경영학 석사 학위논문

The effects of CEO Regulatory Focus on Organizational Attention to ESG

CEO의 조절 초점이 ESG에 대한 조직의 주의에 미치는 영향

2023 년 2월

서울대학교 대학원

경영학과 전략/국제경영 전공

김 동 하

The effects of CEO Regulatory Focus on Organizational Attention to ESG

지도 교수 조 승 아

이 논문을 경영학 석사 학위논문으로 제출함
2022 년 10 월

서울대학교 대학원
경영학과 전략/국제경영 전공
김 동 하

김동하의 경영학 석사 학위논문을 인준함
2022 년 12 월

위 원 장 ＿＿＿ 박 선 현 ＿＿＿ (인)

부위원장 ＿＿＿ 박 남 규 ＿＿＿ (인)

위   원 ＿＿＿ 조 승 아 ＿＿＿ (인)

Abstract

Regulatory focus is a fine proxy to measure motivation of CEO decision−making. Content analysis is an effective tool for measuring regulatory focus of CEO. While formal theoretical works concerning ESG have mainly focused on how regulatory focus simply affects firm performance, this paper focuses on the relationship between CEO regulatory focus and organizational attention to ESG. Industry−level effects have also been studied in this paper. Both promotion focus and prevention focus level were found to affect organizational attention to ESG. Industry−level effects were partially supported.

Keyword : regulatory focus, organizational attention, ESG, content analysis
Student Number : 2020−21114

Table of Contents

1. Introduction

Unlike the past, it is now taken for granted that a firm has to pay attention to ESG performance as well as financial performance (Margolis & Walsh, 2003; Porter & Kramer, 2011; Babiak & Trendafilova, 2011). Since implementing new strategies always requires cost, firms should prudently weigh the benefits and costs of adopting new strategies. This is also an issue for ESG strategies. However, both benefits and cost related to ESG are usually obscure which suggests that it is more difficult to compare advantages and disadvantages of ESG activities (Huang, 2021).

There have been numerous researches whether this ESG approach has a positive effect on firm's financial performance (Clark & Viehs, 2014; Margolis, Elfenbein, & Walsh, 2009). While the results have been far from unanimous, there are not many studies that explain why firms try to adopt ESG strategies (Anantharaman, Huang & Zhao, 2021). Furthermore, study lacks which investigates CEO traits in why firms announce ESG related strategies.

Recent studies found that CEO is one of the most important factors in decision making process of the firm (Kim et al., 2016). This result draw insight from the upper echelons theory (Hambrick & Mason, 1984; Hambrick, 2007). According to upper echelons theory, decision of CEO, which becomes strategy of firm, is influenced by CEOs personal traits; such as personal characteristics, cognitive styles, and regulatory focus. Especially, regulatory focus of CEO largely affects CEO value and goal, which affects CEO decision making (Brockner et al., 2004; Kark & Van Dijk, 2007). Given that CEO is one of the most important factor in decision making of the firm and CEO's decisions are affected by their regulatory focus, it seems likely that organizational attention to ESG heavily relies on regulatory focus of CEO.

We investigate how regulatory focus of CEO affects organizational attention to ESG in different industries. It is expected that CEOs in consumer proximate industries and socially-sensitive industries regard ESG as a risk while those in opposite industries (consumer non-proximate, socially-insensitive industries) view ESG as an opportunity.

Therefore, firms to which prevention-focused CEOs belong are likely to pay more attention to ESG in consumer proximate industries and socially-sensitive industries, while firms to which promotion-focused CEOs belong are likely to pay more attention to ESG in the opposite industries (consumer non-proximate, socially-insensitive industries).

Main contribution of this paper to the literature is that we discover how different CEOs in different industries differently interpret ESG. Not only CEOs of different characteristics within the same industry group make different decisions, but also CEOs of the same character within the different industry group make different decisions. Second contribution to the field is that we discover relationship between CEO traits and ESG strategy. Lastly, while most literature only focused on ESG performance, we suggest new concept, organizational attention to ESG.

The remainder of this paper is organized as follows. Section 2 reviews the literature and develops hypotheses. Section 3 describes research methods. Section 4 presents the result of the study. Section 5 discuss the implication of this study thoroughly.

2. Theory and Hypotheses

2.1 Upper Echelons Theory

Over the past two decades, strategic management has become increasingly concerned with how CEO and top management teams formulate their strategies and affect firm performance. Upper echelons theory basically insists that top management teams' decisions have impact on firms. This idea is rooted in Child's (1972) paper, and the concept has been further refined and developed by Hambrick, and now it is one of the main fields in strategic management (Hambrick and Mason; 1984, Cannella & Monroe, 1997; Finkelstein & Hambrick, 1996). This concept has since become one of the most influential theories in management literature.

The heart of this theory is that strategic decisions represent "weak situations" in complex and ambiguous conditions. In these situations, decision makers will reflect their aspects (their characteristics) in their decisions, and eventually, choices will vary widely depending on the decision maker.

There exist numerous aspects that affect decision makers' decisions, yet complex psychological factors were almost impossible at early stages. Therefore, scholars focused on CEO demographics and background characteristics to use as a proxy for CEO psychological characteristics. CEO demographics were measured by variables such as age, tenure, and education background. However, these information did not reflect the CEO's decision making process wholly since they contain considerable noise comparing to pure psychological figures.

Finkelstein (1992) argued that upper echelons theory should focus on how managerial power affects the whole organization. Other studies also contend that simple CEO demographics and background factors are not sufficient enough to assess relevant upper management characteristics which directly affect the decision making system (Hambrick & Mason, 1984; Hitt & Tyler, 1991). This is because while pure psychological measures are directly interconnected with major CEO decision making process, CEO demographics and backgrounds are indirect indicator of a leader's risk propensity or cognitive style at best (Finkelstein & Hambrick, 1996). For this reason, either personal traits or leadership characteristics are used more frequently as main variables in current literature.

2.2 Attention Based View

The central argument of attention based view is that how decision makers pay and distribute attention shapes the way of firm behavior. The root of this idea originated from Herbert Simon (1947), who argued how firms make decisions depends on the limited attentional capabilities of decision-makers. Through various developments and improvements, Scott (1992) systematically analyzed this concept into three successive premises:

1. Decision-makers' attention to firm issues and answers determines their action (Focus of Attention)
2. Specific condition or context where decision-makers are situated determines their attention to firm issues and answers (Situated

Attention).

3. How the firm's resources and rules control and regulate the allocation and distribution of issues, answers and decision-makers into particular communications and activities determines specific conditions or contexts where decision-makers are situated (Structural Distribution of Attention).

The focus of attention (first principle) incorporates that decision makers can only focus their attention on a limited set of issues and problems, and that the issues they attend to determines what they do. The situated attention (second principle) includes that the attention of decision-makers is affected by firms' situation where decision-makers belongs i.e. firm's procedural and communication channels. Lastly, structural distribution of attention (third principle) implies that the distributed focus of attention among decision-makers is generated by the resources, surrounding environments, and social positions of the firm (Ocasio, 1997)

These three mechanisms are based on the principles of cognitive process like comprehensiveness, cognitive diversity, and mental models of decision-makers (Miller et al., 1998; Cho & Hambrick, 2006). By these mechanisms, with the influence of firms' allocation of resources also present, decision-makers' attention affects firms' behavior.

2.3 ESG Sensitive Industry

In this paper, we refer to sensitive industries as both those subject to social taboos and moral debates and those of high ESG risk. Former case includes tobacco, gambling, alcohol, and adult entertainment (Cai et al., 2012). These industries are vulnerable to negative stakeholder reaction, so CEO has to be conscious and pay attention to what stakeholders want and what they hate. In this perspective, ESG activities are inevitable, and previous research has empirically shown that ESG engagement bring financial benefits (Cai et al., 2012).

Latter case, high ESG risk industries, includes energy (oil and gas), chemicals, paper and pulp, mining, and steel making sectors, which can have major negative socio-environmental impact (Richardson &

Welker, 2001; Lee & Faff, 2009). ESG is considered as a risk for these firms. Previous research has shown that firms in these industries achieve above average ESG performance (Garcia, Mendes-Da-Silva, & Orsato, 2017).

2.4 Consumer Proximity

The concept 'Consumer Proximity' was first introduced by González-Benito and González-Benito, who described the term as "position in the value chain" or "the proximity to the final consumer within the supply chain" (González-Benito & González-Benito, 2006). Not only regarding physical distance, but this term also includes social and psychological distance to consumers.

When a firm's main customer base is end consumer, the firm and the industry is considered as proximate to consumer. On the contrary, when a firm's sales heavily rely on the other firms and the firm's strategy does not involve end consumer that much, the firm and the industry is considered as not proximate to consumer.

When a firm is proximate to consumer, every firm's activities are more visible to stakeholders and therefore more stakeholder reactions are expected. Therefore, decision-maker of the firm is bound to be much more interested in the consumer's response. It is known that higher social visibility consequently leads to more CSR disclosure activities (Branco & Rodrigues, 2008).

2.5 Regulatory Focus

Regulatory focus theory is a goal-attainment theory that is first developed by Higgins, which basically contends that fundamental desire of human to seek pleasure and avoid pain is basic motivational principle (Crowe & Higgins, 1997; Higgins, 1998). These two self-regulation systems are called 'Promotion focus' and 'Prevention focus'.

Promotion-focused individuals concentrate on higher level gains, which is described as hopes, accomplishments, goals and aspirations

(Higgins, Shah & Friedman, 1997). They “keep their head in the clouds”, and dreams about ideal self (Kark & Van Dijk, 2019). They react sensitively to rewards, and willing to take risks. Therefore, promotion-focused individuals make decisions that maximize gain and minimize non-gain (Crowe & Higgins, 1997). This opportunity-seeking behavior of promotion-focused CEOs makes them continuously expand or deviate from their initial business opportunity (Hmieleski & Baron, 2008), because they are sensitive to potential non-gain generated by not shifting their current state (Pennington and Rose, 2003).

Prevention-focused individuals on the other hand, concentrate on following the guidelines and the rules, which is described as safety, duties and responsibilities (Crowe & Higgins, 1997). They react sensitively to punishments, and not willing to take risks. Therefore, prevention-focused individuals make decisions that minimize loss and maximize non-loss (Higgins, 1997). This risk-averse behavior of prevention-focused CEOs makes them focus more on potential risk comparing to competitors.

Although these two concepts might seem as complementary factors, promotion focus and prevention focus are known to be orthogonal (Gorman et al., 2012). They are two different neurocognitive traits so each individual can have a high level of both, or low level of both. (Lanaj et al., 2012, Johnson, Chang, Meyer, Lanaj & Way, 2013). Therefore, it is meaningful to measure both promotion focus level and prevention focus level and analyze separately when analyzing the effect of regulatory focus.

Numerous previous literatures have shown that regulatory focus of individuals affect their strategies and tactics they pursue (Burmeister-Lamp et al., 2012; Kammerlander et al., 2015). Furthermore, drawing on upper echelons theory, regulatory focus of CEO ultimately impacts firms' various strategies, which is empirically tested by a number of studies (Das & Kumar, 2011; Gamache et al., 2015; Kammerlander et al., 2015; Wallace, Little, Hill & Ridge, 2010).

From each promotion focus and prevention focus perspective, we establish hypothesis 1 and 2 as follows;

H1. *CEO promotion focus is positively associated with organizational attention to ESG.*

H2. *CEO prevention focus is positively associated with organizational attention to ESG.*

In developing further hypotheses, we contemplate how CEO in diverse industry perceive ESG differently and conject how different perception affect their attention to ESG, which will leads to distinct strategy.

In socially-sensitive industry, ESG is regarded as a potential threat, because not only stakeholders may consider firms not doing ESG negatively, but there is possibility government may force firms to suffer a great loss if they do not pay attention to ESG issues. Prevention-focused CEOs are motivated to minimize this risk, so they try to pay attention to ESG issues more than promotion-focused CEOs. For prevention-focused CEOs, advantage from reducing risk by focusing on ESG related issues and focusing on ESG related strategies outweigh the cost for cognitive resources concerning ESG.

In proximate industry, firm's activities are visible to stakeholders and therefore more stakeholder reactions are expected. If the firm does not implement ESG activities, negative stakeholder reactions are expected, which is a potential threat. Prevention-focused CEOs who has tendency to minimize risk are willing to pay attention to ESG related issues to reduce potential threats.

On the other hand, for CEOs in non-proximate and socially-insensitive industries, ESG is not that much a risk but rather on opportunity to get competitive advantage. Little cost for ESG strategies have nothing on potential merits on firm reputation. So we have hypotheses 3 and 4;

H3. *Industry has moderating effect on the impact of CEO promotion focus on organizational attention to ESG.*

H3a. *Industry-level consumer proximity will negatively moderate the impact of CEO promotion focus on organizational attention to ESG*

H3b. *Industry-level socially-sensitiveness will negatively moderate the impact of CEO promotion focus on organizational attention to ESG*

H4. *Industry has moderating effect on the impact of CEO prevention focus on organizational attention to ESG.*

H4a. *Industry-level consumer proximity will positively moderate the impact of CEO prevention focus on organizational attention to ESG*

H4b. *Industry-level socially-sensitiveness will positively moderate the impact of CEO prevention focus on organizational attention to ESG.*

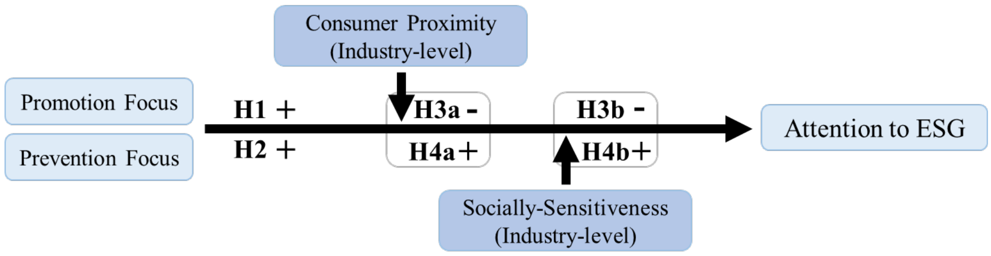

Figure 1 Hypotheses 1, 2, 3, 4

3. Methods

3.1 Sample and data

The sample for the study is collected within S&P 1500 firms in diverse industries. Data is collected from Thomson Reuters Eikon

Refinitiv, and EDGAR/SEC. Industries were divided into 3 sectors; Consumer proximate & socially-insensitive sector, consumer non-proximate & socially-sensitive sector, and consumer non-proximate & socially-insensitive sector.

3.2 Dependent variables

3.2.1. Regulatory focus

Since regulatory focus is an element outside of individual consciousness, it is appropriate to select indirect measurements (Johnson & Steinman, 2009; Johnson, Lanaj, Tan & Chang, 2012). Additionally, recent study shows that letters to shareholders are fine proxy for CEO style and choice of words used (Nadkarni & Chen, 2014). Previous literatures regarding regulatory focus also used letters to shareholders for measurement (Gamache et al., 2015; Gamache et al., 2020)

Furthermore, Kark & Van Dijk (2007) and Johnson et al. (2017) showed that regulatory focus of followers tends to resemble that of leaders, which suggest that even if other executives were involved in writing the letters, regulatory focus of CEO should be reflected in the letters. Lastly, letters to shareholders are consistently written annually in same form, so they are suitable for longitudinal research (Eggers & Kaplan, 2009).

We draw insight from previous studies including Kaplan (2008), and Gamache et al. (2015) in measuring CEO regulatory focus using letters to shareholders included in annual reports. This approach has its own limitation but they are meaningful proxy to measure regulatory focus.

Analogous linguistic approach is used to measure regulatory focus of CEO. We use Linguistic Inquiry and Word Count (LIWC) software to analyze the context. We count number of promotion-oriented (i.e. accomplish, gain, grow, toward, wish, etc.) and prevention-oriented words (i.e. accuracy, avoid, duty, loss, protect, risk, safety, etc.) to measure regulatory focus. We use earning conference call script data from Thomson Reuters Eikon Refinitiv, from 2019-2021 as a sample. Word dictionary to measure promotion focus and prevention focus level used in this paper was first elaborately developed by Gamache et al. (2015).

3.2.2. Consumer proximity

Consumer proximity is coded '0' if the firm is not included in proximate industry, and '1' if the firm is included in proximate industry. Apparel manufacturing, Beverages, Bank industries were included in proximate industries. Oil & Gas, Internet content & Information, Scientific & Technical instruments industries were included in non-proximate industries. This setting is based on the European classification system Nomenclature of Economic Activities (NACE Rev. 2). Industry selection concerning consumer proximity (apparel manufacturing) was also used in Cho, Cho & Lee (2019).

3.2.3. Industry-level socially-sensitiveness

We follow the division of previous literature, which was based on North American Industry Classification System (NAICS) (Garcia, Mendes-Da-Silva & Orsato, 2017). Oil & Gas E&P, Oil & Gas drilling industries were included in socially-sensitive industries. Apparel manufacturing, Beverages, Bank, Internet content & Information, Scientific & Technical instruments industries were included in socially-insensitive industries. Using these previous settings, industries are divided into 3 sectors in this paper; consumer proximate & socially-insensitive sector, consumer non-proximate & socially-sensitive sector, and consumer non-proximate & socially-insensitive sector.

3.3 Independent variables

3.3.1. Attention to ESG

We collect 2 years of item 1 data of 10-K files from the SEC/EDGAR database from 2020 to 2021. We measure the increase of ESG words in 10-K item 1 from 2021 to 2018. LIWC was used to measure ESG words frequencies. Word dictionary to measure ESG related words used in this paper was first exquisitely developed by Baier et al. (2020).

3.4 Control variables

3.4.1. Firm size

Previous research has shown that larger and successful firms may able to allocate additional budget for ESG investment, which leads to faster ESG engagement announcement (Chams, García-Blandón & Hassan, 2021). Therefore, firm size is added as acontrol variable. In this paper, market cap is used as a proxy for firm size

3.4.2 CEO Gender

CEO gender is known to affect organizational behavior in prior researches. So CEO gender is added as a control variable. CEO gender data is manually collected using google and firms' website info.

3.5 Statistical analysis

Statistical analyses are performed by using STATA 11.0. Multiple linear regression model is used for analysis.

4. Results

Total 4-year data of 170 firms were collected. It was total 680 firm-year data. Table 1 shows the means and standard deviations of variables. 97% of firm CEO was men. Average promotion focus of CEO was 0.23%, while average prevention focus of CEO was 0.15%.

Consistent with prior studies, CEO promotion focus and CEO prevention focus was found to be orthogonal (Table 1).

Table 1 Means, standard deviations and correlations

	Variable	Mean	S.D	Min	Max	1	2	3	4	5	6	7
1	Firm Size	1.67	0.94	0	3	1						
2	CEO gender (dummy)	0.97	0.19	0	1	0.03	1					
3	Consumer Proximity (dummy)	5.54	0.50	0	1	0.06	0.08	1				
4	Socially Sensitiveness (dummy)	0.26	0.44	0	1	0.11	-0.03	-0.63*	1			
5	Distance to Consumer (dummy)	0.79	0.41	0	1	0.19*	0.06	0.55*	0.30*	1		
6	CEO Promotion-focus (%)	0.23	0.10	0.08	0.91	-0.12	-0.00	0.24*	-0.36*	-0.10	1	
7	CEO Prevention-focus (%)	0.15	0.07	0.04	0.36	-0.10	0.06	0.31*	-0.18*	0.19*	0.06	1

*p<.05, n=170

Both promotion-focus of CEO and prevention focus of CEO was found to be associated with organizational attention to ESG. Hence, Hypotheses 1 and 2 was supported (Table 2).

To test hypotheses 3 and 4, 3 models of industry division were used. Model 1 used 'Distance to Consumer' variable, which was held '0' if industry is both non-proximate and socially-insensitive, and otherwise '1'. Model 2 used consumer proximity as a boundary condition. Model 3 used socially-sensitiveness as a boundary condition.

With 6 statistical regressions and 3 models combined, hypothesis 3 was partially supported, and hypothesis 4b was supported. For promotion focus, moderation effect of industry was not significant for both consumer proximity and socially-sensitiveness. However, model 1 was found to be significant boundary condition for hypothesis 3. Hence, hypothesis 3 was partially supported, and hypothesis 3a and 3b were not supported.

For prevention focus, moderation effect of industry was not significant for consumer proximity, but was significant for socially-sensitiveness. For model 1 boundary condition, p value was .12, so it was not found to be significant for strict statistical power, but still seems to work as a weak moderator.

Table 2 Regression results

Dependent variable : Organizational attention to ESG								
	1	2	3	4	5	6	7	8
Independent variables	(H1)	(H2)	(H3)	(H3a)	(H3b)	(H4)	(H4a)	(H4b)
			Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
CEO Promotion-focus	1.068** (.311)		3.519** (.838)	2.019** (.611)	1.380** (.338)			
CEO Prevention-focus		1.135** (.493)				-.056 (1.040)	2.099** (.825)	.524 (.514)
Firm Size	.070** (.033)	.065* (.034)	.072** (.033)	.079** (.033)	.065* (.033)	.067* (.035)	.076** (.034)	.060* (.033)
CEO Gender	-.562** (.169)	-.587** (.173)	-.497** (.237)	-.502** (.167)	-.554** (.168)	-.554** (.172)	-.573** (.171)	-.560** (.166)
Distance to Consumer			.641** (.237)			-.354** (.169)		
Consumer Proximity				.058 (.168)			-.033 (.160)	
Socially-Sensitiveness					.355 (.265)			-.625** (.198)
CEO Promotion-focus × Distance to Consumer			-2.848** (.901)			1.765 (1.181)		
CEO Promotion-focus × Consumer Proximity				-1.016 (.710)			-.932 (1.052)	
CEO Promotion-focus × Socially-Sensitiveness					-1.081 (1.452)			5.523** (1.432)
CEO Prevention-focus × Distance to Consumer								
CEO Prevention-focus × Consumer Proximity								
CEO Prevention-focus × Socially-Sensitiveness								
Constant	2.572** (.190)	2.690**(. 188)	1.943** (.286)	2.386** (.226)	2.457** (.195)	2.896** (.216)	2.616** (.201)	2.742** (.184)
R2	.133	.100	.186	.176	.160	.126	.135	.182
Adjusted R2	.117	.083	.161	.151	.134	.099	.109	.157
F	8.46**	6.12**	7.49**	7.02**	6.24**	4.71**	5.12**	7.27**

5. Discussion

This paper first discovers how regulatory focus of CEO affect organizational attention to ESG. Both promotion focus and prevention focus solely has positive impact on organizational attention to ESG. Both result (hypothesis 1 and 2) is easily explained because ESG trend is not only dangerous crisis but also infinite opportunity in 2020s due to beyond count consumers' interest and strict government laws. Interest about ESG increased dramatically in 2019 and 2020, so it should have been a major threat for firms regardless of industry. On the other hand, government laws and announcement of investment banks that they will only invest on ESG-friendly firms would have made ESG trend seen as a tremendous opportunity for certain firms.

Result of hypothesis 3 can be interpreted as follows; while bank was included in consumer proximate industry, it is unlikely that ESG trend was risk for banks. Thinking about various ESG related ETFs and new investment tools, ESG should be thought as more an opportunity rather than risk for banks. This is thought as the reason why only hypothesis 3 was partially supported and hypothesis 3a and 3b were not supported.

Result of hypothesis 4 is also interesting that only hypothesis 4b was supported. First reason can be found as a characteristic of bank industry as mentioned earlier. Result of bank industry might have insignificant impact on hypothesis 4a. Possible second reason is that for only firms where industry face government restrictions, ESG is regarded as a strong risk. Many investment banks and governments have warned that they will withdraw investment from the oil & gas industry. Therefore, it is likely that ESG was regarded as a risk strongly for oil & gas industry, yet not for other industries.

This paper discovers how different CEOs in different industries interpret ESG. CEO in either proximate or socially-sensitive industry view ESG as a potential threat. For prevention-focused CEOs, advantage from reducing risk related to ESG by focusing on ESG trends outweigh the cognitive cost, therefore prevention-focused CEOs leads to higher organizational attention to ESG. For CEOs in opposite industries, ESG is not that much a risk but rather on opportunity to get competitive advantage. Potential small gains that may be gained by focusing attention to ESG are not enough to motivate them to spend cognitive cost on ESG.

This paper has its own uniqueness that it measured organizational attention to ESG by interpreting 10-K data with content analysis. Previous literatures have discovered numerous meaningful results relating to ESG performance but studies were lacked in the field of attention to ESG.

There are several limitations in this paper. First limitation is that this paper used bank industry data for consumer proximate industry. Even though it was used as consumer proximate industry in prior studies, the meaning of bank industry fades away from the perspective of ESG because it’s unlikely that decision making of bank regarding ESG comes from consumer.

Second limitation is lack of data numbers. There can easily be different effects according to varying industries, so more data from diverse industries is required.

Last limitation of this paper is the fact that only 4-year data was considered. With a much longer timeline data regarding organizational attention to ESG, better results are expected.

Reference

Child, J. (1972). Organizational structure, environment and performance: The role of strategic choice. *sociology*, *6*(1), 1-22.

Cannella Jr, A. A., & Monroe, M. J. (1997). Contrasting perspectives on strategic leaders: Toward a more realistic view of top managers. *Journal of management*, *23*(3), 213-237.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, *9*(2), 193-206.

Finkelstein, S., & Hambrick, D. C. (1996). *Strategic leadership: Top executives and their effects on organizations*. Minneapolis, MN: West Publishing Company.

Hitt, M. A., & Tyler, B. B. (1991). Strategic decision models: Integrating different perspectives. *Strategic management journal*, *12*(5), 327-351.

Finkelstein, S. (1992). Power in top management teams: Dimensions, measurement, and validation. *Academy of Management journal*, *35*(3), 505-538.

Miller, C. C., Burke, L. M., & Glick, W. H. (1998). Cognitive diversity among upper-echelon executives: implications for strategic decision processes. *Strategic management journal*, *19*(1), 39-58.

Cho, T. S., & Hambrick, D. C. (2006). Attention as the mediator between top management team characteristics and strategic change: The case of airline deregulation. *Organization science*, *17*(4), 453-469.

Simon, H. A. (1947). (1976). Administrative behavior. A study of decision-making processes in administrative organization . New York: Free Press.

Scott, W. R. (1992). Organizations: rational. *Natural, and Open Systems*, *3*. Prentice-Hall, Englewood Cliffs, NJ.

Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative science quarterly*, *48*(2), 268-305.

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review,* 89, 62–77.

Babiak, K., & Trendafilova, S. (2011). CSR and environmental responsibility: Motives and pressures to adopt green management practices. *Corporate social responsibility and environmental management*, *18*(1), 11-24.

Kim, S., Sambharya, R. B., & Yang, J. S. (2016). Do CEOs exercise managerial discretion to save their jobs?. *Journal of Management & Governance*, *20*, 179-200.

Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of management review*, *32*(2), 334-343.

Clark, G. L., & Viehs, M. (2014). The implications of corporate social responsibility for investors: An overview and evaluation of the existing CSR literature. *Available at SSRN 2481877*.

Margolis, J. D., Elfenbein, H. A., & Walsh, J. P. (2009). Does it Pay to Be Good...And Does it Matter? A Meta-Analysis of the Relationship between Corporate Social and Financial Performance Retrieved from Available at SSRN: https://ssrn.com/abstract=1866371 or http://dx.doi.org/10.2139/ssrn.1866371

Anantharaman, D., Huang, D., & Zhao, K. (2021). The Mix of Soft and Hard Information in ESG Reports and Impression Management.

Brockner, J., Higgins, E. T., & Low, M. B. (2004). Regulatory focus theory and the entrepreneurial process. *Journal of business venturing*, *19*(2), 203-220.

Kark, R., & Van Dijk, D. (2007). Motivation to lead, motivation to follow: The role of the self-regulatory focus in leadership processes. *Academy of management review*, *32*(2), 500-528.

Crowe, E., & Higgins, E. T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention in decision-making. *Organizational behavior and human decision processes*, *69*(2), 117-132.

Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In *Advances in experimental social psychology* (Vol. 30, pp. 1-46). Academic Press.

Gorman, C. A., Meriac, J. P., Overstreet, B. L., Apodaca, S., McIntyre, A. L., Park, P., & Godbey, J. N. (2012). A meta-analysis of the regulatory focus nomological network: Work-related antecedents and consequences. *Journal of Vocational Behavior*, *80*(1), 160-172.

González-Benito, J., & González-Benito, Ó. (2006). A review of determinant factors of environmental proactivity. *Business Strategy and the environment*, *15*(2), 87-102.

Branco, M. C., & Rodrigues, L. L. (2008). Factors influencing social responsibility disclosure by Portuguese companies. *Journal of business Ethics*, *83*, 685-701.

Chams, N., García-Blandón, J., & Hassan, K. (2021). Role reversal! financial performance as an antecedent of ESG: The moderating effect of total quality management. *Sustainability*, *13*(13), 7026.

Cho, C. K., Cho, T. S., & Lee, J. (2019). Managerial attributes, consumer proximity, and corporate environmental performance. *Corporate Social Responsibility and Environmental Management*, *26*(1), 159-169.

Garcia, A. S., Mendes-Da-Silva, W., & Orsato, R. J. (2017). Sensitive industries produce better ESG performance: Evidence from emerging markets. *Journal of cleaner production*, *150*, 135-147.

Kaplan, S. (2008). Cognition, capabilities, and incentives: Assessing firm response to the fiber-optic revolution. *Academy of Management Journal*, *51*(4), 672-695.

Gamache, D. L., McNamara, G., Mannor, M. J., & Johnson, R. E. (2015). Motivated to acquire? The impact of CEO regulatory focus on firm acquisitions. *Academy of Management Journal*, *58*(4), 1261-1282.

Huang, D. Z. (2021). Environmental, social and governance (ESG) activity and firm performance: A review and consolidation. *Accounting & finance*, *61*(1), 335-360.

Cai, Y., Jo, H., & Pan, C. (2012). Doing well while doing bad? CSR in controversial industry sectors. *Journal of Business Ethics*, *108*, 467-480.

Richardson, A. J., & Welker, M. (2001). Social disclosure, financial disclosure and the cost of equity capital. *Accounting, organizations and society*, *26*(7-8), 597-616.

Lee, D. D., & Faff, R. W. (2009). Corporate sustainability performance and idiosyncratic risk: A global perspective. *Financial Review*, *44*(2), 213-237.

Johnson, R. E., & Steinman, L. (2009). Use of implicit measures for organizational research: An empirical example. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, *41*(4), 202.

Johnson, R. E., Lanaj, K., Tan, J. A., & Chang, C. H. (2012). Putting our trust in fairness. *Perspectives on justice and trust in organizations*, 1-28.

Eggers, J. P., & Kaplan, S. (2009). Cognition and renewal: Comparing CEO and organizational effects on incumbent adaptation to technical change. *Organization Science*, *20*(2), 461-477.

Nadkarni, S., & Chen, J. (2014). Bridging yesterday, today, and tomorrow: CEO temporal focus, environmental dynamism, and rate of new product introduction. *Academy of Management Journal*, *57*(6), 1810-1833.

Johnson, R. E., King, D. D., Lin, S. H. J., Scott, B. A., Walker, E. M. J., & Wang, M. (2017). Regulatory focus trickle-down: How leader regulatory focus and behavior shape follower regulatory focus. *Organizational Behavior and Human Decision Processes*, *140*, 29-45.

Gamache, D. L., Neville, F., Bundy, J., & Short, C. E. (2020). Serving differently: CEO regulatory focus and firm stakeholder strategy. *Strategic Management Journal*, *41*(7), 1305-1335.

Hmieleski, K. M., & Baron, R. A. (2008). Regulatory focus and new venture performance: A study of entrepreneurial opportunity exploitation under conditions of risk versus uncertainty. *Strategic Entrepreneurship Journal*, *2*(4), 285-299.

Higgins, E. T., Shah, J., & Friedman, R. (1997). Emotional responses to goal attainment: strength of regulatory focus as moderator. *Journal of personality and social psychology*, *72*(3), 515.

Higgins, E. T. (1997). Beyond pleasure and pain. *American psychologist*, *52*(12), 1280-1300.

Lanaj, K., Chang, C. H., & Johnson, R. E. (2012). Regulatory focus and work-related outcomes: a review and meta-analysis. *Psychological bulletin*, *138*(5), 998-1034.

Johnson, R. E., Chang, C. H., Meyer, T., Lanaj, K., & Way, J. (2013). Approaching success or avoiding failure? Approach and avoidance motives in the work domain. *European Journal of Personality*, *27*(5), 424-441.

Burmeister-Lamp, K., Lévesque, M., & Schade, C. (2012). Are entrepreneurs influenced by risk attitude, regulatory focus or both? An experiment on entrepreneurs' time allocation. *Journal of Business Venturing*, *27*(4), 456-476.

Kammerlander, N., Burger, D., Fust, A., & Fueglistaller, U. (2015). Exploration and exploitation in established small and medium-sized enterprises: The effect of CEOs' regulatory focus. *Journal of Business Venturing*, *30*(4), 582-602.

Das, T. K., & Kumar, R. (2011). Regulatory focus and opportunism in the alliance development process. *Journal of Management*, *37*(3), 682-708.

Wallace, J. C., Little, L. M., Hill, A. D., & Ridge, J. W. (2010). CEO regulatory foci, environmental dynamism, and small firm performance. *Journal of Small Business Management*, *48*(4), 580-604.

초 록

조절 초점 이론은 CEO의 의사결정 단계에서 지각 및 동기를 나타낼 수 있는 좋은 지표이다. 질적내용분석법을 사용하면 CEO의 조절 초점을 효과적으로 측정할 수 있다. ESG와 관련한 기존의 조절 초점 논문들은 주로 기업의 성과에 대한 분석이 주를 이뤘다. 본 논문에서는 CEO의 조절 초점이 ESG에 대한 조직의 주의에 어떠한 영향을 미치지를 연구하였다. 산업 수준의 효과도 분석하였다. 연구 결과, 향상 초점과 예방 초점 둘 다 조직의 주의에 영향을 주는 것으로 나타났다. 산업 수준의 효과는 부분적으로 지지되었다.

주요어 : 조절 초점, 조직 주의, ESG, 질적내용분석
학　번 : 2020-21114

경영학 석사 학위논문

The effects of CEO Regulatory Focus on Organizational Attention to ESG

CEO의 조절 초점이 ESG에 대한 조직의 주의에 미치는 영향

2023 년 2 월

서울대학교 대학원

경영학과 전략/국제경영 전공

김 동 하

The effects of CEO Regulatory Focus on Organizational Attention to ESG

지도 교수 조 승 아

이 논문을 경영학 석사 학위논문으로 제출함
2022 년 10 월

서울대학교 대학원
경영학과 전략/국제경영 전공
김 동 하

김동하의 경영학 석사 학위논문을 인준함
2022 년 12 월

위 원 장 ______ 박 선 현 ______ (인)

부위원장 ______ 박 남 규 ______ (인)

위　　원 ______ 조 승 아 ______ (인)

Abstract

Regulatory focus is a fine proxy to measure motivation of CEO decision-making. Content analysis is an effective tool for measuring regulatory focus of CEO. While formal theoretical works concerning ESG have mainly focused on how regulatory focus simply affects firm performance, this paper focuses on the relationship between CEO regulatory focus and organizational attention to ESG. Industry-level effects have also been studied in this paper. Both promotion focus and prevention focus level were found to affect organizational attention to ESG. Industry-level effects were partially supported.

Keyword : regulatory focus, organizational attention, ESG, content analysis
Student Number : 2020-21114

Table of Contents

1. Introduction

Unlike the past, it is now taken for granted that a firm has to pay attention to ESG performance as well as financial performance (Margolis & Walsh, 2003; Porter & Kramer, 2011; Babiak & Trendafilova, 2011). Since implementing new strategies always requires cost, firms should prudently weigh the benefits and costs of adopting new strategies. This is also an issue for ESG strategies. However, both benefits and cost related to ESG are usually obscure which suggests that it is more difficult to compare advantages and disadvantages of ESG activities (Huang, 2021).

There have been numerous researches whether this ESG approach has a positive effect on firm's financial performance (Clark & Viehs, 2014; Margolis, Elfenbein, & Walsh, 2009). While the results have been far from unanimous, there are not many studies that explain why firms try to adopt ESG strategies (Anantharaman, Huang & Zhao, 2021). Furthermore, study lacks which investigates CEO traits in why firms announce ESG related strategies.

Recent studies found that CEO is one of the most important factors in decision making process of the firm (Kim et al., 2016). This result draw insight from the upper echelons theory (Hambrick & Mason, 1984; Hambrick, 2007). According to upper echelons theory, decision of CEO, which becomes strategy of firm, is influenced by CEOs personal traits; such as personal characteristics, cognitive styles, and regulatory focus. Especially, regulatory focus of CEO largely affects CEO value and goal, which affects CEO decision making (Brockner et al., 2004; Kark & Van Dijk, 2007). Given that CEO is one of the most important factor in decision making of the firm and CEO's decisions are affected by their regulatory focus, it seems likely that organizational attention to ESG heavily relies on regulatory focus of CEO.

We investigate how regulatory focus of CEO affects organizational attention to ESG in different industries. It is expected that CEOs in consumer proximate industries and socially-sensitive industries regard ESG as a risk while those in opposite industries (consumer non-proximate, socially-insensitive industries) view ESG as an opportunity.

Therefore, firms to which prevention-focused CEOs belong are likely to pay more attention to ESG in consumer proximate industries and socially-sensitive industries, while firms to which promotion-focused CEOs belong are likely to pay more attention to ESG in the opposite industries (consumer non-proximate, socially-insensitive industries).

Main contribution of this paper to the literature is that we discover how different CEOs in different industries differently interpret ESG. Not only CEOs of different characteristics within the same industry group make different decisions, but also CEOs of the same character within the different industry group make different decisions. Second contribution to the field is that we discover relationship between CEO traits and ESG strategy. Lastly, while most literature only focused on ESG performance, we suggest new concept, organizational attention to ESG.

The remainder of this paper is organized as follows. Section 2 reviews the literature and develops hypotheses. Section 3 describes research methods. Section 4 presents the result of the study. Section 5 discuss the implication of this study thoroughly.

2. Theory and Hypotheses

2.1 Upper Echelons Theory

Over the past two decades, strategic management has become increasingly concerned with how CEO and top management teams formulate their strategies and affect firm performance. Upper echelons theory basically insists that top management teams' decisions have impact on firms. This idea is rooted in Child's (1972) paper, and the concept has been further refined and developed by Hambrick, and now it is one of the main fields in strategic management (Hambrick and Mason; 1984, Cannella & Monroe, 1997; Finkelstein & Hambrick, 1996). This concept has since become one of the most influential theories in management literature.

The heart of this theory is that strategic decisions represent "weak situations" in complex and ambiguous conditions. In these situations, decision makers will reflect their aspects (their characteristics) in their decisions, and eventually, choices will vary widely depending on the decision maker.

There exist numerous aspects that affect decision makers' decisions, yet complex psychological factors were almost impossible at early stages. Therefore, scholars focused on CEO demographics and background characteristics to use as a proxy for CEO psychological characteristics. CEO demographics were measured by variables such as age, tenure, and education background. However, these information did not reflect the CEO's decision making process wholly since they contain considerable noise comparing to pure psychological figures.

Finkelstein (1992) argued that upper echelons theory should focus on how managerial power affects the whole organization. Other studies also contend that simple CEO demographics and background factors are not sufficient enough to assess relevant upper management characteristics which directly affect the decision making system (Hambrick & Mason, 1984; Hitt & Tyler, 1991). This is because while pure psychological measures are directly interconnected with major CEO decision making process, CEO demographics and backgrounds are indirect indicator of a leader's risk propensity or cognitive style at best (Finkelstein & Hambrick, 1996). For this reason, either personal traits or leadership characteristics are used more frequently as main variables in current literature.

2.2 Attention Based View

The central argument of attention based view is that how decision makers pay and distribute attention shapes the way of firm behavior. The root of this idea originated from Herbert Simon (1947), who argued how firms make decisions depends on the limited attentional capabilities of decision-makers. Through various developments and improvements, Scott (1992) systematically analyzed this concept into three successive premises:

1. Decision-makers' attention to firm issues and answers determines their action (Focus of Attention)
2. Specific condition or context where decision-makers are situated determines their attention to firm issues and answers (Situated

Attention).

3. How the firm's resources and rules control and regulate the allocation and distribution of issues, answers and decision-makers into particular communications and activities determines specific conditions or contexts where decision-makers are situated (Structural Distribution of Attention).

The focus of attention (first principle) incorporates that decision makers can only focus their attention on a limited set of issues and problems, and that the issues they attend to determines what they do. The situated attention (second principle) includes that the attention of decision-makers is affected by firms' situation where decision-makers belongs i.e. firm's procedural and communication channels. Lastly, structural distribution of attention (third principle) implies that the distributed focus of attention among decision-makers is generated by the resources, surrounding environments, and social positions of the firm (Ocasio, 1997)

These three mechanisms are based on the principles of cognitive process like comprehensiveness, cognitive diversity, and mental models of decision-makers (Miller et al., 1998; Cho & Hambrick, 2006). By these mechanisms, with the influence of firms' allocation of resources also present, decision-makers' attention affects firms' behavior.

2.3 ESG Sensitive Industry

In this paper, we refer to sensitive industries as both those subject to social taboos and moral debates and those of high ESG risk. Former case includes tobacco, gambling, alcohol, and adult entertainment (Cai et al., 2012). These industries are vulnerable to negative stakeholder reaction, so CEO has to be conscious and pay attention to what stakeholders want and what they hate. In this perspective, ESG activities are inevitable, and previous research has empirically shown that ESG engagement bring financial benefits (Cai et al., 2012).

Latter case, high ESG risk industries, includes energy (oil and gas), chemicals, paper and pulp, mining, and steel making sectors, which can have major negative socio-environmental impact (Richardson &

Welker, 2001; Lee & Faff, 2009). ESG is considered as a risk for these firms. Previous research has shown that firms in these industries achieve above average ESG performance (Garcia, Mendes-Da-Silva, & Orsato, 2017).

2.4 Consumer Proximity

The concept ‘Consumer Proximity’ was first introduced by González-Benito and González-Benito, who described the term as “position in the value chain” or “the proximity to the final consumer within the supply chain” (González-Benito & González-Benito, 2006). Not only regarding physical distance, but this term also includes social and psychological distance to consumers.

When a firm’s main customer base is end consumer, the firm and the industry is considered as proximate to consumer. On the contrary, when a firm’s sales heavily rely on the other firms and the firm’s strategy does not involve end consumer that much, the firm and the industry is considered as not proximate to consumer.

When a firm is proximate to consumer, every firm’s activities are more visible to stakeholders and therefore more stakeholder reactions are expected. Therefore, decision-maker of the firm is bound to be much more interested in the consumer’s response. It is known that higher social visibility consequently leads to more CSR disclosure activities (Branco & Rodrigues, 2008).

2.5 Regulatory Focus

Regulatory focus theory is a goal-attainment theory that is first developed by Higgins, which basically contends that fundamental desire of human to seek pleasure and avoid pain is basic motivational principle (Crowe & Higgins, 1997; Higgins, 1998). These two self-regulation systems are called ‘Promotion focus’ and ‘Prevention focus’.

Promotion-focused individuals concentrate on higher level gains, which is described as hopes, accomplishments, goals and aspirations

(Higgins, Shah & Friedman, 1997). They “keep their head in the clouds”, and dreams about ideal self (Kark & Van Dijk, 2019). They react sensitively to rewards, and willing to take risks. Therefore, promotion-focused individuals make decisions that maximize gain and minimize non-gain (Crowe & Higgins, 1997). This opportunity-seeking behavior of promotion-focused CEOs makes them continuously expand or deviate from their initial business opportunity (Hmieleski & Baron, 2008), because they are sensitive to potential non-gain generated by not shifting their current state (Pennington and Rose, 2003).

Prevention-focused individuals on the other hand, concentrate on following the guidelines and the rules, which is described as safety, duties and responsibilities (Crowe & Higgins, 1997). They react sensitively to punishments, and not willing to take risks. Therefore, prevention-focused individuals make decisions that minimize loss and maximize non-loss (Higgins, 1997). This risk-averse behavior of prevention-focused CEOs makes them focus more on potential risk comparing to competitors.

Although these two concepts might seem as complementary factors, promotion focus and prevention focus are known to be orthogonal (Gorman et al., 2012). They are two different neurocognitive traits so each individual can have a high level of both, or low level of both. (Lanaj et al., 2012, Johnson, Chang, Meyer, Lanaj & Way, 2013). Therefore, it is meaningful to measure both promotion focus level and prevention focus level and analyze separately when analyzing the effect of regulatory focus.

Numerous previous literatures have shown that regulatory focus of individuals affect their strategies and tactics they pursue (Burmeister-Lamp et al., 2012; Kammerlander et al., 2015). Furthermore, drawing on upper echelons theory, regulatory focus of CEO ultimately impacts firms' various strategies, which is empirically tested by a number of studies (Das & Kumar, 2011; Gamache et al., 2015; Kammerlander et al., 2015; Wallace, Little, Hill & Ridge, 2010).

From each promotion focus and prevention focus perspective, we establish hypothesis 1 and 2 as follows;

H1. *CEO promotion focus is positively associated with organizational attention to ESG.*

H2. *CEO prevention focus is positively associated with organizational attention to ESG.*

In developing further hypotheses, we contemplate how CEO in diverse industry perceive ESG differently and conject how different perception affect their attention to ESG, which will leads to distinct strategy.

In socially-sensitive industry, ESG is regarded as a potential threat, because not only stakeholders may consider firms not doing ESG negatively, but there is possibility government may force firms to suffer a great loss if they do not pay attention to ESG issues. Prevention-focused CEOs are motivated to minimize this risk, so they try to pay attention to ESG issues more than promotion-focused CEOs. For prevention-focused CEOs, advantage from reducing risk by focusing on ESG related issues and focusing on ESG related strategies outweigh the cost for cognitive resources concerning ESG.

In proximate industry, firm's activities are visible to stakeholders and therefore more stakeholder reactions are expected. If the firm does not implement ESG activities, negative stakeholder reactions are expected, which is a potential threat. Prevention-focused CEOs who has tendency to minimize risk are willing to pay attention to ESG related issues to reduce potential threats.

On the other hand, for CEOs in non-proximate and socially-insensitive industries, ESG is not that much a risk but rather on opportunity to get competitive advantage. Little cost for ESG strategies have nothing on potential merits on firm reputation. So we have hypotheses 3 and 4;

H3. *Industry has moderating effect on the impact of CEO promotion focus on organizational attention to ESG.*

H3a. *Industry-level consumer proximity will negatively moderate the impact of CEO promotion focus on organizational attention to ESG*

H3b. *Industry-level socially-sensitiveness will negatively moderate the impact of CEO promotion focus on organizational attention to ESG*

H4. *Industry has moderating effect on the impact of CEO prevention focus on organizational attention to ESG.*

H4a. *Industry-level consumer proximity will positively moderate the impact of CEO prevention focus on organizational attention to ESG*

H4b. *Industry-level socially-sensitiveness will positively moderate the impact of CEO prevention focus on organizational attention to ESG.*

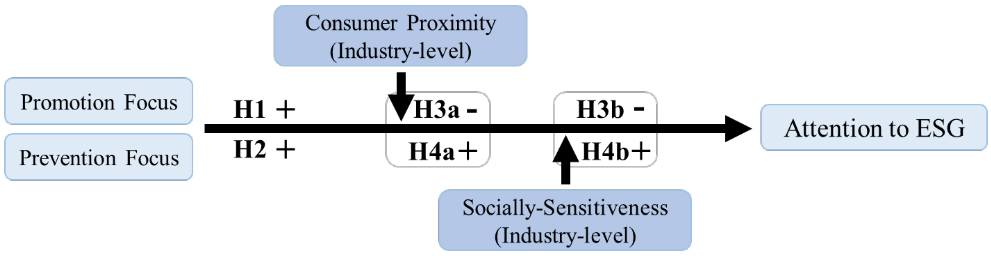

Figure 1 Hypotheses 1, 2, 3, 4

3. Methods

3.1 Sample and data

The sample for the study is collected within S&P 1500 firms in diverse industries. Data is collected from Thomson Reuters Eikon

Refinitiv, and EDGAR/SEC. Industries were divided into 3 sectors; Consumer proximate & socially-insensitive sector, consumer non-proximate & socially-sensitive sector, and consumer non-proximate & socially-insensitive sector.

3.2 Dependent variables

3.2.1. Regulatory focus

Since regulatory focus is an element outside of individual consciousness, it is appropriate to select indirect measurements (Johnson & Steinman, 2009; Johnson, Lanaj, Tan & Chang, 2012). Additionally, recent study shows that letters to shareholders are fine proxy for CEO style and choice of words used (Nadkarni & Chen, 2014). Previous literatures regarding regulatory focus also used letters to shareholders for measurement (Gamache et al., 2015; Gamache et al., 2020)

Furthermore, Kark & Van Dijk (2007) and Johnson et al. (2017) showed that regulatory focus of followers tends to resemble that of leaders, which suggest that even if other executives were involved in writing the letters, regulatory focus of CEO should be reflected in the letters. Lastly, letters to shareholders are consistently written annually in same form, so they are suitable for longitudinal research (Eggers & Kaplan, 2009).

We draw insight from previous studies including Kaplan (2008), and Gamache et al. (2015) in measuring CEO regulatory focus using letters to shareholders included in annual reports. This approach has its own limitation but they are meaningful proxy to measure regulatory focus.

Analogous linguistic approach is used to measure regulatory focus of CEO. We use Linguistic Inquiry and Word Count (LIWC) software to analyze the context. We count number of promotion-oriented (i.e. accomplish, gain, grow, toward, wish, etc.) and prevention-oriented words (i.e. accuracy, avoid, duty, loss, protect, risk, safety, etc.) to measure regulatory focus. We use earning conference call script data from Thomson Reuters Eikon Refinitiv, from 2019-2021 as a sample. Word dictionary to measure promotion focus and prevention focus level used in this paper was first elaborately developed by Gamache et al. (2015).

3.2.2. Consumer proximity

Consumer proximity is coded '0’ if the firm is not included in proximate industry, and '1’ if the firm is included in proximate industry. Apparel manufacturing, Beverages, Bank industries were included in proximate industries. Oil & Gas, Internet content & Information, Scientific & Technical instruments industries were included in non-proximate industries. This setting is based on the European classification system Nomenclature of Economic Activities (NACE Rev. 2). Industry selection concerning consumer proximity (apparel manufacturing) was also used in Cho, Cho & Lee (2019).

3.2.3. Industry-level socially-sensitiveness

We follow the division of previous literature, which was based on North American Industry Classification System (NAICS) (Garcia, Mendes-Da-Silva & Orsato, 2017). Oil & Gas E&P, Oil & Gas drilling industries were included in socially-sensitive industries. Apparel manufacturing, Beverages, Bank, Internet content & Information, Scientific & Technical instruments industries were included in socially-insensitive industries. Using these previous settings, industries are divided into 3 sectors in this paper; consumer proximate & socially-insensitive sector, consumer non-proximate & socially-sensitive sector, and consumer non-proximate & socially-insensitive sector.

3.3 Independent variables

3.3.1. Attention to ESG

We collect 2 years of item 1 data of 10-K files from the SEC/EDGAR database from 2020 to 2021. We measure the increase of ESG words in 10-K item 1 from 2021 to 2018. LIWC was used to measure ESG words frequencies. Word dictionary to measure ESG related words used in this paper was first exquisitely developed by Baier et al. (2020).

3.4 Control variables

3.4.1. Firm size

Previous research has shown that larger and successful firms may able to allocate additional budget for ESG investment, which leads to faster ESG engagement announcement (Chams, García-Blandón & Hassan, 2021). Therefore, firm size is added as acontrol variable. In this paper, market cap is used as a proxy for firm size

3.4.2 CEO Gender

CEO gender is known to affect organizational behavior in prior researches. So CEO gender is added as a control variable. CEO gender data is manually collected using google and firms' website info.

3.5 Statistical analysis

Statistical analyses are performed by using STATA 11.0. Multiple linear regression model is used for analysis.

4. Results

Total 4-year data of 170 firms were collected. It was total 680 firm-year data. Table 1 shows the means and standard deviations of variables. 97% of firm CEO was men. Average promotion focus of CEO was 0.23%, while average prevention focus of CEO was 0.15%.

Consistent with prior studies, CEO promotion focus and CEO prevention focus was found to be orthogonal (Table 1).

Table 1 Means, standard deviations and correlations

	Variable	Mean	S.D	Min	Max	1	2	3	4	5	6	7
1	Firm Size	1.67	0.94	0	3	1						
2	CEO gender (dummy)	0.97	0.19	0	1	0.03	1					
3	Consumer Proximity (dummy)	5.54	0.50	0	1	0.06	0.08	1				
4	Socially Sensitiveness (dummy)	0.26	0.44	0	1	0.11	-0.03	-0.63*	1			
5	Distance to Consumer (dummy)	0.79	0.41	0	1	0.19*	0.06	0.55*	0.30*	1		
6	CEO Promotion-focus (%)	0.23	0.10	0.08	0.91	-0.12	-0.00	0.24*	-0.36*	-0.10	1	
7	CEO Prevention-focus (%)	0.15	0.07	0.04	0.36	-0.10	0.06	0.31*	-0.18*	0.19*	0.06	1

*p<.05, n=170

Both promotion-focus of CEO and prevention focus of CEO was found to be associated with organizational attention to ESG. Hence, Hypotheses 1 and 2 was supported (Table 2).

To test hypotheses 3 and 4, 3 models of industry division were used. Model 1 used ‘Distance to Consumer’ variable, which was held ‘0’ if industry is both non-proximate and socially-insensitive, and otherwise ‘1’. Model 2 used consumer proximity as a boundary condition. Model 3 used socially-sensitiveness as a boundary condition.

With 6 statistical regressions and 3 models combined, hypothesis 3 was partially supported, and hypothesis 4b was supported. For promotion focus, moderation effect of industry was not significant for both consumer proximity and socially-sensitiveness. However, model 1 was found to be significant boundary condition for hypothesis 3. Hence, hypothesis 3 was partially supported, and hypothesis 3a and 3b were not supported.

For prevention focus, moderation effect of industry was not significant for consumer proximity, but was significant for socially-sensitiveness. For model 1 boundary condition, p value was .12, so it was not found to be significant for strict statistical power, but still seems to work as a weak moderator.

Table 2 Regression results

Dependent variable : Organizational attention to ESG								
Independent variables	1 (H1)	2 (H2)	3 (H3)	4 (H3a)	5 (H3b)	6 (H4)	7 (H4a)	8 (H4b)
			Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
CEO Promotion-focus	1.068** (.311)		3.519** (.838)	2.019** (.611)	1.380** (.338)			
CEO Prevention-focus		1.135** (.493)				-.056 (1.040)	2.099** (.825)	.524 (.514)
Firm Size	.070** (.033)	.065* (.034)	.072** (.033)	.079** (.033)	.065* (.033)	.067* (.035)	.076** (.034)	.060* (.033)
CEO Gender	-.562** (.169)	-.587** (.173)	-.497** (.237)	-.502** (.167)	-.554** (.168)	-.554** (.172)	-.573** (.171)	-.560** (.166)
Distance to Consumer			.641** (.237)			-.354** (.169)		
Consumer Proximity				.058 (.168)			-.033 (.160)	
Socially-Sensitiveness					.355 (.265)			-.625** (.198)
CEO Promotion-focus × Distance to Consumer			-2.848** (.901)			1.765 (1.181)		
CEO Promotion-focus × Consumer Proximity				-1.016 (.710)			-.932 (1.052)	
CEO Promotion-focus × Socially-Sensitiveness					-1.081 (1.452)			5.523** (1.432)
CEO Prevention-focus × Distance to Consumer								
CEO Prevention-focus × Consumer Proximity								
CEO Prevention-focus × Socially-Sensitiveness								
Constant	2.572** (.190)	2.690**(. 188)	1.943** (.286)	2.386** (.226)	2.457** (.195)	2.896** (.216)	2.616** (.201)	2.742** (.184)
R2	.133	.100	.186	.176	.160	.126	.135	.182
Adjusted R2	.117	.083	.161	.151	.134	.099	.109	.157
F	8.46**	6.12**	7.49**	7.02**	6.24**	4.71**	5.12**	7.27**

5. Discussion

This paper first discovers how regulatory focus of CEO affect organizational attention to ESG. Both promotion focus and prevention focus solely has positive impact on organizational attention to ESG. Both result (hypothesis 1 and 2) is easily explained because ESG trend is not only dangerous crisis but also infinite opportunity in 2020s due to beyond count consumers' interest and strict government laws. Interest about ESG increased dramatically in 2019 and 2020, so it should have been a major threat for firms regardless of industry. On the other hand, government laws and announcement of investment banks that they will only invest on ESG-friendly firms would have made ESG trend seen as a tremendous opportunity for certain firms.

Result of hypothesis 3 can be interpreted as follows; while bank was included in consumer proximate industry, it is unlikely that ESG trend was risk for banks. Thinking about various ESG related ETFs and new investment tools, ESG should be thought as more an opportunity rather than risk for banks. This is thought as the reason why only hypothesis 3 was partially supported and hypothesis 3a and 3b were not supported.

Result of hypothesis 4 is also interesting that only hypothesis 4b was supported. First reason can be found as a characteristic of bank industry as mentioned earlier. Result of bank industry might have insignificant impact on hypothesis 4a. Possible second reason is that for only firms where industry face government restrictions, ESG is regarded as a strong risk. Many investment banks and governments have warned that they will withdraw investment from the oil & gas industry. Therefore, it is likely that ESG was regarded as a risk strongly for oil & gas industry, yet not for other industries.

This paper discovers how different CEOs in different industries interpret ESG. CEO in either proximate or socially-sensitive industry view ESG as a potential threat. For prevention-focused CEOs, advantage from reducing risk related to ESG by focusing on ESG trends outweigh the cognitive cost, therefore prevention-focused CEOs leads to higher organizational attention to ESG. For CEOs in opposite industries, ESG is not that much a risk but rather on opportunity to get competitive advantage. Potential small gains that may be gained by focusing attention to ESG are not enough to motivate them to spend cognitive cost on ESG.

This paper has its own uniqueness that it measured organizational attention to ESG by interpreting 10-K data with content analysis. Previous literatures have discovered numerous meaningful results relating to ESG performance but studies were lacked in the field of attention to ESG.

There are several limitations in this paper. First limitation is that this paper used bank industry data for consumer proximate industry. Even though it was used as consumer proximate industry in prior studies, the meaning of bank industry fades away from the perspective of ESG because it’s unlikely that decision making of bank regarding ESG comes from consumer.

Second limitation is lack of data numbers. There can easily be different effects according to varying industries, so more data from diverse industries is required.

Last limitation of this paper is the fact that only 4-year data was considered. With a much longer timeline data regarding organizational attention to ESG, better results are expected.

Reference

Child, J. (1972). Organizational structure, environment and performance: The role of strategic choice. *sociology*, *6*(1), 1-22.

Cannella Jr, A. A., & Monroe, M. J. (1997). Contrasting perspectives on strategic leaders: Toward a more realistic view of top managers. *Journal of management*, *23*(3), 213-237.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, *9*(2), 193-206.

Finkelstein, S., & Hambrick, D. C. (1996). *Strategic leadership: Top executives and their effects on organizations*. Minneapolis, MN: West Publishing Company.

Hitt, M. A., & Tyler, B. B. (1991). Strategic decision models: Integrating different perspectives. *Strategic management journal*, *12*(5), 327-351.

Finkelstein, S. (1992). Power in top management teams: Dimensions, measurement, and validation. *Academy of Management journal*, *35*(3), 505-538.

Miller, C. C., Burke, L. M., & Glick, W. H. (1998). Cognitive diversity among upper-echelon executives: implications for strategic decision processes. *Strategic management journal*, *19*(1), 39-58.

Cho, T. S., & Hambrick, D. C. (2006). Attention as the mediator between top management team characteristics and strategic change: The case of airline deregulation. *Organization science*, *17*(4), 453-469.

Simon, H. A. (1947). (1976). Administrative behavior. A study of decision-making processes in administrative organization . New York: Free Press.

Scott, W. R. (1992). Organizations: rational. *Natural, and Open Systems*, *3*. Prentice-Hall, Englewood Cliffs, NJ.

Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative science quarterly*, *48*(2), 268-305.

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review,* 89, 62–77.

Babiak, K., & Trendafilova, S. (2011). CSR and environmental responsibility: Motives and pressures to adopt green management practices. *Corporate social responsibility and environmental management*, *18*(1), 11-24.

Kim, S., Sambharya, R. B., & Yang, J. S. (2016). Do CEOs exercise managerial discretion to save their jobs?. *Journal of Management & Governance*, *20*, 179-200.

Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of management review*, *32*(2), 334-343.

Clark, G. L., & Viehs, M. (2014). The implications of corporate social responsibility for investors: An overview and evaluation of the existing CSR literature. *Available at SSRN 2481877*.

Margolis, J. D., Elfenbein, H. A., & Walsh, J. P. (2009). Does it Pay to Be Good...And Does it Matter? A Meta-Analysis of the Relationship between Corporate Social and Financial Performance Retrieved from Available at SSRN: https://ssrn.com/abstract=1866371 or http://dx.doi.org/10.2139/ssrn.1866371

Anantharaman, D., Huang, D., & Zhao, K. (2021). The Mix of Soft and Hard Information in ESG Reports and Impression Management.

Brockner, J., Higgins, E. T., & Low, M. B. (2004). Regulatory focus theory and the entrepreneurial process. *Journal of business venturing*, *19*(2), 203-220.

Kark, R., & Van Dijk, D. (2007). Motivation to lead, motivation to follow: The role of the self-regulatory focus in leadership processes. *Academy of management review*, *32*(2), 500-528.

Crowe, E., & Higgins, E. T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention in decision-making. *Organizational behavior and human decision processes*, *69*(2), 117-132.

Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In *Advances in experimental social psychology* (Vol. 30, pp. 1-46). Academic Press.

Gorman, C. A., Meriac, J. P., Overstreet, B. L., Apodaca, S., McIntyre, A. L., Park, P., & Godbey, J. N. (2012). A meta-analysis of the regulatory focus nomological network: Work-related antecedents and consequences. *Journal of Vocational Behavior*, *80*(1), 160-172.

González-Benito, J., & González-Benito, Ó. (2006). A review of determinant factors of environmental proactivity. *Business Strategy and the environment*, *15*(2), 87-102.

Branco, M. C., & Rodrigues, L. L. (2008). Factors influencing social responsibility disclosure by Portuguese companies. *Journal of business Ethics*, *83*, 685-701.

Chams, N., García-Blandón, J., & Hassan, K. (2021). Role reversal! financial performance as an antecedent of ESG: The moderating effect of total quality management. *Sustainability*, *13*(13), 7026.

Cho, C. K., Cho, T. S., & Lee, J. (2019). Managerial attributes, consumer proximity, and corporate environmental performance. *Corporate Social Responsibility and Environmental Management*, *26*(1), 159-169.

Garcia, A. S., Mendes-Da-Silva, W., & Orsato, R. J. (2017). Sensitive industries produce better ESG performance: Evidence from emerging markets. *Journal of cleaner production*, *150*, 135-147.

Kaplan, S. (2008). Cognition, capabilities, and incentives: Assessing firm response to the fiber-optic revolution. *Academy of Management Journal*, *51*(4), 672-695.

Gamache, D. L., McNamara, G., Mannor, M. J., & Johnson, R. E. (2015). Motivated to acquire? The impact of CEO regulatory focus on firm acquisitions. *Academy of Management Journal*, *58*(4), 1261-1282.

Huang, D. Z. (2021). Environmental, social and governance (ESG) activity and firm performance: A review and consolidation. *Accounting & finance*, *61*(1), 335-360.

Cai, Y., Jo, H., & Pan, C. (2012). Doing well while doing bad? CSR in controversial industry sectors. *Journal of Business Ethics*, *108*, 467-480.

Richardson, A. J., & Welker, M. (2001). Social disclosure, financial disclosure and the cost of equity capital. *Accounting, organizations and society*, *26*(7-8), 597-616.

Lee, D. D., & Faff, R. W. (2009). Corporate sustainability performance and idiosyncratic risk: A global perspective. *Financial Review*, *44*(2), 213-237.

Johnson, R. E., & Steinman, L. (2009). Use of implicit measures for organizational research: An empirical example. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, *41*(4), 202.

Johnson, R. E., Lanaj, K., Tan, J. A., & Chang, C. H. (2012). Putting our trust in fairness. *Perspectives on justice and trust in organizations*, 1-28.

Eggers, J. P., & Kaplan, S. (2009). Cognition and renewal: Comparing CEO and organizational effects on incumbent adaptation to technical change. *Organization Science*, *20*(2), 461-477.

Nadkarni, S., & Chen, J. (2014). Bridging yesterday, today, and tomorrow: CEO temporal focus, environmental dynamism, and rate of new product introduction. *Academy of Management Journal*, *57*(6), 1810-1833.

Johnson, R. E., King, D. D., Lin, S. H. J., Scott, B. A., Walker, E. M. J., & Wang, M. (2017). Regulatory focus trickle-down: How leader regulatory focus and behavior shape follower regulatory focus. *Organizational Behavior and Human Decision Processes*, *140*, 29-45.

Gamache, D. L., Neville, F., Bundy, J., & Short, C. E. (2020). Serving differently: CEO regulatory focus and firm stakeholder strategy. *Strategic Management Journal*, *41*(7), 1305-1335.

Hmieleski, K. M., & Baron, R. A. (2008). Regulatory focus and new venture performance: A study of entrepreneurial opportunity exploitation under conditions of risk versus uncertainty. *Strategic Entrepreneurship Journal*, *2*(4), 285-299.

Higgins, E. T., Shah, J., & Friedman, R. (1997). Emotional responses to goal attainment: strength of regulatory focus as moderator. *Journal of personality and social psychology*, *72*(3), 515.

Higgins, E. T. (1997). Beyond pleasure and pain. *American psychologist*, *52*(12), 1280-1300.

Lanaj, K., Chang, C. H., & Johnson, R. E. (2012). Regulatory focus and work-related outcomes: a review and meta-analysis. *Psychological bulletin*, *138*(5), 998-1034.

Johnson, R. E., Chang, C. H., Meyer, T., Lanaj, K., & Way, J. (2013). Approaching success or avoiding failure? Approach and avoidance motives in the work domain. *European Journal of Personality*, *27*(5), 424-441.

Burmeister-Lamp, K., Lévesque, M., & Schade, C. (2012). Are entrepreneurs influenced by risk attitude, regulatory focus or both? An experiment on entrepreneurs' time allocation. *Journal of Business Venturing*, *27*(4), 456-476.

Kammerlander, N., Burger, D., Fust, A., & Fueglistaller, U. (2015). Exploration and exploitation in established small and medium-sized enterprises: The effect of CEOs' regulatory focus. *Journal of Business Venturing*, *30*(4), 582-602.

Das, T. K., & Kumar, R. (2011). Regulatory focus and opportunism in the alliance development process. *Journal of Management*, *37*(3), 682-708.

Wallace, J. C., Little, L. M., Hill, A. D., & Ridge, J. W. (2010). CEO regulatory foci, environmental dynamism, and small firm performance. *Journal of Small Business Management*, *48*(4), 580-604.

초 록

조절 초점 이론은 CEO의 의사결정 단계에서 지각 및 동기를 나타낼 수 있는 좋은 지표이다. 질적내용분석법을 사용하면 CEO의 조절 초점을 효과적으로 측정할 수 있다. ESG와 관련한 기존의 조절 초점 논문들은 주로 기업의 성과에 대한 분석이 주를 이뤘다. 본 논문에서는 CEO의 조절 초점이 ESG에 대한 조직의 주의에 어떠한 영향을 미치지를 연구하였다. 산업 수준의 효과도 분석하였다. 연구 결과, 향상 초점과 예방 초점 둘 다 조직의 주의에 영향을 주는 것으로 나타났다. 산업 수준의 효과는 부분적으로 지지되었다.

주요어 : 조절 초점, 조직 주의, ESG, 질적내용분석
학 번 : 2020-21114