Are CSR leaders less prone to engage in impression management?

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Abstract:

This study examines the readability of corporate communication in the CEO letters in the corporate social responsibility (CSR) reports presented by the firms included in the S&P 500 Index. These documents were content analyzed through the use of an automated algorithm provided by Readable.IO. Using a frame of analysis based on the social psychology theory of impression management, we studied the impression management tactics used. The main findings suggest that leading CSR companies (those listed in the Dow Jones Sustainability Index) present more readable CSR information in terms of comprehension and extension. These companies disclose CSR information generally in a positive way. However, these disclosure patterns are mediated by the “goal relevance of the impressions” and the “value of desired goals” related to the impression management tactics used.

Key words: Corporate social responsibility; Readability; Impression Management.

1. Introduction

CSR implies that a company takes into account the impact of its actions "on stakeholders in society, while simultaneously contributing to global sustainability" (Sarkar and Searcy, 2016, p. 1433). The communication of a company's engagement with CSR, that is, of its engagement with environmental, social and ethical issues, pertains to topics such as climate change mitigation, the relations between management and employees, respect for human rights, corporate philanthropy, product liability, and corporate governance (Montecchia et al., 2016).

The communication of such information by companies has been usually done in their annual reports, CSR reports or websites (Montecchia et al., 2016). In the wake of Lock and Seele (2016), CSR reporting is used in this text as an umbrella term for nonfinancial, sustainability, corporate citizenship, or corporate responsibility-labeled reports, albeit acknowledging the existing trend toward the use of "sustainability" in CSR report titles. Nowadays, given the rapid development of CSR reporting over the last few decades (Shabana et al., 2016) and despite the recent uptake of integrated reporting (Zhou et al., 2017), corporate financial reporting is used to disclose financial information whilst CSR reporting is used to disclose information on non-financial issues, and financial reports and CSR reports are usually presented as autonomous standalone reports (Barkemeyer et al., 2014). In this day and age, CSR reports are acknowledge as one of the main interfaces used by companies to communicate with their internal and external stakeholders (Barkemeyer et al., 2014).

One common element that financial reports and CSR reports share is the statement of the chief executive officer (CEO) (Barkemeyer et al., 2014). It is "a periodic, widely read, written, signed, and public representation of a firm's goals, actions, and results", that constitute "an important element of a CEO's discursive narration" (Patelli and Pedrini, 2014, p. 19) In the case of financial reports, such statement is concededly one of its most widely read parts (Clatworthy and Jones, 2003; Fanelli and Grasselli, 2005) and its importance is well documented (Hooghiemstra, 2010). There is evidence that CSR information is being used to an increasing extent to assess management's quality and the potential for management to grow companies' value (Eccles et al., 2011). It is therefore to be expected that CEO statements in CSR reports are also widely read.

Although there is a burgeoning stream of research on corporate communication through chairman/president/CEO statements in annual reports (e.g. Aerts and Yan, 2017; Brennan and Conroy, 2013; Clatworthy and Jones, 2001, 2003, 2006; Craig and Amernic, 2016; Craig and Brennan, 2012; Craig et al., 2013; Fanelli and Grasselli, 2005; Hooghiemstra, 2010; Hyland, 1998; Merkl-Davies and Koller, 2012; Oliveira et al., 2016; Patelli and Pedrini, 2014, 2015; Smith and Taffler, 2000), such communication through similar documents in CSR reports remains under-researched. As far as the authors are aware only four studies have examined CEO letters provided in CSR reports (Barkemeyer et al., 2014; Domenec, 2012; Mäkelä and Laine, 2011; Smeuninx et al., 2016).

Following Barkemeyer et al. (2014), who make an analogy between CEO statements in financial reports and similar statements presented in CSR reports, we aim at examining to what extent can CSR reports actually serve as accurate and fair representations of CSR-related performance. We do this by way of an examination of the readability of the information provided in the CEO letters included in the CSR reports presented by the firms included in the S&P 500 Index. Our purpose is to compare CSR communication through these documents between firms which are deemed as CSR leaders with those that do not enjoy such reputation.

Using a frame of analysis based on the social psychology theory of impression management (IM), we studied the IM tactics used in CEO statements presented in CSR reports. Our analysis is grounded on Tata and Prasad's (2015) conceptual model of CSR communication and Leary and Kowalski's (1990) IM two-component model. This lens of analysis has not been used thus far in the study of CEO letters and CSR reporting (Barkemeyer et al., 2014; Domenec, 2012; Makela and Laine, 2011; Smeniux et al., 2016; Wang et al., 2017; Abu Bakar and Ameer, 2011). Our argument is that leading CSR companies have incentives to be more transparent, because they need to turn CSR image perceived by the audiences (current CSR image) consistent with organization's CSR identity (desired CSR image), basically because the "goal relevance of impressions" (assessed by public visibility) is a crucial element in the management of CSR relations with audiences.

The CEO letters in the CSR reports presented by the firms included in the S&P 500 Index were content analyzed through the use of an automated algorithm provided by Readable.IO to extract data regarding IM tactics. To achieve the research goals, we partitioned the sample in two groups of firms, those belonging to the Dow Jones Sustainability Index (DJSI), arguably world's best-known CSR index, and those that do not belong to this index. Companies belonging to the DJSI are considered as having a higher level of CSR performance, and therefore relevant to assess how these companies use CSR communication to project the desired images of the organization and their desired socially responsible identity to audiences, when compared to their counterparts.

The main findings suggest that leading CSR companies (those listed in the DJSI) present more readable CSR information in terms of comprehension and extension. These companies disclose CSR information generally in a positive way. However, these disclosure patterns are mediated by the "value of desired goals" related to the IM tactics used.

The remainder of the paper is organized as follows. Section 2 presents the background. Section 3 develops the theoretical framework and presents the hypotheses developed. Section 4 describes the research design and section 6 analyzes the empirical results. Finally, section 6 presents the summary and concluding remarks.

2. Background

The study of the readability of accounting narratives has become an important stream of research. Readability analysis has been utilized by researchers in numerous settings ranging from annual reports (Ertugrul et al., 2017; Hwang and Kim, 2017; Lehavy et al., 2011; Li, 2008; Lo et al., 2017; Moreno and Casasola, 2016), CSR reports (Nazari et al., 2017), or integrated reports (Melloni et al., 2017) to the chairman/president/CEO statements in annual reports (Clatworthy and Jones, 2001, 2003, 2006), management discussion and analysis (Lundholm et al., 2014), CSR disclosure in annual reports (Abu Bakar and Ameer, 2011), director's remuneration reports (Hooghiemstra et al., 2017), the compensation discussion and analysis section in proxy statements (Laksmana et al., 2012) or earnings press releases (Lundholm et al., 2014). Some recent studies have also explored whether disclosure readability influences investors' and judgements in experimental settings (Asay et al., 2017; Rennekamp, 2012; Tan et al., 2015).

The focus of this study is on CEO letters. The importance of such statements in financial reports is well documented. As mentioned above, it is a document which is widely read by investors (Clatworthy and Jones, 2003; Courtis, 2004; Fanelli and Grasselli, 2005; Mir et al., 2009). Moreover, it is a significant indicator of financial performance (Smith and Taffler, 1995), it provides a generic overview of companies' activities and performance enabling investors discriminating between bankrupt and financially healthy companies, and therefore subject to strong scrutiny by financial analysts, shareholders, regulators and journalists (Smith and Taffler, 2000; Sonnier, 2008), affects investors' decision-making process and firm's value (Kaplan *et al.*, 1990; Segars and Kohut, 2001), discloses elements of a CEO "mindset(s), aspirations, ideologies and strategic thinking" (Armenic and Craig, 2007, p. 26), and often personifies the culture and personality of the company (Oliver, 2000).

Merkl-Davies and Brennan (2011) discuss four different explanations for discretionary narrative disclosures, such as those present in CEO statements. First, the opportunistic IM view, which assumes that managers manipulate the information present by way of such disclosures to mislead those with an interest in the company, Second, the incremental information perspective, which view narrative disclosure as a way though which companies provide useful additional information to assist investors with their decision making. Third, the hubris approach, that views managers as being affected by a self-deception or egocentric bias regarding their performance. Finally, the retrospective sense-making explanation, according to which managers provide accounts of companies' actions and events by retrospectively ascribing causes to them.

We will also investigate the IM view for two main reasons. First, most earlier research on IM has focused on the CEO narratives (e.g. Courtis, 1995, 1998; Clatworthy and Jones, 2001, 2006; Subramanian et al., 1993; Abrahanson and Park, 1994; Thomas, 1997; Yuthas et al., 2002; Merkl-Davies et al., 2011). Second, and more importantly, in what is probably the most systematic study on CEO statements in CSR reports Barkemeyer et al. (2014, p. 242) concluded that CSR reporting "has not matured over the period of the study [2001-2010] and that the rhetoric used in the CEO statements in sustainability reports is consistent with IM rather than accountability of sustainability performance."

Literature on corporate communication through CEO statements in CSR reports is scarce. To date, few published academic studies examine CEO letters provided in CSR reports (Barkemeyer et al., 2014; Domenec, 2012; Mäkelä and Laine, 2011; Smeuninx et al., 2016), and of these, only Barkemeyer et al. (2014) and Smeuninx et al. (2016) address in a more quantitative manner such communication. Domenec (2012) investigates how the CEOs of BP, Exxon and Chevron tried to reverse the negative image of the oil industry associated to the way in which it harms the environment by using green communication in their annual letters to the stockholders (published in the annual reports) and to the stakeholders (part of the CSR reports) for the period 2003-2009. Whereas in letters to the stockholders the focus was more on factual information (describing achievements, commitments and projects), in letters to stakeholders there was an emphasis on proactive and responsible behaviour and in shared responsibility.

Mäkelä and Laine (2011) compare the use of language in CEO letters from the annual and CSR reports of two Finnish companies for the period 2000-2009. They found important differences between such statements in the two communication media. Whilst the CEO letters provided in the annual reports "make prominent use of the economic discourse of growth and profitability", in similar statements in CSR reports "CEOs rely on the 'well-being' discourse, claiming that the operations of the company are undertaken in the name of providing well-being for society at large." (Mäkelä and Laine, 2011, p. 228) CEO statements in annual reports "the seem to follow the dominant social paradigm: business and growth are natural, unquestioned and leave everybody better off", whereas "when discussing sustainability, the CEOs use the 'well-being discourse,' consisting of explicit concerns for the well-being of society, employees and the natural environment, and assure the readers of the company's commitment to sustainability." (ibid.)

More relevant to our study are Barkemeyer et al. (2014) and Smeuninx et al. (2016), given that they explores in a more quantitative manner the readability of CEO letters in CSR reports. Barkemeyer et al. (2014) examined 548 CEO statements in CSR reports and financial reports from 34 companies in 3 sectors (automobile, oil & gas, mining) for the period 2001-2010. They focused on two sentiment metrics [risk mention (certainty) and positivity (negativity)] and one readability score (the Flesch Reading Ease). Regarding CEO statements in financial reports, Barkemeyer et al.'s (2014) findings revealed a relationship between the rhetoric used in the narrative and corporate financial performance. On the contrary, in the case of CEO statements in CSR reports, the narratives do not appear to be accurate reflections of CSR performance. Barkemeyer et al. (2014, p. 254) conclude that the findings of their study support the view that CSR reports "are increasingly being used for legitimizing purposes".

Smeuninx et al. (2016) analysed autonomous CSR reports or chapters from financial annual reports or integrated reports with sustainability, CSR, or ESG-related keywords present in the heading. They also analysed CEO statements focusing on the company's financial performance in the annual report and CEO letters from CSR reports. Their findings suggest that both CSR reports and CEO letters in those reports as less readable than CEO letters from financial reports.

Other relevant studies are Abu Bakar and Ameer (2011) and Wang et al. (2017). Abu Bakar and Ameer (2011) examined the readability of CSR communications in the annual reports of listed companies in Malaysia. Their findings suggest that companies with good financial performance report communicate CSR in an easier to comprehend manner, as well as that companies with high (low) performance (in terms of profitability, liquidity and growth) present high (low) CSR disclosures readability scores.

Using a sample of 331 CSR reports issued by US public companies, Wang et al. (2017) examined the relationships between CSR reports' readability and CSR performance. These authors hypothesized and found that companies with stronger CSR performance are more likely to have CSR reports with higher readability to emphasize positive information. On the contrary, according to them, companies with inferior CSR performance are more likely to provide more difficult to read CSR reports to minimize readers' reactions to negative information. Their findings also revealed that social performance is more likely to influence the readability of CSR reports than environmental performance.

We add to this literature by examining the readibility of CEO staments in the CSR reports of firms included in the S&P 500 Index and investigating the relationship between their CSR perfomance and their CEOs narratives.

3. Theoretical framework and development of hypotheses

In opposition to financial reporting, CSR reporting appeals to a wider audience (GRI, 2013), that has been expanding, and it is composed by a greater number of non-expert readers (Towsend et al., 2010). More interesting, this wider audience acknowledges CSR reporting as a tool of corporate accountability (KPMG, 2013). Organizations have already recognized this tendency, and realized that it is not only important to engage in CSR, but that it is also equally important to ensure that information about CSR is communicated to audiences (Tata and Prasad, 2015).

These increasing audiences turn CSR reporting susceptible of being used to manage organizations' strategic legitimacy through the use of thoughtfully prepared "legitimation" strategies to manage public perceptions about how organizations' actions are "desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions" (Suchman, 1985, p. 574). Acting in such a way, CSR reporting is used to manage the impressions audiences have from organizations' legitimacy status, reputation, identity or "desired" image.

The rhetoric discourse used in CSR reporting dynamics is crucial to promote relations with stakeholders, project a desired image of the organization and its desired socially responsible identity, and allowing audiences to make sense of the organization's actions. CSR identity is commonly assessed by substantive socially responsible behaviors, measured on the grounds of social performance (Chih et al., 2010). If companies act in an accountable way, they will provide explanations and justifications for their conduct to their audiences, which will imply being subject to the scrutiny, judgment and sanctioning of those audiences (Schlenker, 1980). Consistent with Frink and Ferris (1998), in an accountability context, managers may use CSR reporting rhetoric discourse tactics in an anticipation of an evaluation of their conduct, to win rewards and avoid sanctions (Leary and Kowalski, 1990). But, in some cases CSR disclosure dynamics – the rhetoric discourse – may diverge from substantive socially responsible behaviors (Campbell, 2007). In other words, during the accountability process managers can use IM strategies to achieve their strategic legitimacy goals aimed to control stakeholder's perceptions of organizational outcomes and events. Based on IM theory, when a incongruence between the perceived image by the audience (current CSR image) and the organizations' CSR identity (desired CSR image) exists, managers have incentives to engage in CSR reporting dynamics and turn CSR communication effective to decrease such incongruence (Dutton and Dukerich, 1991; Tata and Prasad, 2015).

IM has been defined as the "attempt to control images that are projected in real or imagined social interactions" (Schlenker, 1980, p. 6). From an economic perspective, IM is seen as manager's rational opportunistic behavior to benefit from them by exploiting information asymmetries. This would manifest itself in reporting bias, incorporating either the obfuscation of negative organizational (concealment) outcomes and emphasis of positive organizational outcomes (enhancement). Consequently, this research approach only allows assessing managers' opportunistic/self-serving behaviors, in the form of "self-presentational dissimulation" strategies.

But, CSR identity is the attributes that collectively represent the characteristics of the organization regarding CSR, and therefore can influence emotions, actions, constrains decision-making process, and influence the centrality of an organization's CSR identity and the importance of its CSR image (Carter, 2006; Dutton and Dukerich, 1991). Moreover, organizations are considered social actors (Whetten and Mackey, 2009). Thus, IM assumptions (Goofman, 1959) can be used to analyze how organizations create, maintain, defend and often enhance their social identities through settings, props, and scripts in a play metaphor (Schlencker, 1980). Consequently, a social psychology perspective of IM theory is more insightful to assess the CSR communication strategies used to manage audiences' perception of organizations' image. Managerial narrative disclosure decisions are affected by social constraints arising from the (imagined) presence of the recipients of corporate reports who use the information in their decision making (Merkl-Davies et al., 2011) whose behavior management try to anticipate (Allport, 1954). In this perspective, managers behavior is seen as cognitive and social bias, resulting from manager's opportunistic behavior (Leary and Kowalski, 1990), or from the informational process (Aerts, 2001, 2005). Under a social psychology approach, IM can take the form of "self-presentational dissimulation" strategies, "enhancement" or "retrospective sensemaking". Self-presentational dissimulation strategies include "creat[ing] an impression at variance with an overall reading of the report" (Stanton et al., 2004). Enhancement entails "creating an impression consistent with an overall reading of the report" (Merkl-Davies et al., 2011). Retrospective sensemaking "is a description of chronological actions, facts, and events (retrospective framing) in order that they make sense in relation to one another and contextualise organisational outcomes" (Oliveira et al., 2016).

The present study follows the social psychology perspective of IM theory to investigate how managers communicate CSR information to their audiences, and discusses the incentives that managers may have to engage in impression management tactics. Our analysis is grounded on Tata and Prasad's (2015) conceptual model of CSR communication and Leary and Kowalski's (1990) IM two-component model, never used hitherto in prior research (Barkemeyer et al., 2014; Domenec, 2012; Makela and Laine, 2011; Smeniux et al., 2016; Wang et al., 2017; Abu Bakar and Ameer, 2011).

Tata and Prasad (2015) proposed a conceptual model of CSR communication, in which from an impression management theory perspective one way to turn current CSR image consistent with desired CSR image is through CSR communication. In their theoretical model, to decrease the incongruence between desired and current CSR images organizations are motivated to use CSR communication according to four factors: a) importance of CSR image to the organization; b) power, status, and attractiveness of the target audience; c) importance of CSR image to the target audience; and d) media attention and public scrutiny. Moreover, this conceptual model also includes the discussion of other four dimensions that constitute the structure of CSR communication: a) anticipatory/reactive; b) assertive/protective; c) direct/indirect; and d) image enhancing/image correcting. Finally, the model includes a feedback loop through which the targets audiences' interpretations of the CSR communication can influence CSR image incongruence as well as the motivation to engage in CSR communication.

This conceptual model is quite similar to Leary Kowaski's (1990) two-component model IM. This model express that people may engage in IM to increase the likelihood that one will obtain the desired outcomes and avoid the undesired outcomes, to enhance one's self-esteem, and to build public images and make their public images consistent with their ideal images. The authors advocate that IM involve two processes: impression management motivation and impression management construction. Impression management motivation takes into consideration the circumstances that determine the adoption of a specific impression management strategy which is influenced by three factors: a) the value of desired goals; b) the goal-relevance on impression; and c) the existing discrepancy between desired and current image. Impression management construction involves "not only choosing the kind of impression to create, but deciding precisely how they will go about doing so (such as deciding to create the desired impression via self-description, non-verbal behavior, or props)"

(Leary and Kowalski, 1990, pp.35-36). Table 1 presents the interconnections between these two conceptual models.

(insert table 1 here)

Regarding impression construction process, Merkl-Davies and Brennan (2007) provide an extensive literature and framework building review of the impression management literature and identify seven discretionary narrative disclosure tactics carried out by disclosure choices and presentation of information (conveying information in a very positive/negative way) and selectivity (omission or inclusion of some items of information), such as: readability manipulation, rethoric manipulation, thematic manipulation, visual and structural manipulation, performance comparisons, choice of earnings numbers, attribution of performance.

The present study focuses on two kinds of impression management tactics (readability manipulation, rhetorical manipulation) to investigate how managers communicate CSR information to their audiences, and discuss the motivation managers may have to engage in those impression management tactics in CEO letters included in CSR reports.

Impression management motivation process: the goal relevance of the impression

Tata and Prasad (2015) suggest that the centrality of CSR identity and the importance of CSR image differ from organization to organization and is similar to a continuum. At one end of the continuum organizations are likely to consider CSR as less important, basically because they are focus in controlling reporting costs and meeting the minimum disclosure requirements. At the other end of the continuum organizations such as those belonging to

Dow Jones Sustainability Index are likely to consider CSR dimension as more central, relevant and therefore attribute more importance to their CSR image. Leary and Kowalski (1990) contend that organizations at this point of the continuum are more prone to engage in IM because the impression they make are relevant to the fulfillment of one or more goals such as reaping the short and long term associated benefits and avoid undesired outcomes, maintain self-esteem, and build public images. However, Courtis (1998, p.459) refer that "effective communication on narratives will be improved if those responsible for writing prose passages are responsive to the reading and comprehension abilities of their audiences." Therefore, we contend that companies with a stronger CSR public image will be more transparent in CSR communication and their narratives will be more readable, with less words and persuasive language.

Hypothesis 1: The number of words and the readability of CEO letters included in CSR reports are associated with companies with a stronger CSR public image.

Tata and Prasad (2015) argue that audiences are likely to pay attention to organizational activities that they perceive to be important to themselves, and make inferences about the organization's social responsibility based on those activities. Moreover, they state that the salience and accessibility of an organization's CSR image and its perceived incongruence is affected by public scrutiny. Similarly, Leary and Kowalski (1990) contend that one relevant factor that determine how relevant an impression is to the fulfillment of their goals is public visibility. Public visibility is a function of both the probability that one's behavior will be observed by others and the number of others who might learn about it. The CSR image of publicly visible companies is relevant to their target audiences who scrutinized them very carefully. Thus publicly visible companies have incentives to communicate their CSR images in a very transparent way.

Hypothesis 2: The number of words and the readability of CEO letters included in CSR reports are associated with companies with a stronger public visibility.

Leary and Kowalski (1990) refer that another factor affecting the goal-relevance of one's impression involves the organization's dependency on the target audience. When an organization is dependent on others for valued outcomes, the impressions made on them are more important, and organizations will be more motivated to engage in impression management. Some of the most relevant stakeholders organizations have is debtholders. The more dependent organizations are from debtholders more important their CSR image is to them, and more likely they will be publicly scrutinized by them. Consequently, leveraged companies are more prone to engage in IM strategies.

Hypothesis 3: The number of words and the readability of CEO letters included in CSR reports are associated with companies with higher levels of leverage.

Impression management motivation process: the value of desired goals

Leary and Kowalski (1990) contend that there is a positive association between the value of the desired goals and the motivation for IM. Consistently, Tata and Prasad (2015) refer that as the audience's power, status and attractiveness increase, influence positively the motivation to engage in IM. Stakeholder audience power can be drawn from a variety of sources: material or financial resources, symbolic resources or physical resources. Thus, according to Leary and Kowalski (1990) target audiences with higher power or status may be in a position to provide valued rewards and outcomes, and therefore organizations are likely to perceive it as important to manage impressions when interacting with such audiences.

On the other hand, Leary and Kowalski (1990) contend that when the availability of resources goes down, the value of desired goals increases, and consequently the motivation to engage is IM is higher to ingratiate powerful audiences. Leary and Kowalski (1990, p.38) argue also that "impression management may be more common in societies with limited economic and political opportunities". In a business context, limited economic and political opportunities are associated with lower levels of organizational performance outcomes such as profitability. Lower levels of profitability will be more salient to relevant stakeholders and expose management to their scrutiny. Therefore, management needs to present more accounting explanations to contextualize those lower levels and legitimate themselves before stakeholders (Aerts, 2005). If the constructed public impression is consistent with management's self-concept of organizational actions and events, the referred contextualization will demand a higher detail, description, and explanation. Therefore, like Aerts (2005) and Bloomfield (2008) argue, the level of readability of a narrative may be related to an informational process, rather than to the hypothesis of obfuscation of bad news. Contextualization of lower levels of organizational outcomes can promote syntactical complexity, due to the inclusion of technical explanations containing technical terminology and complex syntactical structures.

Moreover, in the presence of lower levels of organizational outcomes if management adopt self-presentational dissimulation behaviors narratives will be easier to read (Newman et al., 2003). Narratives will contain fewer cognitive complexities: simpler sentence structure; fewer words of causality; fewer words demanding reflection. Such an argument is consistent with the idea that "liars tell less complex stories" (Merkl-Davies et al., 2011, p. 322).

Regarding the rhetoric manipulation it is expected that poor-performing companies would be less verbose than well-performing companies. Lower levels of organisational outcomes promote self-presentational dissimulation behaviours. Consequently, narratives are shorter, because "lying is associated with fewer details, thus resulting in shorter communication" (Merkl-Davies et al., 2011, p. 323).

Hypothesis 4: The number of words and the readability of CEO letters included in CSR reports are associated with companies' profitability.

4. Research design

4.1. Sample and data

Our sample is composed of the firms include in the S&P 500 Index. The CSR reports for 2016 were extracted from companies' websites and we have selected thse companies that have a CEO letter in their CSR reports. In view of the purpose of this study, these firms were distinguished between those that belong to the DJSI, arguably the world's best-known CSR index, and those that do not belong to it. As mentioned above, companies belonging to this index are considered as having a higher level of CSR performance, and is therefore relevant to assess how these companies use CSR communication to project the desired images of the organization and their desired socially responsible identity to audiences, when compared to their counterparts. The final sample comprises a total of 256 companies (Table 2).

(Insert Table 2 here)

Table 1 displays the sample distribution by industry. Around half of the sample is composed by manufacturing and commercial industries, in all the sample and subsamples. Utilities and finance industry represent around 30% of the total companies analyzed. The accounting and market data used to compute the variables included in the empirical study are collected from the Thomson Reuters Datastream.

The CEO letters included in the CSR reports presented by the firms included in our sample were content analyzed through the use of an automated algorithm provided by Readable.IO to extract data regarding the following two impression management tactics: readability manipulation (assessed by Flesh reading ease index and Gunning Fog index) and rhetorical manipulation (number of words).

Readability analysis commonly uses syntactical struture of narratives, in terms of sentence length and the number of syllables. We used the Flesh Reading Ease index and Gunning Fox index to assess readability because according to Li (2008) they are the most well-known and reliable indices for measuring the readaility of narrative disclosures.

The *FOG* index (Gunning, 1952) identifies how difficult it is for readers to understand a text. It considers both total words in a sentence and the percentage of complex words in a text. The index indicates the number of years of formal education a reader of average intelligence would need to read the text once and understand that piece of writing with its word-sentence workload. The higher the *FOG* index, the more difficult it is for readers to understand the text. Similar to the *FOG* index, the *FLESCH* Reading Ease index defines the level of reading ease of the text. A high *FLESCH* index represents high text readability. Table 3 presents the readability formulae.

(Insert Table 3 here)

Rhetorical manipulation is commonly used by managers to obfuscate bad news through the use of persuasive language to distort the narrative discourse in one or more ethical principles, such as clarity, truthfulness, sincerity, and legitimacy (Yuthas et al., 2002). Rhetorical manipulation has been assessed by prior research by the number of words (Oliveira et al., 2016; Clatworthy and Jones, 2006; Merkl-Davies et al., 2011) and from a psychological perspective the number of words can be used not only to obfuscate bad news, but also to contextualize organizational outcomes, consistent with a retrospective sensemaking strategy. Moreover, the length of a document can be assessed by the number of words used. The length of a document has been also used as a proxy for readability (Li, 2008). The economic rationale is the following: because the information-processing cost of longer documents is presumably to be higher, assuming everything else to be equal, longer documents seem to de more deterring and more difficult to read. Thus, the length of a document could be used strategically by managers in order to make an annual report less transparent and to hide adverse information from investors.

4.2. Estimation model

To test the research hypotheses we estimated the following regression model to examine the motivations managers have to communicate CSR information to their audiences in a more readable and transparent way:

$$IM_i = \beta_0 + \beta_1 DJSI_i + \beta_2 SIZE_i + \beta_3 LEVERAGE_i + \beta_4 PROFITABILITY_i + \beta_5 GROWTH_i + \beta_6 PtoB_i + \beta_7 AGE_i + \beta_8 SEG_i + \beta_9 IND_i + \varepsilon_i \quad (1)$$

where:

IM_i is the impression management strategy used and assessed by the level of readability (Fog and Flesch indices) and rhetorical manipulation (number of words) (Merkl-Davies and Brennan, 2007; Merkl-Davies et al., 2011; Oliveira et al., 2016; Wang et al., 2017; Li, 2008).

$DJSI_i$ was used to measure the independent variable "CSR image" (Lourenço et al., 2014). It is an indicator that assumes 1 if the firm in included in the Dow Jones Sustainability Index 2015, and 0 otherwise.

$SIZE_i$ was used to measure de independent variable "public visibility" (Branco and Rodrigues, 2008; Oliveira et al., 2013, 2016) and assessed by the natural logarithm of total assets.

$LEVERAGE_i$ is the ratio of liabilities to total assets (Lundholm et al., 2014).

$PROFITABILITY_i$ was used to measure the independent variable "return on assets" (ROA) and assessed by the net income before extraordinary items divided by total assets (Lundholm et al., 2014).

In addition, according to prior literature we controlled results through the use of the following variables:

$GROWTH_i$ is the mean of sales growth in the last five years. This variable was included because fast-growing firms might have more complicated issues that need to be discussed in their narrative disclosures (Li, 2008; Wang et al., 2017; Lundholm et al., 2014).

$PtoB_i$ was measured by the price to book ratio. Firms with higher levels of price to book ratio are different from those with lower levels in many aspects, including the investment horizons and potential growth. Growth firms may have more complex and uncertain business models, and thus disclose more complex information. Consequently, price to book ratio is a potential determinant of annual report readability (Li, 2008; Lo et al., 2017; Lundholm et al., 2014).

AGE_i was measured by the number of years the firm had been in operation since its inception. Older firms may exhibit different annual reports readability and length because there is less information asymmetry and less information uncertainty for these firms. If investors are more familiar with and have more precise information about the business models of older firms, then annual reports of older firms should be simpler and more readabale (Li, 2008; Lundholm et al., 2014).

SEG_i is the number of segments the firm has and it was used has a proxy for business operation complexity. Business complexity has been found to be positively associated with the readability (Li, 2008; Richards & Van Staden, 2011; Wang et al., 2017; Lundholm et al., 2014).

IND_i comprise a set of variables related with SIC codes industry classification to account for cross-industry omitted factors affecting the results.

5. Empirical results and discussion

5.1. Descriptive analysis

Table 4 reports the descriptive statistics of the variables used in the empirical analysis.

(Insert Table 4 here)

When considering the entire sample, the mean values of the variables FLESH and FOG are, respectively, 37.721 and 16.458. The difference found between these two indices relates to their definition and scale of measure. A high (low) FOG (FLESCH) index indicates a more difficult to read text. The relation between the *FOG* and reading ease is as follows:

FOG ≥18 means the text is unreadable; 14-18 (difficult); 12-14 (ideal): 10-12 (acceptable); 6-10 (childish). The relation *FLESCH* and reading ease is as follows: *FLESCH*≥90 means text very easy to read; 90-80 (easy to read); 80-70 (fairly easy to read); 70-60 (plain English); 60-50 (fairly easy to read); 50-30 (difficult to read); 30-0 (very difficult to read). Therefore, these results are consistent with each other and both represent that CEO letters included in CSR reports are difficult to read. Among CEO letters included in annual reports and in CSR reports prior literature have found that the level of readability as very low (Oliveira et al., 2016; Barkemeyer et al., 2014; Smeuninx et al., 2016; Wang et al., 2017).

We also found that the average length measured by number of words the CEO letter included in CSR reports is 515.043 words, which is a lower level compared to previous studies that have studied the length of CEO letters included in annual reports of UK firms (Clatworthy and Jones, 2006; Merkl-Davies et al., 2011).

When comparing the two sub-groups of firms, included and excluded from the *DJSI*, we find that the mean values of the variables *FLESH* and *WORD* are higher, and the mean value of the variable *FOG* is lower, in the group of *DJSI* firms. However, the results for the equality of means parametric t test show that these mean values are statistically different only for the variables *GROWTH* and *SEG*. These results do not support prior literature (e.g. Lourenço et al., 2014) that shows that leading CSP firms are significantly larger and have a higher profitability than non-leading CSP firms. A potential explanation for this result may be related to the fact the present sample only includes firms that provide a CSR report.

Since the other variables do not present any significant differences between the two subsamples, we consider that the two subsamples are similar which avoids any potential endogeneity problems.

5.2. Correlation matrix

Table 5 presents the correlations for the continuous variables included in the regression models (due to its discrete nature and limited range, we did not include dummy variables in the Pearson correlation analysis). There is a high statistically negative correlation between the variables *FLESH* and *FOG*, which is consistent with their scale of measure and with previous conclusions from descriptive analysis.

(Insert Table 5 here)

It is also worth to note that the dependent variables *FLESH* and *FOG*, are significantly and positively/negatively correlated with most of the control variables, respectively. Once again results are consistent with the definitions and scales of measures of these two indices. Moreover, it seems that firms that are larger, older, more profitable and more leveraged are more likely to communicate with their audiences in a more readable way. Finally, the dependent variable *WORD* is significantly and negatively correlated with *ROA* and *GROWTH*. This results is consistent with retrospective sensemaking strategies. Less profitable firms are more verbose, because potentially they need to spare more word to contextualize and explain the negative organizational outcomes to their audiences (Aerts, 2001, 2005).

Regarding the control variables correlations are low, which indicates that multicollienarity problems are minimal.

5.3. Regression results

Table 4 presents the regression statistics resulting from the Ordinary Least Squares (OLS) estimation of Equation (1) for each of the three dependent variables. The stability of the regression model was assured by assessing all the assumptions such as autocorrelation, multicollinearity, heteroscedasticity, outliers and influential observations, and normality of residuals.

(Insert Table 5 here)

Findings indicate that the regression model is statistically significant for *FLESCH* (F-statistic = 4.669; p-value < 0.01), *FOG* (F-statistic = 2.857; p-value < 0.01), and *WORD* (F-statistic = 2.011; p-value < 0.01). The regression model presents an explanatory power of: *FLESCH* (adjusted R^2 = 0.158), *FOG* (adjusted R^2 = 0.086), and *WORD* (adjusted R^2 = 0.049).

FLESCH score is associated positively (p-value < 0.05) with *DJSI*. The CEO letters included in CSR reports of firms that belong to the *DJSI* present a higher Flesch Reading Ease score. Moreover, *FOG* index is associated negatively (p-value < 0.1) with *DJSI*. The CEO letters included in CSR reports of firms that belong to the *DJSI* present a lower level of Fog index. Additionally, results also show that *WORD* is associated positively (p-value < 0.01) with DJSI. The CEO letters included in CSR reports of firms that belong to the *DJSI* present a higher number of words. Consequently, H1 (strong CSR image) is supported. This result is consistent with our theoretical framework. According to Tata and Prasad (2015) firms that belong to the *DJSI* are more prone to reduce potential incongruences between current and desired CSR image through more readable and transparent CSR communication compared to *Non-DJSI* firms. *DJSI* firms consider their CSR identity important enough to explore both its short and long term benefits, build organizational self-esteem and their CSR public image. (Leary and Kowalski, 1990). Since they are aware of their responsibility in making effective CSR communication (Courtis, 1998) they interact with their target audiences through the use of transparent and readable narratives. In building their CSR public images they also spend more words, potentially to better explain organizational outcomes, and imprint credibility to the message, highlighting the ethical principles of clarity, truthfulness, sincerity and legitimacy (Yuthas et al., 2002).

Results from table 5 also documents that FLESCH, FOG, and WORD are not statistically associated with SIZE. H2 (strong public visibility) is not supported. Consistent with Tata and Prasad (2015) public visible companies are more prone to be public scrutinized by their relevant audiences. Public visible firms have incentive to engage in IM, basically the impression they make will be easily observed by their target audience (Leary and Kowalski, 1990). Previous results indicate that the dimension of DJSI and Non-DJSI firms did not present statistical differences. Prior, literature has used listing status to assess public visibility (Oliveira et al., 2016). Thus, there is a possibility that public scrutiny is stronger among DJSI firms, rather than among larger firms.

Findings indicate that *FLESCH* score is associated positively (p-value < 0.01) with *LEV*. The CEO letters included in CSR reports of leverage firms present a higher Flesch Reading Ease score. Moreover, *FOG* index is associated negatively (p-value < 0.01) with *LEV*. The CEO letters included in CSR reports of leverage firms present a lower level of Fog index. Additionally, results also show that *WORD* is not associated with *LEV*. Consequently, H3 (leverage) is partially supported. According to Tata and Prasad (2015) and Leary and Kowalski (1990), the greater a firm is dependent from their relevant audience, more readable CSR information firms will use to communicate with them and decrease any incongruence between current and desired CSR image.

Finally, *FLESCH* score is associated positively (p-value < 0.1) with *ROA*. The CEO letters included in CSR reports of less profitable firms present a lower Flesch Reading Ease score. Moreover, *FOG* index is associated negatively (p-value < 0.1) with *ROA*. The CEO letters included in CSR reports of less profitable firms present a higher level of Fog index. Additionally, results also show that *WORD* is associated negatively (p-value < 0.01) with *ROA*. The CEO letters included in CSR reports of less profitable firms present a higher number of words. Consequently, H4 (profitability) is supported. According to Tata and Prasad (2015) and Leary and Kowalski (1990) lower levels of profitability will be more salient to relevant audiences and expose them to their scrutiny. But the scarcity of resources promoted by lower profits is motivation to engage im IM in the form of self-dissimulation strategies to manipulate the perception of the target audience that has power, status and attractiveness regarding a variety of valuable resources vital to the organization's survival. Engaging in such strategies, less profitable firms have incentives to conceal bad news and consequently will disclose more readable information in shorter messages. Consistent with Merkl-Davies et al. (2011, pp.322-323) "liars tell less complex stories (…) with fewer details, thus resulting in shorter communication". However, our results indicate the opposite disclosure behavior. Less profitable firms disclose less readable and longer CEO letters. Negative organizational outcomes need to be better contextualized, including longer discussions, technical explanations with more complex syntactical structures, which is consistent with a IM strategy of retrospective sensemaking.

To better explore our findings, the regression models were rerun after including the interaction between the variables DJSI and ROA. Table 6 presents the main findings. The models were rerun only for the dependent variables FLESCH and WORD. The model for the dependent variable FOG produced the same results.

(Insert Table 6 here)

More profitable firms that belong to DJSI disclose more readable CSR information than those that do not belong to DJSI. But, less profitable firms that do not belong to DJSI disclose less readable CSR information than those firms that belong to DJSI.

On the other hand, less profitable firms that belong to DJSI disclose more CSR information than those that do not belong to DJSI. But, firms that do not belong to DJSI (regardless of the profitability) disclose less CSR information than those that belong to DJSI.

6. Summary and conclusions

The empirical findings indicate that leading CSR companies (those listed in the DJSI) present more readable CSR information in terms of comprehension and extension. These companies disclose CSR information generally in a positive way. However, these disclosure patterns are mediated by the "goal relevance of the impression" and "value of desired goals". More profitable leading CSR companies disclose more readable information in terms of comprehension, while less profitable leading CSP companies disclose more readable information in terms extension, when compared to the non-leading CSP companies.

Leading CSP companies have incentives to be more transparent, because they need to turn CSR image perceived by the audiences (current CSR image) consistent with organization's CSR identity (desired CSR image), basically because the "goal relevance of impressions" (assessed by CSR image and leverage) is a crucial element in the management of CSR relations with audiences.

However, less profitable leading CSP companies adopt a strategy of quantity of information (disclose more CSR information). More profitable leading CSP companies opt to disclose CSR information with more quality.

The present study adds to the emerging literature on organizational impression management, basically because it can broaden our understanding on CSR by investigating the conditions that motivate an organization to manage, maintain, enhance, and repair its CSR image. It can also help mangers and organizations become aware of the various forces that could drive the need for CSR communication, and help them be responsive to stakeholder audiences by communicating information about the organization's socially responsible strategies and activities.

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Table 1 – The interconnections between the two-component of IM (Leary and Kowalski, 1990) and the conceptual model of CSR communication (Tata and Prasad, 2015)

Two-component model of IM (Leary and Kowalski, 1990)	**Conceptual model of CSR communication (Tata and Prasad, 2015)**

***IM motivation*:**
 	
- Discrepancy between desired and current image
 	
- Goal-relevance of impressions:
    - Publicity of one's behavior
    - Individuals' dependency on the target
- Value of desired goals:
    - Relevance of target audience
    - Scarce resources
	***Organizations are more motivated to decrease the incongruence between current and desired CSR image (Proposition 1) when*:**
	- CSR image is very important to the organization (Proposition 2)
	- The target audience has greater power, status, and attractiveness (Proposition 3)
	- CSR image is very important to the target audience (Proposition 4)
	- There are higher levels of media attention and public scrutiny (Proposition 5)

***IM construction*:** - Self-concept - Desired and undesired identity images - Role constraints - Target's values - Current or potential social image	***Structure of CSR communication (Propositions 8 and 9)*:** - Anticipatory/reactive - Assertive/protective - Direct/indirect - Image enhancing/image correcting

Table 2 - Sample distribution by industry

Industry	DJSI firms		Non-DJSI firms		All firms	
	N	**%**	**N**	**%**	**N**	**%**
SIC 1	3	3	6	4	9	4
SIC 2	22	23	34	21	56	22
SIC 3	23	24	34	21	57	22
SIC 4	11	11	28	18	39	15
SIC 5	9	9	17	11	26	10
SIC 6	14	14	24	15	38	15
SIC 7 and 8	15	15	16	10	31	12
All	**97**	**100**	**159**	**100**	**256**	**100**

Table 3 – Readability formulae

Gunning Fog index	0.4 x (average sentence length – percentage of polysyllabic words)
Flesch Reading Ease score	(206.835 – 1.015 x average sentence length) – (84.6 x average syllables per word)

Table 4 – Descriptive statistics

Variable	Mean	Median	Std. Dev.	Min	Max
All firms (n = 256)					
FLESH	37.721	37.950	9.136	3.1	67.6
FOG	16.458	16.600	1.807	10.1	24.0
WORD	515.043	549.500	250.956	97.0	1789.0
SIZE	17.063	16.589	1.335	14.506	21.486
LEV	0.659	0.656	0.180	0.138	1.133
ROA	0.091	0.085	0.084	-0.287	0.434
GROWTH	0.044	0.039	0.086	-0.391	0.361
PtoB	4.432	3.063	7.924	-69.283	49.095
AGE	3.659	3.584	0.685	1.792	5.231
SEG	4.484	5.000	2.386	0.0	10.0
DJSI firms (n = 97)					
FLESH	38.853	39.000	8.356	18.1	67.6
FOG	16.269	16.300	1.593	10.1	19.3
WORD	585.773*	509.000	286.064	151.0	1789.0
SIZE	17.157	16.840	1.381	14.727	21.486
LEV	0.646	0.628	0.175	0.254	1.133
ROA	0.086	0.087	0.076	-0.156	0.321
GROWTH	0.023*	0.002	0.085	-0.301	0.361
PtoB	4.308	2.894	4.907	-5.613	34.518
AGE	3.389	3.664	0.755	1.792	5.231
SEG	4.794*	5.000	2.259	0.0	9.0
Non_DJSI firms (n = 159)					
FLESH	37.031	36.600	9.541	3.1	64.7
FOG	16.574	16.600	1.921	11.2	24.0
WORD	471.893*	428.000	216.741	97.0	1232.0
SIZE	17.006	16.905	1.308	14.506	21.578
LEV	0.668	0.676	0.183	0.138	1.285
ROA	0.094	0.085	0.088	-0.287	0.434
GROWTH	0.057*	0.048	0.085	-0.391	0.334
PtoB	4.507	3.260	9.311	-69.283	49.095
AGE	3.641	3.555	0.641	1.792	5.003
SEG	4.296*	4.000	2.448	0.0	10.0

* The mean values of these variables are significantly different in the sub-group of DJSI firms, as compared to the sub-group of Non-DJSI firms (GROWTH: t-test: 3.107; SEG: t-test: -1.626).

Table 5 – Correlation matrix

	FLESH	FOG	WORD	SENT	SIZE	LEV	ROA	PtoB	AGE
FOG	-0.840***	-	-	-	-	-	-	-	-
WORD	0.161***	-0.149**	-	-	-	-	-	-	-
SENT	0.272***	-0.317***	0.943***	-	-	-	-	-	-
SIZE	0.167***	-0.109*	0.067	0.075	-	-	-	-	-
LEV	0.237***	-0.195***	-0.023	0.019	0.288***	-	-	-	-
ROA	0.104*	-0.102*	-0.132**	-0.113*	-0.310***	-0.182***	-	-	-
GROWTH	-0.017	0.001	-0.104*	-0.115*	-0.180***	-0.166***	0.288***	-	-
PtoB	0.131**	-0.091	-0.017	0.008	-0.085	0.089	0.232***	-	-
AGE	0.168***	-0.161***	-0.011	-0.004	0.089	0.036	-0.039	-0.071	-
SEG	0.049	-0.017	0.063	0.075	0.204***	0.043	-0.079	-0.031	0.059

Correlation significant at ***0.01 level (2-tailed); **0.05 level (2-tailed); *0.1 level (2-tailed)

Table 6 – Regression analysis (all firms)

	FLESH	FOG	WORD
Intercept	7.810	21.173***	315.119
DJSI	2.218**	-0.399*	107.275***
SIZE	0.553	-0.085	19.320
LEV	9.306***	-1.879***	-35.699
ROA	14.688*	-2.708*	-471.404**
GROWTH	3.387	-1.044	-9.585
PtoB	0.110	-0.010	0.172
AGE	2.335***	-0.376**	-18.276
SEG	0.295	-0.19	-1.002
SIC 1	-1.711	0.168	-91.678
SIC 4	3.075*	-0.043	-8.085
SIC 5	6.742***	-0.880**	-50.335
SIC 6	3.746*	-0.292	-145.372**
SIC 7 e 8	0.232	0.402	-22.894
Adj R^2	15.8%	8.6%	4.9%
F value	4.669***	2.857***	2.011**
No observations	256	256	256

Significance levels: ***0.01 (2-tailed); **0.05 (2-tailed); *0.1 (2-tailed)

Table 7 – Regression analysis (after controlling results regarding profitability)

	FLESH		WORD	
	C1	C2	C3	C4
Intercept	11.530	13.585	195.389	356.766
DJSI_ROA_H	3.685***	-	65.409	-
DJSI_ROA_L	0.641	-	152.454***	-
Non_DJSI_ROA_H	-	-2.071	-	-138.124***
Non_DJSI_ROA_L	-	-2.316*	-	-79.236**
SIZE	0.425	0.441	23.398	21.001
LEV	8.722***	8.689***	-16.700	-25.192
GROWTH	5.400	6.100	-7.830	-9.670
PtoB	0.121*	0.132*	-0.245	-0.351
AGE	2.356***	2.302***	-18.744	-18.061
SEG	0.317	0.318	-1.709	-2.377
SIC 1	-3.760	-3.820	-25.372	-44.465
SIC 4	2.920*	2.810*	-2.521	-11.616
SIC 5	6.981***	7.301***	-59.144	-66.526
SIC 6	3.666*	3.102	-140.640**	-137.785**
SIC 7 e 8	-0.177	0.194	-10.961	-29.194
Adj R^2	15.5%	14.5%	4.2%	3.9%
F value	4.591***	4.330***	1.869**	1.800**
No observations	256	256	256	256

Significance levels: ***0.01 (2-tailed); **0.05 (2-tailed); *0.1 (2-tailed)

ROA_H (ROA above median) e ROA_L (ROA below median). Median was determined separately for DJSI firms and Non_DJSI firms. However, the use of the global median produces the same results. The use of FOG index produces also the same results.