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ICAFI

**5th International Conference in Accounting and Finance Innovation**

# **Reading ease manipulation in CSR communications: A sociological approach to the oil and gas sector**

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# Research problem

## Why?

The oil and gas sector is an environmentally sensitive (Hackston & Milne, 1996; Reverte, 2009) and controversial industry (Du & Vieira, 2012) and with important impacts on sustainable development (Doni et al., 2022).



**12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.**

**12.6.1 Number of companies publishing sustainability reports.**



**Biased behaviors  
Irregularities and fraud in the  
practice of CSR**



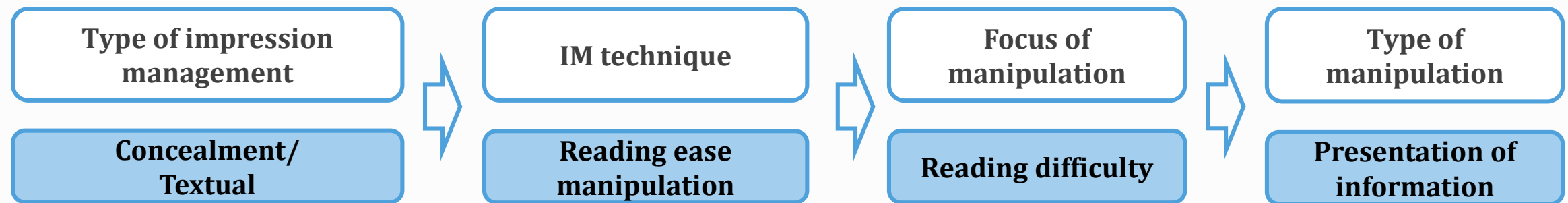
**Increase the problems related to  
transparency and the quality of the  
information disclosed**

- Recent years have seen an increase in the number of companies disclosing CSR information.
- This increase has not been accompanied by an increase in quality and transparency.

(Albitar et al., 2023; Cho et al., 2015; Du & Yu, 2021; Fisher et al., 2020; Hamza & Jarboui, 2022; Lock & Seele, 2016; Michelon et al., 2015; Milne & Gray, 2013).

Impression management (IM) techniques can increase the problems of transparency and quality of sustainability information (Boiral, 2013; Cho & Patten, 2007; Hamza & Jarboui, 2022; Merkl-Davies & Brennan, 2007).

**The concept of IM has its origins in social psychology (Goffman, 1959; Hooghiemstra, 2000; Rosenfeld, 1997; Rosenfeld et al., 1994). IM refers to the control and manipulation of the users' impression conveyed through accounting narratives (Clatworthy & Jones, 2001; Merkl-Davies & Brennan, 2007).**



CSR communications present a low level of readability (Adhariani & du Toit, 2020; Smeuninx et al., 2020).

Reading ease manipulation of CSR communication is an IM technique for companies to create a desired image, obfuscate inferior information, and conceal environmental and social damage caused (Adhariani & du Toit, 2020; Mnif & Kchaou, 2021; Nazari et al., 2017; Nilipour et al., 2020; Smeuninx et al., 2020; Wang et al., 2018).

**Stakeholder, institutional, legitimacy and IM theories are the most researched in the field of IM (Merkl-Davies & Brennan, 2011).**



To obtain resources and legitimize themselves through a favorable stakeholder perception (Suchman, 1995), CEOs can prepare their letters according to a symbolic approach (Cho & Patten, 2007), through opportunistic behavior and IM techniques (Ashforth & Gibbs, 1990; Goffman, 1959; Merkl-Davies & Brennan, 2007).

Periods of macroeconomic instability seem to lead to a change in the adoption of IM. The literature on the impact of financial crisis contexts on the adoption of textual IM techniques, such as reading ease manipulation, is limited, only directed to financial statements and shows contradictory results (Cherry et al., 2023; Im et al., 2021; Khanna & Irvine, 2018; Moreno & Jones, 2022; Patelli & Pedrini, 2014).



**OBJECTIVE:** Develop an integrated perspective of the influence of financial contexts on CEOs' motivations regarding the use of reading ease manipulation in the letters of oil and gas companies' sustainability and integrated reports.

**H1:** The CEO letters in sustainability and integrated reports are more readable during a financial crisis.

**H2:** There are significant corporate characteristics that influence the readability of CEO letters in sustainability and integrated reports.

# Oil and gas sector: sample selection

## Where and When?

The oil and gas sector has grown significantly over the last decade and is one of the largest in the world (Elhuni & Ahmad, 2017). Although the oil industry has enormous resources and capacities, this does not necessarily make it successful in terms of sustainability-related performance (Schneider et al., 2011).



**Final sample composition (336 company-year observations)**



All of the CEO letters went through a pre-processing process, which involved manual extraction, transformation into Microsoft Word documents and analysis of textual characteristics such as abbreviations, punctuation.



Calculation of the readability indices Flesch-Kincaid Grade Level (FKGL), Gunning-Fog (GFI), Coleman-Liau (CLI), Simple Measure of Gobbledygook (SMOG), and Automated Readability (ARI) using the ReadablePro software. Definition of the Average Grade Level (AGL).

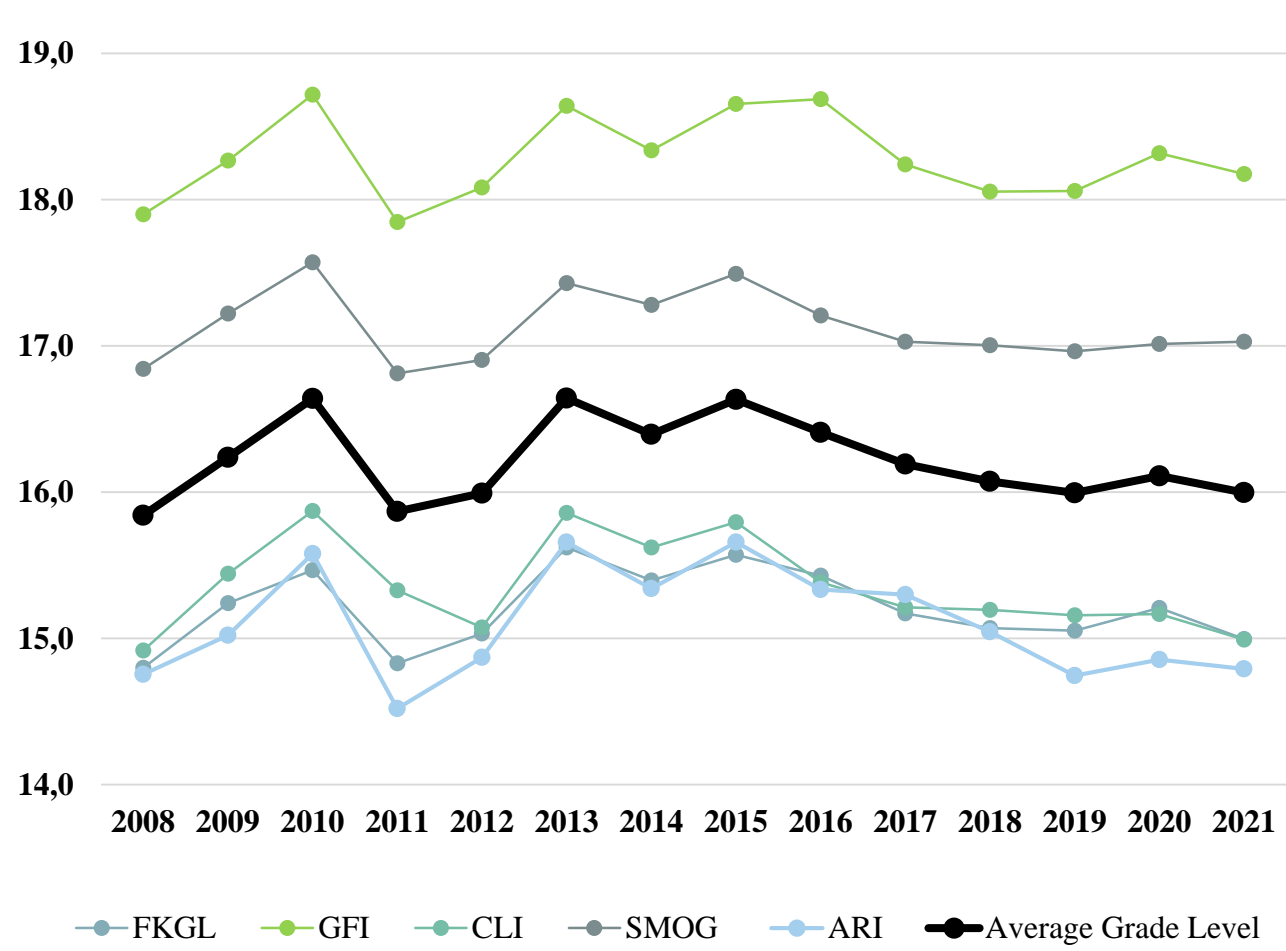


Definition of the control variables and the independent variable (FINANCIAL DIMENSION) which considers the most relevant crises to date have been the Global Financial Crisis (GFC) of 2008-2009, the Sovereign Debt Crisis (SDC) of 2010-2012, and the COVID-19 pandemic of 2020-2021.



Regression analysis using panel data estimations (basic linear models of unobserved effects). Fixed effects (FE) and random effects (RE) were tested (Verbeek, 2017; Wooldridge, 2010).

# Discussion and results



# Descriptive analysis



The easiest CEO letters to read were released by UK companies, BP Plc. and Shell Plc.

Companies based in China (China National Petroleum Corporation, China Petroleum & Chemical Corporation Ltd. and China National Offshore Oil Corporation) released the most difficult CEO letters to read.



**CSR communications in CEO letters are a difficult genre to read**



# Discussion and results

Regression on AGL	Model 1. RE	Model 2. RE/Rob	Model 3. RE/Rob
Company RE	Yes	Yes	Yes
Year RE	No	No	No
Overall R2	<b>0.2605***</b>	<b>0.2816***</b>	<b>0.2302*</b>
<b>FINANCIALD</b>	<b>0.1921**</b> (0.0917)	0.1626 (0.1507)	0.1512 (0.1477)
<b>LETTER_LENGTH</b>	<b>0.0004**</b> (0.0002)	<b>0.0004**</b> (0.0002)	<b>0.0004**</b> (0.0002)
<b>LOG_ASSETS</b>	<b>-0.1860**</b> (0.0870)		
<b>LOG_REVENUE</b>		<b>-0.2234**</b> (0.0875)	
<b>LOG_EMPLOYEES</b>			-0.2031 (0.1916)
<b>CEO_AGE</b>	<b>-0.0341**</b> (0.0170)	-0.0353 (0.0257)	-0.0348 (0.2610)
<b>GENDER_DIV</b>	<b>-2.534**</b> (1.0004)	<b>-2.5408*</b> (1.3103)	<b>-2.7930**</b> (1.3255)
<b>ROA</b>	0.0675 (1.1578)	0.1787 (1.3060)	0.2410 (1.2473)
<b>CSR</b>	<b>-0.0416**</b> (0.0192)	<b>-0.0404**</b> (0.0203)	<b>-0.0468**</b> (0.0228)
<b>CONSTANT</b>	<b>20.6978***</b> (1.5614)	<b>21.2568***</b> (2.1156)	<b>20.6233***</b> (3.0832)

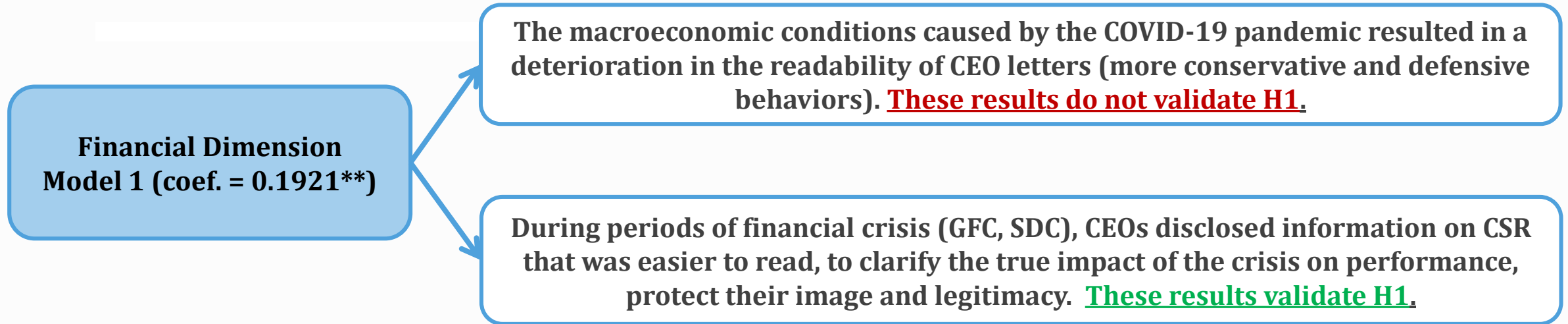
## Regression analysis

The results of the Hausman test demonstrate the suitability of the RE models.

Breusch & Pagan (1980) Lagrange multiplier test for random effects, and Wald tests only demonstrated the explanatory capacity of the company random effects.

Pearson's correlation matrix and variance inflation factor (VIF) analysis (Verbeek, 2017; Wooldridge, 2010) shows the absence of multicollinearity.

Robust standard deviations (Rob) are applied when suitable to adjust the standard errors for general forms of heteroscedasticity and autocorrelation (Verbeek, 2017; Wooldridge, 2010).



Regarding the control variables, the results obtained prove the statistically significant impact of the internal characteristics of oil and gas companies on the reading ease manipulation of CEO letters. **Hypothesis H2 was verified** in the context of the variables LETTER\_LENGTH, LOG\_ASSETS, LOG\_REVENUE, CEO\_AGE, GENDER\_DIV, and CSR.

### Length of the CEO letters

Have a **positive** impact on reading ease manipulation.  
Longer CEO letters (more complex) are more difficult to read.

### Company's size

LOG\_ASSETS and LOG\_REVENUE has a **negative** impact on reading ease manipulation.  
Largest companies are subject to greater pressure from stakeholders and have more resources to participate in CSR activities. Thus, CEOs produced easier-to-read information to improve reputation and image (Abu Bakar & Ameer, 2011; Rutherford, 2003; Uddin & Chakraborty, 2022).

### CEOs' age

Have a **negative** impact on reading ease manipulation.  
Younger CEOs prepare CSR information that is more difficult to read. Older CEOs are more committed to CSR, which may result in communications that are easier to read. (Fabrizi et al., 2014; Mnif & Kchaou, 2021).

### Gender diversity on boards

Have a **negative** impact on reading ease manipulation.  
Boards with a higher representation of female members are associated with CEO letters that are easier to read. Harjoto et al. (2020) and Velte (2018) also suggest evidence that the presence of female leaders is associated with greater readability of accounting narratives.

### CSR performance

Have a **negative** impact on reading ease manipulation.  
CEOs of companies in the oil and gas sector with higher sustainability performance, disclose information that is easier to read. CEOs of companies with lower performance in terms of achieving the SDGs are more likely to write CSR communications more difficult to read to minimize readers' reactions to negative information about CSR performance (Ben-Amar & Belgacem, 2018; Wang et al., 2018).

# Conclusions and contributions



CEO letters of sustainable and integrated reports are a genre difficult to read. BP Plc. and Shell Plc. published the CEO letters easier to read.



During the financial crisis that marked the beginning of 21st century, CEOs disclosed information that was easier to read, to clarify the true impact of the crisis on performance. There are internal characteristics of oil and gas companies that influence the CEOs motivations to engage reading ease manipulation.



**Contributions:** Analyze the impact of macroeconomic conditions on sustainability narratives; obtain information on the CEOs' motivations in relation to sustainable development; investigate an unstudied perspective of the oil and gas sector.



**Limitations:** Focus on other tools to communicate their CSR activities to stakeholders; preform an exhaustive content analysis to analyze the CEOs' underlying messages in depth; analyze other IM techniques to deepen the understanding of the information preparers' motivations to use different forms of IM.

# THANK YOU.

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**Acknowledgments:** This study was conducted at the Research Center on Accounting and Taxation/IPCA (UIDB/04043/2020 and UIDP/04043/2020) and at the CEFAGE Research Center/University of Évora (UIDB/04007/2020) and was funded by the Portuguese Foundation for Science and Technology through national funds.

# Bibliographic references

*Literature*



**Note:** To consult the bibliographical references for this presentation and the article “*Reading ease manipulation in CSR: A sociological approach to the oil and gas sector*”, please access the aforementioned work or request the authors. Thank you.