

The Manifestations and Impacts of Environmental, Social, and Governance "Greenwashing" and "Black Box" in Financial Reporting and Investment Decisions

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Abstract. Environmental, social, and governance (ESG) factors have garnered much attention in response to emerging sustainability concerns. The so-called "ESG black box" and all the greenwashing happening around it are big problems. This is mainly because there's no clear standard, enough transparency, or consistent way of reporting and rating ESG efforts. This study analysed the manifestations and impacts of these issues on financial reporting and investment decisions. This study looked at case studies of BP and H&M and found big differences between what rating agencies say and what companies actually reveal in their sustainability reports. It shows that some information is shared selectively, not all of it. The findings prove that misleading ESG communication and opacity will not only undermine investor confidence, but also distort capital allocation. To address these issues and promote the creation of a more transparent and accountable sustainable finance ecosystem, the study concludes by making actionable recommendations. These things include making standards around the world more consistent, better rules to oversee the process, third-party checks to ensure quality, and using new technology. This paper provides suggestions for the development of related enterprises.

Keywords: ESG, Greenwashing, black box, financial reporting and investment decisions.

1. Introduction

ESG factors are on the rise lately into the new shining sword to corporate strategy, financial reporting and investment asset making processes. Investors, regulators, and stakeholders are now having growing demands for the ESG disclosures of firms in the past decade as a guiding light for companies to be measured on sustainability and norms of ethics and long-run values creation [1, 2]. Ever since ESG got popular and was praised for encouraging companies to be more responsible, there's been a lot of confusion. It is hard to compare different ESG reports because they are not consistent or clear enough. People and investors are worried about how much ESG metrics really matter. Albeit increases the capacity of people to truly evaluate genuineness in ESG fact [3]. Here arises, the so called as ESG black box phenomenon. Wherein the phenomena of sources behind the ESG score, rating and company tales, all of them are shrouded, alongside the rating agencies notching off the rankings from the audience, and companies selective disclosing to indicate the good score with no substance of their message to the sustainability. In which the lack of clarity in ESG rating and reporting on financial statement makes it hard for people to be objective in evaluation and results to the asymmetry in the information in matter of corporation with investors, diminish reliability in their data, and integrity of their business practices [4, 5].

Along with it, this is, green washing phenomenon which, in parallel with the ESG black box phenomena, what is now more emerging into ESG reporting practice on their environmental or social endeavors fabricated to garner such a manufactured of the reputational prestige, when in fact their substantive practice is factual [6]. Green washing is detrimental to the market, to misappropriation of sustainable investment capital and in fact misappropriation on the social responsibility investment Sri calling and valuation [6].

Against this background of phenomena, this study were set to make reality in manifests and influences that both ESG black box and green washing phenomenon onto corporate financial reporting and investment-making process, further now more specifically in this study seeks to provide

definition of manifestation of the ESG black box and greenwashing into the corporate reporting process to investors behaviour and capital allocation decision, and remedies that can remedy its negative impact, when they manifest themselves into the global capital market.

2. Literature Review

2.1. Regulation and Standardization of ESG Reportings

The ESG report has constantly progressing of which is now global in nature early since 2021. Easy more notable developments are evident to enhance the reporting practice with among them are the European Union's Corporate Sustainability Reporting Directive (CSRD) that broaden the range of the required ESG reporting and the International Sustainability Standards Board's (Issb)'s Ascertainable Disclosure Standards, that is to standardize ESG measurements across multiple jurisdictions [7, 8]. In parallel to that, the United States Securities and Exchange Commission (Sec) have released the measure of requirements on climate related disclosure forcing firms to comply with standardized reporting on greenhouse gas emissions and climate-related risks [9]. Even though there are lots of efforts to set clear standards, companies still vary a lot in how they report, measure, and share their ESG information [10]. Worth to note, although disclosure is strictly on voluntary, this leads to a varied measure of company reported on ESG. Subsequently, it will be harder for cross-computational comparison due to different timing inconsistency and report template and definition of the metric [11].

2.2. The ESG Black Box

The black box represents the level of gray areas and how transparent the ESG score calculations are. The ESG scores for companies come from providers like MSCI, Refinitiv, and Sustainalytics. These companies publish their methods, but often it's hard to understand exactly how they come up with their scores. There was a gap in how ESG scores are given. The average rating of 0.54 shows that these scores are not always consistent or fully connected, which suggests they might not be weighing different factors equally [12].

Such opacity is difficult for corporate managers and investors who aim the best ESG score performance and investors who will be invested in the ESG of the valuation model. The black box can carry due secret methodology, confidential protect the Trademark, inconsistent sources of data and scoring who implemented the subjective lenses but no third party confirm to the reported data. Meaningful as it found most of work indicated a good score on the factors of the ESG, but does not imply that company perform the best of the environmental socio of the ESG black box obscures under performer performance [13, 14].

2.3. Greenwashing-of-ESG-Reports

Greenwashing—the practice of deploying deceptive environmental policies and claims—is attracting growing scrutiny from academics and regulators. Extensive empirical work on this green hoax reveals many variants. These include selectively disclosing favorable indicators while omitting negative impacts, announcing symbolic policy commitments without implementing changes in company operations, and intentionally exaggerating claims of carbon neutrality or using ESG-related keywords for marketing purposes to enhance brand image. [15].

Researching more evolved is the color of Green Mask company are doing analysis-content of the methodology textual for detect the greenwashing, what might be observed in corporate report common was common that in bed is embedding e.g. repetitive linguistic obfuscation, and oversubscribe of the environment terms and phrase and briefly as much as, if observer can benefits in the short term on the investor on companies can greenwash, will lose of their clean track on the company so that resulting to a point cause lose faith, their company value [16, 17].

2.4. Investment Decision Process

In now and continuing in practice of investment where ESG is the basis of giving decisions process for investment monies finance, include Institution investor more and longer scale of and long and if not, in the open ESG black box, in the currently and MSCI ESG Black box if the trend of greenwashing will be reduced credible on the process of sustainable, already in open ESG to the companies [18]. Empirical literature indicated by research shown is that the ETS of the black box closed of the positively scoring the black box built ESG that supposed support the company sustainable goal but will make Investor exposed to the risk of regulations, reputation Risk and more the op location of ESG score Higher rate of greenwashing will decrease ability empirical of the score modeling of ESG return and hence investor will mis spend up capital investing not properly handle the companies in getting a high score in the black box is not by true by the sustainability and ESG by is lower rate lower in the environmental but still out of the ESG [19, 20].

3. Case Analysis

As previous reports the finding in this paper also had seem ably high levels of rating divergence from 0.48 to 0.55 on high level of 200 firm's worldwide pair wise correlation of pair of pairs especially the high level of rate divergence and the worst among industries most affected by high environment pressure such as energy and mining sector (mostly because of the weight of the indicators of environment and governance between rating agency). Opacity further enhanced by Fact tha trating agencies refrain from reporting modalities, criteria and source of main data fifth source of greenwashing to provide information. For example, Msci pursues industry specificities Risk Mitigation, while Sustainalytics is focused on generic supply chain risk exposure. Indeed, a single source of rating report investor will face distorted assessment of firm sustainability profile this pairwise correlation of 200 firms worldwide. The variance of the rating agency weight of environmental and governance indicators may correspond to the structural awareness behind rating design.

3.1. Case Study in the Energy Sector: Greenwashing at BP

BSXi has presented itself as a well-known global leader in low-carbon efforts. In its 2021 Sustainability Report, the company shared that it made big investments in renewable projects, especially offshore wind and solar power. Still a deeper look through the global witnesses [2, 3] revealed how over 90% of total money donated in offshore wind and solar investments in the 2021-2022. This paradox shows how companies' messages about sustainability often do not match up with the real money coming in or going out. It emphasizes that the way sustainability is talked about in the industry can be very different from how businesses actually handle it in practice. It is very difficult to get the full picture when looking at how BASFi's ESG ratings compare, especially since MSCI rated it as A and Sustainalytics placed it in the Adverse risk exposure category. It also exhibited the unreliability and the unlawful methodologies of the ESG rating methodologies [3].

BP shares went up after they announced in 2020 that they were planning a big move toward greener energy. Besides, the discontinuation of detailing how its investment continues towards the exploitation of fossil fuel, the shares of there had brought instability in the market and media attention [4]. Such opacity assures an unmired information to sustainability disclosures, this again demonstrates the way that opacity has allowed for the big emitters will maintain the company with their healthy ESG rating despite its environmental practices.

3.2. H&M Greenwashing

The growing fashion brand H&M Group was among the first to offer the product in their brand 'Conscious Collection' with environmentally sustainable solutions through organic cotton and recycled polyester. It Further developed its patented 'Higg Index' in order to further boost the corporate message for the environment. The further comparison illustrates some of the

‘environmentally sustainable product’ that had more unfavorable impact than their conventional counterparts. so far from their marketing. They're planning to have that featured in their 'sung' label on their products. The lack of clarity in the sustainability score reflects similar issues with the overall “black box” of sustainability. Basically, the company’s sustainability claims are hard to verify because shareholders don not have access to enough trustworthy information. Plus, the way the scores are calculated is often kept secret because it's part of the company's proprietary methods [7]. The company in the end claimed a review in the sustainability messaging and warded it off after the exposure over a crackdown on their activities by regulators, which shows also, there's reputational and regulatory risk conditions to greenwashing.

4. Discussion

4.1. ESG Rating Divergence

The variation in ESG ratings across different agencies is a pretty surprising issue discovered in the study. It showed that, on average, the ratings from different agencies don't align very well—correlation tends to stay below 0.55. Previous research by Berg and colleagues also found that the differences between agencies were quite large and meaningful. This points to a deeper, underlying problem: there’s a lack of consistency and transparency in how these ratings are created and scored [21]. This confusion makes investors lose trust and also makes it harder for the company to track how well it's doing in sustainability. It is in the paper also proves, without appropriate regulatory enforcement from the powerful governance and trust agencies non rating agency, it becomes hard for improvement quality in invest effort to boost firm valuation. In fact, investors could become disinterested with sustainability claims and give no attention to real value ESG seamlessness.

Add on to that, the black box effect also hurts company in management. The nontransparent and misleading information, and the rating companies’ failure to get more granular data, makes the sustainability behavior difficult to concretised and makes the improvement in the wrong direction. Selective disclosure and green washing from the Ratings companies, which could also hinder on the faithful disclosure of sustainability performance (for instance as part of financial reporting structure) and, thereby create doubt in essential premises of the assumption of relevance & honest reporting.

The investors in ESG reviews, on the one hand, pass up the ratings because of usefulness on investments and portfolio adjustment in line of sustainability principle or risk profile. Then, reliance in a single-source of ESG data makes the investment vulnerable to the greenwashing and could bear financial and social costs. The market reactions to the ESG news event illustrate that the investor sanctions the greenwashed firm even in the absence of regulatory sanctions.

In consequently to avert these risks, institutionals investors likely integration in multi-source ESG data comparison and media watch on is more likely for small asset managers are not in good monetary position to do in Depth diligence, and in this way ESG integration strengthening measures unlikely to be implemented evenly.

4.2. Legal and Institutional Opportunities

New regulations resulting from the recent initiatives like the European Commission’s CSRD and disclosures pending in the United States in anticipation of new directives by the U.S. SEC should start to address these challenges and focus on more uniform disclosure and greater disclosure transparency. Lack of uniformity of disclosures is not likely to diminish greenwashing when more complementary regulations will allow corporations to present reports in whatever format that are desired or only present the minor successes in their reports. Some areas want to get more involved in overseeing how ESG ratings are done. That could mean putting rules around how rating agencies report their methods, handle conflicts of interest, and conduct independent audits of their reports. It is a step that many see as a good idea. Those provisions help allow for more transparency and accountability and are actually reminiscent of regulatory changes that the credit rating industry had to endure after the 2008 financial crisis. The vicious cycle between op viscacity and greenwashing

warrants particular attention. It allows companies to put out false reports without facing the consequences if they get caught. The latter, it's much less obvious to investors that seek to mislead investors on their actual sustainable company performance. This prevents capital market allocative efficiency because it becomes impossible to separate the sustainable ones from the greenwalkers.

5. Suggestions

5.1. Regulation of the ESG Rating Provider

Similar gap in relation to the ESG rating providers. The agency should make similar to credit rating provider initiation 2008 the financial crisis. The companies should be mandatory to disclose the complete method and transparent data source and potential conflict of interest and rating method independent verification through third party assurance Regulatory agency or recently establish sustainable oversight Bureau can impose regulations below existing financial regulatory authorities.

5.2. Enhancing Third-Party Assurance

Third-party confirmation of ESG disclosures may become mandated to improve consistency and stop misleading. To provide a framework for consistent and trustworthy assurance practices, standards like the International Standard on Assurance Engagements (ISAE) 3000 could be adapted to ESG-specific indicators. Traders wouldn't have to spend as much time double-checking things, and the ESG indicators would be more reliable.

5.3. Using Technology to Improve Clarity

In complicated supply stores where provenance is difficult, new technologies like blockchain could be used to increase transparency in ESG monitoring. Blockchain-based systems may incomparably store environmental and social performance data in real time, making it possible for buyers and regulators to constantly evaluate claims.

5.4. Resources and Education for Investors

Business managers and people involved in funding need to understand ESG indicators well. Organizations like the Principles for Responsible Investment (PRI) and the Chartered Financial Analyst (CFA) Institute could create specialized training modules to help investors understand ESG rating limitations and identify potential greenwashing. Also, investors may be urged to use multi-source standing comparisons to find errors and get a more comprehensive view of the company's performance.

5.5. Collaborative Management

A multi-stakeholder technique that includes governments, businesses, civil society organizations, and investors is required to address the issues of ESG opaque and misleading. Creative efforts might include coordinated enforcement actions against follow offenders, shared databases of ESG efficiency data, and shared campaigns to encourage best practices.

6. Conclusion

This study examined the forms and effects of business financial monitoring and investment decision-making. It reveals transparency in ESG methodologies, and the proper adjustment of conservation narratives are common across industries by qualitative case studies. Due to inconsistent purchase signals and reduced reliability of ESG connectivity, the black box problem presents important challenges in comparing commercial ESG performance. This opacity is exploited by greenwashing, which allows for the careful disclosure of positive information and undermines the

performance of sustainability. These strategies misallocate purchase funds and undermine the trust of long-term investors.

Findings show that firm valuation may certainly increase substantially when ESG disclosure quality is improved, unless solid governance, external assurance, and reputable verification mechanisms are present. Relying on just one source for ESG info can lead traders to make mistakes with their investments and possibly cause social issues. Recommendations include harmonising international monitoring standards, establishing regulatory frameworks for score agencies, requiring third-party verification, using technology for data confirmation, and improving investor education. To properly address these issues, a creative, multi-stakeholder approach is required.

In conclusion, addressing the interconnected issues of misleading and ESG black field opacity for green finance's dignity is crucial. Capital markets will struggle to allocate resources to really green businesses without reliable, up-to-date, and similar ESG data, finally preventing progress toward global sustainability goals.

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