

# Assessing the Effect of Sustainability Reporting and Firm Value on the Consumer Goods Industry

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## ABSTRACT

This thesis investigates the relationship between sustainability reporting, firm value, and brand quality in the consumer goods industry. The study seeks to explore how sustainability reporting practices influence firm value and whether brand quality mediates this relationship. To achieve this objective, quantitative research methods, including regression analysis and structural equation modeling (SEM), will be employed to analyze data collected from a sample of consumer goods companies. The research will examine the direct and indirect effects of sustainability reporting on firm value through brand quality.

The theoretical framework of this study draws from the fields of sustainability reporting, brand management, and corporate finance. It is hypothesised that firms that engage in comprehensive sustainability reporting practices will experience enhanced brand quality, which in turn positively affects their financial performance and firm value. Using statistical techniques, the mediating role of brand quality in the relationship between sustainability reporting and firm value will be tested empirically.

The sample for this study will consist of publicly listed consumer goods companies with available data on sustainability reporting, brand quality metrics, and financial performance. Data will be collected from annual reports, sustainability reports, and other relevant sources. The analysis will control for firm-specific variables such as size, profitability, and industry characteristics to isolate the effects of sustainability reporting and brand quality on firm value. The findings of this research are expected to contribute to the existing literature on sustainability reporting, firm performance, and brand management. The study will provide valuable insights for academics, practitioners, and policymakers interested in understanding the impact of sustainability reporting on firm value and the mechanisms through which sustainability initiatives can create value for consumer goods companies. Furthermore, the results of this study may have implications for corporate strategy and disclosure practices, particularly in industries where brand reputation and consumer perceptions play a significant role in driving competitive advantage and financial performance.

**Keywords:** Sustainability Reporting, Firm Value, Brand Equity, Consumer goods industry

## INTRODUCTION

### Background of the study

Prior to the emergence of the sustainability reporting standard, many financial institutions, such as insurance firms and banks, were mainly focused on traditional business metrics and financial performance (Khalifaturofi'ah, 2023; Singh & Milan, 2023). The primary concern of these organizations was compliance with applicable regulations and shareholder value. However, times have changed and due to the increasing number of people aware of the issues related to the environment and social conditions, various stakeholder groups, such as regulators and investors, demanded more transparency from companies (Friedman & Heinle,

2021). BP (British Petroleum), for instance, faced a significant challenge in its sustainability following the 2010

Deepwater Horizon oil spill (McGuire, Holtmaat, & Prakash, 2021). During the 1990s, The **Comment [KA1]:** check the bibliography Enron scandal during the 2000s (Khan et al., 2022) highlighted the importance of ethical behavior, transparency, and accountability in corporate reporting. These incidents resulted in the call for better reporting standards in various industries. It made it legal for companies to reveal their social and environmental performance. Sustainability reporting is also important today because of its impact on firm value. Firms have come to the realisation that profit making alone is not sufficient to drive consumers nor maintain sustainable growth.

According to the Global Reporting Initiative (GRI), sustainability reports serve as comprehensive documents delineating the social, environmental, and economic impacts of an organization's operations (Whetman, 2018). Kamela and Alam (2021) posit that these reports play a crucial role in econometric analysis, acting as proxies for assessing corporate social responsibility (CSR), a concept challenging to measure directly. While sustainability reports are instrumental in providing a holistic view of a company's non-financial performance, the reliance on them as proxies for CSR introduces certain challenges. The inherent subjectivity in the selection and presentation of data in these reports may influence the econometric analysis results. Through these reports, companies aim to enhance transparency and bolster their corporate image by offering detailed insights into their non-financial operations. The emphasis on transparency is commendable, aligning with the growing demand for corporate accountability. However, it is crucial to recognize that the voluntary nature of sustainability reporting may lead to variances in the depth and quality of information disclosed. This discrepancy can affect the reliability and comparability of such reports across different organizations.

Moving on to firm value, the value of a company is an indication of its financial and economic success (Onoh, Biradawa, & Ndubuisi, 2022). It can be used to determine a firm's long-term **Comment [KA2]:** check the bibliography survival. The company's performance is also influenced by its ability to maintain its profitability through its various operations. Financial statements can provide valuable insight into a company's activities. The various financial measures that are commonly used to evaluate a company's performance are the Market value and the Firm value. The former refers to the company's efficiency with regard to its operations, while the latter is its return on invested capital. The profit-after-tax relationship between a company's earnings and its capital employed is shown in these ratios. The intrinsic value of a company can be determined by the public's confidence in its ability to perform and its success rate over time following a rigorous process that spans several years. Increasing the company's value is an accomplishment that aligns with the organization's mission to improve the welfare of its stakeholders.

Brand equity also plays a vital role in an organization's strategy, particularly in a complex market environment (Ahmad et al., 2021; Safeer et al., 2021). This is especially pertinent in the consumer goods sector, where brand recognition and image have a substantial impact on consumer loyalty and purchasing choices. To adapt to changing consumer behavior and heightened competition, it is imperative to prioritize brand management and advertising to uphold a captivating brand image (Reitsamer & Brunner-Sperdin, 2021). Wang et al. (2015) **Comment [KA3]:** check the bibliography revealed that the economic and prestige elements of brand equity play a significant role in shaping firm's overall performance. The brand extension component also provides a substantial boost to the company's performance at the higher levels (Wang et al., 2015). The results indicate that the brand loyalty component of the firm's performance is negative. Wang et al. (2015) revealed that the performance of the organization is positively affected by its brand equity and social responsibility.

## Problem Statement

While academic perspectives generally express favorable views of sustainability reporting (Amoako et al., 2022; Pobbi, Anaman, & Quarm, 2020), there is a notable dearth of empirical studies exploring the connections between sustainability reporting and financial performance (Friske, Hoelscher, & Nikolov, 2023). Consequently, the inquiry into whether such reporting influences concrete measures of firm value remains unresolved. Moreover, questions pertaining to the evolving dynamics of corporate and investor attitudes towards sustainability reporting are still largely unexplored. This lack of comprehensive empirical evidence

raises concerns about the validity and generalizability of existing positive views on sustainability reporting within academic circles. The research gap lies in the absence of robust empirical data to substantiate or refute these positive perspectives. This is a significant research void, as understanding how sustainability reporting translates into tangible financial outcomes is essential for both academics and practitioners. Without empirical investigations into this specific aspect, the practical implications of sustainability reporting on firm value remain unclear.

Furthermore, there are mixed results on the relationship between sustainability reporting and firm value. For instance, Hariyani, Wahyuandari, and Salatnaya (2022) found that the impact of sustainability reporting on the firm value is negative, as it shows that the company's disclosure of CSR reduces the value of the listed state-owned enterprises. Most companies do not pay much attention to CSR, as it is a non-financial factor (Hariyani, Wahyuandari, & Salatnaya, 2022). However, these findings contrast with research by Nugraha and Hwiyanus (2019) and Widayarsi, Suhadak, and Husaini (2015), who found that CSR disclosure positively influences company value. Borghesi, Chang, and Li (2019) also highlighted that publicizing social disclosures in annual reports impacts stock trading volume, indicating that investors increasingly value the social information conveyed in these reports, thereby boosting the company's value.

Furthermore, there is a notable geographical gap in the existing literature, particularly concerning the consumer goods industry in Ghana. Most of the sustainability reporting researches have been focused on banking industry (Buallay et al., 2021; Mohamed Buallay et al., 2023) and insurance (Mahmoudkhani et al., 2021). The socio-economic and environmental landscape of Ghana introduces unique factors that can significantly influence the dynamics of sustainability reporting and its subsequent impact on firm value. The absence of comprehensive studies in this geographical context hinders a thorough understanding of the specific challenges and opportunities faced by companies in Ghana within the consumer goods sector concerning sustainability practices. Furthermore, within the broader context of sustainability reporting, there is a scarcity of studies that specifically focus on the consumer goods industry in Ghana. This industry is pivotal for the country's economy, and understanding how sustainability reporting influences firm value in this sector is essential for both academics and practitioners. The limited attention given to the consumer goods industry in existing literature creates a gap in knowledge regarding the nuances and intricacies of sustainability practices and their impact on firm value within this particular business domain.

### **General Objective**

The primary objective of this research is to examine the relationship between sustainability reporting, firm value, and brand quality in the consumer goods industry.

### **Specific Objectives**

1. To analyze the influence of sustainability reporting on firm value in the consumer goods industry.
2. To examine the mediating role of brand equity on sustainability reporting and firm value.
3. To assess the impact of greenwashing on brand equity and its subsequent effect on firm value.

### **Research Questions**

1. How does sustainability reporting influence firm value in the consumer goods industry?
2. What is the mediating role of brand equity in the relationship between sustainability reporting and firm value?
3. What impact does greenwashing have on brand equity, and how does this affect firm value?

## **LITERATURE REVIEW INTRODUCTION**

The impact of sustainability reporting, brand equity, and firm value in the evolving consumer products industry cannot be overstated. In recent years, there has been a discernible shift towards corporate sustainability (CS), with firms recognizing the need to integrate economic, social, and environmental factors into their business

operations. This transition is a strategic response to both regulatory obstacles and a conscious effort to enhance brand equity, ultimately leading to a rise in the company's worth.

The link between sustainability reporting, brand equity, and firm value is complex and varied, with each term influencing and being influenced by distinct components of the business environment. This literature study aims to examine and understand the correlation between sustainability actions and corporate value. It will utilize insights from past research to elucidate the processes by which these initiatives impact firm value. Furthermore, it aims to investigate the role of brand equity as a mediator in this process. The next sections go into the core concepts and empirical data that substantiate these principles, the theoretical frameworks that provide their foundation, and the shortcomings of the current research landscape.

### **Conceptual Literature Review**

The correlation between corporate sustainability practices (CSP) and firm performance has received considerable focus in the field of business and environmental research. The existing data strongly indicates a direct relationship between the two factors, emphasizing the significant role of sustainability in improving the value of a company.

The positive correlation has been firmly established by empirical research undertaken by Jones et al. (2020) and Burhan and Rahmanti (2022). These studies emphasize that companies that actively participate in sustainability practices not only contribute to the well-being of the environment and society but also have concrete advantages in terms of their overall performance. This disclosure undermines the conventional corporate model that saw environmental and social obligations as less important than financial prosperity.

### **Global Perspective and Diverse Outcomes in Sustainability Reporting**

The impact of sustainability reporting on the value of a company has been thoroughly studied, and the results have varied across diverse global contexts. The variety of results indicates the intricate and diverse character of sustainability reporting and its influence on company performance.

In a significant study conducted by Hussain (2015), the researcher examined Global Fortune N100 companies and found that sustainability reporting had a beneficial effect on business performance. This study emphasizes that in a worldwide setting, particularly among highly ranked companies, there is a favorable correlation between sustainability reporting and business success. This phenomenon may be attributed to the capacity of multinational corporations to utilize their sustainability endeavors to augment brand worth and establish confidence among stakeholders, resulting in enhanced financial performance.

In contrast, the studies done by Lopez et al. (2020) and Ho and Taylor (2017) indicate a divergent picture. In various settings, they discovered either a detrimental or an inconsequential correlation between sustainability reporting and corporate performance. Indications point to the fact that the advantages of sustainability reporting do not exhibit uniformity across various locations and sectors. It may be deduced that in some situations, the expenses related to implementing and reporting sustainable measures may surpass the perceived advantages, resulting in a neutral or potentially detrimental effect on the value of a company.

### **The Relationship between Sustainability Reporting and Firm Value**

Brand equity, a crucial concept in the field of marketing, has been thoroughly examined due to its significant impact on increasing the value of a company. The works of Keller (2023) and Aaker (2020) have made substantial contributions to the comprehension of brand equity. It is defined as the varying effect that brand knowledge has on how consumers react to the brand's marketing efforts. This notion incorporates several components, including as brand recognition, perceived excellence, and customer loyalty, which all contribute to the overall assessment of the brand's value in the market.

Sustainability reporting has become a crucial factor in establishing and enhancing brand value. Corporations that actively participate in sustainable initiatives and openly disclose their efforts are frequently seen as

conscientious and morally upright. Having a good perspective greatly contributes to the establishment of a robust and favorable brand image and reputation, both of which are crucial elements of brand equity. Research undertaken by Lo and Sheu (2019) and Schadewitz and Niskala (2020) has demonstrated that implementing sustainable business practices is crucial for increasing a company's market value since it indirectly influences brand equity.

The link between sustainability reporting and business value is increasingly being studied with a focus on the mediating function of brand equity. The correlation implies that sustainability reporting does not have a direct impact on the value of a company, but rather affects it indirectly by improving the value of its brand. Effective communication of sustainability policies may bolster customer views of a brand's legitimacy and trustworthiness (Erdem & Swait, 2021), so favorably impacting the value of the business.

The findings of Keller (2022) support the notion that a robust brand positioning strategy, typically reinforced by sustainability measures, may result in substantial enhancements in company performance, thereby validating its mediating function. Moreover, the studies conducted by Davcik et al. (2015) and Jeon (2017) emphasize the effectiveness of branding techniques, such as sustainability reporting, in maintaining brand equity, which ultimately influences the performance and value of the company.

Multiple studies have confirmed the existence of a favorable correlation between sustainability reporting, brand equity, and business value. However, it is crucial to acknowledge the obstacles and methodological discrepancies associated with this field of study. Kusuma and Koesrindartoto (2014) have identified that variations in research findings may be ascribed to variances in reporting methodologies, study durations, and measures employed. Hence, although there is agreement about the advantageous influence of brand equity in mediating the connection between sustainability reporting and company value, the degree and characteristics of this connection may differ depending on contextual and methodological aspects.

## **Theoretical Review**

Theories are formulated to explain, predict and understand phenomena and, in many cases to challenge and extend existing knowledge within the limits of critical bounding assumptions (Swanson, 2021). The theoretical framework is the structure that can hold or support a theory of a research study. The theoretical framework introduces and describes the theory that explains why the research problem under study exists (Swanson, 2021)

The theoretical framework for this study covers the specificity of sustainability reporting and firm value. It also takes into consideration the mediating effect of brand equity on consumer goods industry. In order to arrive at these conclusions, the study is guided by the stakeholder theory and brand equity theory. These theories and the concepts of the differences in sustainability reporting practices as well as firm value and brand quality are discussed in the ensuing sections

## **Stakeholder Theory**

Stakeholder Theory is a view of capitalism that stresses the interconnected relationships between a business and its customers, suppliers, employees, investors, communities and others who have a stake in the organization. The theory argues that a firm should create value for all stakeholders, not just shareholders (Miles, 2022).

The Stakeholder Theory, initially proposed by Freeman in 2020, is crucial for comprehending the extensive range of how sustainability reporting impacts the value of a company. This theory asserts that the success of a corporation is closely tied to its adeptness in managing its connections with crucial entities such as customers, workers, suppliers, communities, and investors. Stakeholder theory posits that firms should consider the interests of all stakeholders, including investors, customers, employees, and the community, in their decision-making processes. Sustainability reporting can be seen as a mechanism for companies to communicate their commitment to stakeholders, thereby enhancing their reputation and long-term viability.

Within the realm of sustainability reporting, this idea emphasizes the significance of open and responsible processes that specifically tackle the problems and interests of these stakeholders. The hypothesis posits that implementing good sustainability reporting may bolster a firm's image and credibility among its stakeholders, hence resulting in a rise in the firm's value. Additionally, it elucidates how disregarding the concerns of stakeholders, such as by engaging in greenwashing, may hurt the value of a brand and, thus, the overall worth of a company. The Stakeholder Theory is essential for comprehending the initial and third aims of this study, as it offers a perspective to assess the significance of authentic sustainability endeavors about their influence on different stakeholders.

### **Brand Equity Theory**

Brand equity is a term used to describe the value of having a recognized brand, based on the idea that firmly established and reputable brands are more successful. More specifically, it's a set of brand assets and liabilities linked to a brand name and symbol, which add to or subtract from the value provided by a product or service. Connecting —brand to the concepts of —equity and —assets radically changed the marketing function, enabling it to expand beyond strategic tactics and get a seat at the executive table.

As given by Miles (2022) Brand equity has four dimensions—brand loyalty, brand awareness, brand associations, and perceived quality, each providing value to a firm in numerous ways. Once a brand identifies the value of brand equity, it can follow this roadmap to build and manage that potential value.

Brand equity theory emphasizes the importance of brand perceptions in driving consumer behavior and firm performance. Brand equity is the differential effect that brand knowledge has on consumer response to the marketing of a brand. Sustainability reporting can contribute to brand equity by enhancing the brand's reputation for sustainability and ethical practices, thereby increasing its perceived value to consumers.

### **Empirical literature Review**

Consumer Satisfaction has been defined as a general feeling of pleasure or gratification experienced by a consumer arising from the ability of a product or service to satisfy the consumer's expectations, desires, and needs (Mai and Ness, 2019). Working from this definition, this study proposed 'green satisfaction' as a construct, defined by Chen (2020) as 'a pleasurable level of consumption-related fulfillment to satisfy a customer's environmental desires sustainable expectations, and green need'. Consumer satisfaction and firm value has been extensively investigated as a predictor of customer loyalty (Cronin et al., 2000; Yang and Peterson, 2004), it being commonly suggested that loyalty is one means by which consumers express their satisfaction with the quality of the obtained product or service (Bloemer and Kasper, 2020). The loyalty that consumers exhibit for a given brand is therefore partly realized through their consistent satisfaction with the performance of that brand. Loyalty is referred to in a variety of market-specific contexts – for example, eco-friendly product, service, store and vendor loyalty – as well as other contexts which reflect the nature of the measure used: green customer and green loyalty. Following Dick and Basu (2021), 'green loyalty' in this study is defined as 'a consumer's commitment to repurchase or otherwise continue using a green brand', typically demonstrated by the repeated purchase of a green product or service or other affirmative activities such as word-of-mouth testimony.

Our premise is that a consumer's positive affect toward a green product or service is likely to stimulate the consumer to repurchase that particular green brand and recommend it to others (Zeithaml et al., 2020). Furthermore, actual satisfaction with a green brand can result in a general intention to repurchase green (Martenson, 2017). Clearly, when a consumer appreciates an ecofriendly product or green brand and is positive about that relationship, the outcome is a high level loyalty and a certain degree of green commitment (Brakus et al., 2019). Ganesan (2020) suggested that trust is a willingness to rely on another party based on recognition of that party's ability, reliability, and benevolence.

It follows that customer trust can sway their buying decisions (Gefen and Straub, 2020).

Following Schurr and Ozanne (2019) and Ganesan (2020), this study defined *green trust* as *the propensity to rely on a product, service, or brand out of a belief or expectation resulting its credibility, benevolence, and ability about its environmental performance* (Chen, 2020). Trust evolves from past experience and previous interaction (Garbarino and Johnson, 2020), and is therefore often described as an individual's experiential learning process over time. Trust encapsulates a consumer's knowledge and experiences with a brand which is geared towards the principles of sustainability reporting.

As an experiential phenomenon, Sustainability reporting is influenced by the consumer's assessment of any direct (e.g. trial, use) and indirect contact (e.g. advertising, recommendation) with the brand (Keller, 2023; Krishnan, 2020).

The consumption experience is the most relevant and significant source of firm trust, since it generates associations, suggestions, and ideas about a green brand which are more self-evident and held with greater conviction by the consumer (Dwyer et al., 2017; Krishnan, 2020). Accordingly, it can be postulated that overall satisfaction, as a general assessment of the consumption experience with a brand, engenders brand trust (Ganesan, 2020; Selnes, 2019). Brand effect has been defined as the potential in a brand to elicit a positive emotional response in an average consumer as a result of its usage (Chaudhuri and Holbrook, 2021). Brand equity, as quoted from Pride & Ferrel (2016) in (Subramaniam et al., 2017) is a marketing and financial value associated with strengthening a brand in the market, including brand assets, brand name awareness, brand loyalty, perceived brand quality, and brand association. When a company introduces strong brand equity, it has an influence on reducing marketing costs for the company, because consumers are increasingly familiar with and loyal to the brand (Pouromid & Iranzadeh, 2019). Moreover, since loyal consumers only buy the products they want, at that time the company increasingly has a high bargaining position to its distributors and retailers. Brand equity, according to Jalilvand et al. (2021), deals with additional utility or added value for a product from its brand name. This is often believed to contribute to a company's long-term profitability. Brand equity is also defined as the main capital for many industries because a strong brand can increase customer confidence in purchasing products and services and make it easier for them to understand intangible factors (Kazemi, 2023).

Brand equity arises when consumers are willing to pay more to know a brand at the same level of quality than an unfamiliar product. Consumers are willing to pay a premium price just to get the value of a brand attached to an item or service (Rego, 2019). Strong and positive brand equity in any organization especially banking industry will reflect the quality of the goods or services provided (Ihthisham et al., 2019). Their study revealed that financial performance affect brand equity, both positively and negatively.

The concept of brand equity has been explored since 1990 by Aaker, (2021) and its role is increasingly important in both management and marketing circles. This concept is still growing and companies are starting to pay attention and focus on its application in marketing programs.

For the first time, Aaker (2021) in his research defines brand equity as a set of assets and liabilities related to the brand name and symbol that are added or subtracted from the value provided by products or services to companies and customers. These assets can be grouped into five dimensions, namely brand awareness, brand association, perceived quality, brand loyalty, and other assets.

### **Relationship between Brand Loyalty and Brand Equity**

The study conducted by Thuy et al. (2019) on financial institutions in Vietnam emphasizes the factors that affect brand equity, one of which is brand loyalty. Likewise, research by Emari et al. (2022) and Nadernezhad & Vakialroaia (2023) shows a direct effect of brand loyalty on brand equity. This research empirically indicates that brand loyalty is an important component of brand equity formation for banking service companies. Meanwhile, Alhaddad (2014), Asif et al., (2015), and Seliani & Pratomo (2019) in their study also succeeded in concluding the importance of achieving brand loyalty from a consumer perspective to increase brand equity.

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## Relationship between Perceived Quality and Brand Equity

Kao & Lin, (2016) and Brangsinga & Sukawati, (2019) indicate that perceived quality has direct relation and influence brand equity in banking sector. The same study by Piaralal & Mei (2015) and Shrestha et al. (2019) traced the relationship between quality and brand equity formation in banking customers. The results of this study confirm a significant relationship between the importance of companies improving quality standards to achieve better brand equity. In another study, Nath Sanyal & Datta (2021) emphasized the role of perceived quality on the formation of brand equity even though it did not have a direct effect. However, this result is different from Nadernezhad & Vakilalroaia (2019) which found no significant effect between perceived quality and brand equity. Otherwise, in tourism sector, (Chow et al., 2017) suggested that company has to ensure to provide high quality in services to building strong brand equity.

## Relationship between Brand Awareness and Brand Equity through Brand Image as mediation

According to Asif et al. (2015) in their study found a direct effect of brand awareness on brand equity in the banking sector. Brand awareness and brand image have also been shown to have a significant effect on brand equity (Awad Alhaddad, 2015). Based on previous research, there is no evidence of an indirect effect between brand awareness and brand equity through brand image as a mediation. Study by Kim & Hyun, (2021) examine the role of corporate image as mediating variable to the effects of marketing efforts and brand equity. They summarize the importance of image roles to forming brand equity of the company.

This study considers the determinants of brand equity in the service sector especially banking industry, where as to achieve high brand equity, organizations need a brand recognition from customers to create positive brand image and in the end customer decided to repeated purchase of the product or service (Subramaniam et al., 2017).

## METHODOLOGY

### Introduction

The purpose of this chapter is to describe the research methodology of this study. Since the aim of this study was to assess the relationship between sustainability reporting and firm value the mediating effect on brand equity, the design of the methodology was based on prior research into these relationships. This chapter describes the research design and methods, method of data collection and the variables used to test the statistical techniques employed to report the results.

### Research Design

In order to answer the research problem, it is of paramount essence to technically disentangle relationship between or among variables in a situation and analyze the relationship devoid of external influences (Nenty, 2019). Consequently, Nenty (2019) opines that research design involves the procedures through which we can explore and analyze the relationship among the variables involved in our problem and consequently to argue the preference of particular procedures over others. Thus research design is a master plan that shows how the research is to be conducted. However, this research adopts a well-structured questionnaires in an attempt to examine the innovative financing approaches to sustainability reporting.

The explanation to the direction of the researcher towards the conduct of research is very imperative (Baiden, 2020). Bryman (2022) defines research strategy as the enquiry of research objectives. Accordingly, Baiden (2020) asserted that, the three main types of research strategies are quantitative, qualitative, and triangulation. However, the choice to adapt any particular strategy depends on the purpose of the study, the type, as well as availability of information for the research (Baiden, 2020). Hence, this research adapts a quantitative strategy.



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## Research Philosophy

This study will adopt the positivist research philosophy. Positivism is a research philosophy rooted in the belief that scientific knowledge is derived from observable and measurable phenomena (Park, Konge, & Artino, 2020). It emphasizes the objective, systematic, and empirical exploration of the external reality to uncover universal laws and patterns (Alharahsheh & Pius, 2020). Through this, researchers seek to apply rigorous methods, often quantitative, to generate reliable and generalizable findings. Positivist research aims to discover objective truths by minimizing subjective biases and interpretations.

The application of the positivism philosophy will be integral to this research, the positivist philosophy, characterized by its emphasis on objective, empirical exploration of observable phenomena, aligns seamlessly with the study's quantitative nature. As the research unfolds, the focus will be on objectively measuring sustainability reporting, firm value, and brand equity through quantifiable indicators and standardized metrics. Surveys, and archival data is involve and systematically employed to collect quantitative data, allowing for the application of statistical methods to test hypotheses related to the impact of sustainability reporting on firm value, with brand equity serving as a mediator.

Furthermore, the research will adhere to the positivist principle of replicability. The structured methods and quantitative measures employed will facilitate the replication of the study by other scholars, contributing to the credibility and generalizability of the findings. The study aims to generate generalizable knowledge by uncovering patterns and relationships between sustainability reporting, firm value, and brand equity within the specific context of the Ghanaian consumer goods industry.

The positivism philosophy's emphasis on minimizing subjective biases which serves as a guiding principle throughout the research process. Researchers will strive for objectivity in data collection and analysis, reducing the impact of personal interpretations on study outcomes. However, it is important to acknowledge the inherent limitations of positivism, particularly its potential oversimplification of social phenomena and its exclusive focus on quantifiable aspects. To address these limitations and ensure a comprehensive understanding, the study may incorporate supplementary qualitative approaches, providing a more holistic perspective on sustainability reporting and brand equity in the consumer goods industry in Ghana.

## Research approach

The study will use the quantitative research approach. Quantitative research is a systematic empirical investigation employing statistical, mathematical, or computational techniques to collect, analyze, and interpret numerical data (Alharahsheh & Pius, 2020). It aims to quantify relationships, patterns, and phenomena to generate objective and generalizable findings. This approach often involves the use of surveys, experiments, structured observations, and statistical analyses to uncover patterns and test hypotheses.

Quantitative research emphasizes objectivity, minimizing the influence of researcher biases (Queirós, Faria, & Almeida, 2017). The structured nature of data collection and statistical analysis enhances the replicability of studies, allowing other researchers to validate findings. Quantitative research provides statistical precision. The use of statistical tests allows researchers to measure the degree of confidence in their findings, providing a level of certainty about the observed relationships.

The quantitative research approach is justified for these reasons; Firstly, the study aims to measure and quantify relationships between key variables such as sustainability reporting, firm value, and brand equity. By utilizing quantitative methods, numerical data will be systematically collected and analyzed, allowing for statistical techniques to measure the strength and direction of associations between these constructs.

Hypothesis testing will be a key aspect of the study, and the quantitative approach aligns seamlessly with this objective. Through statistical analyses, the research will empirically test hypotheses related to the impact of sustainability reporting on firm value and the mediating role of brand equity, providing numerical evidence to support or refute these hypotheses.

Large-scale data collection will be a priority, involving the examination of sustainability reporting practices across a representative sample of companies in the consumer goods sector in Ghana. Quantitative methods are particularly well-suited for handling extensive datasets, contributing to the comprehensiveness and robustness of the research.

### **Population, Sampling and Sampling Technique**

Population in research methodology is understood to be objects, subjects, phenomena, cases, events or activities specified for the purpose of sampling (Bayat, M. S. (2018). Consequently, this research focused on the sustainability reporting with a spotlight on firm value. The population in this study consisted of 10 listed consumer base firms on the Ghana stock exchange. Sample refers to using a part to represent a whole. Notwithstanding, owing to the nature and kind of information needed; and also the resources available for this research, surveying the entire consumer industry is not feasible. Accordingly, only 10 listed companies on the Ghana Stock Exchange were targeted.

Purposive sampling was used to select the sample within the population. Purposive sampling is a sampling technique whereby the researcher decides who to be engaged in the research. This was selected because it allows information-rich issues that are important to the study to be added and also focus on specifics rather than general (Tuuli et al., 2017). The choice was based on brand equity experience sustainability reporting, specifically those in the consumer industry.

### **Sources of Data and Data Collection**

Primary (questionnaire) data were employed for the study. The data is collected to cover every aspect of the research. Neville (2017) argued that research should contain empirical research data. Thus primary data are indispensable in the conduct of any research endeavor. The primary data sources in this research included the population aforementioned. Data were collected through a questionnaire survey targeting consumers. The response structure on the questionnaire was basically close-ended questions. Closed-ended questions were adopted because of its simplicity and ease in analysis. The questionnaire was divided into four thematic areas consistent with the research objectives.

### **Descriptive Statistics**

Descriptive statistics have been widely used in academic research (Abdullah 2020). Descriptive statistics measure central tendency and dispersion. The most commonly used measures of central tendency are mean, mode and median. The mean is the most important measure of central tendency (Veal, 2017). The descriptive statistics used were the mean, maximum and minimum. The mean was calculated to measure the central tendency of the variables in 2020 and 2021. Descriptive statistics are also useful to make general observations about data collected. They report on the trends and patterns of data and provide the basis for comparisons between variables. In this study, descriptive statistics provided a comparison of changes in the data. They show the extent to which sustainability reporting influence and the trends of brand performance.

### **Regression Analysis**

In analyzing the relationship between Sustainability reporting and firm performance in Ghana, the panel data methodology was adopted. The use of panel data regression methodology in this study is based on three fundamental justifications (i) The data collected had time and cross sectional attributes and this will enable us to study the essence sustainability reporting over time as well as across the sampled listed companies (cross-section). (ii) Panel data regression provide better results since it increases sample size and reduces the problem of degree of freedom. (iii) The use of panel data would avoid the problem of multicollinearity, aggregation bias and endogeneity problems (Hsiao, 2020). Panel data analysis is an important method of longitudinal data analysis because it allows for a number of regression analyses in both spatial (units) and temporal (time) dimensions. Especially since the technique incorporates both cross-sectional and time-series data, it gives more insightful results with greater variation, less collinearity and a higher degree of freedom

(Hsiao, 2015). Besides, panel regression is a potent tool for identifying and evaluating results that cannot usually be obtained in mere cross-sectional or time-series analyses.

The regression model is presented as follows:

Module 1

$$Y_i = \beta_0 + \beta_i X_i + \varepsilon_i$$

Where:  $i = 1, \dots, n$  = the cross-sectional unit  $t = 1, \dots, T$  = time index  $Y_{it}$  = dependent variable  $\alpha$  = constant or intercept.

$B_0$  = parameters/estimators or coefficients (if estimated)  $X$  = independent variables  $\varepsilon$  = individual (firm)-specific (fixed) effect.

Module 2

The following empirical models were estimated based on the generic panel regression model to examine the relationship between sustainability reporting and firm value of selected consumer base companies:

$$ROE_{it} = \beta_0 + \beta_1 PPE + \beta_2 FININST + \beta_3 MARINOV + \beta_4 PROSTR + \varepsilon \dots \dots \dots 1$$

$$ROA_{it} = \beta_0 + \beta_1 PPE + \beta_2 FININST + \beta_3 MARINOV + \beta_4 PROSTR + \varepsilon \dots \dots \dots 2$$

**Table 2: Definition, Measurement and a Priori Expectation of Variables**

Variables	Measurement	A-priori Sign
Dependent Variable		
Return on Assets	Net-Income/Total-Assets	
Return on Equity (ROE)	Net Income/Equity	
Independent Variables		
Sustainability Reporting (CM)		Indeterminate
Brand Equity	Expenditure/Income	Indeterminate

Source: Amoako (2024)

**Model Diagnostic Test**

Before arriving at the appropriate empirical model for testing the hypotheses, some model diagnostic tests were conducted to determine whether any of the assumptions of the panel regression model were not violated. Among the tests conducted were the Correlation test and multicollinearity test. The following are descriptions of the various model diagnostic tests conducted.

**Correlation Test**

The study adopted the Pearson correlation matrix to establish the existence of multicollinearity among the independent variables. In order to reduce the effect of outliers and to ensure a normal distribution of the data, a test for normality was conducted. In this study, the Skewness and Kurtosis test was conducted on the data to ascertain its normality. As a guideline, normal data are assumed to have skewness and kurtosis values near. Therefore, if the values are not near zero, then the data cannot be said to be distributed normally. For example, in Field (2019), the value of skewness (asymmetry) and kurtosis should be zero or close to zero if data

normality is to be determined using skewness and kurtosis. He argues that once the value for skewness is greater than 1.96 and for kurtosis is greater than 3.29, it means that the data is not normally distributed.

### **Multicollinearity Test**

A problem of multicollinearity is said to exist where the correlation coefficient of the two variable exceeds 0.7. (Ho & Wong, 2001). The Variance Inflation Factor (VIF) of the variables was used to ascertain if the independent variables presented a multicollinearity problem. VIF describes the extent to which an independent variable explains another independent variable within the model. As a basic rule, Field (2019) argues that if the correlations coefficient of any independent variable exceeds 0.7 or its VIFs is greater than 10, there is a likely cause of multicollinearity.

### **Data Validity and Reliability**

The researcher carried out a pilot study to pretest the validity and reliability of data collected using the questionnaire. According to Berg (2020) validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity which was employed by this study is a measure of the degree to which data collected using a particular instrument represents a specific domain or content of a particular concept. Mugenda and Mugenda (2019) contend that the usual procedure in assessing the content validity of a measure is to use a professional or expert in a particular field. According to Shanghverzy (2020), reliability refers to the consistency of measurement and is frequently assessed using the test-relicts reliability method. Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. The researcher selected a pilot group of 5 individuals each from the target population of the staff working in the selected companies listed on the Ghana Stock Exchange to test the reliability of the research instrument. The pilot data was not included in the actual study. The pilot study allowed for pre-testing of the research instrument. The clarity of the instrument items to the respondents necessary so as to enhance the instrument's validity and reliability. The aim was to correct inconsistencies arising from the instruments, which ensured that they measure what was intended.

## **DATA ANALYSIS AND RESEARCH RESULTS**

### **Data and Information Description**

In this chapter, results gathered from the fieldwork are presented. The fieldwork involved the administration of a well-structured questionnaire. From the 60 questionnaires distributed, all questionnaires were completed and retrieved. This represents a 100% response rate. Hence, the chapter is presented in five main sections. Section one presents information on the sociodemographic characteristics of respondents from the selected listed companies on the Ghana stock exchange in Ghana as well as the descriptive statistics on the age of respondents. Section two presented information on sustainability reporting and its effect on firm value among selected listed companies in Ghana. Section three showed the instruments used in improving the brand equity projects and their effect on firm value in today's market among selected companies in Ghana. Section four presented information on the relationship between sustainability reporting and firm value among selected commercial listed in Ghana and Section five presented information on product innovation strategies and its effect on brand equity among selected companies listed on the Ghana stock Exchange in Ghana.

### **Context of Research Sites**

The data was collected from ten listed companies on the Ghana Stock Exchange. The principal researcher with the help of three research assistants distributed the structured questionnaires to the selected companies. The questionnaires were initially dropped at the companies with respondents who showed interest in participating in the study. The essence of dropping the questionnaires was to ensure privacy and comfort so as to draw objective responses to the questions contained in the questionnaire. Again, the fast paced operations in the selected companies could have compromised the responses as respondents could have rushed through with responses and lastly, the presence of the researcher and the research assistants could have influenced the

responses to the questions to please the researchers. Respondents were given enough‘ time (i.e. two days) to respond to the questionnaire. That is, all the sixty (60) questionnaires were distributed

### Analysis of Questionnaire

Socio-demographic characteristics of respondents from the selected consumer base companies in Ghana are presented in Table 5.1. Majority of the respondents who agreed to participate in the study were females (55.0%). This implies that female workers were more accommodating during the administration of the questionnaire. Additionally and per my observation during the administration of the questionnaire, it was realized that most of the female workers were less inundated with lots of work, hence, had time to respond to the questionnaire compared to their male counterparts. Also, most of the respondents were less than 30 years of age (66.7%). The youthful respondents imply that the consumer industry is infusing the young with the experienced in order to devise of creating access. This is essentially important because of the many millennials who are technology driven and can easily apply such knowledge in gaining competitive advantage for their respective firms. Another observation during the administration of the questionnaire which has implications for the findings is that most of the respondents were ‘fresh’ recruits, hence the young ages of the respondents. Additionally, most of the respondents were first degree holders (60.0%). The finding suggests that the minimum level entry requirement to work in the selected consumer industry is an undergraduate degree. The consumer industry with a lot of sophisticated individuals and professionals with varying demands, hence, being a university graduate afford the stakeholders of companies the peace of mind to entrust the growth of the bank to their academic knowledge. The respondents were sought from different departments of the selected consumer base companies. Among the departments from where respondents were recruited from include operations (53.3%); marketing (20.0%); sales (16.7%) and finance (6.0%). The choice to sought opinions from the various departments was to deduce the ‘true’ stance of the various companies on sustainability reporting methods adopted to improve brand equity in Ghana.

**Table 5.1 Socio-demographic Characteristics of Respondents**

Variables	Frequency	Percentage
<b>Gender</b>		
Male	27	45.0
Female	33	55.0
<b>Age of Respondents</b>		
Less than 30 years	40	66.7
31-40 years	20	33.3
<b>Educational Level</b>		
First degree	36	60.0
Master’s degree	18	30.0
Doctor of Philosophy (PhD)	6	10.0
<b>Department of Work</b>		
Operations	32	53.3
Marketing	12	20.0
Sales	10	16.7
Finance	6	10.0

### Descriptive Statistics

Details of the descriptive statistics are shown in Table 5.2. The mean value of the respondent is 0.36 and standard deviation of 0.09 and minimum and maximum values of 0.126 and 0.512 respectively. This implies that the selected companies have a positive return on firm value from the last decade (2009-2019).

Additionally, the positive outlook of firm value suggests that the selected companies are more likely to improve brand equity and still make profits without running into bankruptcy.

**Table Descriptive statistics of ROA**

Variables	Obs	Mean	Std. Dev.	Min	Max
ROA	60	0.36	0.09	0.126	0.512

ROA=Return on Asset

**Consumer Brand Equity Market**

The various equity finance market adopted by the selected companies are presented in Table 5.3. From the selected companies listed on the Ghana stock exchange, only 3.4% of the respondents strongly agreed that their companies use sponsorship as a means of financing major equity brands in Ghana. The implication is that sponsorship normally has no ‘legal’ binding for repayment. In other words, when a firm sponsors a major project in the consumer industry, it pre-suggests that the companies forges a partnership agreement with the company undertaking the project; hence, paying back the monies and profits are not feasible. For the firms to make returns (profits) for financing projects, sponsorship is not a profitable venture.

Similarly, only 6.7% of the respondents strongly agreed as opposed to the 40.0% who strongly disagreed that the selected companies do not use contractor and equipment suppliers as a means of improving brand equity. The result implies that paying for contractors and equipment has no financial gains for companies considering that firms live off the profits they make from financing major equity brands.

It was, however, strongly agreed by more than half of the respondents (83.4%) that insurance provisions is a profitable equity finance instrument used by the selected companies. This suggests that companies undertaking major projects that pose inherent risk are likely to ‘buy’ insurance packages for workers from companies. Undergoing such processes, documentation for the purchase of the insurance, coupled with the advantages inherent in such investment increases the profitability of the selected companies within the consumer industry.

**Table 5.2 Brand Equity Market Instrument by Listed consumer base Companies**

Variables	Strongly Disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly Agree n (%)
Sponsor (Sp)	41 (68.3)	17 (28.3)	-	-	2 (3.4)
Contractor and Equipment Supplier (CES)	24 (40.0)	27 (45.0)	3 (5.0)	2 (3.3)	4 (6.7)
Financial Advisors (FA)	27 (45.0)	29 (48.4)	-	2 (3.3)	2 (3.3)
Technical Advisors (TA)	18 (30.0)	38 (63.3)	-	-	4 (6.7)
Legal Advisors (LA)	22 (36.7)	32 (53.3)	2 (3.3)	-	4 (6.7)
Equity Advisors (EA)	11 (18.3)	13 (21.7)	15 (25.0)	13 (21.7)	8 (13.3)
Insurance Providers (IP)	2 (3.3)	-	8 (13.3)	-	50 (83.4)

**Instruments used in Financing Brand Equity Projects by Listed consumer base Companies**

The various instruments used in financing brand equity projects by the selected companies are presented in Table 5.4. From the selected commercial banks, 6.6% of the respondents agreed to a very great extent that their firms use capital structure as an instrument for improving equity projects in Ghana. The implication is that the selected companies use capital structure as a means of striking a balance between debt and equity in other to adequately finance the consumer goods, daily operations and future growth of the selected companies. Stated differently, though a minority of the respondents from the selected companies use capital structure, it inure to the growth and financial development of the selected companies.

However, majority of the respondents, 66.7%, to a little extent agreed that loans are used by the selected companies as an instrument in improving equity projects. The results suggest that advance loans to companies and individual contractors undertaking major equity projects as a means of making returns. That is, the selected companies advance a loan facility to the recipient who is liable to repay the loan with the interest as agreed between both parties as well as the principal. The tendency for recipients of the loan facility to repay is a threat to the brands of the selected companies, hence, the reliance on such financial instrument is not wholly adopted by all the selected companies.

**Table 5.4 Market Innovations adopted by listed companies to Brand Equity Projects**

Variables	1, n (%)	2, n (%)	3, n (%)	4, n (%)	5, n (%)
Creating value through pricing (CVP)	50 (83.4)	6 (10.0)	2 (3.3)	-	2 (3.3)
Availability of resources and capabilities (ARC)	6 (10.0)	46 (76.7)	4 (6.7)	2 (3.3)	2 (3.3)
Customer satisfaction and retention (CSR)	54 (90.0)	6 (10.0)	-	-	-
Creating and nurturing strong products (CNS)	52 (86.7)	4 (6.7)	2 (3.3)	-	2 (3.3)
Aggressive anti-competitors marketing campaigns (AMC)	8 (13.3)	2 (3.3)	46 (76.7)	-	4 (6.7)

*1=No extent at all 2= Little extent 3= Moderate extent 4= Great extent 5= Very great extent*

The market innovations used in improving equity brands by the selected companies are presented in Table 5.5. From the selected companies, 10.0% of the respondents agreed but to a little extent that their firms create value through pricing. The implication is that the selected companies use competitive pricing to court companies to borrow money from them to fund their Equity brand projects. Once the pricing, for instance, interest rate, is competitively lower there is the tendency for more companies to approach the companies for assistance. The effect of this approach is that the companies make profits and the companies also complete their projects while making gains.

It was agreed but to a little extent by 76.7% of the respondents that the availability of resources and capabilities by the selected companies are innovative ways of courting businesses. The result suggests that dedicating a makeshift research and development department through the provision of free consultation enlightens prospective business associates to appreciate the products being offered to them for them to make the right choice.

Nonetheless, majority of the respondents, 76.7%, agreed to a great extent that an aggressive anticompetitors marketing campaigns are innovative market approach used by the selected companies to poach businesses. This implies that beating off competition by approaching businesses to offer them financial assistance is an approach the selected firms used to drive traffic to their firms. Since most companies survive on the profits that accrued on the loans they give out to businesses and individuals, this approach is highly profitability to the selected firms.

**Product Innovations**

The various instruments used in improving brand equity product by the selected companies are presented in Table 5.6. From the selected companies, 80.0% of the respondents agreed to a great extent that their companies' innovative product that attracts a lot of businesses is the quality of their operating systems. The implication is that the selected firms use up-to-date technology that does not falter to make transactions easier and faster. Technologies such as efficient and proactive social media pages that enhance easy communication is an innovative product that makes access to the firms easier. Another set of product innovation adopted for use by the selected companies are information intensity (76.7%) and specialization of business (76.7%).

This suggests that the selected companies inundate the media space with lots of information on the products the selected firms offer. This way, the firms becomes the primary destination for most businesses that need money to roll out brand equity projects. Additionally, the firms while putting their products out there in the public are specific on the type of products they offer and their area of expertise.

**Table 5.3 Product Innovation Adopted by Selected Consumer base companies**

Variables	1, n (%)	2, n (%)	3, n (%)	4, n (%)	5, n (%)
Quality of the systems (QS)	-	-	8 (13.3)	48 (80.0)	4 (6.7)
Information intensity (II)	-	46 (76.7)	6 (10.0)	6 (10.0)	2 (3.3)
Specialization of business (SB)	4 (6.7)	46 (76.7)	6 (10.0)	4 (6.7)	-
Management support of competitive strategies (MCS)	11 (18.3)	12 (20.0)	16 (26.7)	11 (18.3)	10 (16.7)

1=Least affected 2= Little affected 3= Moderately affected 4= Greatly affected 5= Most affected

**Regression Analysis**

Details of the correlation analysis showing the association between the dependent variable

(Brand Equity) and independent variable (sustainability reporting, and firm value) are shown in Table 5.7. The importance of undertaking the correlation analysis was to determine the presence or absence of multicollinearity based on the magnitude of the correlation coefficient. According to Wooldridge (2015), a correlation coefficient above 0.8 between explanatory variables should be corrected for multicollinearity. Stated differently, when a variable has a co-efficient equal to or greater than 0.8, it is near perfect or highly correlated.

The correlation between sustainability reporting and brand equity finance instrument is positive and significant ( $r = 0.348$ ). Similarly, there was a positive significant association between firm value and equity brand market innovation ( $r = 0.234$ ). However, the correlation between age of respondent and product innovation was positive but insignificant ( $r = 0.139$ ). From the correlation matrix, none of the variables was highly correlated with another.

**Table 5.4 Correlation Matrix between consumer base Innovations and Brand Equity Finance**

Variables		PFM	PFI	MI	PI
ROA	1.00				
Equity brandProject market (EBP)	0.138	1.00			
Brand Equity instrument (BEI)	0.348**	0.166	1.00		
Market innovation (MI)	0.234*	0.517**	0.075	1.00	
Product innovation (PI)	0.139	0.249**	0.039	0.039	1.00

\*\*= significance at 5% confidence interval (0.05)



\*=significance at 1% confidence interval (0.01)

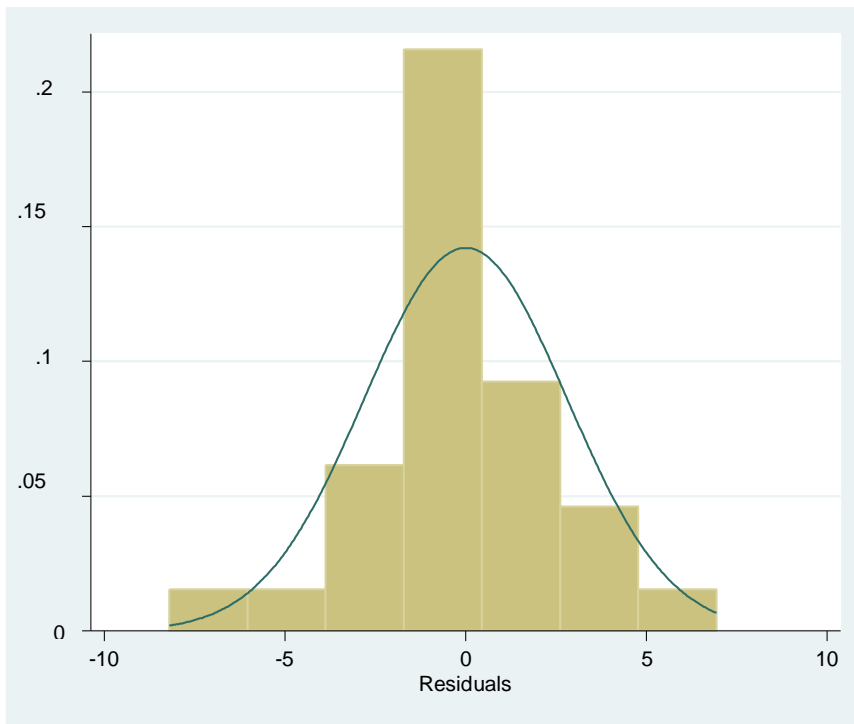
In order to further ascertain the absence of issues of collinearity, the Variance Inflation Test (VIF) test was undertaken (Table 5.8). Findings from test proved that none of the variables had collinearity issues and as such all the variables were included in the regression model.

**Table 5.5 Multicollinearity Test of Study Variables**

Variable	VIF	1/VIF
EBP	1.73	0.576506
BEI	1.88	0.531752
MI	2.57	0.389283
PI	1.37	0.728332
<b>Mean VIF</b>	<b>1.89</b>	

**Normality Test**

In order to reduce the effect of outliers and to ensure a normal distribution of the data, a test for normality was conducted (Figure 5.1). The model is well fitted, thus there is no pattern to the residuals plotted against the fitted values. Stated differently, there is homogeneity of the variance of the residuals.



**Figure 5.1 Test for normality**

**Skewness/Kurtosis Tests for Normality**

In this study, the Skewness and Kurtosis test was conducted on the data to ascertain its normality (Table 5.9). As a guideline, normal data are assumed to have skewness and kurtosis values near 0. Therefore, if the values are not near zero, then the data cannot be said to be distributed normally. According to Field (2009), the value of skewness (asymmetry) and kurtosis should be zero or close to zero if data normality is to be determined using skewness and kurtosis. He argues that once the value for skewness is greater than 1.96 and for kurtosis is

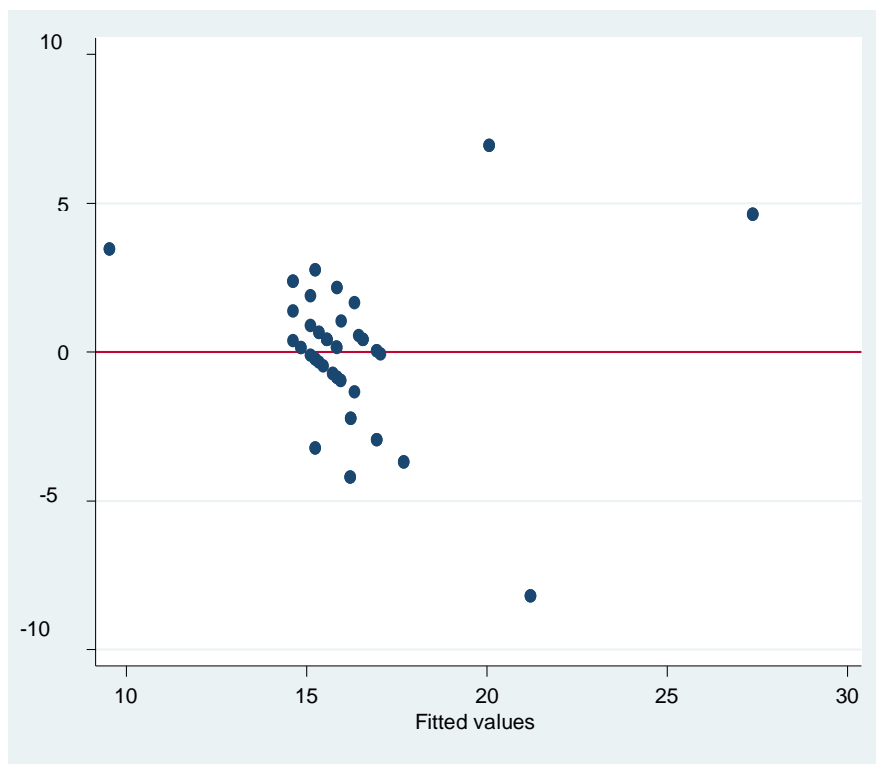
greater than 3.29, it means that the data is not normally distributed. Hence, from the values obtained for Skewness and Kurtosis, the data is considered normally distributed.

**Table 5.6 Normality Test of Skewness and Kurtosis**

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	Adj chi2 (2)	Prob > chi2
Resid	60	0.2428	0.0265	5.92	0.0518

**Homoscedasticity Test**

Details of the homoscedastic test as part of the assumptions for the regression analysis is shown in Figure 5.1. The test was undertaken to determine whether standard errors in the model are homoscedastic so that they can be corrected. Subsequently, there was constant variance between the residuals and fitted values.



**Figure 5.2 Test of homoscedasticity**

The regression model measured with multiple predictors (Equity Brand market, Brand Equity instrument, market innovation and product innovation) against the dependent variable was statistically significant ( $R^2 = 0.4941$ ; Adjusted  $R^2 = 0.4574$ ). The correlation of determination (Adjusted  $R^2$ ) value of 0.4574 meant that close to 46% of the total variability in brand equity is affected by the independent variables (Table 4.10).

To determine whether the regression model was a good fit for the data, ANOVA was adopted (Table 4.10). The regression model is a good fit for the data as evidenced by F ration, which is  $F(4, 55) = 13.43, P > 0.000$ . The F-statistics was used to establish whether the regression equation explained significantly a greater amount of the effect on factors that influence firm value that would be accounted for other than by chance. The brand Equity can be predicted using the independent variables since the significance level is less than 0.05. In other words, the study rejects the null hypothesis in favour of the alternate hypothesis that brand equity market, project instrument and market innovation has statistical significance on firm project.

There was a significant but negative association between brand equity market and firm value ( ) holding all other variables constant. There is about 50.0% increase in equity brand for every unit decrease in sustainability reporting strategies such as equity brand market among the selected consumer base companies. Since the p-value is less than 0.05, the null hypothesis is rejected in favor of the alternate hypothesis that is equity brand market.

## SUMMARY, CONCLUSION AND IMPLICATION OF THE RESEARCH

### Summary

The study offered insightful knowledge on the process of sustainability reporting and firm value on the mediating effect of brand equity on the consumer goods industry. The purpose of undertaking this study was to facilitate the formulation of sustainability reporting and firm value based on the merits and suitability of the financial instruments available, and independent of bias that may arise from familiarity with certain package formats or from lack of understanding and experience. In order to answer the research problem, this research adopted a questionnaire survey design. This research was compiled with principles which aimed at protecting the privacy of every individual who, in the course of the research work was requested to provide personal or commercially valuable information about themselves. This research focused on the consumer goods industry with spotlight on listed firms on Ghana Stock Exchange with

**Comment [KA4]:** mediation revealed clearly there can be a picture before you make a conclusion operations in the Accra Metropolitan Assembly only. Consequently, the population in this study was the management and staff in the consumer goods. Purposive sampling was used to select the sample within the population. Primary (questionnaire) is employed for the study. The data were collected to cover every aspect of the research. The questionnaire was divided into four thematic areas consistent with the research objectives. Descriptive statistics was used to analysis the individual variables that collectively formed the main sustainability reporting variables. Additionally, inferential statistics, specifically multiple linear regressions, was undertaken to assess the relationship between sustainability reportig and firm value Prior to the multiple linear regressions, the assumptions that necessitate this type of analysis were undertaken so as to ascertain the ‘\_authenticity’ of the final results.

## FINDINGS AND DISCOVERIES

There was a significant but negative association between brand equity finance market and firm value holding all other variables constant. This suggests that when sustainability reporting strategies such as brand equity finance markets which includes sponsorship, legal advice and the provision of insurance is not done well; financing projects by the firms will be a less profitable venture. Also, there was a significant but positive association between brand equity finance instrument and sustainability reporting among the selected companies holding all other variables constant. The implication of this is when the outcomes of brand equity project finance instrument such as capital structure, loans and equity increases or yields positive results, the profits derived by the selected companies are the same as the results of the sustainability reporting strategy/ies adopted. Holding all other variables constant, market innovation was significantly associated with brand equity project. This implies that when market innovations adopted by the selected companies‘ increases, financing projects by the firms will yield the same level of profits.

## RECOMMENDATIONS

Through the use of descriptive and inferential statistics, the objectives and hypothesis that guided this study have been realized. There was a significant but negative association between brand equity project market and firm value. Also, there was a significant but positive association between brand equity project instrument and sustainability reporting among the selected companies. Holding all other variables constant, market innovation was significantly associated with brand equity Based on the limitations as outlined in section 6.3, the following recommendations are formulated;

The companies in Ghana need to employ various product innovation strategies such as product range extension, product replacement, and product improvement, product repositioning and new product introduction to enable the firms to be more productive, to grow faster, to invest more and also to earn more profit.

### Further Study and Research

Some areas for possible further work are identified. These areas are not pursued in this study as they are considered outside the direct scope of this research. These areas include the determination of the level of blended equity gearing at which a change in consumer repayment profiles should be considered and also the impact of the cost of sponsor or third party provided subordinated debt, on the determination of optimal gearing.

Finally it must be noted that the pace of evolution of the brand equity market has been overwhelming. As there may have been some changes between the commencement of this study and the conclusion of this thesis, efforts have been made to keep abreast of any such developments but for application of the results of this study, the changes between time of development and time of implementation must be considered.

### Conclusion

The study concludes that listed firms in Ghana have adopted various sustainability reporting strategies aimed at improving brand equity and by extension of firm value. Specifically, the Comment [KA5]: study found out that brand equity project by the selected companies is negative but significantly associated with equity finance market. Also, a positive significant association was observed between brand equity and firm value. Similarly, market innovation was positive and significantly associated with brand equity among the selected firms. Though there was a positive association between product innovation and brand equity finance, this association was statistically insignificant. These findings are significant to the consumer industry, which has a need to remain abreast of profitable alternatives in the equity finance market as it reviews the practices adopted by firms. Furtherance to this, it will serve as a source of assessment for further research into issues of brand equity and assist other countries to be more responsive to the improvement of brands. The purpose of conducting this study will help policy makers such as Government agencies to enhance developmental project by providing appropriate services to suit changes contemporary to improvement of brand equity projects. The study leave further inroads for future researchers in another discipline of finance, economics and management regarding the progressive growth of financing of different brands in the Ghanaian economy. The findings fill the gap in the literature in Ghana where there is dearth of studies that concentrated on firm value and sustainability reporting in the consumer goods industry.

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