

# CORPORATE CHARACTERISTICS, SOCIAL RESPONSIBILITY REPORTING, AND FINANCIAL PERFORMANCE: EVIDENCE IN THAILAND

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## Abstract

This study aims to test the relationship between corporate characteristics, social responsibility reporting, and financial performance. The 2011-2012 annual reports of 220 Thai listed companies are used to measure the extent of corporate social responsibility reporting by word counting. The results indicate that there are significant differences in the level of corporate social responsibility reporting between groups of auditor type and corporate social responsibility award. The type of auditor and a previous corporate social responsibility award have a significant effect on the level of corporate social responsibility reporting. The level of corporate social responsibility reporting, and the type of industry are found to significantly influence corporate financial performance.

**Keywords:** Corporate Social Responsibility Reporting, Financial Performance, Thailand

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## 1. Introduction

Corporations are being pressured not only by shareholders and investors but also by other stakeholders such as customers, creditors, suppliers, society and community, and the environmental lobby. This reflects increased demands from many stakeholder groups, and the increasing impact of social and environmental issues related to globalization (Soderstrom, 2013). Therefore, corporations in today's world have to serve their stakeholders by balancing economic, social, and environmental performance and work towards the goal of sustainable reporting (GRI, 2011). It is notable that in a 2008 survey, KPMG found that the number of corporations providing corporate social responsibility (CSR) reporting is tending to increase, with the proportion of the 250 world class corporations surveyed providing CSR information increasing from 64 to 80 percent between 2005 and 2008 (KPMG, 2008).

CSR reporting provides mostly non-financial information to all stakeholders, and may play a role for investors' and shareholders' decisions to invest in a corporation (De Klerk and De Villiers, 2012). However, even though there have been many literatures related to CSR reporting in developed countries explained (e.g. Ho and Taylor, 2007; Lozano, 2013), few studies (See Sobhani et al., 2012) have been conducted in developing countries where CSR reporting is still developing concepts especially in Thailand where does not have CSR reporting standards and regulations (Suttipun, 2012). Therefore,

the quality of the reporting still varies despite the trend towards extending the concept of corporate responsibility beyond simply that related to the economic performance of the company. Moreover, no study has so far examined the relationship between corporate characteristics, social responsibility reporting, and financial performance of listed companies in developing countries compared with developed countries (See Nakao et al., 2007). Therefore, the factor influencing CSR reporting, and the impact of CSR reporting on financial performance are still questionable and inconclusive (Chen, 2011). In Thailand, some top management still lacks understanding of the main concept of CSR reporting because they still focus to report bases on financial information rather than non-financial information (Smith et al., 2011). Moreover, traditional corporate reporting mainly aims to disclose only financial information because of the framework of Thai Financial Reporting standards (Embong et al., 2012). Even though the traditional financial reporting can serve investors, shareholders, and creditors, but it does not cover all corporate stakeholders' demands that need both financial and non-financial information reporting. In the relationship between CSR reporting and financial performance, the results of prior related studies had been muddled (Margolis and Walsh, 2003; Garcia-Castro et al., 2010). Previous studies in which different countries, different methods, and different periods were conducted in different results. For example, some literatures suggested that CSR reporting is positively related to corporate financial performance (Nakao et al., 2007; Konar and Cohen,

2001), as well that CSR reporting is negatively related to financial performance (Wright and Ferris, 1997).

The study reported herein sought to address that gap in the literature and had two main objectives: to test the different levels of CSR reporting of companies listed in developing countries by using Thailand as a proxy between groups based on industry type, auditor type, and CSR award, and to test the relationship between corporate characteristics, social responsibility reporting, and financial performance by Thai listed companies in the Stock Exchange of Thailand (SET). Therefore, there were two main research questions: are there different levels of CSR reporting of companies listed on the Stock Exchange of Thailand (SET) between groups based on industry type, auditor type, and CSR award, and are there relationships between corporate characteristics, social responsibility reporting, and financial performance.

The study provided contributes expected to the literature relating to CSR reporting in the following ways. Firstly, the study enhances understanding of the relationship between corporate characteristics, CSR reporting and financial performance particularly in developing country. Secondly, this study expands information about CSR reporting in developing countries to scholars, and researchers. It also contributes useful knowledge to investors, shareholders, and creditors who consider CSR reporting when making investment decisions. The study may lead to improvements in the working of Thai CSR reporting regulations with benefits for people, the planet, and profits. This study will also contribute legal and management scholarship by determining the impact that CSR reporting has on company performance and finally the study may motivate Thai listed companies to provide CSR reporting in their annual reports.

## 2. Theories

Many theories have been cited to explain the relationship between corporate characteristics, CSR reporting, and financial performance, notably agency theory (Mele, 2008), legitimacy theory (Ahmad and Sulaiman, 2004; Islam and Deegan, 2010), stakeholder theory (Gray et al., 1998; Llana et al., 2007), media setting agenda theory (Brown and Deegan, 1998), institution theory (Amran and Devi, 2008), and social political theory (Cheng and Fan, 2010). However, agency and stakeholder theories were the theories used in this study to explain these relationships.

The reason why agency theory was used in this study was to explain how CSR reporting used in developing countries represented by Thailand can close the gap and conflict between owners (principles) and managers (agents) as well as developed countries (See Nakao et al., 2007; Konar and Cohen, 2001). Therefore, the relationship between CSR reporting and financial performance was examined. On the

other hand, this study used stakeholder theory to explain whether the power of stakeholder in developing countries represented by Thailand can pressure corporations providing CSR reporting in annual reports as well as developed countries (See Newson and Deegan, 2002; Stray and Ballantine, 2000). From the explanation above, different level of CSR reporting between groups of interests, the relationship between corporate characteristics, and CSR reporting, and the relationship between corporate characteristics, and financial performance were tested in this study.

### 2.1 Agency theory

In some corporations, there is a conflict of interest between owners (as principals) and managers (as agents). This is because, on the one hand, the owners try to maximize the return on their investment over the long term, whilst, on the other hand, the managers want to maximize their own benefits from the corporation. Moreover, the managers are interested in short term influences on their performance. However, the application of agency theory can help corporations to reduce conflicts between owners and managers (Idowu and Louche, 2011). There are four main potential areas of conflicts; insufficient effort, extravagant investment, entrenchment strategies, and self-dealing. Agency theory suggests that if the utility functions of self-serving owners and managers are aligned, both owners and managers will gain benefits. But, if they are not, agency costs will arise (Mele, 2008). Agency theory focuses on the motivation to pursue self-interest as the main cause of agency costs. However, agency theory suffers from the limitation that it is focused on only two interest groups.

Agency theory in this study was used to explain the relationship between CSR reporting and financial performance. This is because although a company incurs costs providing CSR information in its media, it may gain benefits such as higher sales, higher profits, and higher market valuation, as well as enhancing its reputation. These benefits will of course, improve the company's financial performance.

### 2.2 Stakeholder theory

Stakeholder theory explains specific corporate actions and activities based on a stakeholder-agency approach, and is concerned with how relationships with stakeholders are managed by companies in terms of the acknowledgement of stakeholder accountability (Cheng and Fan, 2010). As stakeholder influences become crucial for corporate image and comparative advantage, companies manage their stakeholder relationships by providing information, often in the form of voluntary disclosures in their annual reports. The justification is that stakeholders, which Collier (2008) defines as those who have a stake in an

organisation, have something at risk, as well as the power to influence the organisation, including its actions, decisions, policies or goals. Potential stakeholders include shareholders, creditors, suppliers, the government, customers, competitors, employees, employees' families, the media, the local community, local charities, and future generations (Carrol and Bucholtz, 2006).

According to Gray et al. (1996), stakeholders are identified by companies in order to ascertain which groups need to be managed to further the interests of the corporation. Stakeholder theory suggests that companies will manage these relationships based on different factors such as the nature of the task environment, the salience of stakeholder groups and the values of decision makers who determine the shareholder ranking process (Donaldson and Preston, 1995). Management will tend to satisfy the information demands of those stakeholders who are of greatest importance to the corporations' ongoing survival, so that corporations will not respond to all stakeholders equally (Nasi et al., 1997). The power of stakeholders and their expectations can change over time, so that companies have to continually adapt their operating and reporting behaviours (Deegan, 2001). In summary, stakeholder theory views corporations as part of a social system while focusing on the various stakeholder groups within society (Ratanajongkol et al., 2006).

Stakeholder theory regards the notion of CSR as a means of maximizing the wealth of corporations. For example, a corporation has to serve the demands of its shareholders and investors for economic benefit from their investments, and to maximize the market valuation of the company. On the other hand, the needs of customers and labor can also affect corporate activity and action. However, stakeholder theory posits that the level of different corporate activities and actions will be related to the stakeholder groups which demand such activities and actions, based on the power of each stakeholder.

### 3. Hypothesis Development

CSR reporting is the most common voluntary reporting tool of companies (De Villiers and Alexander, 2014; KPMG, 2011), although there are several reporting tools such as environmental reporting, Triple Bottom-line reporting, sustainable development reporting, and integrated reporting. Some CSR reporting literature had focused on the reasons why companies provide CSR information (See Cowen et al., 1987; Hackston and Milne, 1996). Some prior studies recognized that CSR reporting is different across countries (Jose and Lee, 2007; Kolk et al., 2001). Type of CSR reporting, and kind of news about CSR reporting were also provided (Ho and Taylor, 2007; Deegan and Rankin, 1996). Specific pressure groups (Deegan and Gordon, 1996) and media attention (Brown and Deegan, 1998) were

studied on the content of CSR reporting. In this study, there are three main parts of prior researches and hypotheses; relationships between corporate characteristics and social responsibility reporting, CSR reporting and financial performance, and corporate characteristics and financial performance.

#### 3.1 Relationship between corporate characteristics and social responsibility reporting

Using stakeholder theory, previous studies have indicated that the level of CSR reporting can be influenced by corporate characteristics such as size of company (Ho and Taylor, 2007; Deegan and Gordon, 1996), ownership status (Tagesson et al., 2009), type of industry (Newson and Deegan, 2002), age (Suttipun, 2012), type of business (Choi, 1999), type of auditor (Joshi and Gao, 2009), country of origin (Jahamani, 2003; Wanderley et al., 2008), adherence to the ISO26000 guidelines (Admad and Sulaiman, 2004), and CSR awards (Deegan and Gordon, 1996). However, this study will investigate the influence of three variables on the level of CSR reporting: type of industry, type of auditor, and CSR award.

Choi (1999) investigated CSR reporting based on classifying industries as either high or low environmentally sensitive industries. High environmentally sensitive industries are those that have high levels of social and environmental impact (Ho and Taylor, 2007). On the other hand, industries having little social or environmental impact can be classified as low environmentally sensitive industries (Newson and Deegan, 2002). Many previous studies into the relationship between the type of industry and the level of CSR reporting have found a positive relationship (e.g. Choi, 1999; Stray and Ballantine, 2000). By stakeholder theory, this was because stakeholders of corporations in high environmentally sensitive industries had more expectations about corporate financial and non-financial information reporting than other stakeholders of low environmentally sensitive companies (Gray et al., 1996). However, Suttipun (2012) did not find any significant relationship between the type of industry and the level of triple bottom line reporting in Thailand. However, in this study the following hypothesis was adopted:

*H1:* There is a positive relationship between type of industry, and level of CSR reporting.

Larger auditing companies are generally perceived to provide a more independent auditing service and to abide more closely by auditing standards than smaller auditing firms (Joshi and Gao, 2009) because larger auditing firms are more likely to suffer serious damage to their reputations than smaller auditors. Companies with greater potential gains from external monitoring would generally employ larger auditing firms such as the big-4 audit firms, KPMG, Price Waterhouse Cooper, Deloitte, and Ernst

&Young. Moreover, by stakeholder theory, Big-4 auditors tended to have more corporate stakeholder power to pressure corporations providing CSR reporting than Non-big-4 audit firms. However, previous findings about the relationship between type of auditor and CSR reporting are mixed. For example, Joshi and Gao (2009) and Suttipun (2012) found a relationship between the type of auditor and CSR reporting, but Inchausti (1997), could not find any correlation between them. However, the hypothesis in this study was that:

*H2:* There is a positive relationship between type of auditor, and the level of CSR reporting.

Since 2006, the SET has encouraged its listed companies to provide more CSR reporting by giving CSR award. By stakeholder theory, companies would like to have more attention from their stakeholder so the companies provide their actions and activities related by stakeholder demands including having CSR award. However, the results of studies into whether there is any relationship between CSR award and the level of CSR reporting have been mixed. On the one hand, Deegan and Gordon (1996) found that companies that have received social and environmental awards tend to provide more social and environmental information than other companies that have not been given such an award. On the other hand, Raar (2002) could not find any relationship between the two variables. However, this study hypothesised that:

*H3:* There is a positive relationship between previous CSR award, and the level of CSR reporting.

### **3.2 Relationship between CSR reporting and financial performance**

Although there has been more than 30 years of research and more than 100 empirical studies on the issue of the relationship between CSR reporting and financial performance, the findings have been mixed (Garcia-Castro et al., 2010). In a review of 127 previous studies, Margolis and Walsh (2003) found that 109 studies treated CSR reporting as an independent variable in order to investigate if it was predictive of company's financial performance. They found that 54 studies indicated a significant positive relationship, 27 studies showed a significant negative relationship, and 28 studies revealed a non-significant relationship either way. Therefore, there have been three quite different results in studies seeking a relationship between CSR reporting and corporate performance; a positive relationship, a negative relationship, and no relationship at all.

In support of the first position, Porter and Kramer (2006) argued that companies which can reduce social and environmental problems such as natural pollution may be able to increase their productivity, and improve their reputation, and competitive advantage. Moreover, agency theory can explain that CSR reporting can close the conflict

between corporate owners and managers by increasing their financial performance. Therefore, companies may earn profits which more than offset the cost of CSR disclosures. For example, in a study of 121 Japanese companies listed on the Tokyo Stock Exchange, Osaka Securities Exchange, and Nagoya Stock Exchange between 2002 and 2003, Nakao et al. (2007) found that environmental performance can positively influence financial performance. Konar and Cohen (2001) also found that corporate environmental performance had a positive impact on financial performance.

Conversely however, Connelly and Limpaphayom (2004) noted that corporations are likely to view CSR reporting as a cost acting to reduce corporate profits and that companies will provide as little CSR reporting as possible to meet the minimum legal requirement. Therefore, there would tend to be a negative relationship between CSR reporting and corporate financial performance. For example, Wright and Ferris (1997) found a negative relationship between CSR reporting and the financial performance of South African corporations between 1987 and 1990.

On the other hand, some studies have found that there is no significant relationship between CSR reporting and corporate financial performance in developing countries. For example, Rahman et al. (2010) could not find any relationship between environmental reporting and company's financial performance among 108 companies listed in Thailand, Malaysia, and Singapore. Aras et al. (2009) also tested for a relationship between CSR reporting and corporate financial performance among 100 companies listed on the Istanbul Stock Exchange between 2005 and 2007. However, they could not find any significant relationship. However, the present study hypothesized that:

*H4:* There is a positive relationship between the level of CSR reporting, and financial performance.

### **3.3 Relationship between corporate characteristics and financial performance**

Some previous studies focused on companies in developing countries were unable to find any relationship between CSR reporting and company's financial performance (e.g. Rahman et al., 2010; Aras et al., 2009) as opposed to studies in developed countries which were. This may be because there are certain variables which have an effect on the relationship between CSR reporting and financial performance in developing companies such as the type of industry (Fauzi et al., 2007). Therefore, it is possible to believe that industry type can also be related to company performance. For example, Dragomir (2010) found that high environmentally sensitive companies performed better than low environmentally sensitive companies. Shergill and

Sarkaria (1999) also found a relationship between industry type and the company's financial performance of Indian companies. On the other hand, Fauzi et al. (2007) found that there was no significant relationship between the type of industry and the company performance of Indonesian companies. Therefore, this study set out to test whether:

*H5:* There is a positive relationship between type of industry, and financial performance.

As mentioned earlier, it is commonly believe that big-4 auditors can provide a higher quality audit than non-big 4 auditors. However, the results of studies of the relationship between auditor type and financial performance have been mixed. For example, Teoh and Wong (1993) found that corporations which changed from big-4 auditors to non-big 4 auditors had a lower number of investors responding to their announced earnings (i.e. company performance) after the change. On the other hand, Hackenbrack and Hogan (2002) found that companies which had higher-earning management never changed from non-big-4 auditors to big-4 auditors, and from big-4 auditors to non-big 4 auditors. Chan et al. (2011) found that there was no significant difference in company's financial performance based on whether companies employed big-4 or non-big-4 auditors. However, this study will test the hypothesis that:

*H6:* There is a positive relationship between type of auditor, and financial performance.

CSR award can function as a means by which corporations enhance their financial performance with respect to their stakeholders, for instance by increasing market valuation, sales, profits and reputation or image. This is because when a corporation receives a CSR award it will send a positive signal to their stakeholders (Brammer et al., 2009). Neely (1999) noted that national and international quality awards can affect the measurement of corporate financial performance. As mentioned earlier, CSR award in Thailand were launched in 2006 to encourage voluntary CSR reporting by Thai companies. However, the results of studies about the relationship between CSR award and company's financial performance have been mixed. Leemakdej (2013) found that a CSR award could influence the company performance (market valuation) of Thai listed companies in the case of companies with a potential agenda problem. On the other hand, Claessens et al. (2000) found that a CSR award did not affect company performance. Hendricks and Singhal (2001) were unable to find any significant differences between the company's financial performance of companies receiving a CSR award earlier or later. However, the hypothesis tested in this study is that:

*H7:* There is a positive relationship between previous CSR award, and financial performance.

## 4. Methods

Methods of this study were separated into three parts that consist of data and sample selection, dependent and independent variables used in the study, and data analysis including the equations used for study.

### 4.1 Data and sample selection

The population in this study was all the companies listed on the SET. Using a 95 percent confidence interval (Yamane, 1973), 220 companies out of the 489 companies listed on the SET were chosen by simple random sampling as the sample in this study. The sources of the CSR reporting information were the 2011, and 2012 annual reports of the companies selected. This source was adopted because the annual report is a conveniently available source of information and is provided regularly every year (Amram and Devi, 2008). It also represents the main form of corporate communication to stakeholders. Moreover, many previous studies relating to CSR reporting have used annual reports as their main source of information. The data were collected between July and December 2013.

### 4.2 Dependent and independent variables

Fiori et al. (2009) suggested that corporate financial performance can be measured by profitability, solvency, liquidity, and efficiency. The most common measures of performance are return on assets (ROA), return on equity (ROE) and Tobin's Q (Margolis and Walsh, 2001). However, ROA was used in this study because it has been commonly and widely used as an indicator of a company's financial performance in previous studies (e.g. Aras et al., 2009; Bhagat and Bolton, 2008). ROA represents the profitability of the firm with respect to the total set of assets. ROA data was collected from the website of the SET ([www.set.or.th/set/commomlookup.do](http://www.set.or.th/set/commomlookup.do)).

The dependent variable in this study, the amount of CSR reporting can be measured in five different ways: content analysis, questionnaire survey, reputational measures, unidimensional indicators, and ethical rating (Wood, 2010). However, content analysis was selected to be used in this study because it has been the most common method used for assessing CSR reporting (Gray et al., 1999) and has been used in many previous studies (Raar, 2002; Hackston and Milne, 1996). Moreover, Krippendorff (1980) asserted that content analysis is a technique allowing a replicable and valid inference from data according to the context. Advantages of content analysis are to provide an objective analysis of written materials, to identify meaning from text data, and to quantify qualitative data (Krippendorff, 1980). Word count from annual reports was used as the analysis unit because it can be more easily categorized (Damak-Ayadi, 2010), and needs less subjective

judgment by the researcher (Gamerschlag et al., 2011). Krippendorff (1980) stated that words are the smallest unit of measurement for analysis and can be expected to provide the maximum robustness in assessing the quantity of reporting. Moreover, words are a preferred measure when it is intended to measure the level of total space devoted to a topic and to ascertain the importance of the topic. Deegan and Gordon (1996) supported that word counting is more detailed than measuring sentence, and part-page counting, while Gray et al. (1998) words lend themselves to more exclusive analysis.

The independent variables employed in the study were: type of industry, type of auditor, and CSR award. Data in respect of these variables were all collected from the companies' annual reports which are available as published documents or on the SET website ([www.set.or.th/set/commomlookup.do](http://www.set.or.th/set/commomlookup.do)). The variables were classified as dummy variables. For example, companies were classified as belonging to high or low environmentally sensitive industries to determine industry type and similarly companies were classified as big-4 or non-big-4 auditors under auditor type, and CSR award or non-CSR award companies under CSR award.

### 4.3 Data analysis

Data was analyzed by independent sample *t*-tests, correlation analysis, and path analysis. Independent sample *t*-tests were used to test the different levels of CSR reporting in annual reports between groups based on industry type, auditor type, and CSR award. Correlation and path analysis were used to test the relationship between corporate characteristics, CSR reporting, and company's financial performance. Accordance between empirical data and confirmatory factor analysis model was tested by using fit statistics such as chi-square, root mean square of approximation (RMSEA), comparative fit index (CFI), goodness-of-fit index (GFI), and adjusted goodness-of-fit index (AGRI). The equations used for path analysis are shown below:

$$\text{CSR Reporting} = a + b_1\text{Industry} + b_2\text{Audit} + b_3\text{Award} + \text{error}$$

$$\text{Firm Performance} = a + b_1\text{Industry} + b_2\text{Audit} + b_3\text{Award} + b_4\text{CSR} + \text{error}$$

Where:

CSR Reporting = the level of CSR reporting in annual reports measured by the number of words determined by content analysis

Firm Performance = Corporate financial performance measured by ROA

Industry = Industry type (Dummy variable 1 = high environmentally

Sensitive industry, and 2 = low environmentally sensitive industry)

Audit = Type of Auditor (Dummy variable 1 = big-4 auditors, and 2 = non-big-4 auditors)

Award = CSR award (Dummy variable 1 = company having received a CSR award, and 2 = Company not having received a CSR award).

## 5. Results and Discussions

There were three parts to answer the research questions. Descriptive analysis and the results of *t*-tests were used to test the different levels of corporate social responsibility reporting by the groups of interest. Correlation matrix and path analysis were used to test the relationship between corporate characteristics, social responsibility reporting, and financial performance.

### 5.1 Descriptive analysis and the results of *t*-tests

Descriptive analysis was used to show the frequency, percentage distribution, means, and standard deviations of the dependent and independent variables used in this study (see table 1). The findings show that all the companies surveyed provided CSR reporting in their annual reports in 2011 and 2012. The average words dedicated to CSR reporting during the period 2011-2012 by the Thai listed companies was 1,735 words. Of the 220 companies sampled, 67 companies were classified as being in high environmentally sensitive industries with 153 companies in low environmentally sensitive industries. 135 firms used big-4 audit firms as their external auditors, and 85 companies used non-big-4 auditors. Only 27 of the companies had received a CSR award against 193 companies which had not. Independent sample *t*-tests were used to test the different levels of CSR reporting in annual reports between groups based on industry type, auditor type, and CSR award. The results indicate that there were significant differences in the levels of CSR reporting between groups based on auditor type and CSR award at the 0.01 level. However, there was no significant difference in the level of CSR reporting between groups based on the type of industry ( $P > 0.05$ ).

**Table 1.** Descriptive analysis of variables and the results of Independent sampled *t*-tests

Panel A: Dependent variables					
Variable	Mean	S.D.	Min.	Max.	N
CSR Reporting	1,734.45	3,400.74	356.00	42,836.00	220
Firm Performance	6.25	10.38	-62.91	44.82	220
Panel B: Dummy independent variables					
Variable	Frequency	Percent	Mean	<i>t</i>	P-value
Industry					
- High sensitive industry	67	30.5	1302.70	-1.782	.076
- Low sensitive industry	153	69.5	1927.83		
Audit					
- Big-4 auditors	135	61.4	2212.98	3.158	.002**
- Non-big-4 auditors	85	38.6	982.20		
Award					
- CSR award company	27	12.3	3247.85	2.805	.008**
- Non-award company	193	87.7	1526.15		

\*\* Significant at the 0.01 level, \* significant at the 0.05 level

### 5.2 Correlations matrix

A correlation matrix was used to test the relationship between the corporate characteristics, CSR reporting, and financial performance (see Table 2). The results indicate that auditor type and CSR award were significantly correlated with CSR reporting at

respectively the 0.01 and 0.05 levels. Moreover, there were significant correlations variously between industry type, audit type, and company's financial performance, but CSR reporting was not found to be correlated significantly with company performance at the 0.05 level.

**Table 2.** Correlations matrix

	Industry	Audit	Award	Firm Performance	CSR Reporting
Industry	1	.079	.204**	-.194**	.085
Audit		1	.183**	-.156*	-.177**
Award			1	-.017	-.166*
Firm Performance				1	.128
CSR Reporting					1

\*\* Significant at the 0.01 level, \* significant at the 0.05 level

### 5.3 Path analysis

By using fit statistics such as chi-square, root mean square of approximation (RMSEA), comparative fit index (CFI), goodness-of-fit index (GFI), and adjusted goodness-of-fit index (AGRI), the study found a significant accordance between empirical data and confirmatory factor analysis model. Path analysis was used to test whether there were relationships between the company characteristics, CSR reporting, and company's financial performance among the SET listed companies surveyed. The first layer analysis investigated the relationship between corporate characteristics, and CSR reporting. The results show that the type of auditor, and CSR award have significant effects upon CSR reporting at the 0.05 level (See Model A, Table 3), but the type of industry does not influence CSR reporting. The discussion of the findings and how they relate to previous published studies would be separated into three parts. Firstly, the relationship between corporate characteristics and

CSR reporting investigated in this study revealed that the type of auditor and an existing CSR award significantly influenced the level of CSR reporting in Thai corporate annual reports. With regard to auditor type, this reflects the fact that big-4 audit firms paid more attention to CSR and CSR reporting than non-big-4 auditors as well as providing financial auditing services. Moreover, they had even created CSR surveys of their clients, e.g. the KPMG International Survey of Corporate Social Responsibility, the Price Waterhouse Cooper Corporate Responsibility Practices Survey, the Deloitte CSR Report and the EY Survey Cooperation with GreenBiz Group conducted by Ernst & Young. By stakeholder theory explanation, Big-4 audit firms as corporate stakeholders had more stakeholder power than Non-big-4 auditors. Therefore, the power of Big-4 auditors made corporations provided more CSR reporting in their annual reports than other companies audited by Non-big-4 audit firms. In this area, the results from developing countries represented by Thailand were

consistent with some previous studies in developed countries (e.g. Joshi and Gao, 2009) which found that companies using big-4 auditors provided more CSR reporting than firms using non-big-4 audit firms. The finding that a previous CSR award was predictive of the level of CSR reporting was not surprising. Since 2006, CSR awards have been given by the ThaiPat Institute, which is a non-profit organization, to Thai companies listed on the SET whose actions and activities were conducive to CSR. Therefore, if a company desired a CSR award it will increase its CSR activities including CSR reporting and disclosures. By stakeholder theory, the corporations with CSR awards in both developed countries (See Deegan and Gordon, 1996), and developing countries (See the present study) would serve and get attention from their stakeholder demands by providing CSR reporting. The result was similar to the findings of Deegan and Gordon (1996) that companies with a CSR awards tended to report more social and environmental information than companies without a CSR award.

From Model B, Table 3, it can be seen that the findings indicate that CSR reporting does significantly influence corporate financial

performance. Moreover, the type of industry has a direct effect on company performance at the 0.01 level. However, the study was not able to find any significant relationship between the type of auditor, CSR award, and firm performance ( $P > 0.05$ ). The study also found a significant positive relationship between CSR reporting and financial performance after controlling for industry type in Thailand. This was because CSR reporting reduced social and environmental conflicts between corporations and their stakeholders, therefore, corporations could increase sales, profits, reputation, and competitive advantage by conducting CSR reporting which might lead to better financial performance. By agency theory, the result could explain how CSR reporting used in developing countries represented by Thailand closed the gap and conflict between owners (principles) and managers (agents) as well as developed countries (See Nakao et al., 2007; Konar and Cohen, 2001). This result is consistent with Nakao et al. (2007), and Konar and Cohen (2001) who found that CSR reporting has a positive impact on company's financial performance.

**Table 3.** Path analysis model

Model A: The first layer of full path analysis model					
	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	B	Std. Error	Beta		
(Constant)	4811.364	1468.165		3.277	.001
A Industry	963.641	495.641	.131	1.944	.053
Audit	-1092.867	466.486	-.157	-2.343	.020*
Award	-1700.666	704.906	-.164	-2.413	.017*
Model B: The second layer of full path analysis model					
(Constant)	13.091	4.574		2.862	.005
Industry	-4.720	1.520	-.210	-3.105	.002**
B Audit	-2.744	1.436	-.129	-1.911	.057
Award	2.265	2.172	.072	1.043	.298
CSR Reporting	.000	.000	.135	1.987	.048*

Dependent Variable of Model A = CSR Reporting

Dependent Variable of Model B = Firm Performance

\*\* Significant at the 0.01 level, \* significant at the 0.05 level

Finally, in regard to the relationship between corporate characteristics and financial performance in developing countries represented by Thailand, the study found that whilst the type of industry (high or low environmentally sensitive) influenced company performance significantly, auditor type, and CSR award had no significant effect. By stakeholder theory, this was because stakeholders of corporations in high environmentally sensitive industries had more expectations about corporate financial and non-financial information reporting than other

stakeholders of low environmentally sensitive companies. Therefore, if the companies can satisfy their stakeholders' demands, they can also improve their financial performance in respect of, for instance, income, net profit, and image. This result in developing countries was consistent with developed countries' evidence. For example, Dragomir (2010) found that high environmentally sensitive companies produced better performance than low environmentally sensitive companies.



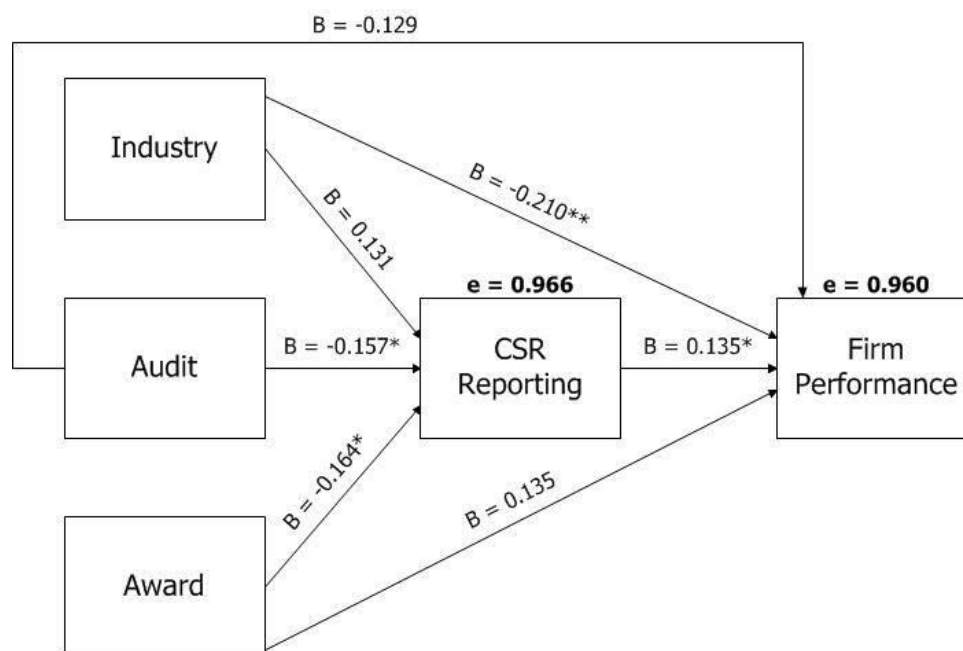
**Figure 1.** The full framework of path analysis model

Figure 1 shows the full model of path analysis studied, with CSR reporting as the dependent variable, and the corporate characteristics, industry type, auditor type, and CSR award as independent variables. Alternatively, with firm performance as the dependent variable, the corporate characteristics, and CSR reporting can be viewed as independent variables. The results show that the  $e$  value of CSR reporting is 0.966, and that of company performance is 0.960. CSR reporting therefore has a significant influence on company performance at the 0.05 level. However, neither auditor type nor CSR award have any direct influence on company performance at the 0.05 significance level, but they do have an indirect significant effect through CSR reporting ( $P < 0.05$ ). In addition, the type of industry has a direct influence on company performance at the 0.01 significance level.

## 6. Conclusions

The study's objectives were to test the different levels of CSR reporting by companies listed on the SET between groups based on industry type, auditor type, and CSR award, and to test the relationships between corporate characteristics, CSR reporting, and financial performance. The results indicated that there were significant differences in the level of CSR reporting between groups based on auditor type and CSR award. The type of auditor and a CSR award had a significant effect on the level of CSR reporting. Moreover, CSR reporting and the type of industry significantly influenced company performance. Therefore, there was a significant relationship between auditor type, corporate social responsibility award, and the level of corporate social responsibility reporting. Moreover, there was a significant

relationship between industry type, the level of corporate social responsibility reporting, and financial performance.

For practical contributions, the findings provide an important reminder to the Thai government and the SET that it would be desirable to require mandatory rather than voluntary CSR reporting by Thai listed companies. The results showing a relationship between CSR reporting and company performance should motivate companies to integrate social and environmental issues into their strategic business plans and not to concentrate solely on economic issues because CSR reporting can influence their business performance. Finally, the results can benefit for financial stakeholders such as investors, shareholders, and creditors who can use non-financial information from CSR reporting when making investment decisions.

In terms of theoretical contributions, the results suggest that agency, and stakeholder theories relating to the relationship between owners and managers, and between corporations and stakeholders operate in developing countries, especially Thailand, as well as in developed countries. In more details, agency theory in this study can explain how corporations in developing countries represented by Thailand use CSR reporting as utility function to close the gap and conflict between owners and managers as well as developed countries. Moreover, the study also proved that corporate stakeholder powers in developing countries by using Thailand as a proxy can pressure companies providing CSR reporting in annual reports as well as developed countries.

Some factors must be mentioned as limitations of this study. Firstly, the study did not consider the quality of CSR reporting by Thai listed companies

because CSR reporting in Thailand is still voluntary so there is no standard relating to it nor indexes to measure the quality of CSR reporting. Next, there are other corporate characteristics which may influence CSR reporting, and financial performance in Thailand such as the size of the company, whether or not it is a family business, its age, country of origin, and the risks undertaken. Therefore, in a future study, the effect of other corporate characteristics should be tested for their effect on CSR reporting, and financial performance. Moreover, future studies should consider international CSR standards or indexes such as the Global Reporting Initiative guidelines and the ISO26000 guidelines in examining the quality of Thai CSR reporting (See Lozano and Huisinigh, 2011).

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