affective reactions. Thus, this study intends to examine whether and how the information in analyst reports influences investors' affective reactions, which, in turn, influence their decisions.

Affect is one of the most fundamental psychological processes that people use to comprehend their world, and is a primary motivator of human behavior and choices (Damasio 1994; Fiske and Taylor 1991; Zajonc 1980). In the area of accounting, affect is commonly considered to be an evaluative reaction, such that information (including numerical information) is represented as a positive or negative valence in memory (Kida and Smith 1995). The coding in memory leads to affective reactions, such as a positive (negative) affect reaction to increasing/favorable (decreasing/unfavorable) information, which, in turn, influence the decisions of information users (i.e., managers, investors) (Kida et al. 1998). For example, Mercer (2005) finds that, in the long term, investors feel good (bad) about positive (negative) management forecasts. These feelings lead investors to perceive management that provides positive forecasts to have higher credibility than management that provides negative forecasts, which, in turn, influence investors' willingness to rely on management's future disclosures.

Based on the above research, this study hypothesizes that when investors receive an analyst report, they code the conclusion in the report as either favorable or unfavorable, which in turn, invoke their affective reactions. Specifically, investors will feel good (bad) if the conclusion in an analyst report is favorable (unfavorable). This leads to H1a.

H1a: Investors will have more positive affective reactions if an analyst report is favorable than if it is unfavorable.

### **Investor Status, Report Conclusion and Investor Affect**

Several studies provide evidence that current and prospective investors use information differently when making investment decisions. Specifically, Hodge and Pronk (2006) find that current and prospective investors acquire different types of financial information within a firm's quarterly report because the two types of investors have different degree of familiarity with investment: Current investors are more familiar and knowledgeable about a given firm and have stronger beliefs about the firm's key accounting information. Cianci (2008) and Cianci and Falsetta (2008) argue that current and prospective investors have different investment goals: Current investors have more prevention goals in that they seek to protect and keep their investment safe and secure, whereas prospective investors have more promotion goals in that they seek opportunities to increase wealth. As a result, these two types of investors rate the relevance of information in the Management Discussion and Analysis (MD&A) of a given firm differently. Specifically, the rating difference between negative and positive information is more significant for current investors than for prospective investors.

It is important to note that all the prior studies have focused on the influence of investor status on their use of management disclosures. This study intends to examine whether investor status influences investors' affective reactions and consequently, their use of analyst reports. According to research on confirmative bias and attitude polarization (Eysenck and Keane 2000; Fine 2006; Lord et al. 1979), people who have a prior belief or attitude accept a given piece of information to be more supportive if the information confirms with their belief. In the current

context, current investors are more likely to have a belief in a given firm than prospective investors (Hodge and Pronk 2006). As a result, when given a favorable analyst report, current investors are more likely to accept the report as it confirms with their beliefs in the investment and thus feel positive than are prospective investors. On the other hand, since current investors (relative to prospective investors) have more prevention goals and are found to be more sensitive to the possibility of a negative outcome (Cianci 2008; Cianci and Falsetta), they are expected to invoke more negative feelings when given a unfavorable analyst report. In sum, this study predicts that the difference in investor affect to a favorable and unfavorable analyst report will be more significant for current investors than for prospective investors. This leads to H1b.

H1b: The difference between investors' affective reactions to favorable and unfavorable analyst reports will be more significant for current investors than for prospective investors.

### **Investor Affect and Investor Decisions**

Prior research finds that investors' affective reactions influence their investment-related judgments and decisions (Mercer 2005; MacGregor et al. 2000; Statman et al. 2008). Following the prior research, this study predicts that investors' affective reactions invoked by the information in analyst reports and investor status will influence their investment decisions. That is, if investors experience both cognitive reactions and affective reactions when using analyst reports, the differences in their affective reactions are expected to be incorporated into their investment decisions after controlling investors' cognitive reactions.

H2: Investors' affective reactions will influence their investment decisions after controlling their cognitive reactions.

Figure 1 (Appendix) summarizes the hypotheses.

## **EXPERIMENT**

### **Experiment Design**

To test the hypotheses, this study adopted a 2 x 2 between-subjects design with the following two variables: (1) conclusion in an analyst report: favorable vs. unfavorable; (2) investor status: current vs. prospective.

### **Participants**

As did in prior studies (MacGregor 2000; Krische 2005), this study recruited undergraduate business students as proxies for nonprofessional investors.<sup>1</sup> In total, sixty-seven undergraduate business students participated in the experiment, with an average of 2.7 year full-time working experience. These students have completed an average of 2.5 accounting classes, which should have given them necessary knowledge to complete the task. Moreover,

<sup>1</sup> Libby et al. (2002) advise that in experiments of novice investors judgment, participants need only a basic understanding of accounting and investing.

approximately one-third of participants had prior investment experience and 67.7% who are not currently investing plan to invest in the next five years.

### **Task**

Participants were asked to assume the role of an investor and read information about Blueco, a medical supply company. Then, participants in the Current Investors condition were told that they had recently purchased the common stock in Blueco and the current stock price was similar to their original purchase price (to exclude the effect of any paper gain or loss). In contrast, participants in the Prospective Investors condition were told that they were currently evaluating the stocks of several companies in the industry, among which was Blueco. After reading the background information about Blueco, participants were provided with an analyst report from American Financial. In the Favorable Report condition, participants were informed that analysts forecasted the earnings per share (EPS) for Blueco's 4<sup>th</sup> quarter to be \$0.50 (\$0.08 higher than its EPS reported for the 3<sup>rd</sup> quarter), and also strongly recommended buying Blueco's stock. In the Unfavorable Report condition, participants were informed that analysts forecasted the EPS for Blueco's 4<sup>th</sup> quarter to be \$0.34 (\$0.08 lower than its EPS reported for its 3<sup>rd</sup> quarter), and also strongly recommended selling Blueco's stock. To control for the effect of analyst incentives, participants in all conditions were informed that American Financial had an investment-banking relationship with Blueco. After reading all the information, participants answered a number of questions regarding their investment decisions, affective reactions, cognitive reactions and the manipulation checks.

### **Dependent Variables**

#### *Investors' Affective Reactions and Cognitive Reactions*

This study followed Mercer (2005) to measure participants' affective reactions and cognitive reactions. Specifically, participants' affective reactions to the analyst report were measured by their agreements with the following statement, "analysts' report from American Financial Inc. caused me to feel good." Participants' responses were recorded on a seven-point Likert-type scale with endpoints "strongly disagree" (1) and "Strongly Agree" (7). According to Mercer (2005), responses to this question capture both the direction and strength of participants' affect. That is, responses above (below) the scale midpoint indicate positive (negative) affect; the higher (lower) the number, the more positive (negative) the affective reaction.

Participants' cognitive reactions were measured by the attributions they made for the reason of the analyst report. Specifically, participants were asked to allocate 100 points to any of five potential reasons for the analyst report: Analysts' desire to keep the good relationship with management, analysts' self-interest, analysts' actual beliefs about the company's economic performance, analysts' desire for fair disclosure to investors and legal liability concerns. Higher (lower) points participants chose to allocate indicated that participants believed the reason (reasons) to be more (less) important cause of the analyst report. Since all the participants were informed that American Financial Inc. had an investment-banking relationship with Blueco, this study was primarily interested in participants' attributions of the analyst report to "analysts' desire to keep the good relationship with management and analyst's self interest". Specifically,

the points out of 100 that participants chose to allocate to these two reasons were added and used as the measure for participants' cognitive reactions in the study.

### *Investment Decision*

Participants' investment decisions were measured by the likelihood they would buy more shares of the Blueco's stock, on a seven-point Likert-type scale with the ends labeled "not likely at all" (1) and "very likely" (7).

## **RESULTS**

### **Manipulation Checks**

To check whether participants perceived the conclusion in the analyst report as manipulated, they were asked to indicate whether analysts from American Financial strongly recommended buying (selling) shares of Blueco. A frequency analysis show that in the favorable (unfavorable) report condition, 97 percent (88 percent) of participants correctly indicated that the analysts recommended buying (selling) shares of Blueco. Participants were also asked to indicate the extent to which they agreed that analysts forecasted Blueco's EPS for the 4<sup>th</sup> quarter to be higher (lower) than its EPS reported for the 3<sup>rd</sup> quarter on a seven Likert-type scale with endpoints "strongly disagree" (1) and "Strongly Agree" (7). A descriptive analysis shows that participants in the favorable report condition strongly agreed that the analysts forecasted Blueco's EPS for the 4<sup>th</sup> quarter to be higher than its EPS reported for the 3<sup>rd</sup> quarter (mean = 5.45, S. D. = 1.98). Similarly, participants in the unfavorable report condition strongly agreed that the analysts forecasted Blueco's EPS for the 4<sup>th</sup> quarter to be lower than its EPS reported for the 3<sup>rd</sup> quarter (mean = 5.97, S. D. = 1.67). Such results indicate that participants perceived the conclusion in the analyst report to be favorable or unfavorable as manipulated.

To check whether participants perceived their status as manipulated, they were asked to indicate whether they were currently holding the shares of Blueco. A frequency analysis shows that in the Current (Prospective) Investors condition, 77 percent (90 percent) of participants correctly indicated that they were (were not) currently holding the shares of Blueco.

Excluding participants who failed one or more of the manipulation checks does not materially change any of the results of the study. Thus, the following analysis included the responses from all participants.

### **Test of Hypotheses**

H1a and H1b predict that the conclusion of an analyst report and investor status will influence participants' affective reactions. To test H1, a 2x2 Analysis of Variance (ANOVA) was conducted with Report Conclusion and Invest Status as the independent variables and participants' affective reaction measure as the dependent variable. The results are reported in Table 1. Panel B of Table 1 shows that Report Conclusion significantly influenced participants' affective reactions ( $F = 8.11$ , two-tailed  $p = 0.01$ ). Specifically, Panel A of Table 1 shows that participants felt more positive when they received a favorable analyst report (mean = 4.53, S.D. = 1.61) than when they received an unfavorable report (mean = 3.54, S.D. = 1.15). This result provides support to H1a.



Moreover, Panel C of Table 1 (Appendix) shows that the difference in participants' affective reactions to the favorable and unfavorable reports is significant in the Current Investors condition ( $F = 6.86$ , two-tailed  $p = 0.01$ ), but not in the Prospective Investors condition ( $F = 2.23$ , two-tailed  $p = 0.15$ ). That is, when given a favorable analyst report, current investors (mean = 4.56, S.D. = 1.46) felt better than prospective investors (mean = 4.50, S. D. = 1.83). When given an unfavorable report, current investors (mean = 3.39, S.D. = 1.20) felt worse than prospective investors (mean = 3.71, S.D. = 1.10) (See Panel A of Table 1). As a result, current investors experienced more significant differences in their affective reactions to favorable and unfavorable reports than prospective investors, consistent with H1b.

To test H2, simple regressions were conducted to examine the influence of participants' affective reactions on their investment decisions. Participants' investment decisions were first regressed on their affective reactions only. The result, which is reported in Panel A of Table 2 (Appendix), shows a significantly positive relationship between the two variables ( $t = 3.65$ , two-tailed  $p < 0.01$ ). Then, the measure for participants' cognitive reactions was included in the regression. The result, which is reported in Panel B of Table 2, still shows a significantly positive relationship between participants' affective reactions and their investment decisions ( $t = 3.94$ , two-tailed  $p < 0.01$ ). Such results provide the support to H2 that investors' affective reactions will significantly influence their investment decisions after controlling for their cognitive reactions.

## DISCUSSION AND CONCLUSIONS

This study provides experimental evidence on the role of investor affect in their use of analyst reports to make investment decisions. It finds that nonprofessional investors feel more positive when they receive a favorable analyst report than when they receive an unfavorable report, and such a difference in feelings is more significant for current investors than for prospective investors. Moreover, investors' affective reactions significantly influence their investment decisions after controlling their cognitive reactions.

The results of this study may have important implications. First, the results complement research on investors' use of analyst reports (e.g. Hirst et al. 1995; Krishnan and Booker 2002; Chang et al. 2008; Kadous et al. 2009) by showing that investors experience affective reactions when using the reports to make their decisions. Prior research, such as Hirst et al. (1995), finds that investors attribute a favorable analyst report more to an analyst's incentive when the analyst has an investment-banking relationship with a target firm (i.e., IB analyst) than when he/she does not. Yet, when judging the investment potential for the target firm, investors ignore their attributions but judge high potential for the firm even though the favorable report comes from an IB analyst. The results about investor affect in this study may provide some insights to explain this unexpected finding. That is, even though investors make cognitive attributions for an analyst report, their attributions may not be incorporated into their judgments because their judgments are more significantly influenced by their affective reactions to the conclusion in the analyst report. These insights may also raise a concern about whether investors over-rely on their affective reactions such that they may overlook or ignore other important financial or nonfinancial information (i.e., information that alerts about analysts' possible incentives). This concern is consistent with that from finance research (Aspara and Tikkanen 2011; Finucane 2002;

Statman et al. 2008) that investors may be driven by their affective reactions towards investment returns or outcomes while ignoring risks, conflicts of interests, or underlying causes of these returns/outcomes. Second, the results provide evidence that current investors and prospective investors respond to analyst reports differently. Such evidence may help analysts better understand the information needs and use of different types of investors and thus better align their reports with the intended audience to enhance the report usefulness.

The above results should be interpreted in light of the study's limitations. First, with the use of an experimental case, there is the inevitable risk that factors that are potentially relevant to investors may have been omitted. Second, it is possible that the information alerting about the analysts' possible incentives (i.e, information about the investment-banking relationship between American Financial and Blueco) in the current experiment is not strong enough. As a result, participants do not invoke significant cognitive reactions to the analyst report, resulting in a finding of an insignificant influence of cognitive reactions in the study. Third, the study's limited external validity should be noted. Participants were limited to undergraduate business students who served as surrogate nonprofessional investors. Moreover, the hypotheses were tested in the context of specific disclosure of a particular company within a specific industry. Accordingly, any generalizations to nonprofessional investors with more investment experience or to other financial disclosure behaviors in other industries must be made with care.

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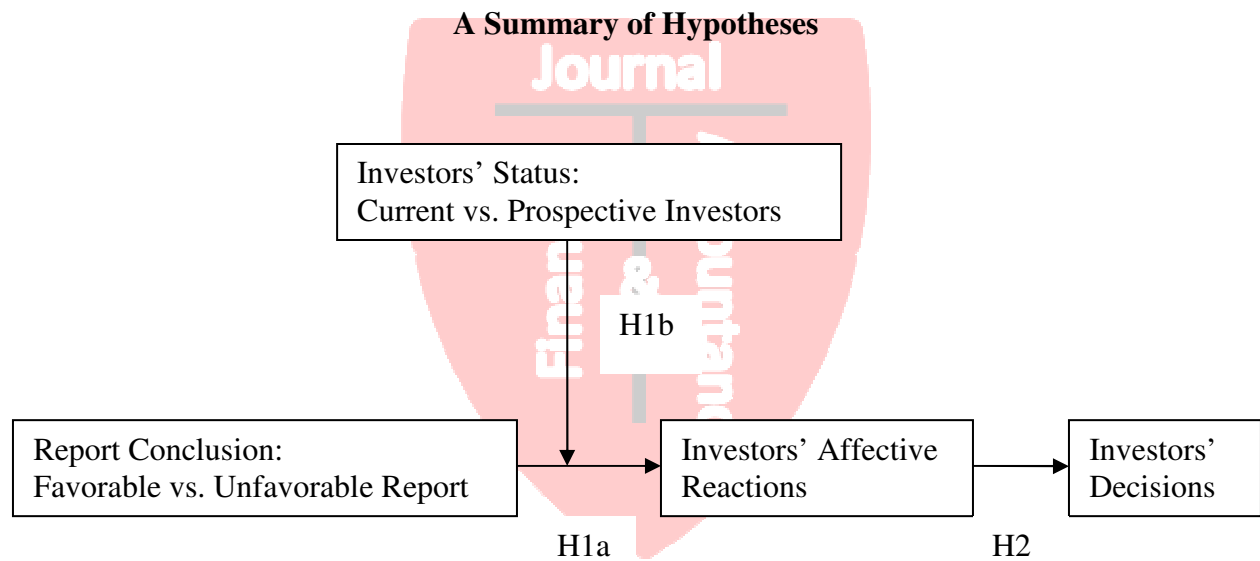
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**APPENDIX**

**FIGURE 1**



**TABLE 1**  
**Effect of Report Conclusion and Investor Status on Investors' Affective Reactions<sup>a</sup>**

**Panel A Mean Affective Reactions (standard deviations are in parentheses)**

	<b>Favorable Conclusion</b>	<b>Unfavorable Conclusion</b>	
<b>Current Investors</b>	4.56 (1.46) n = 18	3.39 (1.20) n = 18	3.97 (1.44) n = 36
<b>Prospective Investors</b>	4.50 (1.83) n = 14	3.71 (1.10) n = 17	4.06 (1.50) n = 31
	4.53 (1.61) n = 32	3.54 (1.15) n = 35	

**Panel B ANOVA Results**

<b>Factor</b>	<b>df</b>	<b>MSE</b>	<b>F-statistics</b>	<b>p-value (two-tailed)</b>
Report Conclusion	1	15.92	8.11	0.01
Investor Status	1	0.28	0.14	0.71
Report Conclusion X Investor Status	1	0.58	0.29	0.59

**Panel C Planned Comparisons**

	<b>d.f.</b>	<b>F-statistics</b>	<b>p-value (two-tailed)</b>
Effect of Report Conclusion in the Current Investors condition	34	6.86	0.01
Effect of Report Conclusion in the Prospective Investors condition	29	2.23	0.15

<sup>a</sup> Participants' affective reactions were measured by the extent to which they agreed that analysts' report from American Financial Inc. caused them to feel good. Responses were recorded on a 7-point Likert-type scale with the ends labeled "strongly disagree" (1) and "strongly agree" (7). Higher means indicate more positive affective reactions among participants.

**TABLE 2**  
**Regression Analysis of the Effect of Participants' Affective Reactions on Their Investment Decisions**

Panel A: DECISIONS =  $\alpha_0 + \alpha_1$  AFFECTIVE REACTIONS +  $\varepsilon$

<u>Variables</u>	<u>Coefficient</u>	<u>Decisions</u>	
		<u>t-test</u>	<u>p-value (two-tailed)</u>
Constant		2.69	0.01**
AFFECTIVE REACTIONS	0.41	3.65	0.00**
Adj. R <sup>2</sup>		0.16	

Panel B: DECISIONS =  $\alpha_0 + \alpha_1$  AFFECTIVE REACTIONS +  $\alpha_2$  COGNITIVE REACTIONS +  $\varepsilon$

<u>Variables</u>	<u>Coefficient</u>	<u>Decisions</u>	
		<u>t-test</u>	<u>p-value (two-tailed)</u>
Constant		0.90	0.37
AFFECTIVE REACTIONS	0.46	3.94	0.00**
COGNITIVE REACTIONS	0.18	1.52	0.13
Adj. R <sup>2</sup>		0.17	

Participants' affective reactions were measured by the extent to which they agreed that analysts' report from American Financial Inc. caused them to feel good. Responses were recorded on a 7-point Likert-type scale with the ends labeled "strongly disagree" (1) and "strongly agree" (7).

Participants' cognitive reactions were measured by the total points out of 100 they allocated to the two reasons for the analyst reports: Analysts' desire to keep the good relationship with management and analyst's self interest.

Participants' investment decisions were measured by the likelihood that participants would buy more shares of Blueco at the time that the analyst report was received. Responses were recorded on a 7-point Likert-type scale with the ends labeled "not likely at all" (1) and "very likely" (7).

\*\* : significant at or less than a 0.01 level