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# Guiding through the Fog: Does annual report readability reveal earnings management?

Aymen Ajina[a], Mhamed Laouiti[b], Badreddine Msolli[c,*]

[a] Arab East Colleges Riyadh and FSEG-University of Sousse, Tunisia
[b] Faculty of Economic Sciences and Management of Mahdia, Tunisia
[c] ESSCA School of Management—LUNAM University, France

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ABSTRACT

This paper attempts to find a relationship between earnings management and annual report readability. The study was conducted on the French stock market between 2010 and 2013 and includes 163 firms listed on the CACALL shares index. We assess the readability of annual reports using the Gunning-Fog Index and earnings management is measured by discretionary accruals estimated using the models of Dechow et al. (1995) and Raman and Shahrur (2008). Our results show the existence of a positive and significant relation between the level of discretionary accounting adjustments and Fog Index. In fact, companies managing their earnings tend to make annual report readability more complex. In this way, we also find a significant link between the Fog Index and the other financial indicators of our model (Ownership dispersion, Profitability, Leverage and Firm size), so supporting our main result.



## 1. Introduction

Legality plays a significant role in and can be said to characterize financial communication. Its aim is to protect the shareholder by guaranteeing "exact, precise and sincere" information (1 August 2003, the [French] Financial Security Law). Financial institutions continue to bolster regulations by strengthening the financial standards transparency directive.

Corporate disclosure usually involves three elements: content (what), timing (when) and presentation (how) (Courtis, 2004), the usefulness of which depends on readability and understandability. Thus, according to the Act NRE-New Economic Regulations- (2001), we expected a bolstering of the regulations and the recommendations in favor of the readability of the information emitted within financial communication.

In 2010 and following the Securities and Exchange Commission (SEC) in the United States (U.S.), the annual report of the AMF (Autorité des Marchés Financiers) ["Financial Markets Regulator"] in France focused on readability. The AMF published an action plan to find solutions to the public crisis of confidence and political expectations. It also aimed to improve the readability of financial information for the "layperson". Taking stock of the legal situation, some companies dedicated funds to making annual reports more readable.

* Corresponding author.
*E-mail address:* badreddine.MSOLLI@essca.fr (B. Msolli).

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Despite this legal rigidity, corporate scandals and accounting fraud are still current. Recurrent financial scandals cause a reliable loss in the global market. Accounting problems are widely cited as the main reason for the loss of confidence of the investors who follow these scandals (Machuga and Teitel, 2007).

In this case, financial information is not completely transparent, whether the communication channel used is “formal” or “informal”. “Informal” channels refers to press releases or interviews with business leaders, which rarely convey “innocent” or unfiltered information that has not previously been approved. In fact, this kind of medium contains certain metaphors that indirectly reflect or create realities (Tomoni, 2012). ‘Formal’ channels refers to the fact that annual reports play a role other than their original aim and help disseminate statements handled mainly when they are less readable and therefore complicated to read (Li, 2008; Bloomfield, 2008). In both cases, fraudulent information is difficult to detect. So, the aim of readability is mainly to make information broadcasted on the financial markets accessible and understandable.

On the theoretical level, readability is always measured by reading scores, known as the “reading index”, originally based on primary school assessments. In this context, the Gunning-Fog Index (Fog Index), developed by Gunning (1952) and derived from the computational linguistics literature, is a well-known and simple formula for measuring readability. A reading index is a calculated score that varies between two extremes. At the first end of the scale is very basic reading comprehension. At the other end, in contrast, reading comprehension is very advanced, corresponding essentially to scientific documents (Courtis, 1997).

The application of these scores to annual reports dates back relatively far (Jones and Shoemaker, 1994) and they are still in use and still show their efficiency as a search tool, particularly in the financial and accounting literature (Tetlock and Paul, 2007; Li, 2008; Biddle et al., 2009; Miller, 2010; Lehavy et al., 2012; Lawrence, 2013; Ramanna and Watts, 2011).

We identified two categories of studies focusing on the relationship between the complexity of annual reports and certain financial indicators.

The first presents annual report readability as a determining factor of future financial performance, especially to explain the behavior of stock prices. Antweiler and Frank (2004), Tetlock and Paul (2007), and Li (2008) show that future stock returns, strategic events and earnings, can be explained by the wording selected by managers to describe their operations and the language newspaper columnists use to report stock market events.

The second type of studies focuses more the other aspect of readability. In fact, some authors study the impact of discloser complexity on asymmetry information and the liquidity of the stock market. Miller (2010), Lawrence (2013) and De Franco et al. (2013) find evidence that complex language discourages individual investor trading due to increased information processing costs. Supporting this evidence, trading volumes are lower when equity analyst reports have a higher Fog Index (De Franco et al., 2013).

Li (2008) finds a negative relationship between the Fog Index and the level of earnings. The author concludes that disclosures of his sample are more difficult to understand. According to Bloomfield (2008), it is unclear whether this result is due to managers providing complex disclosures to obfuscate bad performance or due to be the fact that bad news is simply harder to communicate.

Our study combines the previous two categories of works and is also based on Bloomfield’s proposition (2008). In fact, we try to analyze the possible link between annual report readability and earning management practices. In this way, we suppose that managers who practice earnings management will tend to obfuscate their act by publishing complex annual reports.

In other words, we try to answer the following question: Is the complexity of annual reports linked to companies that practice earnings management? Is there a link between the complexity of annual reports and company practice of earnings management?

According to the previous question, our paper makes a number of important contributions. We contribute to the limited number of studies that has examined the linguistic complexity of corporate disclosures and its relation to other variables, particularly to earnings management indicators.

Furthermore, our study is the first of its kind conducted on the French market. In fact, the French case appeared to be an interesting subject for study because of its corporate governance environment and the annual reports readability importance granted by the French authorities (AMF, 2015; the NRE law, 2001; Financial Security Law, 1 August, 2003).

The findings show the existence of a positive and significant relation between the level of the discretionary accounting adjustments estimated using the models of Dechow et al. (1995), Raman and Shahrur (2008) and Fog Index. This means that managers provide complex disclosures to obfuscate this kind of practice. Some reports indicate that several managers try to conceal the profits by means of complexity in annual reports, confirming the theoretical hypothesis of “big bath accounting”. The remainder of this paper is organized as follows: the second section presents the theoretical setting of the relationship between earnings management and annual report readability. The third section presents the sample and the methodology used, followed by the results and discussions in section four. The last section concludes the paper.

## 2. Theoretical foundations

Corporate governance is a subject of increasing importance for shareholders and generally for all stakeholders. Due to numerous financial scandals and the economic crisis, the importance of this topic has increased significantly over the past two decades. The worldwide failure in financial reporting has largely denounced weak internal controls of companies.