

The Relationship Between Environmental Disclosures and Financial Performance of Public Listed Companies in Malaysia

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Abstract: Nowadays, corporations are facing the challenges of publishing environmental disclosures as the public concerns on the environmental issues have increased. A controversial issue is whether firms with environmental disclosures will result in a better financial performance since, there is an increasing trend for large companies chooses to make environmental disclosures voluntarily. This study aims to examine the relationship between environmental disclosures and financial performance of public listed companies in Malaysia. Content analysis approach was adopted to determine the quantity and quality of the environmental disclosure in the annual reports of 100 companies listed on the Main Board of Bursa Saham Malaysia for the year 2009 until 2013. The results show that only the quality of environmental disclosure has the positive relationship with the company's Earnings per Share (EPS). This study also indicates that larger companies disseminated more environmental information as well as provided better quality disclosure. Interestingly, the results of this study indicated that less environmentally sensitive industries disclosed more and higher quality of environmental disclosure than environmentally sensitive industries. In conclusion, the environmental disclosures practices in Malaysia is still in an adaptation stage as many Malaysia companies still do not disclose any environmental information in their annual reports. Hence, more effective efforts are needed from regulatory bodies to increase the environmental awareness in Malaysia.

Key words: Environmental disclosure, financial performance, content analysis, corporation, EPS

INTRODUCTION

In an era of increased attention to environmental issues, the concept of environmental disclosure has received increasing attention over the past decades both among practitioners and in the academic literature. In 1972, the first United Nations Conference on the Human Environment (UNCHE) was held in Stockholm, Sweden. This is the first major international conference that laid the foundation for recognition of environmental issues at an international level. In relation to this conference, Malaysia introduced its first ever environmental policy directives, enacted the Environmental Quality Act 1974 and established the Department of Environment in 1975. The 20 years after the first international environment conference in 1992, United Nations Conference on Environment and Development (UNCED) or also known as "Rio Earth Summit" was held in Rio de Janeiro. This was the place where the concept of environmental disclosure first gained great prominence and it results in the publication of Agenda 21, the Convention on Biological Diversity, the Framework Convention on Climate Change, the Rio Declaration and a statement of

non-binding Forest Principles. It was reported in New Straits Times (2014) that the need to make Environment Impact Assessments (EIA) Reports public to promote higher level of transparency and accountability. This indicates that environmental disclosure will increase importance in the near future.

The concept of public environmental accounting and reporting has grasped the attention of people early since 1970s. There is an increasing trend for corporations to disclose their environment information by establishing sustainability report or even disclose it in their annual report or company's official website on voluntary initiative. According to the Survey of Corporate Responsibility (KPMG, 2011) which revealed that >90% of the world's 250 largest companies publishing reports detailing with their performance on environmental, social and governance factors.

Nevertheless, Malaysia is still at an infancy level because there is no legal requirement in Malaysia that require the corporation in producing statement of environmental information to the public. However, there are initiatives in encouraging corporations in publishing environmental disclosure. For example, Malaysian

Accounting Standard Board (MASB) has issued Financial Reporting Standard (FRS) 101 in encouraging corporations to disclose additional information "Environmental Reports and Value Added statements" if management consider that it will assist the economic decisions of the users. In addition, the ACCA Malaysia Sustainability Reporting Awards (MaSRA) was created to encourage the voluntary reporting of sustainability, environmental or social information in Malaysia.

On one hand, corporations wish to be more environmentally friendly but on the other hand this might defend the stockholder theory or the friedman doctrine which indicates that the company should only emphasis on making profit. Moreover, some companies or shareholders are not convincing with the financial benefits of environmental related activities as the environmental related activities and benefits are difficult to be quantified. If the corporation is doing something beyond making profit, it is deemed that the corporation breached of its fiduciary duties in making profits for its shareholders. Thus, there is a gap between environmental disclosure and the company's financial performance. Therefore, the question arise is why there are more and more corporations incurred money in environmental management and choose to make environmental disclosure voluntarily? Hence, this study intends to examine the relationship between environmental disclosure and financial performance of public listed companies in Malaysia.

Research objectives:

- To examine the relationship between environmental disclosure and financial performance of public listed companies in Malaysia
- To find out the differences in environmental disclosure based on organizational profile (company size) of Malaysian listed companies
- To assess the differences in environmental disclosure between environmentally sensitive industries and less environmentally sensitive industries

Literature review and hypothesis development

Stakeholder theory: Over the past few decades, there has been growing interest in business ethics and in fact, stakeholder theory is one of the most influential theories in business ethics. For doing business, corporation has demanded the resource from the natural environment and as a return, the corporation should treat and manage the environment properly. Hence, corporate environmental disclosure can be used as a tool in the management of

relations with stakeholders. Corporate environmental disclosure also perceived as part of the dialogue between the corporation and its stakeholders.

As a result, this research sees the stakeholder theory as the most useful framework in explaining environmental disclosure because it concerns with the way a corporation manages its stakeholders. In addition, stakeholder theory differs from the legitimacy theory which treats the whole society as one group. This helps in understanding the practices of voluntary environmental disclosure in Malaysia.

Legitimacy theory: Legitimacy theory posits corporation is bound by the social contract where the corporation consents to fulfill various socially desired actions in return for approval of its objectives, survival and growth (Deegan, 2002). However, if the corporation does not operate within the bound by the social contract, society may terminate the corporation's rights to continue operations or the corporation will be penalized. Hence, there is a legitimacy threat especially for those environmentally sensitive companies which may have adverse effects on the environment.

In order to extend, maintain or defend legitimacy, corporations often will disseminate more environmental disclosure to close legitimacy gaps resulting from a corporation's failure to conform to the expectations of society. Therefore, environmental disclosure can be viewed as a tool to construct image and to influence the public's valuation for a corporation's environmental performance. As a result, corporations will try to escape from the manner which is not acceptable by society and will adapt their operation activities to meet society expectations.

Environmental disclosure: ACCA defined environmental disclosure as the combination of narrative including objectives, explanations and numerical information such as emission amount, resources consumed on a corporations' environmental impact for the particular accounting period. In a different word, environmental disclosure is a systematic statement that describes company's environmental burden and environmental efforts including company's objectives, environmental policies, environmental activities and impacts, reported and published periodically to the public.

There are two primary forms of environmental disclosure which refer to mandatory and voluntary environmental disclosure. Different from Corporate Social Responsibility (CSR) report, environmental disclosure is still under voluntary base without any regulatory or legislative requirements in Malaysia while CSR report is a mandatory obligation for public listed companies to disclose a description of their CSR activities starting on 31st of December 2007.

Iatridis and Alexakis (2012) had conducted a research to examine the determinants for voluntary disclosures. The research has reported that voluntary disclosures show higher profitability and growth as well as higher share trading volume. Their findings found that there is a negative association between voluntary disclosures and earning management which can assist investors in making investment decisions. Hence, they suggest that voluntary disclosures can be a good communication tool to deliver managerial superiority or potential to public.

Although, the trend for environmental disclosure in Malaysia is still at its beginning stage (Heng *et al.*, 2012) as compared to the developed countries like United States and Denmark. However, the increasing pressure from stakeholders is urging the corporations to disseminating environmental information. Shareholders seek for environmental disclosure because they believe that corporations should accountable for their environmental consequences (De Villiers and Van Staden, 2010) as the corporations bound with the social contract. Public no longer believe that corporations can sustain if the corporations do not accounting back to society.

It is crucial to understand the concept of environmental disclosure as the corporations are increasingly required to be both profitable and environmentally responsible. The growing concern on the environmental issues has captured the corporations' awareness on the importance of disseminating environmental information to public.

Said *et al.* (2013) revealed that fund manager know the importance of environmental disclosure. It is becoming increasingly crucial to be disclosed when it influence the company's future financial performance which also will influence stakeholders' decisions. Interestingly, most of the fund managers think that environmental disclosure should be mandatory for all companies in Malaysia rather than voluntary basis.

A more recent study on Romanian Companies by Lungu *et al.* (2014) showed that companies tend to re-position their business regarding disclosures of environmental information in order to meet the demand of environmentally friendly products and services by the consumers. It is becoming increasingly important for companies in recognizing the competitive advantage and performing business strategies that maintain environmental quality to endure the companies' sustainability. Knowing the increasingly importance of environmental information, a research on environmental disclosure in Malaysia as a developing context is very much needed.

The linkage between environmental disclosure and financial performance: From the company perspectives

in order to convince the corporations to engage in environmental practices as well as environmental disclosure, it is necessary to foresee the benefits of the activities. For example, both industrial managers and political decision makers are increasingly more concern on the relationship between environmental disclosure and company performance (Walls *et al.*, 2012).

Yang found that the direct consequences of environmental management practices on market and financial performance is negative. However, environment management practices are positively influence environmental performance which in turn positively influence market and financial performance of a corporation. This indicates that environmental management practice has indirect relationship with the financial performance. The indirect positive consequences of environmental management practices require a longer period to realize while the negative consequences are more short term in nature. San *et al.* (2014) and Singal (2013) in a similar note agreed that positive impact of environmental disclosure need a longer time to realize since, the study found that current period's financial strength is significantly influenced by the previous year's environmental disclosure which means that the investment in the environment brings a positive impact on the next period's credit rating.

Flammer had investigated whether shareholders are sensitive to corporations' environmental disclosure. The results showed that the shareholders react positively to the disclosure of eco-friendly initiatives but react negatively to the disclosure of eco-harmful behavior. There is a significant stock price increase for the corporation that reported to behave responsibly towards environment whereas companies that irresponsibly towards environment experience a significant stock price decrease.

A research by Chen *et al.* (2015) showed that environmental disclosure has a strong and positive correlation with sales growth. This shows the importance of announcing sufficient environmental information to public in order to improve the relationship with stakeholders. By disclosing sufficient environment information, public may have the tendency to increase a market acceptance for products and then increase sales growth. Besides that the research also found that environmental disclosure has positive correlations with product innovations. This indicates that corporation should put environmental consideration at the research and design stage to improve product innovation and gain or retain a competitive advantage for the corporation.

There is a mix of findings on the relationship between environmental disclosure and financial performance. However, most of the findings found that environmental

disclosure will help the organization in gaining competitive advantage in long term. Hence, the hypothesis which indicates a positive relationship between environmental disclosure and financial performance is developed as below:

- H₁: the quantity of environmental disclosure in Malaysian listed companies is positively associated with companies' financial performance
- H₂: the quality of environmental disclosure in Malaysian listed companies is positively associated with companies' financial performance

Quantitative disclosure: In order to measure the quantity of environmental disclosure, content analysis can be considered as the most famous technique that employed in the previous researches. The quantity of environmental disclosure can either be performed by words count, sentences count or pages count.

A research in Thai corporate annual reports by Suttipun and Stanton (2012) showed that the companies in resource industry group made the most environmental disclosure in their annual report while the companies in agricultural and food industries group disclose the least. Larger companies disseminate more on the environmental issues and the most common location for dissemination, it was in corporate governance section. In addition, the most common themes of environmental disclosure for Thai companies were environmental policy, environmental cost and activities and waste management.

Research conducted by Eljayash and Kong (2013) is a comparative study on the differences in environmental disclosure practices between national oil and gas corporations and international oil and gas corporations in the oil sector in countries Arab petroleum exporting for the financial year ended 2008-2010. In his research, words count technique was employed and the research was found that the environmental disclosure has increased for both international and national companies over the period studied as the increasing of words used in environmental disclosure.

Moreover, Ioannou and Serafeim (2014) findings demonstrated that firms in China and South Africa which are the countries that facing severe environmental challenges had significantly increased the disclosure of environmental information while firms in Denmark and Malaysia which perceived as relatively less severe environmental challenges countries exhibited no increase in disseminating of environmental information. After reviewing the previous empirical studies, this study posits that:

- H₃: the quantity of environmental disclosure of large size companies is greater than small size companies
- H₄: the quantity of environmental disclosure for environmentally sensitive companies is greater than less environmentally sensitive companies

Qualitative disclosure: Apart from the quantity aspect, the quality of environmental disclosure of a company is more crucial in evaluating the company's performance. The quality of the environmental information disclosure is perceived as a key value for corporations to grow. There are many advantages for the company who discloses high quality environmental information to the public. Rattanaphaphtham and Kunsrisorn have found that environmental information disclosure quality is significantly and positively related to stakeholder credibility, corporate communication efficiency, corporate transparency, corporate reputation and sustainable growth in Thai-listed firms.

Pled and Iatridis (2012) conducted a research to investigate the quality of CSR disclosures of US environmentally sensitive industries and found that those companies in environmentally sensitive industries such as firms in oil and gas extraction, food manufacturing, chemical manufacturing and fabricated metal product manufacturing, tend to disclose higher quality environmental information in their CSR report. Furthermore, there is a negative relationship between the CSR reporting and the cost of equity which reflecting the evidence that companies are willing to report high quality of CSR report to maintain or improve shareholders' perceptions and subsequently reduce the cost of equity.

He and Loftus (2014) have argued that companies with more favourable environmental performance disseminated a higher level of environmental disclosure than the companies with least favourable environmental performance. The study also found that companies with more favourable environmental performance include a greater proportion of hard disclosure items which are more objective and verifiable.

This contrast with the results by De Villiers and Van Staden (2011) which argued that companies with bad environmental reputations disseminated additional disclosures to explain to public on how they manage environmental issues. They found a negative association between long term environmental performances with the extent of environmental disclosure. They concluded that companies that had bad environmental reputations required disclosing more on the environmental information in order to eliminate information asymmetry between management and shareholders.

Iatridis (2013) examined the relationship between environmental disclosure and environmental performance in Malaysia. The study suggested that bigger companies

size, the need for capital, profitability and capital spending are positively associated with environmental disclosure quality. Manager would be more motivated to produce high quality environmental disclosure in a larger company which has more regulations to follow. In addition, the study proved that companies that disseminated a quality environmental disclosure generally have strong corporate governance and tend to face fewer obstacles in accessing capital markets. Interestingly, majority of the companies are audited by big 4 audit firm or cross-listed on foreign stock exchange. This may because high quality disclosures would reduce uncertainty and gain a competitive advantage.

For more recently and updated, Sulaiman *et al.* (2014) performed a similar study on the determinants of environmental disclosure quality in Malaysia. The results showed that the company size and leverage are positive associated with the quality of environmental disclosures. This support the legitimacy theory as the larger companies tend to report higher quality environmental report to ensure their companies activities and performances are acceptable to society. On the other hand, companies with higher leverage tend to disclose better quality of environmental information to public in order to mitigate the risk as it is a high risk business and the going concern of a high leverage company is highly dependent on long term debt holders. Hence, this study suggested that:

- H₅: the quality of environmental disclosure of large size companies is better than small size companies
- H₆: the quality of environmental disclosure for environmentally sensitive companies is better than less environmentally sensitive companies

MATERIALS AND METHODS

Research design: This research aims to explore insights by investigating the relationship between environmental disclosure and financial performance of public listed companies in Malaysia. To evaluate the extent of environmental disclosure of the companies, a content analysis framework was developed. The content analysis method has been frequently adopted to understand the level of environmental disclosure in previous studies (Sulaiman *et al.*, 2014; Buniamin, 2012). Hence, this research also employed the content analysis technique to analyse the firm’s annual reports. In this study, 100 public listed companies in the main board of Bursa Saham Malaysia are selected by using simple random sampling method. In order to get insights in the trend of environmental disclosure in Malaysia, a time frame of 5 consecutives financial years of annual report from year 2009 until 2013 are investigated.

Measurement of variables: The independent variable, the environmental disclosure of the company is measured in terms of the quantity and quality aspects. For the quantity of environmental disclosure, word count technique is adopted. In line with the previous studies, environmental disclosure of companies can be categorized into four parts which provide us the insight into the extent and nature of information disseminated (Mokhtar and Sulaiman, 2012). For the first part, evidence refers to the environmental disclosure in terms of monetary, non-monetary (i.e., volume) and declarative forms. Furthermore, environmental disclosure can classified as good, bad or neutral types. There are 5 categories (Chairman’s letter, Mission Statement, Director’s report, Operations Review and Other) for the location where environmental information was disclosed. In addition, environmental policy and environmental audit are under environmental sub-themes. Environmental policy is the specific environmental procedures that set by the companies to address environmental issues while environmental audit is the evaluation perform by companies to identify the environmental compliance (Table 1).

In term of examining the quality of the environmental disclosure, an environmental disclosure score checklist is adapted from Sulaiman *et al.* (2014). If an indicator was disseminated completely, it received a score of 1. In contrary, if no information relating to that particular indicator, the undisclosed indicator was numbered with a value of 0. After that all points obtained were summed to determine the quality of environmental disclosure of a company.

In this study, the dependent variable is the financial performance of the company which expected would be influenced by the environmental disclosure practices. In order to measure the company’s financial performance, Return on Assets (ROA), Return on Equity (ROE) and Earnings per Share (EPS) are chosen as the indicators of financial performance of the company. As for control variables, the company size based on total assets and the industry of company are selected to control for the influence of the dummy variables.

The multiple regression model:

$$\text{Financial performance} = \beta_0 + \beta_1 \text{EDQN} + \beta_2 \text{EDQL} + \beta_3 \text{SIZE} + \beta_4 \text{IND} + \epsilon$$

Table 1: Summary of variables

Variables	Proxies	Labels
Independent variable	Environmental disclosure of the company	ED
Dependent variable	Financial performance of the company	FP
Control variable	Company size	SIZE
	Industry of company	IND

Table 2: Table of multiple regressions analysis

Dependent variables	Unstandardized coefficients (B)	SE	Standardized coefficients (β)	t-values	Sig.
ROA					
Constant	-0.247	0.082	-	-3.018	0.003
EDQN	-0.000	0.000	-0.012	-0.156	0.876
EDQL	-0.004	0.003	-0.110	-1.482	0.139
SIZE	0.039	0.010	0.187	3.911	0.000*
IND	-0.025	0.008	-0.137	-3.031	0.003*
ROE					
Constant	-0.374	0.101	-	-3.704	0.000
EDQN	-0.000	0.000	-0.010	-0.132	0.895
EDQL	-0.004	0.003	-0.094	-1.284	0.200
SIZE	0.057	0.012	0.217	4.580	0.000*
IND	-0.033	0.010	-0.144	-3.210	0.001*
EPS					
Constant	-43.233	16.208	-	-2.667	0.008
EDQN	-0.021	0.014	-0.110	-1.453	0.147
EDQL	1.066	0.551	0.144	1.935	0.054*
SIZE	6.810	1.983	0.165	3.434	0.001*
IND	-4.130	1.635	-0.115	-2.526	0.012*

*Represents $p \leq 0.05$ (significant); ROA: $R^2 = 0.067$; Adjusted $R^2 = 0.059$; F-value = 8.857; F significance = 0.000; ROE: $R^2 = 0.081$; Adjusted $R^2 = 0.073$; F-value = 10.873; F significance = 0.000; EPS: $R^2 = 0.060$; Adjusted $R^2 = 0.052$; F-value = 7.863; F significance = 0.000

Table 3: Descriptive statistics analysis on EDQN and EDQL in terms of company size and industry

Analysis	Large company		Small company		Environmentally sensitive company		Less environmentally sensitive company	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
EDQN	111.50	117.609	63.34	67.565	76.52	89.257	93.21	102.080
EDQL	3.05	2.907	1.95	1.828	2.23	2.104	2.65	2.717
Percentage ε (%)	44.00		56.00		52.00		48.00	
	100.00				100.00			

RESULTS AND DISCUSSION

According to Table 2, EDQL is the only independent variable that has positive significant relationship with the EPS ($p \leq 0.05$). This shows that the quality of environmental disclosure is statistically significant ($p = 0.054$) and positive correlated with EPS with a t-value of 1.935. Apart from this, all of other variables are insignificant relationship with the dependent variables ($p \geq 0.05$). On the contrary, control variables of company size and industry show significant relationship with the dependent variable in all 3 models ($p \leq 0.05$).

Table 3 presents that there are 44% of the sample companies are considered as large companies while the remaining 56% of the sample companies are considered as small companies. As predicted, the mean of EDQN and EDQL for large companies are greater than the mean for the small companies, 111.50 words and 3.05 scores compare with 63.34 words and 1.95 scores, respectively. This means that the quantity and quality of environmental disclosure for large companies are greater than small companies.

Moreover, Table 3 shows that 52% of the sample companies are classified as environmentally sensitive companies while the remaining companies as less environmentally sensitive companies. Surprisingly, the

mean of EDQN and EDQL for environmentally sensitive companies are lesser than the mean for the less environmentally sensitive companies, 76.52 words and 2.23 scores compare with 93.21 words and 2.65 scores, respectively. This indicates that the quantity and quality of environmental disclosure for environmentally sensitive companies are poorer than less environmentally sensitive companies.

CONCLUSION

In a nutshell, this study reveals that there is only a positive relationship between quality of environmental disclosure and the EPS. This can explain by EPS is the key drivers in measuring firm's performance and its puts a value on the stock share price in relation to profitability of the company. Therefore, the investment decision made by the investors should focus on the company's future prospects and fundamentals relative to its current stock price. Since, the environmental issues is one of the hot issues in this century and the "Go Green" trend is emerging globally, thus, a good quality of environmental disclosure also consider as a part of company's future prospect to sustain its business. Hence, public listed companies should be more proactive to disseminate higher quality of environmental disclosure in order to increase companies' share price.

In addition, this study also proved that large companies are more likely to disclose higher quantity and quality of environmental disclosure than small companies. The main reason that contributes to this result is that large companies which have significant market share in that particular industries have bigger influence power in the development process of a country. This means that large companies are always be concerned by the public, mass media and governments in locally or even internationally. However, sensitive environmental companies are disseminated less and lower quality of environmental disclosure compare with less sensitive companies. This may due to the loose regulatory system in Malaysia. Therefore, even more effective efforts are needed from regulatory bodies, especially the government to facilitate the environmental disclosure as well as increase the environmental awareness in Malaysia.

In terms of practical implications, it is suggested that Malaysia should have a more functional and comprehensive regulation system regards to the environmental issues. The level of environmental awareness is assumed to be increase if imposes a more strictly rules and regulation. In addition, Bursa Malaysia's CSR framework was launched in as a set of guidelines for Malaysian public listed companies. It is suggested that Bursa Malaysia should issues a more comprehensive framework that guide public listed companies in their environmental disclosure which aligning with GRI guideline and adapt it to the Malaysia business context.

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