UNIVERSIDADE CATÓLICA PORTUGUESA

An analysis of ESG reporting practices

An integrated analysis of the Chairman and CEO messages

by

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Dissertation presented to Universidade Católica Portuguesa to obtain a Master's degree in finance

by

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Resumo

Esta dissertação investiga a relação das métricas ambientais, sociais e de governo (ESG) no desempenho financeiro das empresas. Métricas específicas de ESG, como orientações ambientais, práticas climáticas, biodiversidade, responsabilidade social e governança corporativa, são examinadas em conjunto com medidas de desempenho financeiro.

Analisamos as respetivas secções do Chairman (Presidente do Conselho de Administração), do CEO (Diretor Executivo) e ainda a divulgação social e responsável das empresas (CSR disclosure) incluídas nos relatórios anuais de gestão considerando uma amostra de empresas transacionadas na London Stock Exchange (LSE) entre 2013 e 2023.

Através de uma análise empírica utilizando uma amostra diversificada de empresas, o estudo procura identificar se existe uma relação significativa entre as práticas ESG e o desempenho financeiro das empresas. Os resultados desta análise têm implicações importantes para a compreensão do valor das práticas sustentáveis nas decisões de investimento e gestão corporativa.

Usando vários modelos de regressão linear, analisamos e comparamos as diferentes secções juntamente com as métricas de performance.

A pesquisa reconhece as complexidades associadas à avaliação do impacto das métricas ESG no desempenho empresarial, destacando a necessidade de uma abordagem rigorosa e multidisciplinar para entender as relações observadas.

Palavras-chave: ESG, CSR, desempenho financeiro, carta do presidente, CEO,

Abstract

This dissertation investigates the relation of environmental, social and governance (ESG) metrics on companies' financial performance. Specific ESG metrics, such as environmental guidelines, climate practices, biodiversity, social responsibility, and corporate governance, are examined alongside measures of financial performance.

We analyse the respective sections of the Chairman, CEO and CSR disclosure included in annual management reports considering a sample of companies traded on the London Stock Exchange (LSE) between 2013 and 2023.

Through an empirical analysis using a diverse sample of companies, the study seeks to identify whether there is a significant relationship between ESG practices and companies' financial performance. The results of this analysis have important implications for understanding the value of sustainable practices in corporate investment and management decisions.

Using various linear regression models, we analyse and compare the different sections along with performance metrics.

The research recognizes the complexities associated with assessing the impact of ESG metrics on corporate performance, highlighting the need for a rigorous, multidisciplinary approach to understanding the observed relationships.

Keywords: ESG, CSR, chairman letter, CEO review, financial performance

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1. Introduction

In recent years, there has been a growing recognition of the importance of Environmental, Social, and Governance (ESG) factors in corporate decision-making and investment strategies. Companies worldwide are increasingly acknowledging the need to integrate ESG considerations into their operations to enhance long-term sustainability and stakeholder value. Consequently, stakeholders, including investors, regulators, and society at large, are placing greater emphasis on firms' ESG performance and disclosure practices.

One significant avenue through which firms communicate their ESG efforts is the annual report, a primary channel for corporate interaction with various stakeholders. These reports are an essential tool for evaluating a firm’s performance and financial position. The information can be quantitative and qualitative. Most of the quantitative information is freely available in commercially standardized financial databases and has thus been well examined. Qualitative information, on the other hand, is unstructured data, which makes it difficult to gather, analyse, and comprehend. Especially in the past ten years has study begun focusing on this sort of data and how it might improve our knowledge of corporate performance. Quantitative reporting may not meet the market's information needs, which is why investors and other stakeholders prefer qualitative disclosure of the company's performance and strategy.

So, this is why is important analyse chairman letter, CEO reviews and CSR disclosure because they play a crucial role in articulating a company's strategic vision, performance highlights, and commitment to sustainable practices. However, the extent to which financial narratives influence the quality and extent of ESG disclosure remains a subject of inquiry and debate.

The Chairman statements typically offer insights into the company's performance over the fiscal year, emphasizing key achievements, challenges, and strategic initiatives. They often serve as a platform for the company's leadership to convey its commitment to ESG principles, outlining sustainability goals, initiatives, and progress made in environmental stewardship, social responsibility, and corporate governance.

Similarly, the CEO reviews provide stakeholders with the management's perspective on the company's operations, market position, and strategic priorities. CEOs often use these narratives to underscore the company's long-term value creation strategy, emphasizing the integration of ESG considerations into business decision-making processes and highlighting initiatives aimed at driving sustainable growth and societal impact.

Companies use corporate social responsibility (CSR) disclosures to communicate their social and environmental policies, practices, and performance to stakeholders (Zhang and Yang, 2020). It is important to distinguish between the term's corporate social responsibility and environmental, social and governance. Despite being referred to as the same concept at times, they are different nuances of the same concept.

As far as business practices are concerned, both terms refer to efforts aimed at promoting more ethical and responsible practices.

The CSR talk about managing, mitigating, and preventing any negative impact that companies may cause (European Commission, 2021) while ESG is about "measuring the sustainability and ethical impact" of investments and companies (Market Business News, 2020)

The literature typically speaks of CSR while utilizing ESG ratings to assess CSR activities, hence for the sake of this study, both concepts are employed as loose synonyms. However, readers should keep in mind that 'ESG' refers to CSR's measured efforts.

These narratives offer valuable insights into a company's strategic outlook and performance, questions arise regarding their role in shaping the comprehensiveness and relevance of ESG disclosures within annual reports.

This essay seeks to explore the relationship between ESG disclosure in annual reports and how they impact the financial performance of firms listed on the London Stock Exchange (LSE) during the period from 2013 to 2023. Through an examination of the way that firms include ESG in their annual reports, I aim to assess the influence of these attributes on the firm performance. This dissertation has implications for both managers and investors. In addition to the primary objective of this dissertation, another objective is to find out managers' points of view regarding ESG disclosure strategies to increase the company's value to investors.

The principal area of analysis seeks to investigate how much words related to ESG are included in annual reports. These analyses are conducted from CFIE dataset (El-Haj et al., 2020), they divided into various studies.

Utilizing the extensive dataset from CFIE (Corporate Financial Information Environment), this study employs Ordinary Least Squares (OLS) regression analysis to investigate the impact of incorporating ESG elements into Chairman letters, CEO reviews, and CSR disclosures on company performance. This research aims to quantitatively assess how the integration of ESG within these communication channels influences various aspects of firm outcomes and stakeholder perceptions.

The choice of the LSE-listed firms as the focus of this study is deliberate, given the prominence of the LSE as one of the world's leading financial markets and the increasing scrutiny of ESG performance by investors and regulators alike. Furthermore, the selected sample period spanning over a decade provides a comprehensive temporal perspective to assess potential changes and trends in reporting practices.

Through this research, we aim to contribute to the existing literature on corporate reporting practices and ESG disclosure by providing empirical evidence on the role of financial narratives in shaping ESG communication strategies. The findings of this study hold implications for various stakeholders, including investors, policymakers, and corporate managers, as they seek to navigate the evolving landscape of sustainable investing and corporate transparency.

The study is organized as follows: chapter 2 presents the literature review on ESG, annual report and financial narrative, chapter 3 presents the methodology and data used for this research, chapter 4 presents the results and the main assumptions and chapter 5 presents the conclusion.

2. Literature Review

2.1. Annual reports

Financial reporting stands as a fundamental mechanism by which businesses communicate crucial financial information to stakeholders, ranging from shareholders and investors to regulators and the general public (Brescia et al., 2016). However, the role of financial disclosures within annual reports has been a subject of ongoing scholarly debate. While some argue that these disclosures serve to mitigate information asymmetry between management and external stakeholders, others contend that they may be strategically manipulated by management to obscure unfavorable information or project a more positive image of the firm (Brescia et al., 2016). This tension underscores the importance of understanding how financial narratives are crafted within annual reports to shape stakeholders' perceptions (Abrahamson and Amir, 1996)

Within the realm of financial narratives, impression management theory offers valuable insights into how managers strategically use language and storytelling techniques to influence stakeholders' perceptions of the firm's financial performance and prospects (Souza et al., 2019). By analyzing the textual components of annual reports, researchers can uncover the subtle ways in which managers seek to frame financial information to control the narrative and manage stakeholders' expectations.

The annual report and financial statements characterize a key disclosure in the corporate reporting cycle. Annual reports are a legal requirement and although shareholders are the legislative focal point, these disclosures are used by a variety of stakeholders including financial analysts, prospective investors, customers

and suppliers, lobby groups, regulators, journalists, and academics (El-Haj et al., 2020).

2.2. Financial narratives

The inclusion of financial narratives in this literature review is paramount, given that the CFIE dataset, which forms the basis of our sample, employs corpus linguistics and natural language processing (NLP) techniques to scrutinize the discourse in the accounting and financial markets.

Financial narratives, as defined by some scholars (e.g., Clatworthy & Jones, 2003; 2006), are the qualitative segments of annual reports, applying narrative, linguistic, and communicative competencies to the financial domain. These narratives, which can be found in various sources such as corporate annual reports, financial news articles, investor presentations, and personal finance books, are crafted and disseminated to distribute financial information, mold perceptions, and influence financial decision-making.

Over the past two decades, there has been an increasing demand for enhanced business reporting, with a significant focus on urging companies to disclose more non-financial information (Yiwei et al., 2017). This trend underscores the growing importance of financial narratives in contemporary business reporting.

The power of financial narratives lies in their ability to influence stakeholders' behavior and decision-making processes. By framing financial information in a particular light, managers can steer investors' investment preferences, guide their investment strategies, and shape their understanding of risk and return (Clatworthy & Jones, 2003; 2006). Moreover, financial narratives are not confined to annual reports but can also be found in other sources such as financial news

articles, investor presentations, and personal finance books, further extending their reach and influence.

The utilization of complex narrative disclosures can be perceived as an agency problem rooted in information asymmetry, as managers may exploit complex narratives for personal gain (Souza et al., 2019). Furthermore, the complexity of financial statements can impact investors' ability to process historical accounting reports, potentially leading to increased cognitive load (Drake et al 2016). Therefore, the examination of financial narratives serves as a valuable approach for understanding firms' financial performance, particularly in periods of financial turbulence.

The necessity for financial narrative analysis stems from their significance in every company's annual reports. An annual report comprises both obligatory quantitative data, like financial statements, and a narrative section, which includes the management's viewpoint on the firm's financial status, along with additional information such as the chairman's letter, corporate social responsibility, and key risks (El-Haj et al., 2020). Given that the annual report serves as a primary communication medium for a firm's stakeholders, financial narrative analysis is essential. Companies may intentionally increase the complexity in narrative accounting disclosures to make information extraction more challenging (Bloomfield, 2002).

2.3. Importance of ESG

In recent years, the quantity of literature on ESG subjects has grown significantly.

Nonetheless, there is a lot of debate over the impact that ESG data can have on investor decisions and stock performance. This is well documented in studies

examining market reactions to ESG news, with different writers providing significantly varied findings.

The increasing focus on sustainability and responsible business practices has led to a surge in ESG reporting among companies worldwide. As a key element of corporate transparency, ESG reporting aims to disclose a company's impact on the environment, society, and its governance structure.

On the other hand, there is still a persistent misconception that the amount of actual data indicates that ESG factors have a negative impact on financial performance. For investment professionals, one of the most important concepts in the discourse on ESG concerns is the idea that by taking an organized approach to ESG concerns, they may be able to conduct more thorough investment assessments and make better investment decisions.

ESG practices can play a crucial role in promoting green recovery by fostering sustainable and responsible economic growth (Liu, L. et al. 2023). Recent years have seen a considerable increase in interest in the incorporation of ESG elements in company reporting due to growing concerns about sustainability, ethical standards, and responsible business conduct. As a result of ESG reporting, businesses can reveal how their actions impact the environment, society, and corporate governance, allowing stakeholders to make wise decisions based on the information they have.

For Agnese et al. (2023), 85% of investors consider ESG performance more important than other company data when informing their investment decisions.

Shuili et al. (2020) examine the value relevance of CSR reports, but it does not explicitly address the integration of broader ESG factors within the reports. ESG factors encompass environmental, social, and governance dimensions, which go beyond the scope of CSR. Investigating the extent to which ESG information is included in financial narratives and its impact on value relevance would provide a more comprehensive analysis.

2.3.1. ESG and firm performance

ESG factors have garnered increasing attention from investors, stakeholders, and regulators due to their potential to impact a company's long-term financial performance and reputation (Yiwei et al., 2017).

Yiwei et al. (2017) shed light on the relationship between ESG disclosure and firm value, specifically focusing on the role of CEO power. Their empirical research suggests that transparent ESG reporting positively influences firm value, with CEO power playing a significant role in determining the extent and quality of ESG disclosure.

These findings align with a growing body of literature emphasizing the importance of ESG transparency in enhancing corporate reputation, attracting socially responsible investors, and mitigating various risks. By voluntarily disclosing information related to environmental initiatives, social responsibility efforts, and governance practices, companies signal their commitment to sustainable and responsible business practices, thereby enhancing shareholder value.

Some researchers argue that ESG investment has a negative impact on profitability or firm value. According to Barnett (2007), investment in CSR is likely to have a detrimental impact on corporate financial performance due to the reallocation of cash away from shareholders.

Other researchers find of mixed relationships between ESG and firm value like Giannopoulos et al. (2022) examine the impact of ESG scores on financial performance of Norwegian listed firms from 2010 to 2019. They reveal mixed results, indicating a positive relation between ESG scores and firm value and negative relation between ESG scores and profitability.

Overall, the results from extant ESG-themed literature are significant for this thesis as they underscore the relevance of ESG data to investors' decision-making

processes. However, it's crucial to acknowledge the potential biases in ESG reporting. The lack of standardized reporting techniques and inconsistent rating standards employed by rating agencies can lead to discrepancies in ESG scores, compromising the trustworthiness of ESG information. Therefore, when assessing ESG data-based studies, it's imperative to consider these elements.

2.4. Chairman and CEO messages

This study will concentrate on the Chairman' and CEO message and CSR statement, a fundamental component of every company's annual report. Annual reports serve as crucial channels for communication between corporate management and various stakeholders. Recently, there has been a notable shift towards using narrative disclosures within annual reports, a practice adopted by managers to communicate effectively (Courtis, 1997). While extensive research has been conducted on analysing financial narratives throughout the annual report, this study specifically zeroes in on the chairman's letter.

The chairman's letter holds significant importance as it offers an initial overview of the company's activities and performance throughout the year. It's worth noting that in many companies, the chairman's letter is typically unaudited. However, in the United Kingdom, auditors verify the letter's contents to ensure consistency with the financial statements (Clatworthy & Jones, 2006). Additionally, the chairman's letter serves as a valuable tool for assessing the quality of a firm's earnings.

Unlike other sections of the annual report, the chairman's letter is less bound by specific regulations set forth by the Securities and Exchange Commission (SEC). Within SEC guidelines, there are no stringent requirements dictating the content of this portion of the annual report. Therefore, it provides a

relatively flexible platform for companies to convey their strategic vision, performance highlights, and other pertinent information to stakeholders (Abrahamson and Amir, 1996).

2.5. Research Question

The purpose of this study is to analyse the influence of ESG practices on companies. The research question is motivated by the increasing significance of ESG factors in investment decisions, regulatory frameworks, and stakeholder expectations. This inquiry seeks to investigate how ESG reporting practices influence investor decision-making processes, stakeholder engagement, regulatory compliance, corporate reputation, financial performance, and risk management within the context of UK listed firms. By examining the effects of ESG reporting practices on the performance of the firm, including financial performance, risk management, and long-term sustainability, this study aims to contribute to the understanding of the broader implications of corporate sustainability practices and governance mechanisms.

In the realm of corporate documentation, the chairman's statement assumes a pivotal role as one of the most widely perused sections within the annual report. Serving as a succinct encapsulation of the company's periodic performance and prospects, it offers stakeholders a comprehensive overview. (Clatworthy & Jones, 2003; 2006).

To test if exist any correlation between ESG reporting practices in annual reports of UK listed firms and their company performance, the following hypothesis was formulated.

H1: *There is no statistically significant linear relationship between the ESG metrics and the company performance metrics.*

Some researchers argue that exist a consistent relationship between the ESG disclosure and the financial performance. Meanwhile some researchers argue that not exist any relationship, for example the study conducted by Landi and Sciarelli (2019) focus on 54 listed Italian companies from 2007 to 2015 and report a negative relationship between their ESG scores and financial performance. Another researcher argues that exist a mixed relationship, for example the study conducted by Han et al. (2016) examine listed companies on Korea Stock Exchange from 2008 to 2014 and find no relationship for social score, positive relationship for governance score, and negative relationship for environment score. So, this hypothesis was created to understand how UK companies react to the inclusion of ESG in the annual report.

To conduct this hypothesis below I separate my sample between profitable and unprofitable firms to see if has any relationship between the firms that are considered more valuable that the firms that are not considered to.

As it was mentioned before several studies and researchers say that has a positive linear relationship between the ESG and firm value (Mahmut et al. 2022).

H2a: *There is no statistically significant difference in the level of ESG disclosure between profitable and unprofitable firms.*

H2b: *Profitable firms exhibit a higher level of ESG disclosure compared to unprofitable firms.*

There are a lot of evidence that firms with positive results will adopt more ESG disclosure on their annual report by Li et al. (2017).

H3: *There is a statistically significant linear relationship between ESG metrics and at least one of the company performance metrics.*

To conclude, the last hypothesis was formulated with the intent of answering the main research question. This will be addressed by analysing the ESG disclosure in the three sections (CEO, Chairman and CSR disclosure) through the performance of each firm. Both profitable and unprofitable firms will be

analysed. This research intends to establish a link between the implement of ESG disclosure of each Chairman letter, CEO review and CSR disclosure and the performance of firms. With this hypothesis we are able to assess if indeed firms contribute to better ESG information in their annual reports.

3. Methodology and Data

3.1. Sample selection and Data collection

The primary objective of our study revolves around examining companies listed on the LSE. To conduct this investigation, we have selected a sample spanning from 2013 to 2023, encompassing annual reports with fiscal year-ends falling within this timeframe. Leveraging the comprehensive CFIE dataset compiled by El-Haj et al. (2020), we have access to detailed narratives contained within these annual reports.

To ensure the robustness and representativeness of our sample, we have implemented a stringent criterion. Specifically, we have excluded observations that lack either a chairman letters, CEO review and CSR disclosure. For each feature, I excluded observations with missing annual reports and financial data. This deliberate exclusionary measure is aimed at refining our sample to comprise firms that provide both narrative components within their annual reports. By adhering to this criterion, we aim to construct a sample that accurately reflects the reporting practices and communication strategies adopted by firms listed on the LSE.

This dissertation utilized two distinct sources of data, namely Refinitiv DataStream/Refinitiv Eikon, and data from annual reports (El-Haj et al., 2020).

The Refinitiv DataStream platform was used to extract the list of firms included in the LSE from January 1st, 2013, to December 31st, 2023, as well as Market Value (MV), Earnings per share (EPS), Revenues Growth (REV), EBITDA and Return on Assets (ROA). El-Haj et al. (2020) was used to extract feature information such as the number of words of ESG indices for CEO review (CEO), Chairman letters (CHAIR) and CSR disclosure to study how they implement the ESG in their section of annual report.

After the data extraction process was completed, the information downloaded from Refinitiv DataStream was matched with the data obtained from El-Haj et al (2020). This process resulted in a final sample size of 9495 observations across the period of 2013-2023.

Year	Freq.	Percentage
2013	843	8.88%
2014	895	9.43%
2015	951	10.01%
2016	961	10.12%
2017	1,012	10.66%
2018	1,027	10.82%
2019	1,039	10.94%
2020	992	10.45%
2021	954	10.05%
2022	717	7.55%
2023	104	1.10%
TOTAL	**9,495**	**100%**

Table 1: Sample distribution over year

After that I must divide my sample in two: profitable firms and unprofitable firms to analyse if exists any correlation with ESG. In other words, if the firms that include more ESG in their annual reports are the profitable firms or not.

For the OLS regression I decided to not include the variables PA_Guidelines, PA_Climate and PA_Biodiversity because the values that are present in data

from El-Haj et al. (2020) are very proximally to zero, which would greatly affect my results.

This meticulous approach enables us to delve into the intricate dynamics between financial narratives and ESG disclosure within the context of UK-listed firms. By focusing on a specific subset of annual reports characterized by the presence of both chairman statements, CEO reviews and CSR disclosure, we can gain deeper insights into the interplay between narrative content and the extent and quality of ESG disclosure. Through rigorous analysis of this refined sample, we aim to uncover nuanced patterns and relationships that elucidate the broader landscape of corporate reporting practices and their implications for stakeholders.

3.2. Research Design

The methodology employs Ordinary Least Squares (OLS) estimation to analyse the relationship between ESG disclosure and firm performance. PA_Guidelines, PA_Climate, PA_Biodiversity, PA_ESG1, PA_ESG2, PA_ESG3 are treated as independent variables, while EPS, MV, Net Sales, EBITDA, Revenues and Return on Assets serves as the dependent variable.

The first variable "PA_Guidelines" was provided by my supervisor, the second and third variable are "PA_Climate", "PA_Biodiversity", respectively, are conducted by Sautner et al. (2023), the fourth variable, "PA_ESG1", are based in the study conduct by Baier et al. (2020), the fifth variable, "PA_ESG2", is conduct based in the study of Veberteen et al. (2016) and the last variable, "PA_ESG3", was based in the study by Andrikogiannopoulou et al. (2022).

The study conducted by El-Haj et al. (2020) of these variables consists of analysing how many words appear in annual reports that refer to ESG. The authors created a list of words referring to ESG.

Quantitative analysis involves OLS regression to estimate the effect of financial narratives on ESG disclosure, supplemented by descriptive statistics to summarize the prevalence and characteristics of ESG disclosure within the sample. Ethical considerations encompass compliance with data usage guidelines and proper citation of sources.

Potential limitations include reliance on secondary data and assumptions inherent in OLS estimation, which are transparently acknowledged to ensure the validity and reliability of findings. The study's implications extend to informing corporate reporting practices, regulatory policies regarding ESG disclosure, and enhancing stakeholder decision-making processes.

The hypotheses were tested using the following regressions:

$$PA\_ESG1_{it}=\beta0+\beta1Size_{it}+\beta2EBITDA_{it}+\beta3Net\_sales_{it}+\beta4Revenues\_Growth_{it}+\beta5 EPS_{it}+\beta6ROA_{it}+\varepsilon$$

$$PA\_ESG2_{it}=\beta0+\beta1Size_{it}+\beta2EBITDA_{it}+\beta3Net\_sales_{it}+\beta4Revenues\_Growth_{it}+\beta5 EPS_{it}+\beta6 \cdot ROA_{it}+\varepsilon$$

$$PA\_ESG3_{it}=\beta0+\beta1Size_{it}+\beta2EBITDA_{it}+\beta3Net\_sales_{it}+\beta4Revenues\_Growth_{it}+\beta5 EPS_{it}+\beta6ROA_{it}+\varepsilon$$

Three statistics were used to measure the use of ESG disclosure within the chairman letter, CEO review and CSR disclosure. The first dependent variable for model (1) used was the PA_ESG1, of the chairman letter, CEO review and CSR disclosure from the annual report published by each firm. This variable was developed by Baier et al. (2020).

The second variable for model (1) that was used is the PA_ESG2 as dependent variable, taken from chairman letter, CEO review and CSR disclosure from the

annual report published by firm. This variable was developed by Veberteen et al. (2016).

The third variable for model (1) that was used is the PA_ESG3 taken from the chairman letter, CEO review and CSR disclosure from the annual report published by firm, as a dependent variable. This variable was used following the study conducted by Andrikogiannopoulou et al. (2022).

As independent variables we selected Earnings per Share and Return on Assets based on the study conducted by Souza (2019). Furthermore, a series of control variables were added following the study conducted by Li (2008) to avoid biased results. These are considered nonstrategic components. Size, this was calculated as the natural logarithm of Market Value. Furthermore, this variable captures a firm's operational and business environment. The Revenues Growth that is calculated by: firm sales growth rate = (current fiscal year's net sales or revenues / last fiscal year's total net sales or revenues - 1) * 100. The EBITDA and Net Sales are included too.

For the second model, the process was repeated with the same variables, but this time with a smaller sample since it separated the profitable from the non profitable firms to answer the hypothesis H2a and H2b.

To address hypothesis 3, we formulated a second regression to examine the relationship between performance metrics and ESG factors. This analysis focused solely on earnings per share (EPS) and return on assets (ROA) retrieved from DataStream as they are key indicators of firm profitability. The regressions were structured as follows:

Thus, the following regressions was formulated:

$$Earnings\ per\ share\text{-}fiscal\ end_{it} = \beta_0 + \beta_1 PA\_Climate_{it} + \beta_2 PA\_ESG1_{it} + \beta_3 PA\_ESG2_{it} + \beta_4 PA\_ESG3_{it} + \varepsilon$$

$$Return\ on\ Assets_{it} = \beta_0 + \beta_1 PA\_Climate_{it} + \beta_2 PA\_ESG1_{it} + \beta_3 PA\_ESG2_{it} + \beta_4 PA\_ESG3_{it} + \varepsilon$$

Thus, this regression was done with the intent of understand if the ESG variables with more presence in annual reports samples have any linear relationship with the performance metrics individually. Within this model the independent variables were PA_ESG1, PA_ESG2, PA_ESG3 and PA_Climate.

4. Results

Table 2 describes the descriptive statistics of the whole sample.

Among the narrative variables, PA_Guidelines exhibit a mean of approximately 0.92, indicating that, on average, companies tend to adhere to around 0.92 guidelines out of a possible maximum of 63. PA_Climate and PA_Biodiversity showcase means of 6.16 and 1.31 respectively, suggesting a relatively higher emphasis on climate-related and biodiversity-oriented performance. However, there is considerable variability, as evidenced by the standard deviations of 13.26 and 4.70 for PA_Climate and PA_Biodiversity respectively, showcasing diverse approaches among companies.

Moving to the PA_ESG variables, the descriptive statistics unveil considerable variations. PA_ESG1, PA_ESG2, and PA_ESG3 exhibit means of 188.87, 27.73, and 13.16 respectively, denoting diverse levels of performance across environmental, social, and governance aspects. The standard deviations further highlight the dispersion around these means, underscoring the heterogeneity in ESG performance among the sampled companies.

Analysing the median firm we can denote that has 93 words related with ESG variables in their annual report (CEO review, Chairman letter, CSR disclosure); the median market value is 164.97 and has 2.2% of earnings per share. In addition, the P75 firm has more words related to ESG and has higher value of MV and earning per share, 1089 and 2.5% respectively.

Within the following sections the results are presented as follows: Table 2 presents the results for model 1 regarding the ESG metrics and performance metrics. While table 3 presents the descriptive statistics divided by profitable or non profitable firms and table 4 presents model 2 regarding the OLS coefficients divided by profitable firms and non profitable firms. Finally, table 5 shows model 3 concerning the influence of ESG ate least one performance metric.

VARIABLES	Mean	Median	St. Dev	Min	P25	P50	P75	Max
Narrative Variables (Independent Variables)								
PA_Guidelines	0.92	0	3.13	0	0	0	0	63
PA_Climate	6.16	1	13.26	0	0	1	6	172
PA_Biodiversity	1.31	0	4.70	0	0	0	0	104
PA_ESG1	188.87	82	272.04	0	22	82	248	3,65
PA_ESG2	27.73	8	43.49	0	0	8	40	509
PA_ESG3	13.16	3	24.44	0	0	3	15	301
Other Variables (Control and Dependent Variables)								
EPS	2.66	0.022	511.83	-2744.27	-0.03	0.02	0.25	49054.01
MV	10110.74	164.97	135055.80	0.12	18.60	164.97	1089.47	3808104
NET SALES/REVENUES - 1YR ANN GR	46.87	9.24	945.34	-100	0	9.24	26.09	34696.33
EBITDA (in millions)	3,82	0,01	1.02E+02	-1.5E+03	-6.58E-04	0,02	0,12	3.19E+03
REVENUES (in millions)	19,33	0,13	3.59E+02	-7,62	0,02	0,13	0,88	1.17E+04
RETURN ON ASSETS	16.57	2.48	634.60	-810.80	-5.98	2.48	7.08	20066.67

Table 2: Descriptive statistics

4.1. ESG metric and performance metrics

Table 3 presents the regression models on the three ESG variables that includes, PA_ESG1, PA_ESG2 and PA_ESG3, from the chairman letter, CEO review and CRS disclosure of each firm. This table tests H1.

	PA_ESG1	**PA_ESG2**	**PA_ES3**
Size	0.0001***	*1.295e-05**	*5.504e-06*
	(0.004)	*(0.095)*	*(0.206)*
EBITDA	1.784e-02	0*6.294e-03*	*2.021e-03*
	(0.810)	*(0.595)*	*(0.761)*
Net sales	-3.084e-08	*-2.045e-09*	*1.252e-09*
	(0.173)	*(0.572)*	*(0.538)*
Revenues Growth	*-5.70e+03****	-7.00e+02	-5.00e+02
	(0.005)	*(0.112)*	*(0.077)*
EPS	*-0.001*	*-3.000e-03*	*-1.000e-03*
	(0.765)	*(0.721)*	*(0.779)*
ROA	*-0.059*	*-8.000e-03*	*-4.000e-03*
	(0.181)	*(0.233)*	*(0.281)*
Year Fixed Effects	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes
Observations	9,495	9,495	9,495
Adj R-squared	0.002	0.001	0.003
F-statistic	3.680	3.034	5.600
Prob (F-statistic)	0.00118	0.00578	8.22e-06

**** denotes p-values <0.01, ** denotes p-values <0.05, * denotes p-values <0.10*

Table 3: Hypothesis 1 coefficient's estimation

The regression output provided offers insights into the potential relationship between ESG metrics and company performance metrics, as well as the statistical significance of these relationships. The hypothesis, H1, posits that there is no statistically significant linear relationship between ESG metrics and company performance metrics. Let's delve into the interpretation of the results in line with this hypothesis.

The regression coefficients represent the estimated impact of each independent variable ESG metrics on the dependent variables (company performance metrics), holding other variables constant. The coefficients for ESG metrics (PA_ESG1, PA_ESG2, and PA_ESG3) vary across different performance metrics such as Size, EBITDA, Net sales, Revenue Growth, EPS, and ROA.

Considering the hypothesis, if there is no statistically significant linear relationship between ESG metrics and company performance metrics, we would expect the coefficients for ESG metrics to be statistically insignificant. Looking at the provided output, the coefficients for ESG metrics are not consistently statistically significant across all performance metrics. For instance, while the coefficient for EBITDA in the regression for PA_ESG1 is statistically significant the coefficients for PA_ESG2 and PA_ESG3 in the regressions for EBITDA are not statistically significant.

Moreover, examining the adjusted R-squared value can provide insights into the explanatory power of the model. These values represent the proportion of variance in the dependent variable explained by the independent variables. In this case, the adjusted R-squared value is relatively low, ranging from 0.001 to 0.004, suggesting that the ESG metrics included in the model explain only a small fraction of the variance in company performance metrics.

The F-statistic and its associated probability (Prob) provide overall tests of the significance of the regression model. A low p-value (typically less than 0.05) for the F-statistic indicates that the independent variables collectively have a statistically significant effect on the dependent variable. In this instance, the F-statistics have low p-values, suggesting that the regression models are statistically significant. However, it's essential to note that the significance of individual coefficients (ESG metrics) should be interpreted in line with the hypothesis.

In conclusion, while the regression models overall appear to be statistically significant, the coefficients for ESG metrics do not consistently demonstrate a statistically significant linear relationship with company performance metrics. Thus, the hypothesis that there is no statistically significant linear relationship between ESG metrics and company performance metrics cannot be rejected based on the provided regression output. However, further analysis and examination may be necessary to fully understand the relationship between ESG metrics and company performance. Whilst this regression cannot explain this relationship, it can be concluded that there is indeed a positive relationship between the variables, however not a significant one. The results from this regression support the results of the study conducted by Mahmut et al. (2022).

4.2. Profitable and unprofitable firms

Table 4 present the descriptive statistics between profitable firms and unprofitable firms. Profitable firms were considered to have EPS > 0 whereas unprofitable < 0. These were considered following the study conducted by Subramanian, Insley and Blackwell (1993). This part answers hypothesis 2a e 2b.

	PROFITABLE			**NONPROFITABLE**		
	N	Mean	Median	N	Mean	Median
PA_Guidelines	5474	1.192	0	4021	0.557	0
PA_Climate	5474	7.928	2	4021	3.760	0
PA_Biodiversity	5474	1.656	0	4021	0.846	0
PA_ESG1	5474	235.582	134	4021	125.283	43
PA_ESG2	5474	35.104	17	4021	17.687	2
PA_ESG3	5474	16.554	6	4021	8.535	1

Table 4: Descriptive statistics profitable vs non profitable firms

Table 5 presents the OLS estimation divided between profitable and non profitable firms' companies with the intention of analysing the incidence of ESG variables in the reports of companies in opposite financial contexts.

	PROFITABLE			*NON PROFITABLE*		
	PA_ESG1	**PA_ESG2**	**PA_ESG3**	**PA_ESG1**	**PA_ESG2**	**PA_ESG3**
Size	*0.0001*	*7.525e-06*	*4.693e-06*	0.0060***	0.0007***	0.0004***
	(0.064)	*(0.468)*	*(0.428)*	*(0.000)*	*(0.000)*	*(0.000)*
EBITDA	*-1.02e-01*	*5.49e-03*	*-8.215e-03*	1.172e-01	2.621e-02	1.111e-02
	(0.626)	*(0.858)*	*(0.664)*	*(0.183)*	*(0.070)*	*(0.166)*
Net sales	*-7.089e-10*	*-1.273e-09*	*3.692e-09*	2.721e-06***	5.049e-07***	2.29e-07
	(0.988)	*(0.861)*	*(0.372)*	*(0.000)*	*(0.000)*	*(0.231)*
Revenues Growth	*-3.71e+05****	*-6.80e+04****	*-3.16e+04****	-2.70e+03	-3.00e+02	-2.00e+02
	(0.000)	*(0.000)*	*(0.000)*	*(0.219)*	*(0.480)*	*(0.231)*
EPS	*-0.0028*	*-0.0004*	*-0.0002*	*0.0386*	*0.0036*	*0.0027*
	(0.647)	*(0.690)*	*(0.713)*	*(0.263)*	*(0.523)*	*(0.385)*
ROA	*-0.0141***	*-0.0022***	*-0.0011*	*-0.0034*	*-0.0004*	*-0.0002*
	(0.048)	*(0.049)*	*(0.094)*	*(0.444)*	*(0.572)*	*(0.590)*
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,474	5,474	5,474	4,021	4,021	4,021
R-squared	0.007	0.009	0.008	0.050	0.042	0.038
F-statistic	6.524	8.049	7.482	35.02	29.51	26.17
Prob (F-statistic)	7.089e-10	1.13e-08	5.31e-08	1.71e-41	8.78e-35	1.04e-30

**** denotes p-values <0.01, ** denotes p-values <0.05, * denotes p-values <0.10*

Table 5: Multivariate analysis profitable vs non profitable firms

The provided regression output aims to assess the relationship between Environmental, Social, and Governance (ESG) disclosure stages and firm profitability, as per the two hypotheses: H2a, affirming that there is no statistically significant difference in ESG disclosure levels between profitable and unprofitable firms, and H2b, suggesting that profitable firms exhibit a higher level of ESG disclosure compared to unprofitable firms. Let's interpret these findings within the context of the hypotheses.

Firstly, the coefficients for ESG variables (PA_ESG1, PA_ESG2, and PA_ESG3) across both profitable and unprofitable firms provide insights into the

association between ESG disclosure levels and profitability. If H2a holds true, we would expect the coefficients for ESG variables to be statistically insignificant, indicating no significant difference in ESG disclosure levels between the two groups. Conversely, if H2b is supported, we would anticipate higher and statistically significant coefficients for ESG variables among profitable firms, suggesting a positive association between profitability and ESG disclosure levels.

In interpreting the coefficients, it's essential to consider their statistical significance and their magnitudes. A statistically significant coefficient (indicated by asterisks) suggests that the corresponding independent variable has a significant impact on the dependent variable.

For instance, looking at the coefficients for EBITDA across profitable and unprofitable firms, we see statistically significant coefficients for profitable firms suggesting a positive relationship between EBITDA and ESG disclosure levels among profitable firms. Conversely, the coefficients for EBITDA among unprofitable firms are not statistically significant, indicating no significant relationship between EBITDA and ESG disclosure levels in this group.

Similarly, examining the coefficients for Net sales reveals statistically significant coefficients for both profitable and unprofitable firms, suggesting a significant positive relationship between Net sales and ESG disclosure levels in both groups.

Comparing the coefficients for ESG variables across profitable and unprofitable firms can provide further insights. If profitable firms exhibit higher and statistically significant coefficients for ESG variables compared to unprofitable firms, it will support H2b, indicating that profitable firms indeed disclose ESG information to a greater extent. Conversely, if there are no significant differences in the coefficients between the two groups, it would support H2a, suggesting no significant disparity in ESG disclosure levels based on profitability.

Furthermore, the F-statistics and associated p-values provide overall tests of the significance of the regression models. A low p-value (typically less than 0.05) for the F-statistic indicates that the independent variables collectively have a statistically significant effect on the dependent variable. In this context, a significant F-statistic would support the overall significance of the regression model in explaining the relationship between ESG disclosure levels and firm profitability.

Lastly, the adjusted R-squared value offer insights into the explanatory power of the models. Higher values indicate that the independent variables explain a greater proportion of the variance in the dependent variable. These value can help assess the overall fit of the regression models in explaining the relationship between ESG disclosure levels and firm profitability.

In conclusion, the interpretation of the regression output should be evaluated considering the hypotheses. If the coefficients for ESG variables are statistically significant and higher among profitable firms compared to unprofitable firms, it would support H2b, suggesting a positive association between profitability and ESG disclosure levels. Conversely, if there are no significant differences in the coefficients between the two groups, it would support H2a, indicating no significant disparity in ESG disclosure levels based on profitability.

4.3. Company performance metrics

Table 6 presents the regression model on the performance metrics variable. This tests hypothesis 3.

	EPS	ROA
PA_CLIMATE	0.1308	0.3994
	(0.896)	(0.747)
PA_ESG1	-0.0004	-0.0444
	(0.994)	(0.514)
PA_ESG2	-0.0428	0.0146
	(0.897)	(0.972)
PA_ESG3	-0.0457	-0.0730
	(0.945)	(0.929)
Observations	9,495	9,496
Adj R-squared	-0.000	-0.000
F-statistic	0.02562	0.4813
Prob (F-statistic)	0.999	0.750

Table 6: Impact of ESG on profitability

The regression output provided offers insights into the potential relationship between Environmental, Social, and Governance (ESG) metrics and company performance metrics, specifically focusing on earnings per share (EPS) and return on assets (ROA). The hypothesis posits that there is a statistically significant linear relationship between ESG metrics and at least one of the company performance metrics.

Starting with the coefficients, they represent the estimated impact of each ESG metric on EPS and ROA. For instance, in the case of EPS, the coefficients for PA_CLIMATE, PA_ESG1, PA_ESG2, and PA_ESG3 are 0.1308, -0.0004, -0.0428, and -0.0457 respectively. Equally, for ROA, the coefficients for the same ESG metrics are 0.3994, -0.0444, 0.0146, and -0.0730 respectively.

However, the interpretation of these coefficients should be approached cautiously due to their high p-values (above 0.05), indicating that they are not statistically significant. This suggests that there is insufficient evidence to conclude a significant linear relationship between ESG metrics and EPS or ROA.

The adjusted R-squared value is far away to zero, indicating that the insertion of ESG metrics in the regression model does not improve the explanatory power of the model regarding EPS or ROA. Additionally, the F-

statistics are low, further supporting the lack of statistical significance in the relationship between ESG metrics and company performance metrics.

The results do not concur with this hypothesis and do not show statistically significant linear correlation between ESG metrics and EPS, nor the metrics and ROA. It can therefore be concluded that the variations in ESG metrics might not have been enough to describe the variations in EPS and ROA, while other factors have been driving these company performance metrics.

This finding matters to various stakeholders interested in discovering the real link between ESG strategies and financial performance. Indeed, since ESG is increasingly a topic of discussion for investors and policy makers, our analysis shows that ESG scores may not be directly linked to EPS or ROA at least in the context analysed. More research should be done on this non-linear relationship between the two.

Furthermore, in the case of the lack of statistical significance between the ESG metrics and the company performance metrics, it does not mean that the ESG metrics do not matter. ESG factors could still influence firms' financial performance through the indirect mechanisms (Eg: risk management, reputation enhancement, and the formation of stakeholder relations). Future studies may investigate these indirect pathways and estimate their broader effects on company outcomes.

In summary, despite a strong expectation in the hypothesis that there would be a clear and significant linear relationship between ESG and company performance metrics, the regression analysis suggested that, at best, there was no meaningful correlation; and at worst, there was an indication that once we controlled for effects of size and asset ownership, the social and environmental factors measured through ESG reporting were actually negatively related to profitability. Clearly more work is needed to understand the complex relationship between ESG initiatives and financial performance if we are to

reconcile such claims with the complex reality of businesses' efforts at socially and environmentally sustainable development and the way they are measured against multiple aspects of corporate success. These results are consistent with the study conducted by (Han et al. 2016), that also found that exist a mixed relationship between ESG metrics and performance metrics.

5. Conclusion

This study investigates the use of ESG disclosure within chairman letter, CEO review and CSR disclosure of English firms. This research includes both profitable and non profitable firms.

It is crucial for management to carefully select their words during the financial reporting process, as investors assess the value of a firm based on their perception of its financial reports.

In order to achieve the aim of this dissertation, various regression model was employed, which incorporated various measures of ESG disclosure, and their effects on the firm performance. The model only includes the CEO review, Chairman Letter and CSR disclosure.

The findings from the regression analyses provided insights into the relationship between ESG metrics and various performance indicators, such as earnings per share (EPS), return on assets (ROA), size (MV), EBITDA, net sales and revenue growth. The results revealed a nuanced picture, indicating that while there may be some associations between ESG disclosure and certain performance metrics, these relationships were not consistently statistically significant across all variables.

In terms of the first hypothesis, claiming that statistically significant linear relationships do not exist between the ESG metrics and the company

performance metrics, this general claim can be determined. The regression analyses indicated that the models might be statistically significant overall, but the coefficients of ESG metrics indicated statistically insignificant linear impacts on performance metrics. Thus, most of the results may suggest some relationships between ESG disclosures and firm performance but an equivalently unobvious linear pattern or uniform evidence for all dimensions.

Concerning the second set of hypotheses regarding the difference in the ESG disclosure levels based on firm profitability, the findings are more inconclusive. Although the coefficients of the ESG variables are significant for the profitable firms, implying that they are positively associated with profitability, the outcomes for the unprofitable ones are not determined by similar patterns. Thus, in this case, firms that can generate profit are likelier to engage in ESG reporting, the relationship between the two remains inconsistent.

Lastly, the analysis of the relationship between ESG metrics and company performance metrics, specifically focusing on EPS and ROA, did not yield statistically significant results. Despite exploring various dimensions of ESG disclosure, including climate-related and biodiversity-oriented performance, the regression models failed to establish a significant linear relationship between ESG metrics and financial performance indicators. This suggests that while ESG initiatives may have indirect effects on financial performance through risk management, reputation enhancement, and stakeholder engagement, their direct impact on EPS and ROA remains elusive.

In conclusion, this dissertation contributes to the existing literature on corporate reporting practices and ESG disclosure by providing empirical evidence on the relationship between narrative disclosures and financial performance metrics. While the findings suggest some associations between ESG disclosure and firm performance, particularly among profitable firms, the relationships are not uniformly significant across all dimensions. This

underscores the need for further research to explore the nuanced dynamics between ESG initiatives and financial outcomes, considering the multifaceted nature of corporate sustainability efforts.

Likewise, this study has its limitations. First, the focus of this research was only on non-financial English firms and the use of the ESG within only three sections of the annual report, the chairman letter, the CEO review, and CSR disclosure. The variables of ESG are reduced too which made it impossible to study each metric in greater detail. Third, this research focused on the use of ESG words during a small period. Thus, for future research, large sample needs to be used covering more firms. Furthermore, it would come as an important aspect to study this is in a longer period and studying this relationship and see how the inclusion of ESG in reports has varied over the years, as some values that were previously found to be significant were statistically insignificant in this dissertation. This could be due to the sample size limitation. To conclude, other parts of the annual reports should be studies and a comparison within the different parts of the annual report should be done, to see if the use of ESG disclosure is present within all sections of the annual report.

From these limitations, future research can be done, such as explore how ESG disclosure and its impact on performance vary across different industries. Each sector may face unique environmental, social, and governance challenges, and understanding sector-specific dynamics can help tailor ESG strategies and reporting practices accordingly. Another study that it will be interest is compare ESG disclosure practices and their effects on firm performance across different countries and regions. Investigating cultural, regulatory, and market differences can shed light on the contextual factors shaping ESG reporting.

Beyond the proposed recommendations, additional research should focus on the qualitative elements of ESG disclosure. This can involve analyzing the content and tone of narratives in annual reports to understand how companies

convey their ESG endeavors and commitments to stakeholders. This qualitative approach can shed light on the underlying reasons and strategies behind ESG disclosure practices, complementing numerical analyses of ESG metrics.

Future studies should investigate the impact of institutional investors and regulatory bodies on ESG reporting and company behaviors. An investigation into the roles of shareholder activism, ESG rating agencies, and regulatory frameworks in the development of corporate reporting standards is necessary for understanding the factors accelerating ESG disclosure development. It is also possible to conduct research that traces the development of ESG reporting over time and determines how it affects financial outcomes to identify common patterns between sustainability reporting and financial results. Finally, understanding how ESG reporting continues as stakeholder anticipations and government regulations change helps firms achieve higher levels of transparency and accountability.

To sum it up, this research provides some perspectives on the link between ESG disclosures and corporate success. Yet, there is considerable flexibility for potential experiments going forward. By acknowledging the shortcomings of this research and broadening the investigation, one can obtain a more complete understanding of this relevant issue.

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Appendices

CONTROL VARIABLE	DEFINITION	DATASTREAM CODES
SIZE	Natural logarithm of the market value of equity	MV
EARNINGS PER SHARE	Result of the period (positive or negative) divided by the total number of shares of the firms.	WC05202
REVENUES GROWTH	Firm sales growth rate = (current fiscal year's net sales or revenues / last fiscal year's total net sales or revenues - 1) * 100	WC08631
EBITDA	Earnings Before interest, taxes, depreciation, and amortization	WC18198
ROA	Return on the asset calculated as the ratio for net income to total assets.	WC08326
NET SALES/REVENUES	Sum of a company's gross sales minus its returns, allowances, and discounts	WC01001
INDEPENDENT VARIABLES	**DEFINITION**	**RETRIEVED FROM**
PA_Guidelines	Alves P. et al (2020): Natural logarithm of the number of words related to guidelines.	CFIE project
PA_Climate	Sautner et al. (2023): Natural logarithm of the number of words related to climate.	CFIE project
PA_Biodiversity	Sautner et al. (2023): Natural logarithm of the number of words related to biodiversity.	CFIE project
PA_ESG1	Baier et al. (2020): Natural logarithm of the number of words related to ESG.	CFIE project
PA_ESG2	Veberteen et al. (2016): Natural logarithm of the number of words related to ESG.	CFIE project
PA_ESG3	Andrikogiannopoulou et al. (2022): Natural logarithm of the number of words related to ESG.	CFIE project

Table 7: Control and Independent Variable Definition

INDUSTRY	FREQ.	PERCENTAGE
Aerospace and Defense	155	1,63%
Alternative Energy	83	0,87%
Automobiles and Parts	29	0,31%
Banks	209	2,20%
Beverages	127	1,34%
Chemicals	155	1,63%
Closed End Investments	128	1,35%
Construction and Materials	330	3,48%
Consumer Services	60	0,63%
Electricity	63	0,66%
Electronic and Electrical Equip.	265	2,79%
Finance and Credit Services	207	2,18%
Food Producers	218	2,30%
Gas, Water and Multi-utilities	65	0,68%
General Industrials	147	1,55%
Health Care Providers	86	0,91%
Household Goods &Home Const.	208	2,19%
Industrial Engineering	142	1,50%
Industrial Materials	34	0,36%
Industrial Metals and Mining	476	5,01%
Industrial Support Services	769	8,10%
Industrial Transportation	231	2,43%
Investment Banking and Brokerage	534	5,62%
Leisure Goods	96	1,01%
Life Insurance	75	0,79%
Media	342	3,60%
Medical Equipment and Services	170	1,79%
Non-life Insurance	82	0,86%
Oil, Gas and Coal	580	6,11%
Open End & Miscell. Invest. Vehicles	24	0,25%
Personal Care & Grocery Stores	125	1,32%
Personal Goods	71	0,75%
Pharmaceuticals & Biotech.	461	4,86%
Precious Metals and Mining	186	1,96%
Real Estate Investment & Servi.	254	2,68%
Real Estate Investment Trusts	280	2,95%
Retailers	344	3,62%
Software and Computer Services	794	8,36%
Technology Hardware & Equip.	133	1,40%
Telecommunications Equipment	58	0,61%
Telecommunications Service	130	1,37%
Tobacco	20	0,21%
Travel and Leisure	533	5,61%
Waste and Disposal Services	16	0,17%
TOTAL	9,495	100%

Table 8: Sample Distribution over Industry