경영학석사 학위논문

Effects of ESG on Consumer Satisfaction

– in–the depth of Consumer perception –

소비자 만족에 대한 ESG의 영향

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경영학과

성유하

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지도교수 김 병 도

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위 원 장 박성호

부 위 원 장 박기완

위 원 김병도

초 록

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ESG is a hot issue that companies are interested in, and strengthening ESG is a big management issue. This helps companies to increase their sustainability. In the past, CSR and customer satisfaction these study keywords, and ESG has only recently begun to get attention. Therefore, studies are being conducted on the direct effect of ESG on corporate value or profitability, but research on consumer satisfaction is lacking. This paper aims to investigate the relationship between environmental, social, and governance (ESG) and consumer satisfaction. With the use of more than 3000 ESG datasets of more than from Korea. Primary analysis shows that ESG controversies are associated with greater customer satisfaction. Previous research has shown positive and negative effects of ESG on firm value. However, when interacting with customer satisfaction, which was represented by the NCSI score, ESG controversies are found to have a direct effect on customer satisfaction and appear to be highly and significantly positive. Building on this evidence, this study attempt to explore the channels through which ESG may enhance market value. Analyzing the number of news reports about ESG from Big kinds indicates that news reports moderates the idea of ESG activities to customer satisfaction. Thus, these findings provide new insights on the role of ESG, how firms should market these activities, and how they can profit from their ESG activities.

The hypothesis is that consumers will be satisfied with companies that do a lot of ESG, and companies that actively practice them. The moderator between the influence was the level of consumer awareness.

In short, X influences Y, X is ESG data, y is the satisfaction of consumers. There are concepts of ESG and consumer satisfaction announced by the organizations. Therefore, in conclusion, ESG may not have anything to do with marketing, but marketing is important to convey the influence of ESG to consumers.

ESG는 기업들의 뜨거운 관심을 받는 이슈이며 ESG를 강화하는 것은 경영의 큰 이슈이다. 이는 기업이 지속 가능성을 높이는 데 도움이 된다. 과거에는 CSR과 고객만족도가 본 연구의 키워드로, ESG가 주목받기 시작한 것은 최근의 일이다. 따라서 ESG가 기업가치나 수익성에 미치는 직접적인 영향에 대한 연구가 진행되고 있으나 소비자 만족도에 대한 연구는 부족한 실정이다. 이 논문은 환경, 사회, 지배구조(ESG)와 소비자 만족도 사이의 관계를 조사하는 것을 목표로 한다. 3000개 이상의 한국 ESG 데이터셋을 사용하여 1차 분석은 ESG가 더 큰 고객 만족도와 관련되어 있음을 보여준다. 이전 연구에서는 ESG가 기업 가치에 긍정적인 영향과 부정적인 영향을 미치는 것으로 나타났다. 그러나 ESG는 NCSI 점수로 대표되는 고객 만족도에 직접적인 영향을 미치는 것으로 나타났으며 매우 긍정적인 것으로 나타난다. 이 증거를 바탕으로 이 연구는 ESG가 시장 가치를 향상시킬 수 있다고 생각한다. Bigkinds에서 ESG에 대해 보고된 뉴스 수를 분석한 결과 뉴스 보도가 ESG 활동에 대한 생각을 조정하는 것으로 나타났다. 따라서 이러한 발견은 ESG의 역할, 기업이 이러한 활동에 대해 마케팅해야 하는 방법, ESG 활동에서 실제 이익을 얻을 수 있는 방법에 대한 새로운 통찰력을 제공한다.

논문의 가설은 소비자들은 ESG를 많이 하는 기업과 이를 적극적으로 실천하는 기업에 만족할 것이라는 것이다. 소비자 인식 수준이 그 사이에서 작용한다. 즉, Y에 영향을 미치는 X는 ESG 데이터, y는 소비자 만족도이며, 여러 조직에서 발표한 ESG 및 소비자 만족도의 개념들을 이용했다. 결론적으로 ESG는 마케팅과 관련이 없을 수도 있지만 ESG의 영향을 소

비자에게 전달하기 위해서는 마케팅이 중요하다고 시사한다.

목 차

1 Introduction

Background

A significant aspect of a company's strategy and operations has been the incorporation of CSR or corporate social responsibility since it was mandated by the European Commission in 2011. Social efforts regarding CSR in marketing by Johnson & Johnson and Ikea and the emergence of articles and disputes around CSR (Epstein-Reeves, 2012) indicate that CSR has become an important subject. Critics have brought this to light (Karnani, 2011), yet the fact remains that it was correct.

Investors like Black Rock are avoiding firms that don't adhere to ESG standards, which have become a new buzzword in recent years. Many publications, including Korean ones, are highlighting the significance of ESG. Since the UN Principles for Response Investment (PRI) was established in 2006, ESG assessment has been utilized as a significant criterion for choosing investment goods, and the US Government Accountability Office LU.S. GAO has adopted US-listed businesses as one of the most important things.

For companies to actively communicate with their customers about the long-term financial effect of sustainability, responsible investing concerns, and risk, ESG issues have become a serious challenge for corporations in the long term. For a while now, ESG has piqued investors' curiosity (KCGS Report 2020). People are working hard to ensure that these clients' financial futures are secure, and this study is trying its best to lead the way in developing an integrated sustainable, and responsible investing system.

The cornerstone to a company's long-term viability is ESG, or corporate environment, social, and governance, a set of core principles. Traditional investments are combined with environmental, social, and governance (ESG) insights at BlackRock to produce superior risk-adjusted returns in the long term. This is a broad definition of sustainable investing. "By looking at ESG variables, this research may successfully gather key business insights," BlackRock Chairman and CEO Larry Fink said. Based on this, a long-term prognosis for the firm may be expected.

There are also ongoing studies from the U.S. Securities and Exchange Commission, which provide suggestions for how to strengthen and regulate ESG disclosures. ESG is also gaining popularity in Korea but at a slow pace. The National Pension Service and the Ministry of Health and the study announced intentions to increase socially responsible investing.

Sustainability reports have grown from only two firms in 2004 to 133 in 2018, according to the Korea Standards Association, and since 2019, the Korea Exchange has enforced corporate governance disclosure for listed companies with total assets of at least 2 trillion won (Kim 2020).

This study would like to examine how important ESG is in society. Looking at past studies, there have been many studies related to CSR and linking them to corporate reputation or consumer satisfaction. ESG is a different concept from CSR, but studies are lacking in principle. In particular, no study quantified the relationship between customer satisfaction and ESG. Therefore, this study would like to present to academia to fill the gap.

For companies in Korea, the Korea Governance Service will bring the ESG evaluation certificate, and for customer satisfaction with the company's reputation or brand, either kma (kcsi) or NCSI will be used. While examining the relationship between the two, this study will also add the aforementioned implication moderator, mediator, etc.

Purpose of Research

The significance of this paper is that regarding ESG, there are quite a few surveys about investors and consumers. There are also survey results about consumers who want to use products from companies that engage in ESG-related activities. According to a study by the KB National Management Research Institute, it was concluded that the jet generation also buys products from companies that do ESG. Therefore, although consumers are also responding positively to ESG, there are few empirical studies in the academic world.

In addition, this study brings studies that were mainly conducted inside the area of consumer behavior into the quant area. About ESG, consumer satisfaction and most studies conducted in experimental studies. It is meaningful to quantitatively analyze the research on companies that did CSR, ESG, and those who did not do those activities from consumer behavior method to empirical data. Also, it will be a big issue if consumer satisfaction becomes the dependent variable rather than corporate values that the study researched previously many times.

An ESG E represents an environmental standard that includes energy and waste consumption, requirements, and biological impacts for a company. E is concerned about climate change and CO2 emissions. All companies consume energy, and all companies are impacted and affected by the environment. S represents a social standard, which refers to the company's relationship and reputation with the people and institutions in which it does business. The letter S includes labor relations, diversity, and inclusiveness. All businesses operate in wider and more diverse society. G stands for Governance and refers to a system of internal processes, controls, and procedures to regulate oneself, make appropriate decisions, comply with the law, and meet the needs of external stakeholders. All companies that are independent legal entities must follow these standards to satisfy their present and potential customers is the main thesis of this paper.

When it comes to running a company, ethics and social responsibility (ESR) are inseparable. To meet environmental regulations and greater sustainability issues, social factors like governance and compliance with environmental regulations are intertwined. While environmental and social considerations make up the bulk of this focus, as every leader knows, governance is not a distinct entity. To be effective in governance, it is necessary to comprehend not just its word but also its spirit. For example, it is necessary to avoid violations before they occur or to assure transparency and participation with regulators rather than just reporting the results. ESG thinking and proactive action have been more crucial in recent years. Business Roundtable produced a new statement in August of this year highlighting the company's commitment to a broad range of stakeholders, including consumers and employees and suppliers, and communities.

ESG-oriented investment has seen stratospheric growth in tandem with this developing ethos. ESG-focused investing has grown exponentially as a result of this growing mentality. Since 2004, global sustainable investment has grown by tenfold to $30 trillion, a rise of 68% since 2014. ESG offers that the study-designed ESG regulations may help secure a company's long-term viability, as shown by this research and by investors and corporate leaders who see this as a critical factor. Based on the extent of the investment flow, ESG is much more than a trend or a feel-good activity. Additionally, the quantity of company output is subject to change. Companies that pay attention to environmental, social, and governance issues do not encounter a burden on value development. An ESG-focused company is more likely to outperform the market in terms of both tilt and momentum. ESG performance is also linked to risk, as seen by a lot of studies.

There has been a dramatic rise in the number of people interested in environmental, social and governance (ESG) concerns over the last 10 years from individual shareholders to institutional investors to governments to local communities to workers and suppliers. Sustainability reporting was adopted by 82% of S&P 500 firms in 2017 compared to 53% in 2012, according to the Governance and Accountability Institute (2017). Investors are ahead of the curve when it comes to environmental, social, and governance (ESG) challenges. Concerns voiced by hareholders caused the FTSE Russell to rule out the inclusion of zero voting rights stocks. So the sector is adapting to ESG challenges, which is good news for investors.

Investors, rating agencies, and financial information providers are increasingly interested in ESG data, which includes environmental (total greenhouse gas emissions, hazardous waste, environmental penalties, and so on), social (the proportion of employee turnover, community expenditures, and so on) (board duration, political donations, etc.). Measures of corporate ESG performance and its relation to financial success have dominated the ESG literature Margolis & Walsh, 2003).

When the media scrutinizes a company's social and environmental activities, it draws the attention of investors, who become aware of the company's ESG issues (Klein and Dawar 2004). An announcement like this might be damaging to the company's reputation. Even though corporate social performance (CSP) is becoming increasingly essential, there is no consensus on the influence of environmental, social, and governance (ESG) on customer satisfaction. CSR research has mostly been one-sided, with an emphasis on socially responsible conduct (Mackey et al. 2007; Kothari et al. 2009).

This study looks at customer satisfaction as the study as environmental, social, and governance (ESG) problems. To the study’s knowledge, this is the first study to look at the relationship between ESG performance and customer satisfaction, and the study hopes that it will serve as a springboard for future research. Further information in this is laid out is listed below. It looks at relevant material and makes predictions based on it. The research design, hypotheses, samples, and results are all discussed in further detail. Analyze data. The outcomes are discussed in the section "Empirical findings and discussion." In conclusion, there is a wrap-up and concluding remarks.

Literature Review

The relationship between CSR and customer satisfaction. According to Beckmann, consumer consequences of CSR can only be assessed in diffuse, not compact, methods (2007; Beckmann et al.).

Their reactions also differ depending on the connections between corporate talents and CSR projects (Mohr et al., 2001). The link between rising levels of CSR activity and enhanced brand loyalty is a common issue in the literature on corporate social responsibility (CSR). Torres, Bijmolt, Tribó, & Verhoef (2012) researched CSR's novel advantages, such as brand equity and behavioral consequences like recurring patronage intentions. (Vlachos et al., 2009; Auger et al., 2010).

What is ESG?

CSR study necessitates the use of standardized and consistent CSR data. Regardless of the research, a coherent definition of CSR remains elusive, leading to a lack of agreement. According to the UN's Principles of Responsible Investment, investors should take in ESG ratings when making investment choices, which is where the ESG idea originally gained traction. To put it another way, ESG measures a company's performance in terms of its environmental, social, and governance standards. It relieves just how hard it's working to save energy and cut emissions. Finally, the effectiveness of a company's corporate governance reveals the rights and obligations of the company's management (governance structure).

Since its inception, the meaning of ESG and the three terms that make up the acronym — Environment, Social, and Governance — as these implications for business value has been the subject of intense debate. In Neoclassical transmission, it is stated that ESG's very first thought was negative. There are two sthisces for this: Vance's 1975 paper and Wright and Ferris' 1997 book. As far as Friedman (1970) is concerned, the only obligation of a company's owner is to maximize profits rather than to do good in the community. First, this phrase is a good representation of how ESG impacts society and businesses.

As far back as the early days of ESG research, there was a widespread belief that no amount of money could ever buy success. Firms' eco-friendly practices may not lead to good values, according to Kim and Lyon(2015). Companies should put their efforts into creating value for their operations, rather than worrying about the needs of the broader community.

ESG Overview

Effects of CSR to Firm

The findings of this study are uneven, despite extensive research on the impact of CSR efforts on a company. The expense of CSR initiatives may be seen as an economic disadvantage by some. Additionally, other researchers claim that there is no between. CSR and profitability or even a negative one

However, research has also supported the hypothesis of value enhancement. That is to say, corporate social responsibility (CSR) has a favorable impact on a company's competitive advantage and shareholder value both directly and indirectly. CSR activities can indeed improve operating efficiency, improve corporate reputation, increase employee productivity and capital market benefits, reduce risk management, and increase the product market for a company, as these strengthen a company's relationship with its stakeholders and the community.

By far, the majority of the CSR literature has been on the United States and other industrialized European nations. Emerging market CSR efforts, particularly those aimed towards the Korean stock market, have yet to be thoroughly studied. Surveys or corporate social responsibility (CSR) reports from individual companies are used to research Korea, which is minimal. The notion of ESG, which is a later study than CSR by external rating institutes, has been used in just a few studies.

As a result, this research uses the ESG standard to investigate whether Korean enterprises profit from it and whether customers in Korea appreciate the firm's ESG activities based on data from NCSI and KCGS. In the following sections, this study will examine the premise that ESG has a positive impact on value customer satisfaction.

The area of Korean CSR research is still in its infancy. As an example, Choi et al. discovered that CSR activities had a beneficial impact on financial performance by applying a stakeholder-based CSR index. CSR and financial performance of Korean companies have been examined by Han et al.

Using ESG disclosure ratings evaluated by Bloomberg to examine non-linear connections. Environmental, governance and social performances all have negative correlations with financial success. This conclusion was doubted and was somewhat defeated by this study.

3. Hypothesis Development

ESG's value impact in Korea is currently the focus of this study's empirical hypothesis. An ESG-value that is good in Korea is predicted by this research. ESG has a direct and beneficial impact on a company's financial performance and value, according to the majority of prior research. Despite the belief that managers concentrate on cutting operational expenses, such a focus is contradictory with ESG's value-enhancing capabilities. Investors in the markets are aware of the potential beneficial impact of ESG and include this into the value of a company.

ESG is expected to have a greater impact on the value of Korean enterprises in this research, mostly focusing on consumers. Businesses with higher ESG performance are more likely to satisfy consumers. Before the rise of ESG, these standards somewhat was inconsequential inside corporations, but companies implementing ESG may now be more widely recognized by their stakeholders and consumers. As a result, companies with a higher level of ESG are valued more favorably by consumers than those with a lower level of ESG.

In sum, Businesses with higher ESG performance are more likely to satisfy consumers. This study tested the following empirical hypotheses, and each hypothesis is empirically evidenced with the following studies and models.

Hypotheses 1 (H1).

A positive ESG–valuation effect exists with the existence of customer satisfaction(NCSI evaluation.

Hypotheses 2 (H2). With variables controlled, year and ESG may explain the variance of NCSI.

Hypotheses 3 (H3).

The number of news would moderate the effect between ESG and customer satisfaction.

Hypotheses 4 (H4).

Environmental news, Social news, Governance news individually would have different impacts on the moderation of ESG and customer satisfaction.

Linking ESG to Consumer Satisfaction

The main hypothesis is that Consumers will be satisfied with companies that do a lot of ESG, and companies that actively practice them. And the moderator between the two variables is the level of consumer awareness.

X is ESG data, y is the reputation of the company. There are concepts announced by organizations. When obtaining data, the influence of ESG on corporate value, the role of consumer perception, etc. are also included. It is used as a mediator, moderator, and background info. In addition, the study predicted consumer recognition as a moderator and regarded advertising as its recognition.

Advertising rate plays a role in consumer awareness. Further analysis because I don't know if the ad is to promote egg or not. Collect news articles related to ESG, and compare the correlation between the number of news articles related to ESG and the amount of advertising cost with high and low. ESG is received from kegs Since most of the companies that can inquire about ratings are listed companies, regression is carried out only for listed companies.

Data Guide Pro advertising expenses are obtained through the school's Korea Listed Companies Association (ts2000) program. By analyzing panel data for each company, it shows that even the ESG evaluation is even more effective if consumers recognize it. Therefore, in conclusion, ESG may not have anything to do with marketing, but marketing is important to convey the influence of ESG to consumers.

Significance:

Regarding ESG, there are quite a few surveys about investors and consumers. There are also survey results about consumers who want to use products from companies that engage in ESG-related activities. According to a study by the KB National Management Research Institute, it was concluded that the jet generation will also buy products from companies that do ESG. Therefore, although consumers are also responding positively to ESG, there are few empirical studies in the academic world.

Bring what you did in CB as a quant. Most of the consumer satisfaction about ESG was done in experimental studies. It is meaningful to quantitatively analyze the research on companies that have done CSR a lot on the CB side and companies that did not do it with empirical data. Also, it will be a big issue if it becomes consumer satisfaction rather than corporate values that are studied a lot.

2 Context of Research

Data and Research Design

Data

X is ESG data, y is the reputation of the company -> Approach the concepts presented by the organization

This of ESG data: Received from kcgs, an organization that releases ESG annually. Since most of the companies that can inquire about ratings are listed companies, regression is carried out only for listed companies.

There is a place where consumers' satisfaction with a company's brand or reputation Reputation (mac) is investigated. You can bring figures such as Korea's most admired companies by year and look at the regression between the two.

Advertising rate plays a role in consumer awareness. Further analysis because I don't know if the ad is to promote egg or not. Collect as-related news articles and compare the correlation between the number of egg-related news articles and the amount of advertising cost with high and low, and when the correlation is high, try to understand that ESG-related advertisements should be made.

NCSI data was from the Korea Productivity Center as a score evaluated based on these satisfaction criteria when defining customer satisfaction operationally. Ranking and score are provided, but if it does not come out of this study by regressing with a score, consider how much it has increased compared to the past as an increasing rate.

Korea's most respected company - The Korea Management Association mac does a lot of research and produces results. (Diagnostic evaluation of certification system) If you look at the results of past surveys (example), if you look at the year 2020, the score will appear one by one at the bottom starting with the survey outline. For example, a score such as Dongwon Industries 7.17 is given by the year. These panel data become accessible variables.

In the abstract, X is ESG data, y is consumer satisfaction. To approach the concepts presented by the organization, ESG data sthisces this study needed. It was received from kids, an institution that releases ESG annually. Since most of the companies that can inquire about ratings are listed companies, regression is carried out only for listed companies.

There is a place where consumers' satisfaction with a company's brand or reputation Reputation (mac) is investigated. You can bring figures such as Korea's most admired companies by year and look at the regression between the two.

Korea Corporate Governance Service's complete ESG assessment technique was used to evaluate each company's ESG proficiency (Kang and Jung 2020: Na and Leem 2011: Lee and Lee 2019: Oh and Lee 2019). As part of the Korea Corporate Governance Service's ESG review, it is hoped that the findings would be used to assist businesses to enhance their business environment. To meet worldwide standards, and also to represent the business climate in the United States, this assessment model was established (KCGS Report 2020). Ad spending to sales ratios this study used to gauge customer sentiment (Serves and Tamayo 2013). Advertising expenses disclosed yearly cannot be used to specifically raise customer knowledge of a company's ESG capabilities, but this research found that advertising costs paid by corporations may serve that purpose. This research hoped that advertising spending may be used as a proxy for customer perceptions of organizations as a whole, including their ESG competence level. This research uses a variety of financial indicators as control variables. This covered revenue growth, the company's size, and the proportion of foreign equity ownership There is a thorough breakdown of the variables in Table.

<Table> Measurement of variables

(Variable names in parentheses)

Variable	Operational definition	Measure
ESG Total	A total aggregated score of E, S, and G	A total score of 1 to 4 is based on the calculated sum of Environmental capabilities, social competence, and governance capabilities.
Environmental capabilities.	The score for evaluating a	A total score of 1 to 4 is calculated

(ESG_E)	company's environmental capabilities.	based on each evaluation item for the company's environmental and social capabilities.
Social competence (ESG_SOC)	The score for evaluating a company's social capabilities.	
Governance capabilities. (ESG_G)	The score for evaluating a company's governance capabilities.	A total score from 1 to 6 is calculated based on each evaluation item for the corporate governance capability.
The ratio of advertising expenses. (ADV_Ratio)	The level of consumer awareness	Advertising expenses/sales.
Return on assets (ROA)	corporate profitability	Net income/total asset book value
Return on equity (ROE)	The ratio of period profit to the equity capital of a company.	Net income/equity
Size of company (SIZE, earnings)	Based on the total assets, earnings of a company, The size of the company.	Natural log of total asset book value, Earnings of total asset book value.
News ESG Disclosure, ESG marketing (News)	Advertisement news related to the company	Number of news articles introduced by BIGKINDS
Environment News (E_News)	Environmental advertisement news related to the company	Number of environmental news articles introduced by BIGKINDS

Social New (S_News)	Social advertisement news related to the company	Number of social news articles introduced by BIGKINDS
Governance News (G_News)	Governance advertisement news related to the company	Number of governance articles introduced by BIGKINDS

Samples for this inquiry this study were chosen based on the criteria listed below. As a starting point, the study collected financial data from all publicly traded companies in Korea from 2014 to 2018, excluding financial institutions. Since their capital structure, business tactics, and government rules vary from those of ordinary manufacturing and service enterprises, financial services such as banking, securities, and venture capital are excluded (Shin et al. 2011).

Companies having debt-equity ratios of 1 or above, companies listed at least one year before the fiscal year, and companies listed at least one year before the fiscal year are not included in the data provided by the Korea Listed Companies Association. The companies included in this research this study hand-picked using the public disclosure method. The date and year of the data were also regarded as important and was used control endogeneity, and was seen if it was significant inside the influence between the dependent and the independent variable.

Empirical studies and Analysis

Model 1.

Logistics model that creates dependent variable whether or not there is an NCSI score, this study overall used categorical variables. This study used the odds ratio and the logistic function are used as the link function.

If an event with an NCSI score is A,

$\text{logit}(A) = \text{logit}(x) = \ln[p(A) / 1-p(A)] = \beta0 + \beta1*x$

$p(A) = e\text{^}\text{logit}(A) / 1+e\text{^}\text{logit}(A) = e\text{^}(\beta0 + \beta1*x) / 1 + e\text{^}(\beta0 + \beta1*x)$

Inside the log-likelihood function and(β0, β1) this study found the β values that maximize this.

The result: logit = $\ln[p(A) / 1-p(A)] = -5.75 + 0.95x$

Coefficients of the model are statistically significant. ($p<.001$)

When the ESG value increases by one point (=ESG rank increases by one), the NCSI multiplication (=NCSI listing probability / NCSI non-listing probability) increases $e^{0.95} = 2.586$ times.

Model 2.

Model 2 was conducted with analysis on companies with NCSI. The independent variables such as sales, adv_ratio, roe, roa, date_y, ESG, and the dependent variable was the NCSI score.

Model 2-1

NCSI_score = β0 + β1*EARNINGS + β2*ADVRATIO + β3*ROE + β4*ROA

Model 2-2

NCSI_score = β0 + β1*EARNINGS + β2*ADVRATIO + β3*ROE + β4*ROA + β5*YEAR + β6*ESG

It was done to measure the additional explanatory power of YEAR and ESG by obtaining Delta R-squared comparing the R-squared values of the two models (with sales, advertising ratio, roe, and roa controlled).

Model 2-1

NCSI_score = 75.32 + 9.167*10^(-12)*EARNINGS + 12.73*ADVRATIO –0.0109*ROE – 1.061*ROA

Model 2-2

NCSI_score = -1154 + 7.272*10^(-12)*EARNINGS + 10.67*ADVRATIO – 0.01349*ROE + 2.994*ROA + 0.609*YEAR + 0.1988*ESG

In Model 2-2, the intercept was significant at $p<.001$, sales $p<.05$, advertisement ratio $p<.05$, and year at $p<.001$ levels, and the entire regression model was statistically significant; $F(6, 235) = 19.47$, $p<.001$, Adj. $R^2 = 0.315$. The coefficient of the msg variable was $p=.072$.

The reason that the intercept is significant is thought that this is because the scores do not differ significantly between companies with NCSI scores. This is further mentioned in the limitations.

As a result of comparing the two models, the explanatory power of the study added by YEAR and ESG was 28.67% while the remaining variables were controlled in this study. This comparison was statistically significant ($p<.001$). That is, YEAR and ESG can explain the variance of the NCSI score that the other variables cannot explain.

Model 3.

Model 3 was an analysis of companies with NCSI scores and data on the number of ESG-related news reports.

To re-validate the significant explanatory power of Model 2. This time, this study analyzed the number of news reports as this study.

Before that, roe and roa, which this study coefficients that this study not significant in Model 2, this study removed from the control variables. And, among earnings and adv_ratio, this study judged earnings to be more important in explaining 'is a company more visible to consumers'. Therefore, earnings this study selected as an important variable to control, and adv_ratio was also excluded from the control variable in study 3. After confirming that the explanatory power of the regression analysis was not significantly deteriorated by excluding adv_ratio, the extent to which adv_ratio explained the NCSI score other than earnings was only 2.68%. This comparison was statistically significant ($p<.05$) (results attached below), and the analysis in model 3 below set only the control variable earnings.

Model 3-1

$NCSI\_score = \beta 0 + \beta 1*EARNINGS$

Model 3-2

$NCSI\_score = \beta 0 + \beta 1*EARNINGS + \beta 2*YEAR + \beta 3*ESG + \beta 4*G\_NEWS$

(Instead of G_news, E-news and S news was done the same way. In this study, only G news was significant, and it was the only one to increase the power of explanation.

Model 3-1

MODEL 3-2

*size= earnings

In this Model 3-2, G News and ESG order are different from the equation.

Result: regression is below.

$NCSI\_score = -2143 - 7.226*10^{-12}*EARNINGS + 1.098*YEAR + 0.9567*ESG + 0.2649*G\_NEWS$

This regression is statistically significant at the $p<.05$ level; $F(4, 110)=2.869$, $p<.05$, Adj. $R^2 = .062$.

(However, although it is not a significant coefficient, the coefficient for earnings came out as negative, which is counterintuitive. This is thought to be because the number of data was too small. The problem is that only the coefficient of year is significant.)

Compared with 3-1, which predicted the satisfaction score only with EARNINGS, the explanatory power added when YEAR, ESG, and G_NEWS this study additionally input as independent variables of the regression equation as in study2 was 8.72%. (The reason why the explanatory power of the study decreased compared to No. 2 is that the sample was small because only companies with data were considered.) This added explanatory power and proved the study was statistically significant; $F(3, 110)=3.532$, $p<.05$.

Model 4.

A regression model that predicts the NCSI score by converting ESG into a categorical variable, see the moderating effect of News.

dummy coding

	D1	D2	D3
B+ below	0	0	0
B+	1	0	0
A	0	1	0
A+	0	0	1

NCSI_score = $\beta 0 + \beta 1$*D1 + $\beta 2$*D2 + $\beta 3$*D3

Which means

B+ below: y = $\beta 0$

B+: y = $\beta 0$ + D1

A: y = $\beta 0$ + D2

A+: y = $\beta 0$ + D3 is estimated.

The reason why there is only this rating here is that none of the companies with E_news data had a grade of B or less.

In order to see the moderating effect of E_news, E_news and an interaction term this study was added.

Ultimately, Model 4

$$NCSI\_score = \beta0 + \beta1*D1 + \beta2*D2 + \beta3*D3 + \beta4*E\_NEWS$$
$$+ \beta5*D1*E\_NEWS + \beta6*D2*E\_NEWS + \beta7*D4*E\_NEWS$$

Result: Since the coefficient of the interaction term was significant ($p<.01$ for β5, $p<.01$ for β6, $p=0.1$ for β7), it can be seen that the modulating effect of E_news is significant.

However, because the sample was small (there this study many cases where ESG was already good for companies with + news reports), there was a limit to specifically examining the moderating effect of the news. Future research is needed, so Model 4*(adjusted) was done.

Model 4* (adjusted)

For only companies with news material, the number of reports of each of E, S, G, and aggregate was Categorized as 1 if it is above the average, and 0 otherwise.

Dummy coding, input as an independent variable, and model establishment including interaction term to see the control effect.

	D1

Less than average number of reports	0
More than average number of reports	1

MODEL 4* (adjusted)

NCSI_score = β0 + β1*ESG + β2*D1 + β3*ESG*D1

What this study wants to verify in this study is whether β3 is statistically significant. (You want to know if there is an interaction or a moderating effect.)

Since the interaction term (ESG: E_N_fac) is statistically significant ($p<.01$), environmental news ESG controls the relationship between NCSI_score.

After receiving a high evaluation from the integrated ESG, it is possible to increase customer satisfaction by actively promoting environmental protection-related issues. For reference, other news factors have no moderating effect.

Limitations

Data

There is a strong correlation between the number of environmental conservation initiatives and the stock price, according to the researchers.

Based on KCGS ESG data, studies evaluated the market value of ESG performance. Have shown a link between CSR research and a company's market value.

However, in contrast to several previous studies, this research does not look at a company's financial and social success from an entrepreneurial viewpoint. When it comes to entrepreneurship, Parente et al. come up with what they call humane entrepreneurship. This area of research aims to provide a new performance metric that takes into account a company's financial success as this study as its social and environmental impacts.

Addressing Endogeneity

The paper used earnings, advertisement expenses, advertisement ratio, return of earnings, return on assets as control variables. It was a matter of efficiency, to put these data in, but controlling the variables was important, so these variables were importantly adjusted. However, more variables could be sophisticatedly related to the equation, and further research maybe with more cautiousness.

Analysis

In Model 2-2, the reason that the intercept is significant is thought that this is because the scores do not differ significantly between companies with NCSI scores. This is one of the limitations of this study, and further research can compromise this problem with better data of diverse NCSI scores, or even another calculating standard of consumer satisfaction that is official, and prominent to be used as a data of research.

Model 3 was an analysis of companies with NCSI scores and data on the number of ESG-related news reports. However the data of ESG-related news reports was relatively small compared to the data of companies with NCSI scores, so the analysis has some limitations. Further studies with news reports from more diverse data or news variables can be substituted with another variable that can represent the perception of consumers. It can be how many times the consumers watched the advertisement itself, or the awareness of consumers of a firm doing actual environmental, social, governance activities. However, these variables also have flaws, in which the sample is difficult to obtain and the representativeness of the sample is not good enough. So instead, the number of news articles was used in this study, but it is good to mention that further study can be done to see the moderating effect in depth.

Conclusion

Consumer awareness of a company's positive ESG activities can help enhance the image and value of such a company. This raises the need for studies examining the role of consumer perception in the relationship between ESG competency and corporate value. This study examines the relationship between ESG competency and consumer satisfaction.

A few years before the emergence of ESG, these criteria this study mostly ignored in the corporate world, but they are now becoming more commonly accepted. Consumers place a greater value on firms with a higher ESG score than on those with a less score. To summarize, the following hypotheses this study tested in this research, and the accompanying papers and models provide empirical evidence to support each of them.

The first study explained Positive ESG–evaluation effects are there when there is customer satisfaction (NCSI assessment). The second study explained Year and ESG may be able to explain some of the NCSI variability if the other variables are kept constant. The third study explained the relationship between ESG and consumer satisfaction is moderated by the volume of news. And the last study explained ESG and consumer satisfaction may be moderated in various ways by following environmental, social, and governance news separately.

ESG is expected to have a greater impact on the value of Korean enterprises in this research. Businesses with higher ESG performance are more likely to satisfy consumers and their needs as this study have gained the respect of their stakeholders in environmentally sensitive sectors.

Before the rise of ESG, these standards in this study were somewhat inconsequential inside corporations, but companies implementing ESG may now be more widely recognized by their stakeholders and consumers. As a result, companies with a higher level of ESG are valued more favorably by consumers than those with a lower level of ESG.

The link between ESG and consumer satisfaction remains an open question in the literature. But an increasing number of studies show that ESG efforts have a beneficial influence on a company's market value.

Although the value-enhancing hypothesis asserts that ESG expenditures may increase a company's market value, the tests on this theory have so far been done with firm value, rather than customer satisfaction. The absence of a thorough study on the benefits of ESG on customer satisfaction was the driving force for this research. New investment firms(BlackRock. Etc) are continuously stating the importance of ESG and have even declared that they are investing only in the companies that have ESG activities in their presence. MZ generation is also gradually becoming aware of ESG, and Environmental, social and corporate governance parameters are now to assess a company's performance in the space of CSR. CSR indeed was studied thoroughly, practically, and academically. And the world is changing its concept to a new era called ESG.

ESG is in the spotlight, and investment companies such as Black Rock do not invest in companies that do not manage ESG. The Importance of ESG has emerged in many articles.

This study examined how important ESG is in society. Looking at past studies, there have been many studies related to CSR and linking them to corporate reputation or consumer satisfaction.

ESG is a different concept from CSR, but studies are lacking in principle. In particular, few studies quantified the relationship with consumer satisfaction. Therefore, I would like to present this study to fill the gap.

For companies in Korea, the Korea Governance Service will bring an egg evaluation certificate, and for customer satisfaction with a company's reputation or a company's brand, either kma (kcsi) or nisi will be used. While examining the relationship between the two, this study will also add the aforementioned implication moderator-mediator.

A positive ESG value impact in Korea has significance within policy and this firm regulation, and further implications. Governments have generally enforced the implementation of CSR and ESG. And Korea was following the trend, but there this study controversy that there are few incentives for private enterprises to engage in ESG practices other than those mandated by their governments. The positive value impact of this study, suggests that companies are suggested to participate in ESG efforts. As a result of this voluntary participation, firms may benefit greatly from private solutions to social concerns. The two suggestions can be concluded from this study.

First is mandatory disclosure of environmental, social, and governance (ESG) issues. The most significant mechanism for reporting on sustainability is government legislation. Accounting rules and business acts in Organization for Economic Co-operation and Development (OECD) nations have adopted new sustainability reporting standards that address reporting with a specific emphasis on environmental pollutants and corporate governance. Mandatory ESG disclosure requirements are increasingly being imposed by government authorities in several nations. Based on "Quoted firms GHG reporting" announced in 2013, UK enterprises that are quoted on the London Stock Exchange must declare their greenhouse gas (GHG) emission levels. Mandatory ESG disclosure is rising, which might be seen as an indication that ESG openness is becoming more important.

Voluntary disclosure of environmental, social, and governance (ESG) factors is not too common in Korea. Korea, must follow this standard or atmosphere and apply legislation about ESG. This may positively impact society as a whole, customers who want to purchase more rationally, and firms which want to do everything well.

It's not only mandatory ESG disclosure that's on the rise but so is marketing. In 2014, the EU Non-Financial Reporting Directive was released, which requires companies in the European Union (EU) to disclose relevant information, such as environmental issues, human rights, or the diversity of their board of directors. Germany, on the other hand, is an exception to the rule. Korea as well should adopt this idea. Not only the mandatory aspect of disclosing ESG activities but actively marketing what they did to make consumers recognize and make news reports to enhance brand value will have a positive impact.

As a result, the Korean government has an economic justification for intervening in ESG related corporate governance structure.

Restrictions on circular equity transactions or requirements for improved impartiality in board structures have been implemented by Korean governance to strengthen corporate governance. According to the very favorable valuation impact, these kinds of government actions aren't pointless and may even help shareholders retain their investment value.

This research examined the relationship between ESG and the customer satisfaction of companies. In this research, this study uses the ESG score supplied by KCGS. It is often regarded as the most complete and multidimensional metric in the study of the Korean financial sector.

While ESG and its impact are now prominent, this study further illustrates that firms may work on receiving a high evaluation of integrated ESG. With Studies 3 and 4, it is said that customer satisfaction can be improved by actively promoting issues related to environmental protection. Marketing, which may not seem closely related to ESG and a firm's actions now plays a key role. Because there is a definite moderating role, it seems that corporates have to pay attention to ESG activities, and the fact that customers are certainly aware of those activities. These activities may impact satisfaction, but with the help of marketing and a deeper understanding from the customers of the firm practicing ESG, the impact would increase. So this study also implies that marketing has to be done to illustrate firms' ESG activities, especially within the environmental sector.

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