An Empirical Examination of the Relationship between Environmental Disclosure and Financial Performance in MALAYSIA

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Abstract

This paper aims to examine the link between environmental reporting practices and firm performance of Malaysia Public Listed Companies for the year 2009.By using content analysis, this study reveals that 68.1% of 299 companies provide environmental information in their annual reports with an average of 7.82 sentences and 18.3% of the companies have separate environmental section in their annual reports. Insignificant relationship is found between environmental reporting and return on assets but significant relationship between environmental reporting with return on equity is reported. Additionally, company size, leverage and industry sensitivity companies found to have significant relation with firm performance.

Keywords Environmental reporting, return on asset, return on equity, financial performance

INTRODUCTION

Since firms are facing growing pressure to become responsible and greener, they have started to consider environmental issues within the context of their business activities. Many of the companies seek to confirm their social responsibility by using environmental reporting (Dixon, Mousa and Woodhead, 2005). Deegan and Rankin (1999) suggest that environmental information is important and required by the public in decision-making for various purposes including lending and investment. Perhaps more important, environmental disclosure is a source of documentary evidence that can be used by external parties to evaluate company performance. Previous researcher argued that the ability of the company to demonstrate good environmental management via environmental reporting would promote reputational advantages (O'Donovon, 2002). However, it is widely believed that firms will not adopt a voluntary disclosure unless its benefits outweigh the cost (Nishitani, Kaneko, Fujii and Komatsu, 2012).

Environmental disclosure is still a voluntary exercise in Malaysia as well as in many other countries. However, in recent year, there is an increasing number of firms across different industries have voluntarily disclosed environmental information in their annual reports. A number of studies have documented evidence on environmental information disclosure in Malaysia. Various aspect have been investigated such as reporting attitudes (Andrew, Gul, Guthrie and Teoh, 1989; Jaffar, 2006; Yusoff, Yusoff and Lehman, 2007), motivation of environmental reporting (Ahmad, Hassan and Mohammad, 2003; Nik Ahmad and Sulaiman, 2004; Elijido-Ten, 2009.), the factor that influence the environmental reporting such as corporate characteristic (A.Manaf, Atan and Mohamed, 2006; Thompson and Zakaria, 2004; Yusoff, Lehman and Nasir, 2006; Smith, Yahya and Amiruddin, 2007; Buniamin, Alrazi, Johari and Abd Rahman, 2008, 2011;Anuar, Sulaiman and Nik Ahmad, 2009; Buniamin, 2010), as well asthe association of corporate governance attributes and environmental reporting practices (Jaffar, Jamaludin and Abdul Rahman (2007); Buniamin et al., 2008; Htay, Ab. Rashid, Adnan and Mydin Meera, 2012).

Although environmental reporting studies in Malaysia appear to be growing, most of the studies have looked at environmental information that has been disclosed by firms in their annual reports. Nevertheless, researchers pay less attention to the correlation between the disclosure of environment information and firm performance. In developed country, there are extensive widespread empirical tests of the relationship between environmental disclosure and firm performance. Thus, this study seeks to close this gap by examining the relationship between environmental information disclosure and firm performance within a Malaysia context.

This paper makes a contribution to the literature in several ways. First, it reports the recent findings on environmental reporting practices in Malaysia. If an environmental reporting practice is low, then this would be of concern government regulatory agencies as well as policy maker. This would imply a need for a mandatory environmental reporting or consider introducing (further) regulation in this important area. Second, this study seeks to make a contribution to the debate about the impact of environmental reporting practices on firm performance, especially within a Malaysia context. The results of this study may provide information to the companies concerning whether environmental reporting has any substantiated impact on their financial performance. If the results of the study indicate a positive impact, this will encourage Malaysia companies to communicating environmental information to wider stakeholders and increase environmental reporting practices in Malaysia.

The remainder of this paper begins with a review literature, hypotheses to be tested, research method adopted, finding and discussion and finally, conclusion.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Environmental Reporting Practices in Malaysia

Environmental reporting practice in Malaysia is still at the early stage of development compared to the matured explorations in developed countries (Elijido-Ten, 2009; Yusoff and Lehman, 2005). A survey by Association of Chartered Certified Accountants

(ACCA) (2002) on the corporate environmental reporting practice of Malaysian companies shows that the number of reporting companies grew from 25 in 1999, to 35 in 2000 and reach to 40 companies in 2001. These represent 5.3%, 7.0% and 7.7% of the KLSE First Board listed companies in 1999, 2000 and 2001 respectively. Similarly, Alrazi, Nik Ahmad and Sulaiman (2009) conducting a longitudinal study to examine the level of environmental reporting practices of 94 Malaysian companies during the year of 1999, 2003 and 2006 reveled that an increase in the number of companies reporting environmental information from 45 (47%) companies in 1999 to 64 (67%) companies in 2006.

Although the number of reporting companies is increasing, environmental reporting in Malaysia indicating a low level of maturity (Elijido-Ten, 2009). The extent of environmental reporting among Malaysian firms is still at the infancy stage, where many companies do not disclose information beyond what is required by regulations and standards (Jaffar et al., 2007). Nik Ahmad and Sulaiman (2004), in their study of 140 Malaysian public listed companies reveal that on average the companies disclose approximately five sentences. Consistent with Nik Ahmad and Sulaiman (2004), Buniamin et al. (2008) reported that on average Malaysian companies disclose 4.7 sentences in the year 2005 whereas Alrazi et al. (2009) show a fluctuation in the average of number of sentences disclosed. In 1999, on average companies disclose 3.83 sentences, whereas 14.10 sentences in 2003 and 12.27 sentences in 2006.

In addition, Nik Ahmad and Sulaiman (2004) examined a total of 138 Malaysian companies listed on Bursa Malaysia in the year 2000 and found out the company disclose very general information. Similar result has been documented by Yusoff et al. (2006). The authors conducted a longitudinal study from the year 1999 to 2002reveal that in the year 1999, there were 32 qualitative environmental disclosures and a total of 33 general disclosures on environmental information. Only 2 quantitative disclosures were discovered. The finding was supported by Alrazi et al. (2009) which stated that most of the environmental information disclosed by Malaysian companies is narrative in nature. The findings demonstrated that 98% of environmental information disclosed in 2006 was declarative information while only 2% of the information was in the form of monetary/non-monetary.

Besides, environmental reporting practices of Malaysian indicated that only positive environmental information was frequently reported. Nik Ahmad and Sulaiman (2004) found that among 158 disclosed sentences on environmental information; only 4 (2%) sentences were disclosed on bad news while 123 (66%) sentences were good environmental news, respectively. Similarly Jaffar (2006) in a study of the environmental disclosure practice of 'environmentally problematic companies' reported that twelve of fourteen reporting companies have reported positive environmental information (86%) in their 1999 annual reports. The result of a study conducted by Alrazi et al. (2009) is in line with Nik Ahmad and Sulaiman (2004) and Jaffar (2006) where the study found that among 1,178 disclosed sentences on environmental information during the year 2003, only 23 (2%) sentences were disclosed on bad news while 638 (54%).

The quality of environmental reporting in Malaysia is also still at low level (Jaffar et al.,2007). In a study of 200 companies in six industries listed on the First Board of Bursa Malaysia for the year of 2004, Jaffar et al., (2007) report that out of 76 disclosure item, the average level of quality disclosure is 0.3522 with the highest frequencies of disclosure is 0.3289 (25 items). Similar result has been reported by Alrazi et al, (2009) and Buniamin et al. (2011). Buniamin et al. (2011) reported that among 243 Malaysian companies, the highest disclosure score is reported to be 54.26% and the average for each company is merely 3.24%.

Link between Environmental Reporting and Firm Performance

Recently, there has been a great deal of interest in the research literature regarding whether or not environmental reporting practices can improve firm performance. A review of a study in this area reports conflicting results. By using the data from the year 1973 for the whole sample of 31 U.S. highly-polluted firms, Freedman and Jaggi (1982) found a statistically insignificant association between environmental disclosure and economic performance. Similarly, based on a sample of the 26 largest firms monitored by the Council on Economic Priorities, Wiseman (1982) found no relationship between the measurable information companies disclose about environmental performance in their annual reports and their actual environmental performance.

From a longitudinal outlook, Murray, Sinclair, Power and Gray (2006) examine the relationship between social and environmental reporting and financial performance of Top 100 United Kingdom companies over the nine year period starting from the year 1989 to 1997. According to Murray et al. (2006), the relationships between share price returns and total social and environmental, voluntary social and environmental and environmental disclosures varied from year to year, varied across different forms of disclosure and swung between positive and negative over time. However, none of these relationships were significant. Similarly, Cormier and Magnan (2007) conducted a longitudinal study to investigate the impact of firm's environmental reporting on the relationship between a firm's earnings and its stock market value across three countries, Canada, France and Germany and suggested that decisions to report environmental information have a moderating impact on the stock market valuation of a German firm's earnings but not significantly influence the stock market valuation of Canadian and French firm's earnings.

However, previous researchers have argued that environmental reporting could have a positive impact on the organization (Stanwick and Stanwick, 2000). A number of studies have yielded a significant relationship between environmental disclosure and firm performance. Al-Tuwaijri, Christensen and Hughes II(2004) employ a simultaneous equations approach to investigate the relations among environmental disclosure, environmental performance and economic performance. Using the data from 2004 of Standard and Poor's 500 companies, the study reveals that good environmental performance is significantly associated with good economic performance, and also with more extensive quantifiable environmental disclosures of specific pollution measures and occurrences.

Moneva and Cueller (2009)analyzed the value relevance of different types of financial and non-financial environmental disclosures of 44 Spanish companies listed on the Madrid Stock Exchange for the period 1996–2004. Using a regression model, results suggest two financial environmental disclosure variable, expenditure on environmental activities and provision for contingencies have a negative influence on the market value of the companies. However, the only financial environmental disclosure has a positive significant relationship with the value of the company is disclosure of environmental assets or investments, suggesting that investors think that these investments can generate a higher return in future.

In China, Zhongfu, Jianhui and Pinglin (2011) explore the impact of the extent of environment information disclosure on economic performance of 445 listed companies of the manufacturing industries at Shanghai Stock Exchange. The data are collected independently from among the environment information disclosure material of the 2008-2009 year annual reports. With Tobin Q as the indicator of economic performance, the environment information disclosure has a positive effect on the Tobin Q of economic performance of the current year and the following year. In line with the evidence obtained by Zhongfu et al. (2011), Assaf et al. (2012) indicated the hotels that undertake more extensive environmental reporting demonstrate higher performance. In a further examination of the environmental disclosure-performance relation, Haj and Aaydi (2011) found that there is a significant negative relationship between environmental disclosures of 31 Tunisian companies and financial performance.

Based on the review of previous studies examining the relationship between environmental reporting and firm performance, although the results are mixed, but works where a significant positive relationship between environment and firm performance is obtained are predominant. Therefore, it would be expected that firms would incorporate environmental information in their annual reports in order to obtain the potential financial benefits that may occur. Therefore, the hypotheses to be empirically tested are the following:

H1: There is a significant relationship between environmental reporting practices and Return on Asset (ROA).

H2: There is a significant relationship between environmental reporting practices and Return on Equity ROE.

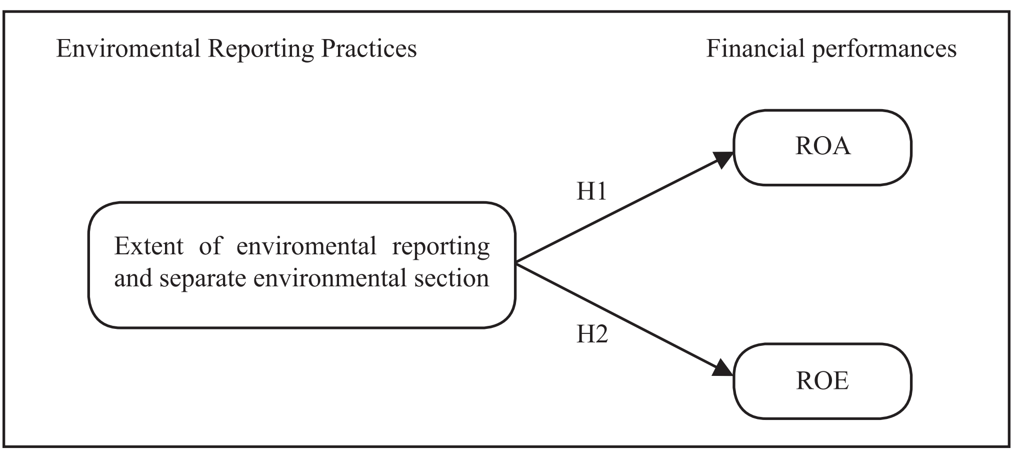

Figure 1 Research model of the relationship between environmental disclosures and financial performance

LEGITIMACY THEORY

Legitimacy theory has become one of the most cited theories within the social and environmental accounting area. It is based on the idea of a social contract between business and the wider society (Patten, 1992). It posits that organizations will react to the community's expectations (Patten, 1992; Tilt, 1994) and be responsive to environmental pressures, including political, economic and social pressure (Deegan and Rankin, 1996). Failure of organizations to meet those expectations may result in community dissatisfaction, criticism and penalties being incurred that restrict the activities of the firm (Buhr, 1998; O'Donovan, 2002). Consequently, it will affect the ability of the companies to operate and succeed in future. Therefore, to justify their existence in a community, the organization will take action to legitimize their activities (Buhr, 1998) and reduce the legitimacy gap (O'Donovan, 2002). Accordingly, an organization may use its annual reports to portray the image of being environmentally responsible, thereby implying congruence between corporate and societal values (O'Donovan, 2002). Management make decisions based upon self-interest.

RESEARCH METHODOLOGY

The population for this study is all public listed companies listed on Main Board as of 31 December 2009. The sample size is determined by using online sample size calculator by Raosoft. All financial firms are excluded as these sectors are additionally governed by certain rules and procedures from regulatory bodies such as Bank Negara Malaysia and Ministry of Finance. Furthermore, the operation of these companies are deemed to have less impact to the environment (Wilmshurst and Frost, 2000) and as such increase the likelihood of non-reporting incidence (ACCA, 2002, 2004; Ahmad et al., 2003).The final sample consists of 229 companies randomly selected using the random number generator available in Excel. Data is extracted using the content analysis method from the annual reports of these companies.

The previous researchers have utilized the content analysis approach to explain the environmental disclosure by companies (for example, Ingram and Frazier, 1980; Guthrie and Parker, 1990; Zeghal and Ahmed, 1990; Gray, Kouhy and Levers (1995a,b); Hackston and Milne, 1996; Wilmshurst and Frost, 2000; Jaffar, Iskandara and Muhammad, 2002; Nik Ahmad and Sulaiman, 2004; Alrazi et al., 2009; Buniamin et al., 2008; 2011). In line with those studies, content analysis will be used as the research method in the present study. It is the most appropriate method of analysis in examining the incidence of environmental reporting (Nik Ahmad and Sulaiman, 2004)

Although environmental disclosure could take various means, such as environmental reports as well as in company staff newspapers, press releases, paid newspaper, television and radio advertising, company brochures (Zeghal and Ahmed, 1990) and company internet web pages (William and Ho, 1999; Campbell, 2004), the study merely examine annual reports since annual reports remain the most widely used document in the analysis of environmental reporting for the reason that they are produced regularly (Buhr, 1998) and are widely read (Deegan and Rankin, 1996). Gray et al. (1995a) argued that the primary method of communicating with stakeholder is through annual reports that include financial statements and other information. It is considered by various user groups to be the major source of information about an organization 's environmental performance (Deegan and Rankin, 1996) and completeness in terms of the company's communication on social issues (Gray et al., 1995b).In addition, annual reports are used due to their high degree of credibility of information reported (Tilt, 1994; Neu, Warsama and Pedwell, 1998; Unerman, 2000), accessibility (Unerman, 2000) and their reliability due to auditing verification (Yusof, Yatim and Mohd Nasir, 2004).

To measure environmental disclosure, the study used extent of environmental information disclosure and separate environmental section. Environmental information is defined as the information regarding "the impact company activities have on the physical or natural environment in which they operate" (Wilmshurst and Frost, 2000: 16). Each existence is coded as "1" if firm disclosing some forms of environmental information in annual reports, while "0" if firm do not disclose any environmental information. Consistent with Buniamin et al. (2008; 2011), Alrazi et al. (2009) and Buniamin (2010) the study use extent of environmental reporting and separate environmental section as proxy of environmental reporting practices. The extent of environmental reporting is measured by the number of sentences, as it can convey the meaning and provide more reliable measurement (Hackston and Milne, 1996). Furthermore, counting sentences may reduce error compared to individual words (Milne and Adler, 1999). Graphical diagrams, pictures and captions to pictures of disclosure environmental reporting were excluded from analysis as due to inclusion would involve high level of subjectivity (Nik Ahmad and Sulaiman, 2004).

To test our hypotheses, we employ financial performance as dependent variable, environmental disclosure as independent variables. To measure financial performance, we used return on assets (ROA) and return on equity (ROE). Most previous studies used accounting data such ROA and ROE(for example Yoshikawa and Phan, 2003) as it measures the efficiency of assets in producing income while return on equity is a measurement of the performance of the firm relative to shareholder investment (Haj and Aaydi, 2011). McGuire, Sundgreen, and Schneeweis (1988) argued that financial performance measures are better predictors for corporate social responsibility, which include environmental disclosures.

Company size, leverage, foreign association and environmental sensitivity industry are used in this study as a control variable. The choice of these variables is guided by prior literature. It is found in the research that larger companies tend to disclose more information than smaller firms do (Patten, 2002) and can have a positive effect on firm performance. Additionally, firms from high environmentally sensitive industries are usually subject to greater public attention and usually show higher levels of environmental information than less environmentally sensitive industries (Belhaj and Ayadi, 2011). Leverage also has been suggested in previous studies as a factor influencing both financial performance and environmental performance (Pava and Krausz, 1996).According to Clarkson et al. (2008), firms that raise financing in debt have a higher tendency for voluntary disclosures. Moreover, the environmental discourse may vary across countries in which firms belong and it is suggested that an environmental disclosure was strongly influenced by country of origin (Wanderley, Lucian, Farache, and Filho, 2008). Thus they must legitimize their environmental compliance and must respond to pressures in order reflect the same image of the parent.

Table 1 Measurement of variables

Variables		Measurement
Dependent Variables	Return on Asset	Net profit divided by total asset
	Return on Equity	Net profit divided by total equity
Independent Variables	Extent of environmental reporting	Number of sentences
	Separate environmental section	1: existence of a separate environmental section in the annual report 0 = there is separate environmental section in the annual report
Control variables	Firm size	natural logarithm of total asset
	Leverage	Long-term debt to total asset ratio.
	Industrial sensitivity	1: Environmental sensitive industry 0: Less environmentally sensitive This involved reviewing the works of previous researchers (for example, Wilmshurst and Frost, 2000) and also a report issued by the Department of Environment Malaysia, 2002).
	Foreign association	1= if the company is a subsidiary of an international company 0 = otherwise

In order to test the relationship between environmental reporting practices and firm performance as described in our two hypotheses, the study used regression analysis. Thus, we set up the following linear model:

$$FP = \beta_0 + \beta_1 EnvQty_{+} \beta_2 EnvSec + \beta_3 \Sigma Assets + \beta_4 Lev + \beta_4 IndSen + \beta_4 ForeignAss + \varepsilon \ldots (1)$$

Where

FP = performance of the company, measured by return on asset and return on equity
β_0 = intercept
EnvQty = Extent of environmental reporting
EnvSec = Separate environmental section in annual report
ΣAssets = Size of companies measured by natural logarithm of total sales
Lev IndSen = environmentally sensitive industry
ForeignAss = Foreign association = Leverage
ε = Disturbance term

FINDING AND DISCUSSION

Descriptive Analysis and Correlation Analysis

The companies in our sample are representatives of various sectors, with considerable numbers are from industrial product sector (27.9%), followed by trading and services sector (27.1%) and consumer product sector (13.5%). The study found that out 156 of 229(68.1%) companies contained some kind of environmental information in their corporate annual reports. As shown in Table 2, among the nine sectors, trading and services comprise the highest number of companies (21%) that voluntarily report environmental information followed by industrial product (15.3%) andconsumer product (10%). *This result is consistent with Alrazi et al. (2009), which also verified that trading/services companies as the sectors that have higher level of disclosures on environmental information among other sector of industries.*

Table 2 Demographic result

Sector	Companies					
	Distribution of companies		Disclose		Not Disclose	
	No	**%**	**No.**	**%**	**No.**	**%**
Construction	14	6.1	11	4.8	3	1.3
Consumer Products	31	13.5	23	10.0	8	3.5
Industrial Products	64	27.9	35	15.3	29	12.7
Infrastructure Project Companies	4	1.7	4	1.7	0	0.0
Plantation	17	7.4	12	5.2	5	2.2
Properties	28	12.2	17	7.4	11	4.8
Technology	7	3.1	5	2.2	2	0.9
Trading/Services	62	27.1	48	21.0	14	6.1
Hotel	2	0.9	1	0.4	1	0.4
Total	**229**	**100%**	**156**	**68.1%**	**73**	**31.9%**

This result shows an improvement in the number of companies engaging with environmental disclosure from the study by Buniamin et al., (2008) and Alrazi et al. (2009) due to increased awareness on the importance of environmental reporting by the Malaysian companies. Buniamin et al. (2008) reported that only 28% of the sample report some form of environmental information in their annual report for the year 2005 whereas Alrazi et al. (2009) reported 47% and 64% for the year 1999 and 2006 respectively.

In total, these 156 companies provided 1,790 sentences with an average 7.82 sentences with 18.3% of the company has separate environmental section in their annual report. The extent of disclosure is higher than a result reveals by Buniamin et al. (2008) in which the author reported that on average Malaysian companies disclose 4.7 sentences in the year 2005. However, the result is lower as compare to Alrazi et al. (2009) which conducted a longitudinal study showed a fluctuation in the average of number of sentences disclosed. In 1999, on average companies disclose 3.83 sentences, whereas 14.10 sentences in 2003 and 12.27 sentences in 2006. One possible explanation is that, Malaysia's economy is affected by the global financial crisis 2007-2008. This is consistent with Kuasirikun and Sherer's (2004) argument that the amount of environmental information disclosed appears to decline as a country experiences an economic recession. In the times of financial crisis companies might not have afforded the costly process of additional information of voluntary disclosures due to the related preparation and competitive costs. Hence, companies would have provided less environmental information during the financial crisis.

Before conducting correlation analysis, normality test is done using Kolmogorov-Smirnov test with significance level of less than 0.05 indicates that the distribution of the data is not normal (De Vaus, 2002). Table 3 reports that all the continuous variables are not normally distributed (significant level of less than 0.05 indicates non-normality).

Table 3 Descriptive statistics for dependent and continuous independent variables

	Extent	Size	Leverage	ROA	ROE
Mean	7.82	3.58E9	15.8802	7.7614	13.0140
Standard Deviation	14.990	8.630E9	17.65157	8.23976	12.94542
Skewness	4.309	4.431	2.283	2.359	2.145
Kurtosis	2.7762	23.593	7.169	7.893	6.605
K-S test	0.000*	0.000*	0.000*	0.000*	0.000*

*Significance at 0.01; K-S with significance <0.05, hence data not normally distributed.

The study used Spearman correlation to assess the relationship between the independent variables included in the regression. Before testing the hypotheses, the study checks if the regression analysis fulfils the assumptions of multicollinearity. The results show that this assumption is fulfilled in which there is no coefficient correlation between two variables is greater than 0.80(Field, 2000; Cooper and Schindler, 2003). Table 4 indicated that that extent of environmental reporting has positive relationship with environmental section, company size and foreign association. It is also noted that company size has a positive relationship with leverage and industry sensitivity.

Table 4 Spearman correlation matrix

	Extent	Environ-mental section	Leve-rage	Normal Score Size	Foreign Asso-ciation	Industry Sensi-tivity	ROA	ROE
Extent	1.000							
Environmental section	.672**	1.000						
Leverage	.108	.075	1.000					
Normal Score Size	.446**	.405**	.206**	1.000				
Foreign Association	.154*	.168*	.013	.032	1.000			

Industry Sensitivity	-.091	-.057	-.001	.219**	-.065	1.000		
ROA	.036	.016	-.070	-.044	.019	-.097	1.000	
ROE	.077	.058	.136*	.011	.002	-.125	.855**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Regression Analysis

Based on results obtained from K-S test, data of this study is not normally distributed. Therefore, the variables are transformed to normal data using normal score before conducting the regression analysis because it is required that the data is normally distributed in order for the linear regression analysis is conducted.

Table 5 Multiple regression result

	Model 1 - ROA	Model 2 - ROE
Independent variables	**Sig.**	**Sig.**
Extent	.213	.023
Environmental section	.882	.989
Leverage	.646	.044
Normal Score Size	.000	.013
Foreign Association	.935	.248
Industry Sensitivity	.024	.015
R^2	.069	.070
Adjusted R^2	.043	.045
F Statistic (sig)	2.722	2.797

Based on the Table 5, it is found that none of the elements of *environmental reporting practices* is found to be significantly correlated with the ROA. Therefore, there is no sufficient evidence to support H1. The result is in accordance with the study of Freedman and Jaggi (1982) and Richardson and Welker (2001).Richardson and Welker (2001) suggested that the additional environmental disclosure would increase the burden on the firm and increase the cost of equity capital. Additionally, the impact of environmental environment reporting practices on firm performance may not be an immediate one (Murray et al., 2006).As shown for Model 2 when ROE is the dependent variable utilized to measure financial performance, it is found that the extent of environmental reporting significantly with ROE. The result is consistent with Al-Tuwaijri et al., (2004), Moneva and Cueller (2009), Haj and Aaydi (2011) and Zhongfu et al. (2011). Although, the R-squares is very small (7%) and indicates a very weak relationship between environmental reporting and financial performance, the results indicated that the high level of environmental information disclosed could encourage financial markets react positively to the such information and thus it benefits the financial performance of the firm and in turn contributes to higher return on equity. Therefore H2 is supported.

Contrary to our expectation, size of the company and industry sensitivity is negatively related with the ROA and ROE. Based on correlation analysis, the larger companies tend to disclose more environmental information in their annual report. In turn, they experienced profits reductions since voluntary disclosure is costly (Mohd Ghazli and Weetman, 2006) and reported lower ROA and ROE. Additionally, more environmentally sensitive companies are reported lower ROA and ROE could be due to the fact that these companies have passed through the same crisis periods (2007-2008) that influenced the major financial indicators of the companies. However, leverage is significantly and positively correlated with ROE. According to previous studies, financial leverage affects cost of capital, ultimately influencing firms' profitability. The firms' decision to use a long-term debt is based on a trade-off with interest tax shields. The tax benefits of debt dominate up to a certain debt ratio, resulting in higher return on equity (Gu, 1993). Although multinational corporations are provide more information environmental information in the annual reports, this study found no relationship between foreign association and firm performance due to the fact that only 10.5% of the companies in the samples are a subsidiary of an international company.

CONCLUSIONS

The purpose of this study is to investigate the current state of environment reporting practices in Malaysia and attempts to examine the relationship between environment reporting practices and financial performance. The finding indicates that there in an improvement in the number of reporting companies and extent of disclosure as compared to a study conducted by previous researcher. On average companies disclose 7.82 sentences with 18.3% of the companies has separate environmental section in their annual report. Based on Table 4.4, acceptable findings on the relationship between environmental disclosure and firm financial performance for Malaysian public companies are reported.

The findings of the study should be interpreted in light of several limitations. Firstly, this study is the use of annual report as research instrument. It is recommended that other media such as standalone reports and internet environmental reporting are used in conducting the research in the future. Next limitation of this study is that it is only focused on 2009 annual report. Due to this, this study is not expected to show any trends and changes in *environmental reporting practices* in Malaysia. In our opinion, it would be interesting for future research to consider the analysis of potential time lapses separating the environmental reporting practices and the achievement of financial performance through longitudinal studies. Apart from that, this study only focuses on two types of financial performance measurements. Other measurements of financial performance are not being tested but may give significant findings.

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