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Price Impact of ESG Scores: Evidence from Korean Retail Firms*,**

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Abstract

Purpose – This paper examines the value relevance of socially responsible activities in the Korean retail firms. Recent studies predict positive relationships between socially responsible activities and the value of corporation.

Research design, data, and methodology – We use the environmental score, social score, governance score and the sum of these three scores to represent a fim's effectiveness of socially responsible activities. These scores are published by the Korean Corporate Governance Service. This paper adopts a share price valuation model to evaluate the effect of socially responsible activities on a firm's share price, which controls for the book value of assets and current earnings. The ordinary least square method is employed to examine the relationship. The sample of Korea retail firms is examined from 2011 to 2016. We also conduct sub-sample analysis based on the categorization of chaebol affiliates and non-chaebol affiliates.

Results – The entire sample analysis finds neither negatively nor positively significant relationship between socially responsible activities and the value of a corporation. In contrast, our examinations find a significantly positive valuation effect of social score within non-chaebol retail firms.

Conclusions – The results weakly support the positive valuation effect of socially responsible activities. The results are consistent with recent studies that highlight heterogeneous effects of socially responsible activities on corporate policies and valuation.

Keywords: Chaebol Affiliates, Corporate Social Responsibility, ESG score, Retail Industry, Valuation.

JEL Classifications: G30, G32.

1. Introduction

Corporate social responsibility (CSR) indicates a firm's operational practice toward public good beyond the requirement of law. The CSR strategies aims toward enhancing long-term profits with sustainable growth plans. By establishing a good relationship with investors and society, an active engagement in CSR practice may enhance the equity value of a corporation. In particular, retail firms take significantly care of CSR performances because the retail firms have to satisfy the needs of individual customers, highly influenced by the media image of the retail firms.

We investigate how a retail firm's socially responsible activity affects the valuation of firm. Socially responsible firms tend to meet with the ethical demands of shareholders and accordingly obtain a higher valuation from investors. In fact, Yoon, Lee, and Byun (2018) argue that firms with active engagement in socially responsible activities have a larger firm value by adopting the valuation model of Ohlson (1995) in the sample of Korean firms.

We test whether more socially responsible firms have a higher firm valuation within the sample of Korean retail firms. For this purpose, we choose the Korean retail firms publicly traded in the financial market, mainly in the Korean Exchange. We use combinations of environmental score, social score, and governance score to proxy the retail corporation's engagement in socially responsible activities. The valuation model of Ohlson (1995) is adopted to examine the relationship between CSR performances and a

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corporation's valuation. Various specifications of cross-sectional regression models are adopted to examine whether CSR performance affects a firm's shareholder value.

Recent analyses highlight that the effect of CSR performance on corporate valuation and policies is not equal across each individual corporation. In the Korean market, especially, large conglomerates managed by a family, chaebol affiliates, are shown to have different implications on the effectiveness of CSR practices on the valuation of firms. For instance, Yoon et al. (2018) show that the practice of corporate governance influences the value of corporation differently between chaebol affiliates and non-chaebol affiliates. We also follow this categorization within the sample of the Korean retail firms.

The main findings of our paper could be depicted as follows. We find neither negatively nor positively significant relationship between socially responsible activities and the value of a corporation when we aggregate all of the environmental, social, and governance to measure the individual firm level CSR practices (hereafter, ESG score). The categorization of chaebol affiliates and non-chaebol affiliates does not influence the results.

This result appears to be tightly related to the characteristics of the aggregate ESG score. As argued above, retail firms take care of the needs of individual customers directly. Such individual consumer may not value environmental score significantly because the retail industry is not a manufacturing one that may emit pollutant substantially. Furthermore, individual consumers may not have enough background for the governance activity of corporation. Accordingly, the mix of environmental, social, and governance score may not influence the value of corporation significantly probably due to the characteristics of customers in the retail firms.

To overcome such kind of problems, we next separately use the environmental score, social score and the governance score for the above three samples of corporations. Our estimation results show that the social performance of the retail firms has a positive valuation effect within non-chaebol affiliates. We find insignificant valuation effects of CSR performance when we use the environmental score or the governance score as proxy variables for the CSR performance of the retail corporations.

Economic conditions of non-chaebol affiliates may be tightly associated with the above findings. The individual retail firm belonging to chaebol affiliates may not solely determine the brand-image of their firms. The overall brand image of its conglomerates critically influences the reputation and brand value of the individual retail firm, which may induce a weak connection between CSR performance and firm value. However, the social performance of a retail corporation may enhance the value of corporation significantly within non-chaebol affiliates, consistent with the prediction of Yoon et al. (2018).

This research contributes to the extant studies in a number of ways. Our research provides evidence generally arguing against the value enhancing aspect of corporate social responsibility in the retail industry. For the case of ESG score, the environmental score, and the governance score, we find no significant relationship between CSR performance and firm value, unlike the evidence of Yoon and Lee (2018) in the sample of entire Korean market.

However, we find a significant valuation effect of social score within non-chaebol affiliates, which weakly supports the value enhancing theory of CSR performance. The result also highlights the significance of firm or industry characteristics in deciding the effect of CSR practices on the value of a corporation. The characteristics of retail industry that directly deal with individual consumers may provide an economic explanation behind insignificant effect of the environmental score or governance score on the valuation of firms. The different economic conditions in between chaebol affiliates and non-chaebol affiliates may influence the valuation effect of CSR performances as highlighted in Yoon et al. (2018) and Yoon and Lee (2019).

This paper is organized as follows. Section 2 provides the review on extant literature. Section 3 explains the sample selection and our empirical strategy. Section 4 provides the main findings from the empirical estimations. Section 5 provide conclusions.

2. Literature Review

2.1. Review on Related Literature

In the literature of CSR research, it is important to use uniformly comparable CSR information. The concept of ESG was firstly proposed within the United Nations Principles of Responsible Investment; the report argues that the investors take account of ESG scores as an significant factor in the decision of investment. The ESG score evaluates a corporation's environmental practice, social performance, and corporate governance activity. A corporation's environmental practice point to its effort to cut down resource consumption and emissions. A corporation's social practice points out respecting human rights, community relations, and product responsibility. A corporation's governance practice indicates the protection of shareholder rights and monitoring systems on CEOs.

Recent studies have promoted the value-enhancing theory of CSR performance. A firm's CSR performance positively influences the value of firm directly and indirectly, and thus increases the value of firm. The CSR performance increases operating performance (Brammer & Millington, 2005) and improves the reputation of a corporation (Porter & Kramer, 2002). A firm's social performance also raises employees' productivity (Valentine & Frischman, 2008). All of these studies indicate the value enhancing perspective of CSR performances.

In the context of the Korean market, Yoon et al. (2018) directly investigate the value enhancing theory of a firm's CSR performance. By using the valuation model of Ohlson (1995), they show that CSR performances have positive valuation effects in the Korean financial market and have less significant valuation effect in environmentally sensitive industries. They also found a strong valuation effect of governance score in chaebol affiliates.

Our work is also tightly associated with a branch of literature investigating the firm/industry level heterogeneity in the effectiveness of CSR practices on corporate policies and values. For instance, Lin, Chang, and Dang (2015) confirm that each individual firm has heterogenous CSR requirements, which significantly differ across the characteristics of corporations. Miralles-Quirós, Miralles-Quirós, and Valente Gonçalves (2018) document that the valuation effect of CSR practice is more significant for firms belonging to environmentally sensitive industries.

In the Korean financial market, such an emphasis on the firm-level heterogeneity is examined from the perspective of the large family owned conglomerate, chaebol. For example, Yoon et al. (2018) highlight that the valuation effect of CSR performance is different in accordance with the categorization of chaebol and non-chaebol groups. Yoon and Lee (2019) also highlight that CSR practice affects the information asymmetry differently across chaebol and non-chaebol affiliates in the Korean financial market.

2.2. Development of Hypothesis

As argued in Yoon et al. (2018) a corporation's superior quality of environmental and social practices may promote their shareholder value by positively influencing the market price of a share.

H1: Socially responsible retail firms have a higher stock value.

However, as highlighted in Yoon and Lee (2019), chaebol affiliates may face different economic environments. For instance, the brand image of an individual retail firm belonging to a chaebol may be significantly influenced by the entire brand image of the chaebol. Thus, the individual retail firm's CSR practice may not significantly influence the value of the retail firm because the overall CSR performance of the group may have more significant implications on the retail firm's value.

H2: CSR performance of a retail firm within chaebol affiliates may have weaker valuation effect.

This paper tests these two empirical predictions within the sample of Korean retail industry.

3. Sample Selection and Empirical Methods

3.1. Data and Empirical Models

To examine how CSR performances affects the market valuation of corporation, we use the valuation model of Ohlson (1995). To examine economic relationship between market valuation and accounting information, Ohlson (1995) sets a firm's market price of a share as a function of a set of accounting information. This set of accounting information includes future earnings, dividends, and book asset values. Miralles-Quirós et al. (2018) use a modified version of the valuation model of Ohlson (1995). They incorporate the book value per share (BPS) and the earnings per share (EPS) as the primary accounting variables in the valuation model. Basically, this estimation methodology is related to the study of Le, Kim, and Su (2018) and Le (2018). Based on the model, we include a variety of independent variables to proxy a corporation's CSR performance. The following empirical model summarizes our benchmark specification:

$$P_{i,t} = \beta_0 + \beta_1 CSR_{i,t} + \beta_2 BPS_{i,t} + \beta_3 EPS_{i,t} + \epsilon_{i,t}$$

The dependent variable represents the value of shareholder and we use the share price, P. The subscript i and t indicate an individual firm i at the end of af fiscal year t. CSR represents a variety of CSR performance measure. We use the total of environmental score, social score and corporate governance score as a benchmark measure of CSR performance. We also use these three individual components of ESG score separately to proxy a retail firm's significance of CSR performance. The variable, BPS, indicates the book value of asset per a share. EPS indicates a firm's net income per a share of stock. We use the statistical estimation method of ordinary least square to estimate the above empirical model. All of the aforementioned variables undergo winsorization process with 1% level as a cutoff value. This winsorization process mitigates the potential problems from outlier observations.

We adopt two different types of data source in the examination of our empirical model. The first data source is related to accounting information in the valuation model of Ohlson (1995). The accounting information for share price, BPS and EPS is obtained from DataGuide. All of this information is measured for each fiscal year. To proxy a firm's CSR performance, we use the environmental score, social score and governance score graded by the Korean Corporate Governance Service.

We categorize a specific retail firm as a member of chaebol affiliates by using the report of the Korean Financial Supervisory Service. Based on the categorization of the Korean Financial Supervisory Service, chaebol is a large business conglomerate that has total book assets over ₩2 trillion. The business group is also operated by controlling

shareholders or the family members of founders. By adopting the criterion of the Korean Financial Supervisory Service, we make the groups of chaebol affiliates and non-chaebol affiliates.

3.2. Descriptive Statistics

Table 1 provides summary statistics for the CSR and firm characteristic variables used in testing our hypotheses. The proxy variables for CSR performances and the variables used in the valuation model of Ohlson (1995) are considered in the table. In particular, the ESG score and each component of ESG score - the environmental score (E-score), the social score (S-score), and the governance score (G-score) are used as the proxy variables for CSR performance of the Korean retail firms. Split-adjusted stock price, the book value per share, and the net income per share variables are included as well. The mean and median values are firstly reported in the table. Table 1 also contains the statistics of 1st quartile, 3rd quartile and the standard deviation.

Table 1: Summary Statistics

Variables	Mean	Median	p25	p75	SD
ESG-Score	250.13	239.00	167.00	308.00	115.79
E-Score	68.83	54.00	15.50	107.50	61.09
S-Score	88.43	72.00	53.00	115.50	51.52
G-Score	92.25	94.00	73.00	107.00	28.83
PRICE	49.21	8.46	1.73	48.09	103.59
BPS	57.87	10.17	2.25	44.28	133.40
EPS	2.60	0.37	-0.04	2.65	11.02

Table 1 points to significant variations in the proxy variables for CSR performances. For instance, the average value of ESG score is 250.13 and its standard deviation is 115.79, which is quantitatively sizable. Each individual component of the ESG score also shows similar mean and variance patterns. Such a significant variation of the independent variables allows us to examine an economically meaningful relationship between CSR performances and the share price of retail firms.

Table 1 also indicates that the environmental score contributes less significantly to the overall ESG score. While the mean values of the social and governance scores are 88.43 and 92.25, respectively, the mean of the environmental score is 68.83, which is significantly low. This unequal contribution might be related to the characteristic of the retail industry. The retail industry is not categorized as an environmentally sensitive industry, which implies that the retail firms may have limited incentives to pay attention to environmental issues. Therefore, the retail firms may not receive high grade in the evaluation of the environmental score.

Furthermore, Table 1 points out that all variables of interests show right skewed distributions. The mean values of all variables in Table 1 are higher than their corresponding median values. This tendency is not influenced whether we consider the proxy variables for CSR performances or the control variables for the valuation model of Ohlson (1995).

Table 2: Pairwise Correlation Coefficients.

No.	Variable	1	2	3	4	5	6	7
1	ESG-Score	1.000						
2	E-Score	0.908	1.000					
3	S-Score	0.904	0.739	1.000				
4	G-Score	0.505	0.238	0.309	1.000			
5	PRICE	0.494	0.452	0.512	0.112	1.000		
6	BPS	0.517	0.499	0.526	0.079	0.912	1.000	
7	EPS	0.288	0.194	0.347	0.124	0.521	0.402	1.000

Table 2 provides the pairwise correlation coefficients among the variables in Table 1. The proxy variables for CSR performances and the variables used in our valuation model are examined.

Table 2 provides a couple of interesting results. First of all, the table shows a strong correlation between the ESG scores, and its environmental/social score component. For instance, the correlation coefficient between E-score and ESG-score is substantially high at 0.908. The coefficient between S-score and ESG –score is also quite high at 0.904. Yet, the correlation coefficient between E-score and S-score is 0.739, which is not as high as their corresponding coefficients with the ESG score.

Table 2 also indicates significantly positive correlations between share price and the proxy variables for CSR performances. Except the governance score, the share price of the retail firms has positive correlation with CSR performance variable around 0.5. For instance, the correlation coefficient between price and the ESG-score is 0.494, These significantly positive correlations support the value enhancing aspect of socially responsible activities consistent with the result of Yoon et al. (2018) in the Korean market.

It is also noteworthy that the price variable has significantly large correlation with the book value per share (BPS) and the earnings per share (EPS) as argued in Ohlson (1995). Such large correlation coefficients imply that the significantly positive correlation coefficients between CSR performances and share price may change when we examine cross-sectional regression models that account for the effects of BPS and EPS altogether.

4. Empirical Results

4.1. Entire Sample

Table 3 reports our estimation results of the valuation model of Ohlson (1995) for the sample of firms in the Korean retail industry. We consider the total ESG-score and each individual component of the ESG score to capture a firm's engagements in CSR practices. In particular, we examine the environmental score (E-score), the social score (S-score), the governance score (G-score), and the ESG score separately for each column. The table also incorporates BPS and EPS as the set of control variables. The table contains the coefficients from our estimations and their corresponding t-values (in parenthesis). The number of sample observations and the value of adjusted R^2 are reported as well. Our empirical hypothesis of H1 implies significantly positive coefficients on the proxy variables for CSR performances.

Table 3 reports neither positive nor negative relationship between CSR performances and the equity value of retail firms. All of the coefficients on the proxy variable for CSR performances are not statistically significant. The coefficient on the ESG-score is 0.009, for example, which is positive but not statistically significant. All other coefficients on the proxy variables for CSR performances are not statistically significant, either.

Table 3: CSR and Share Price

	Price	Price	Price	Price
ESG-Score	0.009			
	(0.42)			
E-Score		-0.005		
		(-0.12)		
S-Score			0.019	
			(0.39)	
G-Score				0.084
				(1.10)
BPS	0.646***	0.651***	0.647***	0.650***
	(32.40)	(32.42)	(32.54)	(36.66)
EPS	1.732***	1.741***	1.726***	1.717***
	(8.02)	(8.10)	(7.92)	(7.97)
Intercept	4.990	7.331**	5.583	-0.543
	(0.92)	(2.23)	(1.24)	(-0.07)
N	324	324	324	324
adj. R-sq	0.859	0.859	0.859	0.859

note: The signs of *, **, and *** point to statistical significance at 10%, 5% and 1% levels, respectively. ( ) represents t-statistics.

This finding is inconsistent with a highly positive correlation between CSR performances and the equity price of retail firms, documented in Table 2. For example, Table 2 point out that the correlation coefficient between the ESG score and the share price of retail firm is 0.494. This result implies that the accounting information reflected in BPS or EPS provide more significant information related to the determination of current level of share prices. In fact, all of the coefficients on BPS and EPS turn out statistically significant.

This finding is not well aligned with the first hypothesis of this paper. To be specific, the finding contradicts the empirical result of Yoon et al. (2018). They show significantly positive valuation effects of CSR performances in the Korean financial market. The environmental and social scores are shown to have positive valuation effects even if the variable individually proxies the performance of CSR in the market.

Table 4 estimates the same empirical models of Table 3 but it restricts the sample of firm-year observations to chaebol affiliates. In line with Table 3, the E-score, the S-score, the G-score and the ESG score are used as a proxy variable for a retail firm's CSR performance. The dependent variable is the share price and the control variables for the regression are BPS and EPS. Table 4 documents the coefficients from our empirical examinations and their t-values (in parenthesis). The number of sample firm-year observations in chaebol affiliates and the value of adjusted R^2 are reported as well.

Table 4: CSR and Share Price in Chaebol Affiliates

	Price	Price	Price	Price
ESG-Score	-0.025			
	(-0.55)			
E-Score		-0.058		
		(-0.71)		
S-Score			-0.095	
			(-0.97)	
G-Score				0.207
				(1.16)
BPS	0.643***	0.646***	0.646***	0.638***
	(21.72)	(21.37)	(22.43)	(23.57)
EPS	1.806***	1.776***	1.843***	1.753***
	(5.60)	(5.49)	(5.68)	(5.43)
Intercept	19.346	16.917*	22.468*	-8.803
	(1.28)	(1.81)	(1.79)	(-0.47)
N	134	134	134	134
adj. R-sq	0.850	0.850	0.851	0.851

note: The signs of *, **, and *** point to statistical significance at 10%, 5% and 1% levels, respectively. ( ) represents t-statistics.

Table 4 presents statistically insignificant relationship between the set of CSR performance measures and the

share price of retail firms belonging to chaebol affiliates. The coefficient on the ESG score, for instance, is –0.025 and its value turns out statistically insignificant even at the significance level of 10%l. The negative coefficients are observed for the case of E-score and S-score while these coefficients are still statistically insignificant. In case of the G-score, the coefficient is positive but can not reject the null hypothesis of zero effect of CSR performance on the value of a corporation.

The results imply that CSR performances do not have positive valuation effects even if we consider the sample of chaebol affiliates, To put it another way, our first empirical hypothesis is not supported within chaebol affiliates, These results are consistent to the results based on the entire sample of retail firms documented in Table 3, which suggests the robustness of our results in Table 3. The results are inconsistent to the positive valuation effect reported in Yoon et al. (2018) in the Korean financial market as well.

Table 5: CSR and Share Price in Non-Chaebol Affiliates

	Price	Price	Price	Price
ESG-Score	0.017			
	(0.76)			
E-Score		0.008		
		(0.21)		
S-Score			0.144**	
			(2.26)	
G-Score				-0.017
				(-0.32)
BPS	0.750***	0.759***	0.693***	0.761***
	(6.85)	(6.97)	(6.21)	(6.99)
EPS	0.850**	0.865**	0.803**	0.871**
	(2.27)	(2.30)	(2.16)	(2.32)
Intercept	0.636	3.427	-4.331	5.264
	(0.14)	(1.40)	(-1.08)	(1.04)
N	190	190	190	190
adj. R-sq	0.224	0.221	0.242	0.222

note: The signs of *, **, and *** point to statistical significance at 10%, 5% and 1% levels, respectively. ( ) represents t-statistics.

Table 5 uses the sample of non-chaebol affiliates in the examination while the table estimates the same empirical models described in Tables 3 and 4. The E-score, the S-score, the G-score and the ESG score are still analyzed as our main variables of interests. In line with the valuation model of Ohlson (1995), we employ the share price of each retail firm as the dependent variable, and we control for the effect of book value per share and earnings per share. Table 5 reports the coefficients and their t-statistics (in parenthesis). The number of sample firm-year observations within non-chaebol affiliates and the value of adjusted R2 are included as well.

Table 5 provides significantly different results compared to those of the previous tables. The social score turns out to have significantly positive valuation effects on the share price of retail firms within non-chaebol affiliates. The estimated coefficient on the social score is 0.144, which is also quite larger than the other estimated coefficients in Table 5. Table 5 also shows that the coefficients on the E-Score, the G-score and the ESG score are still statistically insignificant.

The results of Tables 4 and 5 support our second hypothesis predicting a weaker valuation effect of CSR performances within chaebol affiliates. While the social performances of retail firms within non-chaebol affiliates have significantly positive valuation effects on the share price, all of the CSR performance variables do not impact the value of corporation significantly within the sample of chaebol affiliates.

The results might be closely associated with recent studies focusing on the role of chaebol categorization in determining the relationship between CSR performances and corporate policies. For instance, Yoon and Lee (2019) highlight that chaebol affiliates may have different economic environments compared to non-chaebol affiliates. As argued above, the brand image of an individual retail firm belonging to a chaebol may be significantly affected by the overall brand image of the chaebol group. Therefore, the individual retail firm's CSR performance may not significantly enhance the value of the retail firm because the CSR performance of the chaebol group may have insignificant implications on the value of an individual retail firm.

The significant impact of social score in enhancing the value of firms appears to be closely connected with the characteristics of retail corporations. Most of all, retail firms take care of the demands of individual customers directly and accordingly are not categorized into environmentally sensitive ones unlike other manufacturing industries. Accordingly, the valuation effect of environmental performance may not be strong as reported the previous tables. Furthermore, such individual consumers may not have enough backgrounds for understanding the governance activity of corporation, which limits the potential influence of good governance practice of retail firms on share prices.

4.2. Robustness

Now, we try to conduct additional regression analyses to confirm the robustness of our empirical findings. The following analyses include two or more proxy variables for CSR practices and figure out the robustness of our main empirical examination reported in the previous section.

Table 6 reports the estimation results of the valuation model of Ohlson (1995) for the entire sample of Korean retail firms. The first column includes E-score and S-score and the second column incorporates S-score and G-score,

altogether. The third column considers the E-score and the G-score and the final column includes all of each individual score component in a cross-sectional model. The dependent variable is a firm's share price and the control variables are still BPS and EPS. The estimated coefficients and corresponding t-statistics are reported in the table.

Table 6: CSR and Share Price - Robustness

	Price	Price	Price	Price
E-Score	-0.027		-0.016	-0.029
	(-0.49)		(-0.38)	(-0.54)
S-Score	0.041	0.003		0.026
	(0.62)	(0.05)		(0.39)
G-Score		0.082	0.090	0.084
		(1.03)	(1.16)	(1.06)
BPS	0.649***	0.649***	0.653***	0.652***
	(31.75)	(32.46)	(32.43)	(31.66)
EPS	1.709***	1.715***	1.714***	1.696***
	(7.73)	(7.86)	(7.94)	(7.66)
Intercept	5.425	-0.642	-0.276	-0.962
	(1.20)	(-0.09)	(-0.04)	(-0.13)
N	324	324	324	324
adj. R-sq	0.858	0.859	0.859	0.858

note: The signs of *, **, and *** point to statistical significance at 10%, 5% and 1% levels, respectively. ( ) represents t-statistics.

Table 6 still reports neither a positive nor negative relationship between CSR performances and the shareholder value of retail firms even though we include various combinations of CSR performance measures in the examination. To be specific, all of the coefficients on the proxy variable for CSR performances turn out statistically insignificant ones. For instance, the coefficients on the E-score, the S-score, and the G-score are –0.029, 0.026 and 0.084, respectively, all of which are not statistically significant.

The results of Table 6 confirm the robustness of our results in Table 3. Although we consider the roles of various aspects of CSR performances simultaneously, the table does not show any significant valuation effects of these CSR practices. Of course, this result argues against our first empirical prediction, H1 and is not consistent to the Korean market evidence of Yoon et al. (2018).

Table 7 reports the estimation results of the valuation model of Ohlson (1995) for the sample of retail firms belonging to the category of chaebol affiliates, In line with Table 6, the first column employs E-score and S-score and the second column includes S-score and G-score together to capture various aspects of CSR performances at once. The E-score and the G-score is included in the third column and all of each individual score component are examined in the last column. We use the same control variables of BPS and EPS as well. The coefficients and their t-statistics are also included in the table.

Table 7: CSR and Share Price in Chaebol Affiliates - Robustness

	Price	Price	Price	Price
E-Score	-0.008		-0.058	0.018
	(-0.07)		(-0.71)	(0.16)
S-Score	-0.089	-0.119		-0.134
	(-0.65)	(-1.19)		(-0.96)
G-Score		0.244	0.207	0.249
		(1.35)	(1.16)	(1.36)
BPS	0.647***	0.651***	0.648***	0.649***
	(21.34)	(22.50)	(21.43)	(21.45)
EPS	1.837***	1.800***	1.731***	1.813***
	(5.45)	(5.54)	(5.32)	(5.39)
Intercept	22.437*	0.876	-3.596	0.517
	(1.78)	(0.04)	(-0.18)	(0.03)
N	134	134	134	134
adj. R-sq	0.850	0.852	0.851	0.850

note: The signs of *, **, and *** point to statistical significance at 10%, 5% and 1% levels, respectively. ( ) represents t-statistics.

The results of Table 7 correspond to those of Table 4, which point to insignificant valuation effects of CSR performances within the sample of chaebol affiliates, Even though the table considers the various aspects of CSR performances at once, the table does not present statistically significant relationships between CSR performance measures and the share price of retail corporation belonging to the category of chaebol affiliates. The results of Table 7 still argue against our first empirical prediction indicating a positive valuation effect of CSR performance.

Table 8: CSR and Share Price in Non-Chaebol Affiliates – Robustness

	Price	Price	Price	Price
E-Score	-0.029		0.014	-0.018
	(-0.70)		(0.34)	(-0.41)
S-Score	0.162**	0.178**		0.186**
	(2.36)	(2.58)		(2.59)
G-Score		-0.074	-0.024	-0.068
		(-1.28)	(-0.42)	(-1.14)
BPS	0.687***	0.680***	0.760***	0.678***
	(6.14)	(6.09)	(6.96)	(6.05)
EPS	0.804**	0.805**	0.868**	0.805**
	(2.16)	(2.17)	(2.31)	(2.17)
Intercept	-4.170	0.198	5.279	-0.059
	(-1.04)	(0.04)	(1.04)	(-0.01)
N	190	190	190	190
adj. R-sq	0.240	0.245	0.218	0.241

note: The signs of ***, **, and * point to statistical significance at 1%, 5% and 10% levels, respectively. ( ) represents t-statistics.

Table 8 reports the estimation results of our empirical model for the sample of retail firms belonging to the category of non-chaebol affiliates, As in Tables 6 and 7, the first three columns pick up each pair of E-score, S-score and G-score. The last column includes all of the E-score, S-score and G-score as the proxy variables for CSR performances. The BPS and EPS variables are considered as control variables as well. The coefficients from the estimation and their t-values are reported in the table.

Table 8 confirms the robustness of our result in Table 5. The social score turns out to influence the value of corporation in a significantly positive way for all three empirical models including the social score as an independent variable. For instance, the estimated coefficient on the social score is at 0.186, when we take account of all of the E-score, S-score and G-score simultaneously. The coefficients on S-score in the first and second columns provide similar results as well.

Tables 7 and 8 confirm again our second empirical hypothesis indicating a weaker valuation effect of CSR performances within chaebol affiliates. As documented in Tables 4 and 5, the social score has positive valuation effects only within the sample of non-chaebol affiliates in the Korean retail industry even after considering various aspects of CSR performances simultaneously in the examination. This finding is also in line with the results of Yoon et al. (2018) and Yoon and Lee (2019), both of which emphasize different economic conditions across chaebol affiliates and non-chaebol affiliates.

5. Conclusions

This study examines whether a firm's CSR performances have positive valuation effects in the Korean retail industry. Specifically, recent studies argued that socially responsible firms are more willing to satisfy the ethical demands of shareholders and accordingly obtain a higher valuation from the market. In the overall Korean financial market, Yoon et al. (2018) actually confirm positive valuation effects of CSR performances by adopting various specifications of empirical models.

To test this hypothesis, we choose the Korean retail firms publicly traded in the financial market from 2011 and 2016. We use various combinations of the environmental score, social score, and governance scores offered by the Korean Corporate Governance Service. The valuation model of Ohlson (1995) is adopted to investigate the relationship between CSR performances and a retail firm's share price. Because a number of recent studies highlights the heterogenous effects of CSR performance across firms with different characteristics, we also conduct a subsample analysis in accordance with the categorization of chaebol affiliates and non-chaebol affiliates, consistent to recent studies such as Yoon et al. (2018).

Our empirical analysis finds neither negatively nor positively significant effects of CSR performances on the equity value of retail firm when we examine the entire sample of retail firms. This result is robust whether we consider various combinations of CSR performance measures in the examination. In contrast, our subsample analysis confirms significantly positive valuation effects of the social performance within non-chaebol affiliates, while no significant valuation effect is confirmed within the sample of chaebol affiliates.

This finding might be tightly related with the characteristics of retail firms. Retail industry is not considered as an environmentally sensitive one, which may reduce the positive valuation of environmental performance within the retail firms. Moreover, the retail firms may have to deal with the needs of each individual consumer directly who pays limited attention to the exact governance structure of a corporation. Accordingly, the environmental and governance performances may not have significant valuation effects within the sample of retail firms.

Economic conditions of chaebol affiliates may be also tightly associated with the above findings. The individual retail firm belonging to chaebol affiliates may not solely improve its brand-image by more actively engaging in socially responsible activities. The overall brand image and socially responsible activities of its conglomerates may affect the value of firm more significantly. Thus an individual firm's CSR performance measure only partly capture the valuation effects of CSR within chaebol affiliates, which potentially drives statistically insignificant relationship between an individual firm's CSR performance

This paper has contributions to the extant literature in a couple of ways. Most of all, we find empirical evidence arguing against the positive valuation effect of CSR performances in the sample of entire retail firms. This finding is not well aligned with recent studies confirming the value-enhancing perspective of CSR performances such as Miralles-Quirós et al. (2018) or Yoon et al. (2018). However, our subsample analysis based on the category of non-chaebol provide weakly supporting evidence for the hypothesis. These results emphasize that the characteristics of retail industry and chaebol affiliates significantly affect the effect of CSR performance on corporate policies and valuation in line with a number of recent studies such as Yoon and Lee (2019).

Our work, however, does not fully address the endogeneity biases that arise from cross-sectional regression models. The importance of industry characteristics in shaping the valuation effect of CSR seems an important issue but we restrict the sample of firms to the retail firms. The above research topics are left for future studies.

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