

THE EFFECT OF CORPORATE CHARACTERISTIC ON SOCIAL AND ENVIRONMENTAL DISCLOSURE: EVIDENCE FROM MAI LISTED FIRMS IN THAILAND

Kulchaya Waenkaeo¹Satha Waroonkun^{1*}

¹Faculty of Business Administration, Maejo University 50290, Thailand

ABSTRACT

The main purpose of this research is to examine the impacts of corporate characteristic on social and environmental disclosure. The database is drawing from the Stock Exchange of Thailand (SET) on its website. This database shows that there are 79 MAI Listed in Thailand which can be the sample and population. Ordinary Least Squares (OLS) regression is used for data analysis. The results indicated that, the greater in firm size and firm age, the more positive relationship it has on social and environmental disclosure. Moreover, the results of ANOVA analysis indicated that differences in audit firm cause difference in social and environmental disclosure.

Keywords: Social and environmental disclosure, leverage, profitability, liquidity

Introduction

The global warming caused by human mis-behavior has drawn dramatic attentions to many stakeholders. Which has been caused by human behavior. This behavior such as deforestation, pollution and carbon emissions created the environmental problems as climate change which is a significant concern as it impacts living life on earth. (Ismail, Ramli & Darus 2014). The stakeholders have tried to solve this problem in many ways, such as setting up related-regulations to control and protect the environment. However, the role of business has contracts with society in order to employ useful natural resource and human resource for their business operation.

According to legitimacy theory, businesses are allowed to temporarily exploit natural resource to support their operation; therefore, business entities must give providence to natural conservation. That is, business entities should set up policy concerning on nature, social and community responsibilities. These businesses entities must focus on Corporate Social Responsibility (CSR) more than maximizing their profits. Hence CSR is the core of business success, because it concerns the benefit in social and economic, which changes on business awareness on society and environmental impacts. It is high time that businesses focus on the existence of community and society to ensure co-exist in the long-run, i.e., business operates under social and community responsibility. To the survival of economic system, a global business is increased the responsibility on social and environmental for balance the economic, social, environmental and political (Pattern, 2002).

The voluntary disclosure in the annual reports supports information for stakeholder in the areas of accounting. The firm provides information to stakeholders who will help the business to survive and also to be accepted by society and community. Singhania and Gandhi (2015) mention that the company usually discloses CSR information to avoid the negative impact of government regulations. Consistent with Lu and Abeysekera (2014) indicate that the communication between firms and their

stakeholders such as suppliers, employees, customer, communities and regulators by used corporate social and environmental disclosure represent their activities. Stock Exchange of Thailand (SET) intends to continue its mission to build a strong foundation for the sustainable growth of the capital market in the long run. As a result, SET focuses its role in sustainable development in three key areas: first, encouraging stakeholders of the capital market to determinedly focus on sustainability in business process and investment; second, fostering the development of the ecosystem to promote sustainability of the capital market; and thirdly, elevating the sustainable development of the Thai capital market to be globally accepted (The Securities and Exchange Commission: SEC, 2016). Therefore, this study aims to explore the extent of Environmental and Social Disclosure (ESD) of companies registered to SEC.

The main purpose of this research is to examine the impacts of corporate characteristic on social and environmental disclosure. In addition, the research purposes are to examine the relationships of corporate characteristic on social and environmental disclosure. The results of the research can be used to improve the social and environmental disclosure. Managers can use these results to support their decision making on strategy setting. This research is organized in five sections as follows. The first part is rational and theoretical foundation, the second part reviews previous studies and relevant literature, explains the theoretical framework, describes the conceptual model, and develops the related hypotheses for testing, while the third discusses research methodology, including sample selection and data collection procedure, the variable measurements. The fourth presents the results of statistic testing, demonstrates the empirical results, and discussion in full detail. Finally, it details the conclusion, theoretical and managerial contributions, limitations, and suggestions for future research.

Theoretical foundation

Legitimacy theory indicated that the organization has contracts with society in order to employ, use full

natural resource and human resource for their business operation (Cormier & Gordon, 2001) however, the company acquired the rights and authorities visiting the society in a way that is temporary license, based on conditions that firm must operate with righteousness which socially accepted. Consistent with Villiers and Staden (2006) state that the company will not be able to survive if business procedural are not accepted by society, especially, social acceptance in social and environmental responsibility would ensure the firms' growth sustainably (Branco & Rodrigues, 2008). Most previous research in social and environmental disclosure employ the legitimacy theory explaining relations of firms' disclosure of environmental and social information; for instance, in the work of operate (Cormier & Gordon, 2001; Villiers & Staden, 2006; Branco & Rodrigues, 2008). Therefore this research attempts to investigate the firm characteristic on social and environmental disclosure by utilizing two theories including, legitimacy theory and stakeholder theory to explain the conceptual model.

Stakeholder theory

Freeman, (1994) stated that stakeholder theory has two points as organization should be generating value and responsibility for stakeholder together (Freeman, Wicks, & Parmar, 2004). Deegan (2002) indicated that stakeholder group has influence and obligation on investigating resources to a firm operation based on stakeholder theory. Stakeholders are defined as employees, financiers, customers, employees, and communities. Therefore, businesses operate based on norm, regulation and business ethic by focusing on the social responsibility and maximizing firm value together implying that there have been implicit contracts existed between society and corporations. Consequently, social and environmental disclosure demonstrate the action it is province information by can demonstrate that action of firm as good corporate citizens and also supported stakeholders' expectation. Prior researches employed the stakeholder theory to illustrate variable relation in conceptual model (Lu & Abeysekera, 2015; Chiu & Wang, 2015).

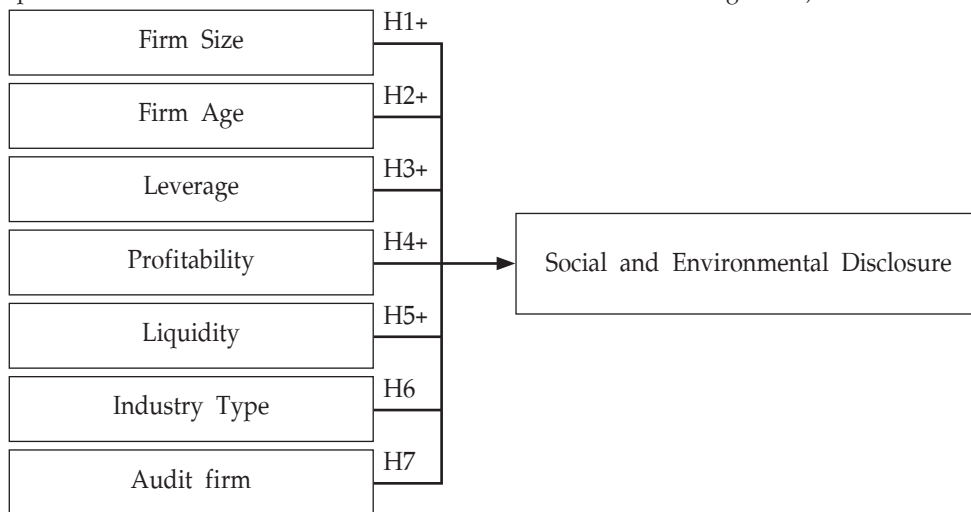


Figure 1 Research conceptual framework

Literature review and hypothesis development
Social and environmental disclosure

Legitimacy theory indicates that the organization have provisional contracts with society in order to utilize natural resource and human resource for their business operations, under social value and believes. Then, organization attempts to take responsibility

in their operation activity by attention in group activities to respond about community and social performance (Mathews, 1995; Rahahleh & Sharairi, 2008). Therefore, business obtains CSR to be able to their procedure and policy. CSR is the core of business success, because it concerns the benefit in social and economic, which changes on business

awareness on society and environmental impacts. To the survival of economic system, a global business is increased the responsibility on social and environmental for balance the economic, social, environmental and political (Patten, 2002).

Stakeholder theory indicates that business can be survived as influenced by stakeholder (employees, financiers, customers, employees, and communities). Therefore, stakeholder group need more information for business behavior assessment together with financial and non-financial information. Social and environmental information should be the firm's primary focus. However, social and environmental disclosure must be voluntary and may consider between cost and benefit of organization. Prior research found that factors affecting on social and environmental disclosure are organization characteristic and corporate governance (Brammer & Pavelin, 2004; Soliman, 2013; Lu & Abeysekera, 2014; Branco & Rodrigues, 2008). Firm strategy and policy in environmental related procedure of productivity and service are represented in social and environmental disclosure. Thus, information disclosure must be voluntary as firms have set up their own environmental policy, such as production environmentally friendly products, supporting community and society on a regular basis which exhibits to customer participation and stakeholder reliability (KMPG, 2005; Patten, 1992). Social and environmental disclosure is valuable because it provide strategy and framework for linking economic, social and environmental (White, 2005; Murcia & Santos, 2012).

Firm sized

Social and environmental disclosure may have affected by firm size because higher pressures from diverse stakeholders in larger firm. Larger firms have higher obligation in social and environmental disclosures than those of smaller ones (Cormier & Gordon, 2001; Neu, Warsame & Pedwell, 1998). The firm size can be used by measuring on firms' total assets. Branco and Rodrigues (2008) found that firm size has a positive relationship with social and environmental disclosure in annual reports and web pages, which is consistent with Brammer and Pavelin (2004) indicating that firm size and social

performance have a positive relationship with social disclosure. They also found some evidence that the positively relation among firm's size, media visibility, social performance, and firm disclosure. Therefore, the hypothesis is posited as follows:

Hypothesis 1: Firm size will have a positive relationship with social and environmental disclosure.

Firm age

Prior research indicates that long time operated firms shows higher concerns on the social responsibility than those of new ones. Firm age can be measured by number of years as the firm has been established. Akhtaruddin (2005) indicated that information disclosure of the firm is important to enhance their reputation and image in the market. Consistent with Ghomi and Leung (2013), firm age has a positive effect on greenhouse gas as voluntary disclosure and hard disclosure. Additionally, Singhania and Gandhi (2015) found that firm age is a positive related disclosure index of the company. Accordingly, old firms prefer more voluntary disclosure in order to reflect their business survival.

In contrast, Soliman (2013) mentioned that there is the opportunity that old firms might have enhanced their financial report. However, he found that old firms do not have any significant association with voluntary disclosure. From the mix result, the hypothesis is posited as follows:

Hypothesis 2: Firm age will have a positive relationship with social and environmental disclosure.

Leverage

Leverage is representing a company's risk which are important for company characteristic because of that can affect firms' environmental disclosure. Prior research argued that investors consider firm performance based on leverage information increases (Huang & Kun, 2010). Brammer and Pavelin (2006) indicated that firms with lower leverage have sufficient funds which there have opportunity to focus on environmental activity. According to Lu and Abeysekera (2014) mentioned that firm activity and disclosure may have influence from creditors by considering capital structure. In contrast, Uyar, Kilic and Bayyurt (2013) found that leverage has negative association with the scope of voluntary

disclosure. Moreover, Lu and Abeysekera (2014) found that leverage has no significant association with the scope of voluntary disclosure. In addition, Branco and Rodrigues (2008) found that there is no significant relationship of leverage on social responsibility disclosure in annual report. On the contrary, there is negative relationship between leverage on social and environmental disclosure on the web page. Therefore, the hypothesis is posited as follows:

Hypothesis 3: Leverage will have a positive relationship with social and environmental disclosure.

Profitability

According to prior research it was found that firms with higher profit tend to disclose more information than those of less profit. In addition, if firms operate poorly, it may decide not to disclose any information at all as it is uncertain of its ability to financially support such activities. Furthermore, Qiu, Shaukat and Tharyan (2016) indicate that past profitability drives current social disclosure. Additionally, Lu and Abeysekera (2014) indicate that financial performance has a positive association on social and environmental disclosure. On the other hand, Akbas (2014) argued that profitability is negative on environmental disclosure. That meaning, firm with low profitability ratios likelihood have more environmental information discloses. According to Branco and Rodrigues (2008) demonstrated that profitability has no relationship on social responsibility disclosure. Therefore, the hypothesis is posited as follows:

Hypothesis 4: Profitability will have a positive relationship with social and environmental disclosure.

Liquidity

According to Lan, Wang and Zhang (2013), firms with more liquidity are considered to have higher firm performance. Moreover, Cooke (1989) argued that high liquidity of the firm has relationship with disclosure information. Linda, Achsani, and Beik (2015) argue that the lower corporate risk must be considered with higher current ratio of the firm. Therefore, the hypothesis is posited as follows:

Hypothesis 5: Liquidity will have a positive relationship with social and environmental disclosure.

Industry type

Industry type may depend on regulation difference. Industries contaminating more pollution engage in more environmental and social disclosure than other firms. These industries may have an effect on environmental, for example, food and beverage industry, chemical industry and so on. Therefore, different industry may have tent to difference in regulation mandatory as a result different in stakeholders' expectation. According to Lu and Abeysekera (2013), industry types have a positive effect on environmental and social disclosure.

Hypothesis 6: Different industries will have different degree on social and environmental disclosure.

Audit firm

The audit firm illustrates the reliability of information disclosure by the auditor who has influence on organization. More information disclosure may reduce possible legal action cost (Watts & Zimmerman, 1986). Then, organization with Big 4 firm assured financial reported it likely to have more environmental and social disclosure. According to Murcia and Santos (2012) those audit firms are relevant in the social and environmental disclosure in economic disclosure model only. Moreover, Uyar, Kilic and Bayyurt (2013) had study the Turkish listed companies and found that audit firm sized has a positives related with cooperate voluntary disclosure. In contrast, prior research finds that auditor size does not have any significant association with voluntary disclosure level (Soliman, 2013; Lu & Abeysekera, 2014) Therefore, the hypothesis is posited as follows:

Hypothesis 7: Differences audit firm type will have different degree on social and environmental disclosure.

Research methods

Sample and data collection procedure

The Stock Exchange of Thailand has given providence to social and environmental impact, which has led to the primary introduction of environmental protection policy. Thai - listed MAI firms are increasingly aware to protect and maintain in social and environmental preservation. Consequently, The Thai - listed MAI firm wear selected as the sample.

The database is drawing from the Stock Exchange of Thailand on its website: <http://www.sec.or.th> based on this database, there are 79 MAI Listed company. The financial firm was excluded because of particular characteristics of their accounting system (Reverte, 2008). The annual report in 2014 was used for analysis. Moreover, the content analysis was used for consider firm social and environmental disclosure index.

Variable measurement

Social and environmental disclosure index, employed by Murcia & Santos; 2012; Jantana & Phadoongsitthi,

2015) includes 46 index including: Social Disclosure which includes social financial information, Products and Services, Employees Environmental Disclosure which includes Environmental Policies, Environmental Management and Auditing, Impact of Products and Service in the Environmental, Energy, Environmental Financial Information, Carbon Credits and Other Environmental information.

For measuring each variable addressed in the conceptual model, we apply from prior research as measurement as the following table 1.

Table 1 Measurement variable

Independent variable	Symbol	Proxies used	Reference
Firm Size	SIZE	Ln (Total assets)	(Branco & Rodrigues, 2008)
Firm Age	AGE	Time of trade date in The Stock Exchange of Thailand	(Singhania & Gandhi, 2015)
Leverage	DE IC	Debt to Equity ratio : D/E Interest Coverage ration	(Lu & Abeysekera, 2014) Murcia (2012)
Profitability	PRO	Return on Assets (ROA)	Murcia (2012)
Liquidity	CR	Current ratios	(Linda, Achsani, & Beik, 2015)
Firm Type	TYPE	Companies that are sensitive in social and environmental = 1 Other = 0	Abeysekera (2013)
Audit firm	AUD	Big 4 = 1 Non Big 4=0	Murcia (2012) Murcia (2012)
social and environmental disclosure	SED		Murcia (2012)

Statistic test

Regression analysis: The ordinary least squared (OLS) regression analysis is used to test all postulated hypotheses. It is employed to examine the relationship

between independent variables and dependent variable which all variables are categorical and interval data. All proposed hypotheses in this research is test by the equations as shown below.

$$\text{Equation: } ESD = \alpha_{01} + \beta_1 SIZE + \beta_2 AGE + \beta_3 DE + \beta_4 IC + \beta_5 PRO + \beta_6 CR + \varepsilon_1$$

Results

The correlation matrix for all variables are presented in Table 2. As a result, the potential problems relating for multicollinearity, all correlation coefficients of independent variables are lower than 0.80, and all variance inflation factors (VIFs) values range from

1.104 – 2.806 that well below the cut – off value of 10, meaning that the independent variables are not correlated with each other (Neter, Wasserman & Kutner (1985). Thus, there are no substantial multicollinearity problems in this study.

Table 2 Correlation Matrix

	SIZE	AGE	DE	IC	PRO	CR	TYPE	AUD	ESD
SIZE	1								
AGE	-.045	1							
DE	.109	.062	1						
IC	-.043	-.142	.006	1					
PRO	.008	-.065	-.412**	.654**	1				
CR	.059	-.093	-.086	.063	.152	1			
TYPE	.063	-.071	.036	.071			1		
AUD	.227*	-.113	-.088	.096	.083	-.013	-.025	1	
ESD	.155	.390**	.086	.049	.029	-.131	-.051	-.333**	1

* $p < 0.10$, ** $p < .05$, *** $P < 0.01$

Table 3 Results of regression analysis^a

Independent variable	Social and Environmental Disclosure		
	Bata	Error	P-value
SIZE	.077	.29	.012**
AGE	2.466	.000	.026**
DE	.001	.001	.739
IC	2.363	.000	.370
PRO	-.001	.002	.738
CR	-.008	.007	.233
Adjusted R2 = .203			
F = 3.033			
Sig = .015			

*** $p < .01$, ** $p < .05$, * $p < .10$

^aBeta coefficients with standard errors in parenthesis.

Table 3 shows the results of OLS regression analysis of the relationships between corporate characteristic and social and environmental disclosure predicting that they have a positive influence of firm size on social and environmental disclosure ($b_{33} = .479$, $p < 0.01$) and firm age on social and environmental disclosure ($b_{33} = .479$, $p < 0.01$) Therefore, Hypothesis 1 and 2 are supported. Prior research suggested that disclosure is positive related with firm size and social performance (Brammer, Stephen & Pavelin, 2004). However, Ghomi and Leung (2013) found

that firm age has a positive effect on greenhouse gas voluntary disclosure and hard disclosure. Additionally, Singhanian and Gandhi (2015) found that firm age has a positive related disclosure index of the company. Accordingly, old firms liked more voluntary disclosure in order to reflect their business survival. Surprisingly, the finding indicated that leverage, profitability and liquidity was not significant to social and environmental disclosure. Thus, Hypothesis 3, 4 and 5 is not supported.

Table 4 Results of ANOVA analysis^a

Independent	Mean	S.D.	Statistical Test
Audit firm			
Big 4	.290	.1261	F = 9.510 Sig = .003**
Non Big4	.412	.1637	
Total	.379	.1631	
Firm Type			
Companies that are sensitive in social and environmental	.372	1.623	F = .195 Sig = .660
Other	.389	.1659	
Total	.379	.1631	

*** $p < .01$, ** $p < .05$, * $p < .10$

^aBeta coefficients with standard errors in parenthesis.

Table 4 shows the results of ANOVA analysis indicating that differences in audit firm have difference in social and environmental disclosure. Therefore, Hypothesis 6 is supported. Prior research suggested that audit firm size has a positive relationship with corporate voluntary disclosure from Turkish listed companies (Uyar, Kilic & Bayyurt, 2013). Surprisingly, the finding indicates that they are not significant in firm type. Thus, Hypothesis 7 is not supported.

Conclusion and discussion

This research attempts to study on social and environmental disclosure in organization perspective especially, to investigate the firm characteristic on SET. Data was collected from from 79 MAI firms. The findings indicated that firm size and firm age has a positive relationship on social and environmental disclosure. Larger firms have plenty of funds to support social and environmental activities more than smaller firms. Executives tend to disclose such information to public including stakeholders, which is in accordance with stakeholder theory and legitimacy theory, especially older-operated firms. In addition, businesses employing Big 4 Accounting Offices tends to disclose more also as they would like to guard their professional creditability. Regarding industry type, it is found that there is

no significant difference on information disclosure as Stock Exchange Commission (SEC) has stimulated and indirectly enforced companies to operate under CSR concepts.

Regarding leverage, profitability, and liquidity, it is found that there is no significant relationship with level of information disclosure. Leverage and liquidity, this might be explained as MAI companies are new companies in capital market which has been forced to mandate financial report than before. As a result, creditors have received enough information to make a decision that there did not concern in voluntary disclosure as environmental disclosure. According to Lu and Abeysekera (2014) found that leverage has no significant association with the scope of voluntary disclosure. Moreover, It is possible that the voluntary social disclosure is depend on the social responsibility policy which may not be related to the profitability of the firms. According to Branco and Rodrigues (2008); Jantana and Phadoongsitthi (2015) demonstrated that profitability has no relationship on social responsibility disclosure.

Contributions and directions for future research

This study is to provide important theoretical contributions extending previous research on ESD

by using organization level. This research finds the link among firm sized and firm age on ESD which has little studies in Thailand context. Moreover, it will provide additional evidence about the role of firm characteristic on ESD. In addition, this research integrates two theories to examine the relations of all variables. For directions for future research, the findings provide clear were on the size and age that have positive influences on SED. While, three variables; leverage, profitability, liquidity, is not significant on SED. As a result, future research may choose these variable as the independent variable and also may choose data collection on others group as sample. In addition, data collection may be done by exploring companies' website, and companies' online media society.

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