

THE CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE IN VIETNAM

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Abstract - In the context of economic integration and climate change, the companies need to conduct corporate social responsibility practices to meet the sustainable development. This study attempts to assess the extent of corporate social responsibility disclosure (CSR) in case of 601 listed Vietnamese enterprises. Data is gathered from Vietnamese listed annual reports, financial statements, and other sources. The amount of voluntary and mandatory CSR is measured by Global Reporting Initiatives (GRI) recommendations and Vietnamese regulations, respectively. The findings indicate that the general level of CSR in Vietnam is low, no mandatory CSR items are revealed by all enterprises, and the amount of CSR varies by industry sector. To enhance the CSR of Vietnamese listed firms, local government is suggested to strengthen propaganda for enterprises on the obligations and benefits of implementing CSR.

Key words - Sustainable development; disclosure; corporate social responsibility; listed companies; Vietnam

1. Introduction

Although there have been economic growth and technical advancement in recent years, various businesses have come under fire for contributing to social and environmental issues such as pollution, waste, resource depletion, poor product quality, and worker safety. Vietnam is one of the countries heavily affected by climate change and need to have a green business for sustainable development. After the global economic crisis, in order to increase the self-responsibility of private enterprises, the international organizations and local governments have introduced regulations to control the activities of multinational companies including the disclosure of CSR information [1]. Recently, an increasing number of companies have included corporate governance objectives related to CSR, disclosed information on their websites, and applied Global Reporting Initiatives (GRI) standards [2]. According to the guidelines in Ministry of Finance-Vietnam Circular No. 155/2015/TT-BTC, listed firms are required to report certain mandatory CSR data. The corporations in Vietnam, however, do not express much motivation to implement CSR practices. [3] Found that 50 out of 20,000 businesses in Vietnam meet social responsibility to enter the local market as the requirement of the Vietnam-US Textile and Garment Agreement 2003. Therefore, with regard to developing nations, a level of voluntary disclosure in Vietnam is opaque and draws the interest of businesses and scholars. This paper seeks to determine the scope of CSR among listed firms in Vietnam and whether or not businesses abide by the directives in GRI or Circular No. 155/2015/TT-BTC, 96/2020/TT-BTC.

2. Corporate social responsibility

In the 1970s, from the point of view of shareholders, many economists notably stated that enterprise mainly focuses on profit maximization, efficient use of business resources to show CSR practice [4]. The rapid economic development with increasing competition puts more pressure from business to meet internal and external stakeholders. From the perspective of stakeholder theory, [5] argued that the private sector manages its impact on society and the environment in the broadest sense of commercial interests. Thus, in order to reach the goal of maximizing profits for shareholders, the company should also concern other stakeholders such as customers, suppliers, and investors [6]. CSR, therefore, is understood as the corporate responsibility to meet the expectations and obligations of society, including economic, legal, ethical and philanthropy aspects [7].

According to [8], CSR is not only business goals beyond legal obligations but also a strategic value creation for the community. It is responsible for economic stability, environmental protection and society [9]. CSR is a strategy to ensure business operations towards sustainable development in three aspects of economy, environment and society [10], [11].

In a perspective of stakeholders, [12] presented that CSR disclosure is the reporting and publication about economic, social and environmental activities in financial data or usually a combination of non-financial quantitative, narrative, and qualitative information. This definition is the underlying goal of social accounting provided the clarity and adequacy based on the debate on transparency, democracy, and accountability.

3. Methodology

3.1. CSR measurement

Table 1. Number of dimensions of each dimension on CSR

Content of CSR	Number of dimensions
Voluntary disclosure regarding to GRI	73
CSR in term of economics	15
CSR in term of environment	24 for manufacturing and service sector 21 for commerce sector
CSR in term of Society	34
Mandatory disclosure regarding to Circular No. 155/2015/TT-BTC	15

CSR is measured by content analysis, which has been extensively used in many studies on the level of CSR [13]

- [14]. The secondary data is gathered via a variety of publications from listed Vietnamese firms, including annual reports, financial statements, and reports on sustainable development. The list of elements expressing the CSR dimension is divided into mandatory disclosure in accordance with Circular No. 155/2015/TT-BTC and voluntary disclosure in accordance with GRI. Table 1 displays the specifics of the checklist.

CSR D has been calculated as an unweighted index in the equation as follows:

$$CSR D_i = \sum_{i=1}^n Y_{ij}/n$$

Note: CSR D_i is the extent of CSR D for Firm I, Y_{ij} is 1 if CSR item is disclosed, Y_{ij} is 0 if CSR item is not disclosed, n is 15 if CSR D is mandatory, n is 73 if CSR D is voluntary for the manufacturing and service sectors, and n is 70 if CSR D is voluntary for the commerce one. There are three people (2 PhD, 1 MBA) conducted the content analysis by marking the CSR D for each enterprise in sample follow the structure above. After that, the result of each person is compared to guarantee the accuracy and consistency in CSR D calculation, if there is no difference, the index is accepted.

3.2. Sampling and data collection

This study investigates a list of 601 randomly selected companies from the Vietnamese stock exchange which have published clearly and informative annual report, 200 of which are in the manufacturing sector, 201 in business, and 200 in services. The data was collected from different reports such as annual reports, financial reports or sustainable development reports in 2017 due to exclude the effects of COVID-19 in the business operation.

4. Findings and discussion

Comparing and assessing the level of CSR D involved in the descriptive analysis. Additionally, analysis of variance demonstrates the variation in CSR D between each business sector, which is run with SPSS version 21.

4.1. The mandatory and voluntary CSR D

The results of descriptive analysis show the level of mandatory and voluntary CSR D and compare these CSR D requirements for various business categories using an ANOVA test in Table 2.

As can be seen in Table 2, CSR D index is highest for manufacturing enterprises. The mandatory CSR D index, calculated by 15 elements in accordance with Ministry of Finance Circular No. 155/2015/TT-BTC dated 06/10/2015, is shown in Table 2. Vietnamese listed firms' CSR D index is 46.15%. Table 2 compares the mandatory CSR D requirements for various business categories using an ANOVA test. According to the statistics, manufacturing organizations have the highest levels of CSR D, at 53.30%, while commercial enterprises have the lowest levels, at 42.12%. There are manufacturing and service businesses in particular that do not publish the necessary CSR data. There are no businesses that publish all of the mandatory elements mandated by the Vietnamese government; the greatest percentage is 93.33%, or 14 of 15 items.

Table 2. Descriptive result of CSR D Index of Vietnamese listed enterprises

Sector	Mean	Standard Deviation	Min	Max
The mandatory CSR D				
Manufacturing	53.30	26.80	0.00	93.33
Commerce	42.12	23.57	6.67	93.33
Service	43.03	25.44	0.00	93.33
General	46.15	25.76	0.00	93.33
df = 598; F = 12.047; sig = 0.000				
The voluntary CSR D				
Manufacturing	14.070	8.238	1.37	63.01
Commerce	8.124	5.416	0.00	30.00
Service	8.679	5.663	0.00	23.29
General	10.287	7.080	0.00	63.01
df = 598; F = 50.152; sig = 0.000				

The voluntary unweighted CSR D index is 10.29%, according to Table 2. The voluntary CSR D index is highest among manufacturing companies (14.07%), then service companies, and eventually commercial companies. There is business in the commercial and service sectors that does not willingly disclose CSR information, the manufacturing enterprise with the highest voluntary CSR D is 63.01%.

Table 3. The Post-hoc test of CSR D Index

Sector (X)	Sector (Y)	Mean Difference (X-Y)	Std. Error	Sig.	90% Confidence Interval	
					Lower Bound	Upper Bound
The mandatory CSR D						
Manufacturing	Commerce	11.177*	2.527	0.000	7.013	15.340
	Service	10.266*	2.530	0.000	6.098	14.435
Commerce	Manufacturing	-11.176*	2.527	0.000	-15.340	-7.013
	Service	-0.910	2.527	0.719	-5.073	3.253
Service	Manufacturing	-10.266*	2.530	0.000	-14.435	-6.098
	Commerce	0.910	2.527	0.719	-3.253	5.073
The voluntary CSR D						
Manufacturing	Commerce	5.946*	0.655	0.000	4.866	7.026
	Service	5.391*	0.656	0.000	4.310	6.472
Commerce	Manufacturing	-5.946*	0.655	0.000	-7.026	-4.866
	Service	-0.555	0.655	0.397	-1.635	0.525
Service	Manufacturing	-5.391*	0.656	0.000	-6.472	-4.310
	Commerce	0.555	0.655	0.397	-0.525	1.635
*. The mean difference is significant at the 0.05 level.						

According to the findings shown in Table 3, the manufacturing and commerce sectors differ in terms of CSR D, as do the service and manufacturing sectors (Sig. = 0.000 < 0.005). There is no difference between the commercial and service sectors, (Sig. = 0.719 > 0.005). Furthermore, there are considerable differences in CSR D between the manufacturing and commerce sectors as well as between the service and manufacturing sectors. The difference between the commercial and service sectors is not significant (Sig. = 0.397 > 0.005).

In relation to the CSR D of 601 firms, no company has stated all dimensions, and the degree of CSR D is minimal. There are 273 firms that publish 7 out of 15 items (45.42%), 328 that publish 6 out of 15 dimensions

(54.58%), 10 that publish 1 out of 15 dimensions, and 39 that publish 14 out of 15 dimensions. In particular, two businesses, Hoa Sen Group Joint Stock Company and Da Nang Books and School Equipment Joint Stock Company, do not disclose any CSR information. The reason is that there is a low level of awareness of CSRD requirements among listed companies in Vietnam. Figure 1 depicts the CSRD level that is required. The highest rate of publication is “the labor policy to ensure the health, safety, and welfare of workers” with 573 enterprises accounting for 95.34%, the least published content is the sponsor for “irrigation projects, environmental protection, wind power, solar energy”, with 10 enterprises accounting for 1.66%.

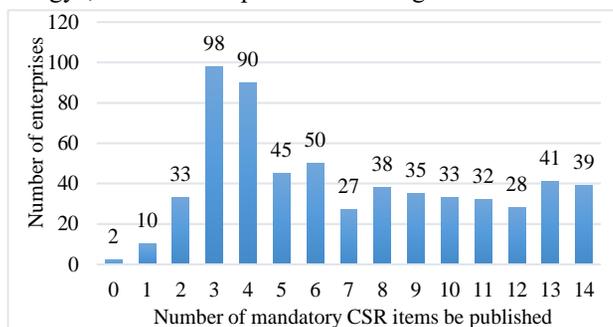


Figure 1. The mandatory CSRD of listed companies in Vietnam

4.2. The voluntary CSRD in term of economic

Financial performance, market value, indirect economic effects, procurement methods, anti-corruption, and anti-competitive behavior were among the items considered in the CSRD in term of economic.

The voluntary unweighted CSRD in term of economic is 13.52%. The findings of the ANOVA test (Table 4) show that the CSRD of the various business types varies according to the economic dimension of the GRI. Manufacturing-related businesses have the highest CSRD index (16.26%), followed by service and retail businesses.

Table 4. The description of each dimension of voluntary CSRD

Sector	Voluntary CSRD	Standard Deviation	Min	Max
In term economic				
Manufacturing	16.26	7.67	0.00	53.33
Commerce	12.10	4.00	0.00	26.67
Service	12.19	4.34	0.00	46.67
General	13.52	5.90	0.00	53.33
df = 598; F = 36.218; sig = 0.000				
In term of environment				
Manufacturing	16.79	13.57	0.00	70.83
Commerce	7.53	11.18	0.00	47.62
Service	8.06	10.99	0.00	33.33
General	10.79	12.68	0.00	70.83
df = 598; F = 37.772; sig = 0.000				
In term of society				
Manufacturing	11.18	8.52	0.00	61.76
Commerce	6.73	4.90	0.00	29.41
Service	7.56	4.89	0.00	26.47
General	8.48	6.61	0.00	61.76
df = 598; F = 27.902; Sig. = 0.000				

It has been demonstrated that no companies voluntarily publish all economic dimension items related to GRI. Vietnamese listed firms often engage in voluntary CSRD to a lesser extent than the average extent (less than or equal to 7 out of 15 items published). Only two businesses published 8 out of the fifteen items, or 0.33% of the total; fourteen businesses-did not publish any CSR information.

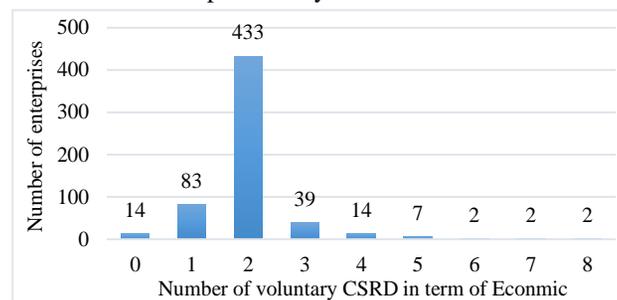


Figure 2. The voluntary CSRD in term of economics of Vietnam listed enterprises

Combining data has revealed that different types of business publish the economic aspects in different and irregular ways. For instance, there is 195 (97.5%) manufacturing businesses published the dimension of direct economic value produced (i.e., Revenue and Costs), whereas 153 businesses in the commercial sector accounted for 76.12%, and 162 businesses provided services, accounting for 81%. In terms of the risks and opportunities associated with climate change for business activities, there are 17 businesses accounting for 2.83%, of which 15 (7.50%) are manufacturing businesses. According to Table 4, each type of commercial enterprise and service enterprise has a single entity, which represents 0.50%.

4.2.1. The voluntary CSRD in term of environment

Low levels of voluntary CSRD indices are being created by Vietnam-listed firms, both in terms of number and quality. The environmental dimension of the GRI includes 24 categories, including materials, energy, water, biodiversity, emissions, waste, environmental compliance, and environmental supplier assessment. However, there are 21 items in the commercial enterprises because only three of them are material-related. The findings indicate that the CSRD index is 10.79%.

According to the results of the ANOVA test, the environmental CSRD index varies between the three different types of businesses (see Table 4). At 16.79%, the manufacturing sector has the highest index, which is then followed by service companies and eventually commercial sector.

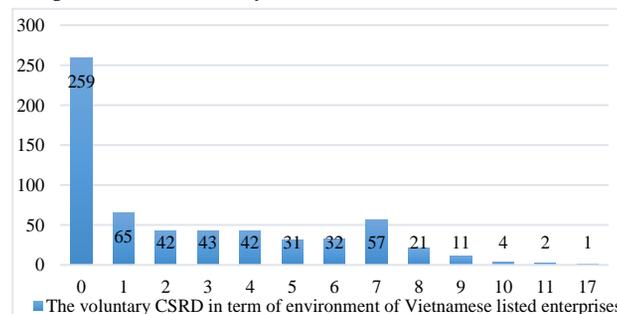


Figure 3. The voluntary CSRD in term of environment of Vietnamese listed enterprises

Furthermore, there are 259 of the 601 businesses in the sample (or 43.09%), which do not disclose their voluntary CSR in term of environment. Only one business, called Everpia Joint Stock Company, has a CSR index that is above average (17 out of 24 items), while 65 and 42 other businesses disclose one and two items, respectively. This indicates that there is little CSR in the setting of Vietnam's listed corporations. The detail has shown in Figure 3.

No item has been declared 24 CSR items related to the GRI's environment component (Table 4). "Description of significant impacts of activities, products, and services on biodiversity in protected areas and high biodiversity value outside protected areas, habitats protected or restored, total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations" are the three unpublished items. Items like "operational facilities are owned, leased, or managed, adjacent to protected and high biodiversity areas outside of protected areas; water storage areas are affected by the discharge of water and/or wastewater. "Negative environmental impacts in the supply chain" are disclosed by one or two companies. The most frequently published item is "energy consumption within the organization" (by 264 companies). Due to lack of environmental awareness in Vietnamese businesses, there is a low level of CSR in the environment. Additionally, following environmental regulations costs money, therefore refraining from publishing lessens the negative impact on the brand and reputation of the business.

4.2.2. The voluntary CSR in term of society

Table 4 presents the voluntary CSR in term of society is 8.48%. The finding of CSR in term of society is consistent with environment that not all companies publish the same items. The degree of CSR items (12 out of 34 items) is under one third.

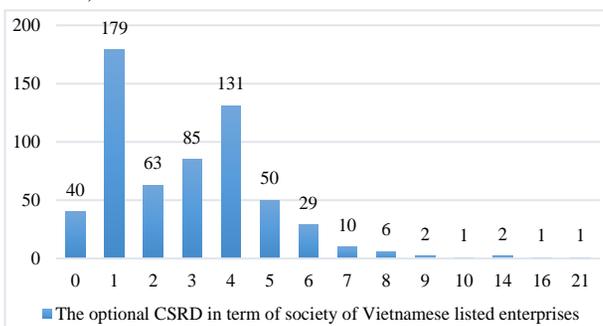


Figure 4. The voluntary CSR in term of society of Vietnamese listed enterprises

The above average CSR in term of society are rarely published by Vietnamese enterprises. It, hence, shows only one firm disclosed 21 out of 34 items (Everpia Joint Stock Company). Two businesses disclosed 14 of the 34 items, while one firm disclosed 16 of the 34. While 179 organizations provide one item, 40 companies do not publish any information. In terms of society, CSR prevalence is significantly low.

The results of the ANOVA test are shown in Table 4; the social CSR index differs between the three different types of business. At 11.18%, the manufacturing sector had the highest index, which was next followed by the service sector and finally the commercial sector.

Based on the results of investigating Vietnam listed companies, the level of CSR is quite low, consistent with the findings in research by [15] – [16]. It has been made clear that no company publishes and reports all items. With a score of 88.69% (533 survey businesses), "Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings" is the highest. There is no report published an item namely "Operations with significant actual or potential negative impacts on local communities". The motivation for adopting CSR standards in Vietnamese companies is to be recognized by local government [17]. Furthermore, they can improve financial performance by positive practices of CSR [18]. The implementation of CSR is a tool to demonstrate to stakeholders such as international investors and customers that they can fill the gaps related to this issue in emerging economies [21].

5. Conclusion

In the international economic integration, CSR becomes a connective and effective tool for Vietnamese businesses expanding their operations on a global scale. First of all, Vietnamese goods must meet international social and environmental standards to export to international markets. Secondly, the World Bank, International Labor Organization (ILO) and multinational companies have created many pressures for Vietnamese Government to promote CSR implementation to decrease the social problems in the emerging economy [19]. However, the research results find that companies show very low incentives to apply CSR standards as following:

(1) Vietnam has a low prevalence of CSR. The mandatory index (46.15%) is higher on average than the voluntary CSR index (10.29%).

(2) No businesses disclose every item; the 39 businesses that publish 14 out of 15 items account for 93.33% of all businesses. The minimum number of publications by most businesses is nil.

(3) The level of CSR is different among different sectors. The economic CSR index is greater than the environmental and social indices.

(4) The voluntary CSR level (6.81%) is lower than the mandatory level (46.15%).

(5) There are variations in CSR amongst various business areas. Compared to businesses in the commercial and service sectors, manufacturing companies have the greatest level of CSR.

The authors recommend the following policy implications for companies, consumers, and state management organizations based on the findings of this research. Firstly, businesses should be a shift in how CSR is viewed; corporations should create long-term plans for putting social responsibility principles into practice and make all CSR data publicly available. Secondly, customers should choose consumer goods from companies that uphold social responsibility standards and seeing their consumption decisions in the context of personal social responsibility; stepping up the marketing of such products to families and

other close relatives. Thirdly, the government should strengthen the message to businesses about the requirements and advantages of conducting CSR practices; Monitoring the execution of CSRD in terms of quantity and quality; Establishing guidelines to enable and encourage businesses to carry out their social obligations; The regulations and legislation must be robust enough to deal with transgressions by businesses in the execution of social responsibility.

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REFERENCES

- [1] P.-M. Nguyen, N. D. Vo, N. Phuc Nguyen, and Y. Choo, "Corporate Social Responsibilities of Food Processing Companies in Vietnam from Consumer Perspective", *Sustainability*, Vol. 12, No. 1, p. 71, Dec. 2019, doi: 10.3390/su12010071.
- [2] D. Coluccia, S. Fontana, and S. Solimene, "Disclosure of corporate social responsibility: a comparison between traditional and digital reporting. An empirical analysis on Italian listed companies", *IJMF*, Vol. 8, No. 3/4, p. 230, 2016, doi: 10.1504/IJMF.2016.081854.
- [3] Bui, H., & Bui, H. "The Vietnamese Consumer Perception on Corporate Social Responsibility". *Journal of International Business Research*, Vol. 9, Issue. 1, p. 75–87, 2010.
- [4] M. Friedman, "A Friedman doctrine-- The Social Responsibility Of Business Is to Increase Its Profits", *The New York Times*, Sep. 13, 1970. Accessed: Mar. 27, 2023. [Online]. Available: <https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html>
- [5] A. B. Carroll, "A Three-Dimensional Conceptual Model of Corporate Performance", *AMR*, Vol. 4, No. 4, pp. 497–505, Oct. 1979, doi: 10.5465/amr.1979.4498296.
- [6] R. E. Freeman, *Strategic Management: A Stakeholder Approach*. Cambridge University Press, 2010.
- [7] A. B. Carroll, "Corporate social responsibility: The centerpiece of competing and complementary frameworks", *Organizational Dynamics*, Vol. 44, No. 2, pp. 87–96, 2015, doi: 10.1016/j.orgdyn.2015.02.002.
- [8] D. Chandler, *Strategic Corporate Social Responsibility: Sustainable Value Creation*, Fourth edition. Thousand Oaks: SAGE Publications, Inc, 2016.
- [9] E. García Villena, S. Gracia Villar, L. A. Dzul López, R. M. Álvarez, I. Delgado Noya, and J. Luis Vidal Mazón, "Approach to a Project Framework in the Environment of Sustainability and Corporate Social Responsibility (CSR): Case Study of a Training Proposal to a Group of Students in a Higher Education Institution", *Sustainability*, Vol. 13, No. 19, Art. no. 19, Jan. 2021, doi: 10.3390/su131910880.
- [10] P. Clark *et al.*, "Consequences of Twenty-First-Century Policy for Multi-Millennial Climate and Sea-Level Change", *Nature Climate Change*, Vol. 6, No. 4, Feb. 2016, doi: 10.1038/nclimate2923.
- [11] M. A. Latapí Agudelo, L. Jóhannsdóttir, and B. Davíðsdóttir, "A literature review of the history and evolution of corporate social responsibility", *International Journal of Corporate Social Responsibility*, Vol. 4, No. 1, p. 1, Jan. 2019, doi: 10.1186/s40991-018-0039-y.
- [12] P. Gray and D. Salber, "Modelling and Using Sensed Context Information in the Design of Interactive Applications", in *Engineering for Human-Computer Interaction*, Springer, Berlin, Heidelberg, 2001, pp. 317–335. doi: 10.1007/3-540-45348-2_26.
- [13] C. Deegan, "Introduction: The legitimising effect of social and environmental disclosures – a theoretical foundation", *Accounting, Auditing & Accountability Journal*, Vol. 15, No. 3, pp. 282–311, Jan. 2002, doi: 10.1108/09513570210435852.
- [14] A. Murray, D. Sinclair, D. Power, and R. Gray, "Do financial markets care about social and environmental disclosure? Further evidence and exploration from the UK", *Accounting, Auditing & Accountability Journal*, Vol. 19, No. 2, pp. 228–255, Jan. 2006, doi: 10.1108/09513570610656105.
- [15] X. Bai, K.-T. Wang, T. K. Tran, M. Sadiq, L. M. Trung, and K. Khudoykulov, "Measuring China's green economic recovery and

energy environment sustainability: Econometric analysis of sustainable development goals", *Economic Analysis and Policy*, Vol. 75, pp. 768–779, Sep. 2022, doi: 10.1016/j.eap.2022.07.005.

- [16] T. Q. Tran, "The impact of financial performance on corporate social responsibility disclosure: the case of VN100 in Vietnam", *Social Responsibility Journal*, Vol. 18, No. 4, pp. 744–756, Jan. 2021, doi: 10.1108/SRJ-09-2020-0363.
- [17] B. W. Husted, D. Jamali, and W. Saffar, "Near and dear? The role of location in CSR engagement", *Strategic Management Journal*, Vol. 37, No. 10, pp. 2050–2070, Oct. 2016, doi: 10.1002/smj.2437.
- [18] M. Orlitzky, F. L. Schmidt, and S. L. Rynes, "Corporate Social and Financial Performance: A Meta-Analysis", *Organization Studies*, Vol. 24, No. 3, p. 403, 2003.
- [19] A. N. Tran and S. Jeppesen, "SMEs in their Own Right: The Views of Managers and Workers in Vietnamese Textiles, Garment, and Footwear Companies", *Journal of Business Ethics*, Vol. 137, No. 3, pp. 589–608, 2016.

APPENDIX

Appendix I. Voluntary economic CSRD index of Vietnam listed companies

Items	Total		Manufacture		Commerce		Service	
	n	%	n	%	n	%	n	%
Employee wages and benefits	538	89,52	158	79,00	190	94,53	190	95,00
The direct economic value generated and distributed (Revenue and Cost)	510	84,86	195	97,50	153	76,12	162	81,00
The percentage of senior management at significant locations of operation that is hired from the local community	45	7,49	38	19,00	2	1,00	5	2,50
Building the sustainable chain	37	6,16	27	13,50	8	3,98	2	1,00
Improving economic development, international integration	26	4,33	22	11,00	3	1,49	1	0,50
Financial implication and other risks and opportunities for the organizations' activities due to climate changes	17	2,83	15	7,50	1	0,50	1	0,50
Reinvestment	13	2,16	6	3,00	5	2,49	2	1,00
Linking criteria of social environment and governance in investment projects	10	1,66	8	4,00	1	0,50	1	0,50
Funding for hydro project, environment protection, solar...	10	1,66	8	4,00	1	0,50	1	0,50
Communication and training on policy and procedure of anti-corruption	8	1,33	6	3,00	2	1,00	0	0,00
Minimize damage caused by natural disasters	4	0,67	3	1,50	0	0,00	1	0,50
Integrating sustainability in the supply chain, improving supplier selection processes	3	0,50	3	1,50	0	0,00	0	0,00
Legal action against anti-competitive behavior, monopoly and antitrust practices	3	0,50	3	1,50	0	0,00	0	0,00
Preventing acts of unfair competition	3	0,50	3	1,50	0	0,00	0	0,00
Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	1	0,17	0	0,00	0	0,00	1	0,50

Source: Collected data calculated by the authors

Appendix 2. Voluntary environmental CSR index of Vietnam listed companies

Items	Total		Manufacture		Commerce		Service	
	n	%	n	%	n	%	n	%
Energy consumption within the organization	264	43,93	131	65,50	61	30,35	72	36,00
Water intake by source	225	37,44	107	53,50	56	27,86	62	31,00
Materials have been used by weight or volume	204	33,94	104	52,00	42	20,90	58	29,00
Failure to comply with environmental laws and regulations	198	32,95	86	43,00	50	24,88	62	31,00
Reduction of energy consumption	174	28,95	84	42,00	40	19,90	50	25,00
Recirculation and reuse of water	121	20,13	72	36,00	17	8,46	32	16,00
Recycled materials have been used	103	17,14	56	28,00	14	6,97	33	16,50
Total water withdrawal by source	49	8,15	31	15,50	13	6,47	5	2,50
Total amount of waste by type and method of treatment	48	7,99	28	14,00	13	6,47	7	3,50
Greenhouse gas emissions	38	6,32	28	14,00	9	4,48	1	0,50
Energy intensity	19	3,16	18	9,00	0	0,00	1	0,50
Reduce the energy needs of products and services	17	2,83	16	8,00	1	0,50	0	0,00
Recycled products and product packaging materials	15	2,50	14	7,00	0	0,00	1	0,50
Energy consumption outside of the organization	10	1,66	10	5,00	0	0,00	0	0,00
Transporting hazardous waste	9	1,50	8	4,00	1	0,50	0	0,00
Water sources are significantly affected by the amount of water input	6	1,00	4	2,00	0	0,00	2	1,00
New suppliers have been preliminarily evaluated using environmental criteria	4	0,67	3	1,50	0	0,00	1	0,50
Significant spills	3	0,50	3	1,50	0	0,00	0	0,00
Water storage areas are affected by the discharge of water and/or wastewater flows	2	0,33	2	1,00	0	0,00	0	0,00
Operational facilities are owned, leased, managed in, or adjacent to protected areas and high biodiversity areas outside protected areas.	1	0,17	0	0,00	1	0,50	0	0,00
Negative environmental impacts in the supply chain and actions taken	1	0,17	1	0,50	0	0,00	0	0,00
Significant impact of activities, products and services on biodiversity	0	0,00	0	0,00	0	0,00	0	0,00
Habitats are preserved or restored	0	0,00	0	0,00	0	0,00	0	0,00
IUCN Red List species and species in the national conservation list have habitats in areas affected by activities	0	0,00	0	0,00	0	0,00	0	0,00

Source: Collected data calculated by the authors

Appendix 3. Voluntary social CSR index of Vietnam listed companies

Items	Total		Manufacture		Commerce		Service	
	n	%	n	%	n	%	n	%
Skills improvement programs for staff and transition support programs	533	88,69	168	84,00	179	89,05	186	93,00
Health and safety topics are covered in the official agreement with the union	296	49,25	118	59,00	82	40,80	96	48,00
Benefits provide full-time employees not for temporary or part-time employees	294	48,92	110	55,00	83	41,29	101	50,50
Activities that involve local communities, impact assessments and development programs	255	42,43	127	63,50	62	30,85	66	33,00
Average number of training hours per year for each employee	89	14,81	47	23,50	24	11,94	18	9,00
Evaluate the health and safety impacts of different types of products and services	57	9,48	48	24,00	5	2,49	4	2,00
Maternity leave	36	5,99	10	5,00	9	4,48	17	8,50

Number of new employees and severance rates	35	5,82	29	14,50	2	1,00	4	2,00
Diversity of managerial level and staff	31	5,16	24	12,00	2	1,00	5	2,50
Requirements for brand, product and service information	24	3,99	16	8,00	5	2,49	3	1,50
Type and rate of injury, occupational disease, lost days, absence status and work related deaths	11	1,83	5	2,50	2	1,00	4	2,00
Representatives of workers in the official occupational health and safety committee links between management and employees	10	1,66	7	3,50	1	0,50	2	1,00
Percentage of employees who are periodically evaluated for their performance and professional development	10	1,66	9	4,50	0	0,00	1	0,50
The rate of basic wages and remuneration for women compared to men	9	1,50	7	3,50	0	0,00	2	1,00
Workers have a higher rate of are at high risk of occupational-related diseases	7	1,16	6	3,00	0	0,00	1	0,50
Discrimination cases and corrective actions taken	4	0,67	2	1,00	0	0,00	2	1,00
Activities and suppliers have significant risks in child labor cases	4	0,67	3	1,50	1	0,50	0	0,00
Failure to comply with laws and regulations in the field of economy and society	4	0,67	2	1,00	0	0,00	2	1,00
Activities and suppliers in which freedom of association/right to unionize and collective bargaining may be at risk	3	0,50	3	1,50	0	0,00	0	0,00
Activities can negatively impact or have significant negative impacts on the local community	3	0,50	2	1,00	1	0,50	0	0,00
New suppliers have been preliminarily evaluated using social criteria	3	0,50	3	1,50	0	0,00	0	0,00
Non-compliance cases related to the health and safety impact of products and services	3	0,50	3	1,50	0	0,00	0	0,00
Activities and suppliers have significant risks of forced or compulsory labor cases	2	0,33	2	1,00	0	0,00	0	0,00
Training staff on human rights processes or policies	2	0,33	1	0,50	1	0,50	0	0,00
Non-compliance cases related to information and trademarks of products and services	2	0,33	2	1,00	0	0,00	0	0,00
Complaints are based on violations of customers' security rights and loss of customer data	2	0,33	1	0,50	1	0,50	0	0,00
Security personnel are trained in human rights processes or policies	1	0,17	1	0,50	0	0,00	0	0,00
Activities need to review human rights or impact assessments	1	0,17	1	0,50	0	0,00	0	0,00
Significant investment agreements and agreements include human rights provisions or preliminary human rights assessments	1	0,17	1	0,50	0	0,00	0	0,00
Political contributions	1	0,17	1	0,50	0	0,00	0	0,00
Non-compliance cases related to marketing communications	1	0,17	1	0,50	0	0,00	0	0,00
Minimum notice period of changes in operations	0	0,00	0	0,00	0	0,00	0	0,00
Violations related to indigenous people's rights	0	0,00	0	0,00	0	0,00	0	0,00
Negative social impacts in the supply chain and actions taken	0	0,00	0	0,00	0	0,00	0	0,00

Source: Collected data calculated by the authors