HOW CAN UNFAVORABLE INFORMATION BE MINIMIZED? “DESIRED IMAGES” EMERGE FROM THE COMPANY AND FROM WITHIN OURSELVES

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1. RESEARCH OBJECTIVE

This research aims to analyze how accounting information can be manipulated by preparers and investors to create the desired image of a company (an investment). On the one hand, aiming to convert unfavorable information into a favorable image, preparers use impression management and “optimal” directional presentation of information. On the other hand, investors that face unfavorable information and that identify an investment as a sunk cost deceive themselves as regards to unfavorable information. Self-deception explains why investors make bad decisions (i.e., maintain bad investments) even when they have available information to help them.

2. RELEVANCE OF THE STUDY

This research is relevant to both accounting and psychology literature with the presentation of financial reporting as well as the influence of investors’ biases on information acquisition and evaluation of accounting information. Although significant advances have been made in the understanding of how investors react to (un)favorable information, little attention has been given to the order of disclosing information and self-deception in this process.

3. RESEARCH DELIMITATION

The purpose of this research is to analyze in a behavioral approach how decisions are made by investors based on accounting information. Then, this research is delimited as Behavioral Accounting, which is related to how accounting affects and is affected by judgment and decision of individuals and organizations, and use an experimental design.

4. THEORETICAL BACKGROUND

The theoretical constructs of our analysis can be observed in Figure 1. The left side shows that preparers seek to create the desired image in two ways: first, by using what is called ‘impression management’ in accounting literature; second, by presenting favorable and unfavorable information in an “optimal” directional sequence. Such variables have the function of minimizing unfavorable information so that they cause the least annoyance while good news is emphasized. The right side shows that investors also seek to create an image of the company for themselves and that this image is influenced by their investment position. Thus, the investor seeks to minimize the annoyance of unfavorable information once the investment has already been made. One explanation for that is that they use a construct referred to as ‘self-deception’ in psychology literature (Clegg & Moissinac, 2005; Davidson, 1985; Fernbach, Hagmayer, & Sloman, 2014; Mele, 2001; Sloman, Fernbach, & Hagmayer, 2010).
Psychological and organizational behavior research have shown that people respond differentially to positive and negative stimuli, and negative events tend to generate stronger behavioral responses than positive events (Barsade, 2002; Cacioppo, Gardner, & Berntson, 1997; Rozin & Royzman, 2001). Psychological literature in motivated reasoning shows that directional preferences influence not only the decisions people make but also how information gets processed. Individuals often accept information that is consistent with their preferences and they tend to accept the information without thinking about it deeply while they tend to spend more cognitive effort scrutinizing information that is inconsistent with their preferences (Ditto & Lopez, 1992; Hales et al., 2011).

5. METHODOLOGICAL PROPOSAL

In order to use an experimental design in this research, the framework model will be applied in three different experiments. Analyzing the framework in different experiments allows us to focus on one or two phenomena at a time. The sample used in this study consists of nonprofessional investors and other participants who may have knowledge of the fundamental concepts of financial accounting and analysis of financial reports and experience (or willingness to invest) in the stock exchange market. Hence, a broad range of participants are expected: non-professional investors, MBA students, and subjects from Amazon Mechanical Turk. Participants of research will be required to analyze a hypothetical public company’s financial reports and make earnings forecast for the company. Furthermore, scrutiny time will be measured, but participants will be not told about.

**Experiment 1.** The aim of Experiment 1 is to analyze if unfavorable information would be more intensively scrutinized than favorable information. We will use an experiment design with randomization of subjects into two different groups. The participants assigned to the first group will receive a Management Discussion & Analysis (MD&A) with three unfavorable pieces of information while the second group will receive a MD&A with three favorable pieces of information. Moreover, all participants will receive the same financial information. We will use
real financial information from a Brazilian Company whose shares are traded at BMF&Bovespa and ADRs at NYSE.

**Experiment 2.** The aim of Experiment 2 is to analyze how the impression management and the direction how information is disclosed can minimize the impact of unfavorable information. We will employ a design that manipulates (1) the impression management condition and (2) the optimal directional condition.

1) *Impression management manipulation:* Different impression management techniques were used based on Jones’ (2011) framework, such as (i) stress the favorable information (good news) and downplay the unfavorable information (bad news) and (ii) attribute good news to themselves but bad news to the environment. Subjects received information without impression management in the first condition and with impression management in the second condition.

2) *Optimal directional manipulation:* Six pieces of information about the company were presented to three different groups of subjects. The lists are identical, but the order in which the information was presented was different in each list. Series A opens with favorable information and ends with unfavorable information (Favorable – Unfavorable). This order is reversed in Series B (Unfavorable – Favorable). Additionally, a control group that received information in a neutral order was created, i.e., favorable and unfavorable information interspersed. Thus, to avoid any bias, there were two series for control groups, one starting with favorable information (series C) and another starting with unfavorable information (series D). After the characteristics were presented, subjects commented about their propensity to invest in the company.

**Experiment 3.** The aim of Experiment 3 is to answer how the investment position affects decision making and how self-deception explains why investors make bad decisions (i.e., unrealistic forecasts) even when they have available information to help them. We will employ a design that manipulates (1) the participant’s investments position and (2) unfavorable or favorable information received. We will use a web-based experiment where subjects are randomized into different manipulation groups.

1) *Self-deception:* It is the people tendency to deceive themselves about the diagnostic value of their own actions. Among the four manipulation groups, two will receive information that is congruent with their expectations and two will receive information contrary to their expectations, as shown in Table 1.

<table>
<thead>
<tr>
<th>Investment position</th>
<th>Information about company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Favorable information</td>
</tr>
<tr>
<td>Long</td>
<td>Congruent with expectation</td>
</tr>
<tr>
<td>Short</td>
<td>Contrary with expectation</td>
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<tr>
<td></td>
<td>Unfavorable information</td>
</tr>
<tr>
<td></td>
<td>Contrary with expectation</td>
</tr>
<tr>
<td></td>
<td>Congruent with expectation</td>
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</tbody>
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Considering that self-deceivers change their behavior to provide positive evidence, it is expected that people are motivated to deceive themselves in the manipulation groups where information is contrary to expectation. On the other hand, people are not motivated to deceive themselves when information is congruent with their expectation.

Self-deception is measured by the denial of agency behavior or the denial of the motives that generated this behavior. Consequently, self-deceivers are expected to deny information that is contrary to their expectations and we will operationalize it in two ways. First, we will
compare the score that participants assigned to how favorable or unfavorable the pieces of information they received were with the mean score of participants from groups in which information is congruent with expectations. Second, we asked participants the following question: “Did the information from the Management Report bother you, and because of that you spent more time analyzing the company's financial statements?” In this case, an effort denial was expected from self-deceiving participants.

**Performance-based reward**

We intend to implement a performance-based reward as an investors’ incentive structure based on studies by Hales, Kuang, and Venkataraman (2011) and Hales (2007). Considering that the company data used in the survey was real, participants will be told that the reward will be based on the performance of the company during the next year, i.e., the reward will be based on the accuracy of their earnings forecast. The performance-based reward aims to make participants assume the pressures and risks of a bad decision.

**Psychometric questionnaires**

Additionally, participants will respond to psychometric questionnaires that will measure their natural optimism based on the Life Orientation Test-Revised (LOT-R) questionnaire developed by Scheier & Carver (1985) and later modified by Scheier, Carver, & Bridges (1994). These questions evaluate what impacts this personality traits could affect investment decisions. The LOT-R instrument has been extensively used in psychology literature to capture an individual’s natural optimism (Nes & Segerstrom, 2006). The LOT-R scale was used in the accounting field by Hales et al. (2015)

6. **POTENTIAL CONTRIBUTIONS**

This research contributes to both accounting and psychology literature with the presentation of financial reporting as well as the influence of investors’ biases on information acquisition and evaluation of accounting information. First, preferences of the order of given information has been researched in the field of psychology (Legg & Sweeny, 2014; Ross & Simonson, 1991) but there is no study involving the order of given information on financial reports disclosed by companies. Second, this study expects to show that self-deception mediates the relationship between information content and information process.

This research can aid accounting practitioners, regulators, and investors who are concerned about the reliability of information in financial statements. Although auditors do not audit Management Reports, they are responsible for reading them and reporting material misstatements in the financial statements, after which regulators can monitor how information is disclosed. Investors may consider the research results as self-critical in relation to their decisions. As a result, they can create mechanisms to monitor themselves against the biases that can lead them to make an unwise decision.

**REFERENCES**


Hales, J. (2007). Directional preferences, information processing, and investors’ forecasts of


