The Influences of CSR Accounting Practices on Firm Sustainability: Evidence from ISO 14000 Businesses
ผลกระทบข้อปฏิบัติทางบัญชีที่มีความรับผิดชอบต่อสังคมอย่างยั่งยืนขององค์กร: หลักฐานจากธุรกิจ ISO 14000

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Abstract

The objective of this research is to examine the influence of corporate social responsibility (CSR) in accounting practices on firm sustainability through mediating influences of accounting information disclosure, corporate reputation and respect of stakeholder benefit. Furthermore, the three factors as antecedents, namely, corporate governance awareness, executive vision for sustainability and perceived public requirement are investigated. The corporate communication is the moderating variables of this research. The key research question is how CSR accounting practices has influence on firm sustainability. A questionnaire was used as an instrument for data collection. Here, 103 accounting managers of the ISO 14000 businesses in Thailand were selected as key informants. The Ordinary Least Squares (OLS) regression analysis was employed to examine all hypotheses. The results indicated that almost every dimension of CSR accounting practices has a potential positive impact on accounting information disclosure, corporate reputation, respect of stakeholder benefit and firm sustainability. In addition, accounting information disclosure, corporate reputation, and respect of stakeholder benefit has a greater positive influence level greater on firm sustainability. Likewise, three antecedent variables have significant influence on CSR accounting practices. Finally, the moderating variables show some partial support for the hypotheses derived from the conceptual model.

Keywords: *Corporate Social Responsibility Accounting Practices, Accordance with Environmental Value, Reasonable Accounting Practice, Regulation Accounting Compliance, Social Involvement Concerns*

บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อตรวจสอบอิทธิพลของข้อปฏิบัติทางบัญชีที่มีความรับผิดชอบต่อสังคมของธุรกิจต่อการพัฒนาอย่างยั่งยืนขององค์กร โดยผ่านตัวแปรเชื่อมกลางซึ่งประกอบด้วยการเปิดเผยข้อมูลทางบัญชี ชื่อเสียงขององค์กร และผลประโยชน์ของผู้มีส่วนได้เสีย นอกจากนั้น ยังมีปัจจัยตัวแปรก่อนหน้านั้นอีก 3 ตัว ได้แก่ การตระหนักถึงการกำกับดูแลกิจการ วิสัยทัศน์ของผู้บริหารเพื่อความยั่งยืนขององค์กร และการรับรู้ความต้องการของ

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สาธารณะ ตัวแปรแทรก ได้แก่ การสื่อสารขององค์กร โดยตั้งคำถามงานวิจัยว่าข้อปฏิบัติทางบัญชีที่มีความรับผิดชอบต่อสังคมของธุรกิจมีอิทธิพลต่อการพัฒนาอย่างยั่งยืนขององค์กรได้อย่างไร เครื่องมือในการเก็บข้อมูล คือ แบบสอบถาม ผู้ตอบแบบสอบถาม ได้แก่ ผู้บริหารฝ่ายบัญชีของธุรกิจที่มีมาตรฐาน ISO 14000 จำนวน 103 ราย ใช้การวิเคราะห์การถดถอยเป็นเครื่องมือทางสถิติในการทดสอบสมมติฐานที่ตั้งขึ้น ผลจากการศึกษาชี้ให้เห็นว่ามิติส่วนใหญ่ของตัวแปรข้อปฏิบัติทางบัญชีที่มีความรับผิดชอบต่อสังคมนั้น มีผลกระทบเชิงบวกต่อการเปิดเผยข้อมูลทางบัญชี ชื่อเสียงขององค์กร ผลประโยชน์ของผู้มีส่วนได้เสีย และความยั่งยืนขององค์กร นอกจากนี้ ตัวแปรเชื่อมกลาง ได้แก่ การเปิดเผยข้อมูลทางการบัญชี ชื่อเสียงขององค์กร และผลประโยชน์ของผู้มีส่วนได้เสีย มีผลกระทบเชิงบวกต่อการพัฒนาอย่างยั่งยืนขององค์กร ในขณะเดียวกัน ตัวแปร 3 ตัวก่อนหน้านั้น ก็มีผลกระทบเชิงบวกค่อนข้างสูงต่อตัวแปรข้อปฏิบัติทางบัญชีที่มีความรับผิดชอบต่อสังคม และตัวแปรแทรกก็มีผลกระทบเชิงบวกส่วนใหญ่ที่สนับสนุนตามข้อสมมติฐานที่กำหนดไว้

คำสำคัญ: *ข้อปฏิบัติทางบัญชีที่มีความรับผิดชอบต่อสังคมของธุรกิจ ข้อควรคำนึงถึงมูลค่าสิ่งแวดล้อม ข้อกำหนดการปฏิบัติทางบัญชีที่ดี การปฏิบัติตามข้อบังคับ กฎระเบียบทางบัญชี การมีส่วนร่วมต่อสังคม*

Introduction

In the 20th century, Corporate Social Responsibility (CSR) has been one of the most significant corporate trends. Ullmann (1985) indicated that when businesses adopt CSR, their financial information disclosure improves greatly. In general, businesses adopt CSR not only to enhance their reputation and win the public's trust, but also to raise their brand image and competitiveness. More businesses have realized that CSR not only enhances the image of corporations but may also create profits for them and firm sustainability.

Many prior researches indicated that one of the reasons for failure in accounting profession is due to the lack of responsibility to society, community and stakeholders (Weber, 2008). Therefore, the role of accounting profession is to pay attention to the ethical practices in order to build reliability and credibility for stakeholders. In this research, CSR accounting practices is the procedure of accounting implementation related to environmental value, reasonable accounting and social involvement concerns. Therefore, the accounting role has indicated that firms will encompass the social requirement to respond to social demand and environmental, or Social Responsibility Accounting (SRA) (Rahahleh & Sharairi, 2008).

From an accounting perspective, CSR is not only a prominent research theme but can also be found in corporate missions and value statements. Therefore, firms that engage in corporate social responsibility are interested in maximizing the profit of shareholders. The fact is, many firms have already done to improve the financial performance, maximize the stakeholder's wealth, reputation and maintain public goodwill (Haigh & Jones, 2006).

Given this, a handful of research has investigated the effect of CSR on firm sustainability, according to the literature review, the interest has grown in the business world on implementing social responsibility as well as to fulfill legislative requirements, but also to improve corporate growth. In addition, firm achieves business strategy both short-term and long-term by engaging with operations for society, environment, and economy (Prayukvong & Olsen, 2009; Castka & Balzarova, 2008).

The main purpose of this research is to examine the effect of CSR accounting practices on firm sustainability. In addition, the research questions are as follows: (1) how do the four dimensions of CSR accounting practices have an influence on accounting information disclosure, corporate reputation, and respect to stakeholder benefit?, (2) how does accounting information disclosure have an influence on corporate reputation?, (3) how does corporate reputation have an influence on respect to stakeholder benefit?, (4) how do accounting information disclosure, corporate reputation, and respect to stakeholder benefit have an influence on firm sustainability?, (5) how do corporate governance awareness, executive vision for sustainability, and perceived public requirement have an influence on four dimensions of CSR accounting practices?, (6) how do the corporate communication moderate the relationship among CSR accounting practices and accounting information disclosure, corporate reputation, and respect to stakeholder benefit?

Theoretical Foundation

There are three theories that support the conceptual framework of this research. They are Stakeholder Theory, Social Learning Theory, and Contingency Theory.

Stakeholder theory is a key attribute for appropriate stakeholders in three aspects; 1) descriptive justification, which concentrates on organization management behaviors, 2) instrumental justification, which focuses on stakeholder management relatively for achieving corporate objective, and 3) normative justifications, or moral or ethical consideration as foundation concepts (Donaldson & Preston, 1995). Then, stakeholder theory provides a useful explanation of the relationships among corporate social responsibility effectiveness, corporate sustainable and its constructs.

Social learning theory states that different individual behaviors depend on specific characteristics, environment, and good relationship among colleagues which can improve the knowledge and experience (Bandura, 1977). Moreover, contingency theory concerns with the congruence between management strategy and environment uncertainty circumstances.

Literature Review and Research Hypotheses Development

ISO 14000 primarily focuses on CSR accounting practices. It is designed to introduce environmental improvement on the entire organization’s operations and enable organizations to incorporate environmental issues into the corporate decision-making process. As such, ISO 14000 certified organizations’ benefits including the improvement in social, environmental and economic performances, enhancement of corporate image, reduction in environmental risks and incidents, and compliance of legislation.

This study agenda is proposed, aiming at linking three key theoretical aspects of CSR accounting practices as the main ideas with the antecedent and consequence factors. The final result is firm sustainability. Then, a conceptual model of this study is presented as shown in Table 1.

3.1 CSR Accounting Practices

CSR accounting practices is defined to determine and measure the social activity related to the organization, to consider its appropriate strategies and social performances for evaluating firm performance, then recording and reporting firm’s activities that have an effect on society

(Rahahleh & Sharairi, 2008). Therefore, this study attempts to fulfill the gap by focusing on corporate social responsibility behavior and also proposing a new construct, namely accordance with environmental values, reasonable accounting practices, regulation accounting compliance, and social involvement concerns. Consistent with Weber (2008), CSR accounting practices are the key element in improving the image and reputation that increase company competitiveness and business success as well as corporate sustainability.

3.1.1 Accordance with Environment Value

Accordance with environmental value is defined as the identification, allocation and analysis of material streams and their related money flows by using environmental accounting systems to provide insight in environmental impacts and associated financial effects. The extent of accordance with environment values requires that the organization must report business activity likely to effect environments in order to expose social responsibility (Schaltegger, Bennett, Burritt, & Jasch, 2008; Haigh & Jones, 2006).

Moreover, the accordance with environment values is providing incremental information and comprehensive both financial and non-financial accounting information, to support decision making. Azzone, Brophy, Noci, Welford, and Young (1997) indicated that the accordance with environment values has a positive relationship to accounting disclosure quality. Thus, the hypothesis was posited as follows:

Hypothesis 1: Accordance with environment values is expected to improve (a) accounting information disclosure; (b) corporate reputation; and (c) respect of stakeholder benefit.

3.1.2 Reasonable Accounting Practice

Reasonable accounting practice is defined a procedure that is effective and responsive for information users. A reasonable accounting practice is one of important parts to increase stakeholder understanding. Jenkins and Yakovleva (2006) suggest that the ability of reasonable accounting practices is a central feature of decision analysis and one of its most interesting areas of application. Moreover, prior research indicates that reasonable accounting practices is relative to providing a firm performance based on management efficiency, cooperage governance and strategic decision making. Therefore, the hypothesis was posited as follows:

Hypothesis 2: Reasonable accounting practices is expected to improve (a) accounting information disclosure; (b) corporate reputation; and (c) respect of stakeholder benefit.

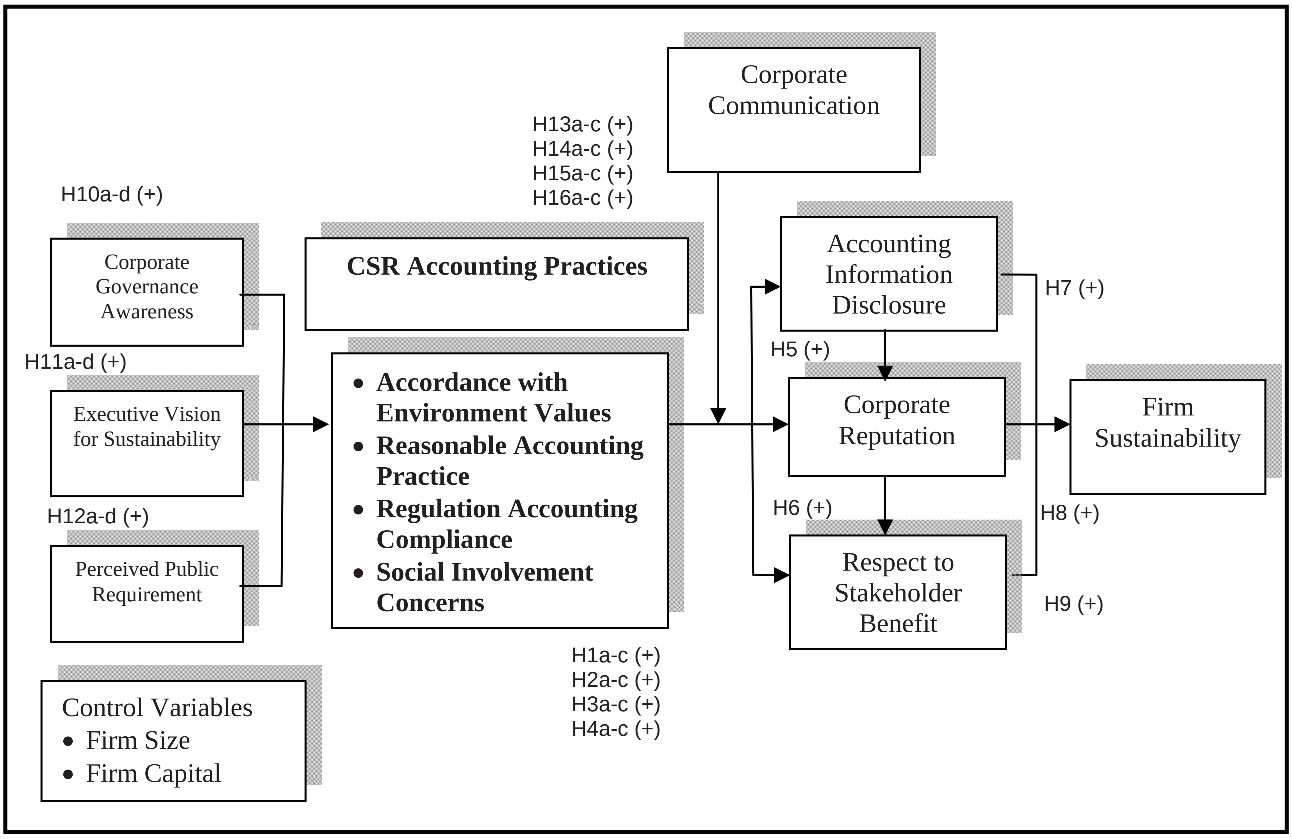

Figure 1 Conceptual Model of the Influences of CSR Accounting Practices on Firm Sustainability: Evidence from ISO 14000 Businesses

3.1.3 Regulation Accounting Compliance

Regulation accounting compliance is defined as accounting practices that follow regulations and law that affected accounting statement and information disclosure. Nowadays, regulation accounting compliance has concerned business operations on a voluntary basis, that strive to comply with the law, rule, policy and regulations that provide societal values. Therefore, businesses that practice according to accounting principles and regulations tend to increase accounting performance. Thus, the hypothesis was posited as follows:

Hypothesis 3: Regulation accounting compliance is expected to improve (a) accounting information disclosure; (b) corporate reputation; and (c) respect of stakeholder benefit.

3.1.4 Social Involvement Concerns

Social involvement concerns is defined as the report that can provides completely all perspectives of business activity information, even negative effects, that influences or may influence on employee-related issues, community involvement, environmental concerns and other ethical issues (Schaltegger et al., 2008; Haigh & Jones, 2006). In other words, social involvement concerns are highlighting a progress made towards improving environmental performances and enhancing workplace, and societal well-being.

Based on the literature reviewed, McWilliams and Siegels (2001) concluded that social involvement concerns actions lead to excellent business value, motivational community and outstanding stakeholder acceptance; the hypothesis was posited as follows:

Hypothesis 4: Social involvement concerns is expected to improve (a) accounting information disclosure; (b) corporate reputation; and (c) respect of stakeholder benefit.

3.2 Mediating Effects of the Relationships

3.2.1 Accounting Information Disclosure

Accounting information disclosure refers to the activity of the company to declare the information produced to improve user's decision making in internal and external events. Moreover, firms will be attempting to monitor accountability and transparency to more valuation of environmental information. Additionally, effective accounting information disclosure is significantly related with correctness and timeliness. Therefore, the hypothesis was formulated as follows:

Hypothesis 5: Accounting information disclosure will promote a change of a higher influence on corporate reputation.

Hypothesis 7: A firm with greater level of accounting information disclosure will achieve better firm sustainability.

3.2.2 Corporate Reputation

Corporate reputation is defined as a collective assessment of a firm's past behaviors and outcomes that depict the firm's ability to render valued results to multiple stakeholders (Bromley, 2002). Therefore, several firms attempt to increase the reputation which enhances the stakeholder trustworthiness through sustained financial outcome (Fox, Nobles, & Akers, 2011). Previously, the literature in the corporate reputations, stated the positive relevance information on corporate reputation such as social performance, social responsibility, and environmental performance of the firm (Kuckertz & Wagner, 2010). Therefore, the hypothesis was formulated as follows:

Hypothesis 6: Corporate reputation will promote a change of a higher influence on respect of stakeholder benefit.

Hypothesis 8: A firm with a greater level of corporate reputation will achieve better firm sustainability.

3.2.3 Respect to Stakeholder Benefit

Respect to stakeholder benefit is defined as the company accepting the importance of stakeholder benefit. Prayukvong and Olsen (2009) suggested that social responsibility accounting is considered when companies focus on fair process of social care that affects stakeholder acceptance. Then, stakeholders expect that accounting information must provide credibility to users to make decision. Therefore, the hypothesis was formulated as follows:

Hypothesis 9: A firm with a greater level of respect of stakeholder benefit will achieve better firm sustainability.

3.3 Antecedents of CSR Accounting Practices

3.3.1 Corporate Governance Awareness

Corporate governance awareness is defined as the emphasis on the mechanisms of the organization being controlled and directed, including securing reliable information disclosure and responsibility of their stakeholders (Nazli, Mohd, & Pauline, 2006). In recent years, environment issues are a key pressure of corporation efforts to develop a business strategy that could assure sustainable development through operation systems that focuses on firms' rights and responsibility. Therefore, the hypothesis was formulated as follows:

Hypothesis 10: The higher change in the corporate governance awareness, the more likely that a firm will gain greater (a) accordance with environmental value; (b) reasonable accounting practice; (c) regulation on accounting compliance; and (d) social involvement concerns.

3.3.2 Executive Vision for Sustainability

Executive vision for sustainability is defined as the aspiration of the company's administration to accomplish long-term success. Thereby, the firm's manager is the starting point of social responsibility accounting practices in an organization, and particularly transformational leadership can be used to stimulate employees to create innovations (Waldman, Siegel, & Javidan, 2006). Therefore, the hypothesis was formulated as follows:

Hypothesis 11: The higher change in the executive vision for sustainability, the more likely that firm will gain greater (a) accordance with environmental value; (b) reasonable accounting practice; (c) regulation on accounting compliance; and (d) social involvement concerns.

3.3.3 Perceived Public Requirement

Perceived public requirement is defined as the recognition of public enforcement that may have an effect on a firm's practices in the future, in which some force is likely to influence the firm's movement action. Prior research found the level of the public's environmental commitment as well as concerns on potential environmental problems in the future, as a pressure to the operation of the firm (Kuckertz & Wagner, 2010). Therefore, the hypothesis was formulated as follows:

Hypothesis 12: The higher change in the perceived public requirement, the more likely that firm will gain greater (a) accordance with environmental value; (b) reasonable accounting practice; (c) regulation on accounting compliance; and (d) social involvement concerns.

3.4 Moderating Effects of the Relationships

Corporate communication is defined as the act of exchanging accounting information between the company and stakeholders, which explains how companies strategically engage in CSR including good communication to their stakeholders both directly and indirectly. Good communication can enhance trustworthiness and provide a good reputation of the firm (Hill, 1990). Therefore, the hypotheses were formulated as follows:

Hypothesis 13: Corporate communication will positively moderate the relationships among accordance with environmental value, and (a) accounting information disclosure, (b) corporate reputation, and (c) respect of stakeholder benefit.

Hypothesis 14: Corporate communication will positively moderate the relationships among reasonable accounting practice and (a) accounting information disclosure, (b) corporate reputation, and (c) respect of stakeholder benefit.

Hypothesis 15: Corporate communication will positively moderate the relationships among regulation accounting compliance and (a) accounting information disclosure, (b) corporate

reputation, and (c) respect of stakeholder benefit.

Hypothesis 16: Corporate communication will positively moderate the relationships among social involvement concerns and (a) accounting information disclosure, (b) corporate reputation, and (c) respect of stakeholder benefit.

Research Methods

4.1 Population and Data Collection Procedure

The questionnaires were used to collect data from 481 ISO 14000 businesses in Thailand as listed in Thai Industrial Standards Institute, Ministry of Industry (http://tisi.go.th) as of August 19, 2013. The mail survey is appropriate because it is a widely-used method for large-scale data collection in large geographical areas. (Neuman, 2006). Chief financial officers (CFO's), accounting directors and accounting managers are key informants because they determine corporate social responsibility policy and truly understand their business.

One hundred and three responses were received and usable, effective response rate was approximately 21.41%. According to Aaker, Kumar, and Day (2011), the response rate for a mail survey, without an appropriate follow-up procedure greater than 20% is considered acceptable.

4.2 Questionnaire Development

Several constructs and multiple scale items were developed as new scales from literature reviews. All variables in the survey are obtained from literature review and were measured using a five-point Likert Scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A pre-test method was conducted to assert validity and reliability of the questionnaire. In this case, the instrument was then pretested among 30 informants randomly selected from a population frame not included in the sample. Also, experts review and recommend revising the questionnaire to improve the construct validity before data collection. There are six parts of questionnaires: part one is the demographic check list; part two contains the questions about general information of business; and part three through part seven are questions of each construct in the conceptual model. The final part is an open-ended question for general suggestions and opinion.

4.3 Reliability and Validity

Confirmatory factor analysis (CFA) was used to test the validity of instrument to confirm that a set of measurement accurately represents the concept. This analysis has a high potential to inflate the component loadings. Therefore, a higher rule-of-thumb, a cut-off value of 0.40, was accepted (Nunnally & Bernstein, 1994) and Cronbach's alpha was used to measure an internal consistency which should be greater than 0.60 (Hair, Black, Babin, Anderson, & Tatham, 2006). Table 1 shows that all variables have factor loading scores between 0.64-0.89 indicating a construct validity. Also, the Cronbach's alpha coefficients for all variables ranging from 0.69-0.86 indicate the accepted reliability level of these constructs (Cronbach, 1951).

This research used a variance inflation factor (VIF) and a tolerance value as indicators of a high degree of multicollinearity among the independent variables. VIF is directly related to the tolerance value. In case that a tolerance value is greater than 0.10 and VIF is less than 10, the multicollinearity was not concerned (Hair et al., 2006).

Variance inflation factors (VIFs) ranging from 1.258-2.183 (Table 3) are well below the cut-off value of 10 as recommended by Hair et al. (2006) meaning that the independent variables are not correlated with each other. Accordingly, there are no significant multicollinearity problems confronted in this research.

Table 1 The Results of Measurement Validation

Variables	Factor Loadings	Cronbach's Alpha
Accordance with Environment Value (AEV)	0.78 - 0.81	0.83
Reasonable Accounting Practice (RAP)	0.64 - 0.89	0.69
Regulation Accounting Compliance (RAC)	0.82 - 0.88	0.84
Social Involvement Concerns (SIC)	0.79 - 0.84	0.77
Accounting Information Disclosure (AID)	0.73 - 0.86	0.85
Corporate Reputation (CR)	0.83 - 0.85	0.72
Respect of Stakeholder Benefit (RSB)	0.77 - 0.81	0.86
Firm Sustainability (FS1)	0.71 - 0.83	0.75
Corporate Governance Awareness (CGA)	0.70 - 0.82	0.78
Executive Vision for Sustainability (EVS)	0.74 – 0.84	0.70
Perceived Public Requirement (PPR)	0.73 – 0.85	0.83
Corporate Communication (CC)	0.68 – 0.78	0.73

Correlation analysis was used to test the correlations among all variables and provides a correlation matrix that shows intercorrelations among all variables for the initial analysis.

4.4 Statistical Techniques

To determine the conceptual model, the Ordinary Least Squares (OLS) regression analysis was used to test the overall relationship after model estimation. Used directly with an appropriate data set, liner least squares regression can be used to fit the data with the function shown as follows:

Equation 1: $$AID = \alpha_1 + \beta_1 AEV + \beta_2 RAP + \beta_3 RAC + \beta_4 SIC + \beta_5 FS + \beta_6 FC + \varepsilon$$

Equation 2: $$AID = \alpha_2 + \beta_7 AEV + \beta_8 RAP + \beta_9 RAC + \beta_{10} SIC + \beta_{11} CC + \beta_{12}(AEV*CC) + \beta_{13}(RAP*CC) + \beta_{14}(RAC*CC) + \beta_{15}(SIC*CC) + \beta_{16} FS + \beta_{17} FC + \varepsilon$$

Equation 3: $$CR = \alpha_3 + \beta_{18} AEV + \beta_{19} RAP + \beta_{20} RAC + \beta_{21} SIC + \beta_{22} FS + \beta_{23} FC + \varepsilon$$

Equation 4: $$CR = \alpha_4 + \beta_{24} AEV + \beta_{25} RAP + \beta_{26} RAC + \beta_{27} SIC + \beta_{28} CC + \beta_{29}(AEV*CC) + \beta_{30}(RAP*CC) + \beta_{31}(RAC*CC) + \beta_{32}(SIC*CC) + \beta_{33} FS + \beta_{34} FC + \varepsilon$$

Equation 5: RSB = $\alpha_5 + \beta_{35}AEV + \beta_{36}RAP + \beta_{37}RAC + \beta_{38}SIC + \beta_{39}FS + \beta_{40}FC + \varepsilon$

Equation 6: RSB = $\alpha_6 + \beta_{41}AEV + \beta_{42}RAP + \beta_{43}RAC + \beta_{44}SIC + \beta_{45}CC + \beta_{46}(AEV*CC) + \beta_{47}(RAP*CC) + \beta_{48}(RAC*CC) + \beta_{49}(SIC*CC) + \beta_{50}FS + \beta_{51}FC + \varepsilon$

Equation 7: CR = $\alpha_7 + \beta_{52}AID + \beta_{53}FS + \beta_{54}FC + \varepsilon$

Equation 8: RSB = $\alpha_8 + \beta_{55}CR + \beta_{56}FS + \beta_{57}FC + \varepsilon$

Equation 9: FS1 = $\alpha_9 + \beta_{58}AID + \beta_{59}CR + \beta_{60}RSB + \beta_{61}FS + \beta_{62}FC + \varepsilon$

Equation 10: AEV = $\alpha_{10} + \beta_{63}CGA + \beta_{64}EVS + \beta_{65}PPR + \beta_{66}FS + \beta_{67}FC + \varepsilon$

Equation 11: RAP = $\alpha_{11} + \beta_{68}CGA + \beta_{69}EVS + \beta_{70}PPR + \beta_{71}FS + \beta_{72}FC + \varepsilon$

Equation 12: RAC = $\alpha_{12} + \beta_{73}CGA + \beta_{74}EVS + \beta_{75}PPR + \beta_{76}FS + \beta_{77}FC + \varepsilon$

Equation 13: SIC = $\alpha_{13} + \beta_{78}CGA + \beta_{79}EVS + \beta_{80}PPR + \beta_{81}FS + \beta_{82}FC + \varepsilon$

Research Results and Discussion

Descriptive statistics and correlation matrix for all variables are shown in Table 2.

Table 2 Descriptive Statistics and Correlation Matrix

Variables	AEV	RAP	RAC	SIC	AID	CR	RSB	FS1	CGA	EVS	PPR	CC
Mean	4.18	4.16	4.20	4.16	4.21	3.91	3.90	3.80	3.97	3.91	.90	.174
SD	0.51	0.52	0.61	0.64	0.51	0.68	0.72	0.67	0.73	0.79	.381	.122
AEV												
RAP	.722**											
RAC	.767**	.772**										
SIC	.720**	.818**	.820**									
AID	.709**	.726**	.669**	.682**								
CR	.571**	.611**	.475**	.524**	.648**							
RSB	.490**	.694**	.473**	.614**	.510**	.727**						
FS1	.469**	.598**	.510**	.523**	.482**	.490**	.622**					
CGA	.469**	.598**	.510**	.523**	.482**	.490**	.622**	.795**				
EVS	.456**	.602**	.534**	.520**	.481**	.558**	.564**	.791**	.796**			
PPR	-.055	.091	.121	.049	.075	.014	.010	.129	.115	.184		
CC	.003	-.043	.129	.039	-.103	.016	.006	.109	.124	.153	.042	

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

Table 3 presents the results of OLS regression analysis. Firstly, OLS tests the relationship among dimensions of CSR accounting practices predicted to have a positive influence on accounting information disclosure, corporate reputation, and respect to stakeholder benefit. The finding indicates that the accordance with environment value has a strongly significant and positively effect on accounting information disclosure (β_1= 0.323), corporate reputation (β_{18}= 0.265), and respect to stakeholder benefit (β_{35}= 0.248). Therefore, hypotheses 1a-1c were strongly supported. Prior research also indicates that companies will engage CSR in accounting information disclosure; that is, being seen as socially responsible will lead them to corporate reputation and allow them to achieve better economic result through respect to stakeholder benefit in sustaining business (Branco & Rodrigues, 2008).

Surprisingly, the reasonable accounting practice was not significant on accounting information disclosure (β_{2}= 0.152), corporate reputation (β_{19}= 0.126), and respect to stakeholder benefit (β_{36}= 0.114). Thus, hypotheses 2a-2c were not supported. Gluld (1974) stated that increasing uncertainty in the prior accounting practice did not necessarily lead to larger valuation of information. For the regulation accounting compliance, the results indicated that it has a significant and positively effect on accounting information disclosure (β_{3}= 0.304), corporate reputation (β_{20}= 0.209), and respect to stakeholder benefit (β_{37}= 0.267). Thus, hypotheses 3a-3c were supported. In this case, a firm that follows regulations related to accounting tends to increase accounting performance and enhance the relationship with the stakeholders.

Moreover, the social involvement concerns have a positive relationship with accounting information disclosure (β_{4}= 0.169), corporate reputation (β_{21}= 0.147), and respect to stakeholder benefit (β_{38}= 0.215). Thus, hypotheses 4a-4c were strongly supported. Consistent with prior research, the firms would invest in social activity area in order to build satisfaction with their stakeholders. Furthermore, the firm usually focuses on social involvement environment, which raises stakeholder acceptance (Klein & Dawar, 2004).

The interaction between the accordance with environment value and corporate communication on accounting information disclosure (β_{12}= 0.192), corporate reputation (β_{29}= 0.154), and respect to stakeholder benefit (β_{46}= -0.073), have significant relationships. Thus, hypotheses 13a-13c were supported. The interaction between reasonable accounting practice and corporate communication also indicates a significant and positively effect on accounting information disclosure (β_{13}= 0.204), corporate reputation (β_{30}= 0.215), and respect to stakeholder benefit (β_{47}= 0.180). Therefore, hypotheses 14a-14c were strongly supported. The result is consistent with prior research which suggests that business intention on corporate communication issue has been related to social and business role, management, public policy, stakeholder and corporate accountability topic (Barth, Landsman, & Lang, 2008). Moreover, the interaction between regulation accounting compliance and corporate communication has a significant and positively effect on accounting information disclosure (β_{14}= 0.099). Thus, hypothesis 15a was supported but Hypotheses 15b-15c were not supported.

Table 3 The Results of OLS Regression Analysis [a]

Independent Variables	Dependent Variables					
	Equation 9: Firm Sustainability (FS1)	Equation 1, 2: Accounting Information Disclosure (AID)	Equation 3,4: Corporate Reputation (CR)	Equation 5,6: Respect to Stakeholder Benefit (RSB)	Equation 7: Corporate Reputation (CR)	Equation 8: Respect to Stakeholder Benefit (RSB)
Accordance of Environment Value (AEV)		.323** (β_1) (.073)	.265** (β_{18}) (.041)	.248** (β_{35}) (.068)		
Reasonable Accounting Practice (RAP)		.152 (β_2) (.065)	.126 (β_{19}) (.081)	.114 (β_{36}) (.065)		
Regulation Accounting Compliance (RAC)		.304** (β_3) (.048)	.209** (β_{20}) (.076)	.267* (β_{37}) (.041)		
Social Involvement Concerns (SIC)		.169** (β_4) (.050)	.147** (β_{21}) (.080)	.215* (β_{38}) (.043)		
Corporate Communication (CC)		.246** (.068)	.239** (.075)	.215** (.071)		
AEV x CC		.192** (β_{12}) (.071)	.154** (β_{29}) (.060)	-.073* (β_{46}) (.077)		
RAP x CC		.204** (β_{13}) (.083)	215** (β_{30}) (.093)	.180* (β_{47}) (.077)		
RAC x CC		.099* (β_{14}) (.067)	.016 (.073)	.011 (.081)		
SIC x CC		.145* (β_{15}) (.060)	.240* (β_{32}) (.066)	.111* (β_{49}) (.070)		
Accounting Information Disclosure (AID)	.253** (β_{58}) (.067)				.238** (β_{52}) (.040)	
Corporate Reputation (CR)	.298** (β_{59}) (.058)					.273** (β_{55}) (.045)
Respect to Stakeholder Benefit (RSB)	.242** (β_{60}) (.071)					
Firm Size (FS)	.032 (.094)	-.051 (.066)	-.081 (.083)	.120 (.096)	-.045 (.067)	.135 (.088)
Firm Capital (FC)	.140 (.094)	-.046 (.066)	-.122 (.083)	-.011 (.096)	-.032 (.068)	-.054 (.089)
Adjusted R square	.301	.369	.384	.432	.445	.434
Maximum VIF	2.183	2.183	2.183	2.183	1.258	1.258

Note: The value of the beta coefficients are in the first row. Below are the values of standard error in the parenthesis.

* $p < 0.10$, ** $p < 0.05$

Surprisingly, the interaction between social involvement concerns and corporate communication has a significant and positively effect on accounting information disclosure (β_{15}= 0.145), corporate reputation (β_{32}= 0.240), and respect to stakeholder benefit (β_{49}= 0.111). Thus, hypotheses 16a-16c were supported. Castka and Balzarova (2008) suggest that social involvement concern of the firm will reflect firm survival in the long term.

In addition, according to Table 3, the relationship among consequence indicates that accounting information disclosure has a strongly significant and positively effect on corporate reputation (β_{52}= 0.238), and firm sustainability (β_{58}= 0.253). Therefore, hypotheses 5 and 7 were strongly supported. The prior research suggested that the importance of accounting information disclosure can enhance reputation of the firms, consistent with Hooghiemstra (2000) who indicates that the outcomes of social responsibility disclosure was a communication to create competitive advantage. For the corporate reputation, the results indicate that it has a strongly significantly and positively effect on respect to stakeholder benefit (β_{55}= 0.273), and firm sustainability (β_{59}= 0.298). Hence, hypotheses 6 and 8 were strongly supported. Prior research suggested that accounting information disclosure reflects organization activities (Maines & Wahlen, 2006). For the respect to stakeholder benefit, the results show that it has a strongly significantly and positively effect on firm sustainability (β_{60}= 0.242). Hence, hypothesis 9 was supported.

This section explains the influences of three antecedents on four dimensions of CSR accounting practices (Table 4). The result indicates that corporate governance awareness has a significant and positively effect on accordance with environment value (β_{63}= 0.248), and social involvement concerns (β_{78}= 0.267). Therefore, hypotheses 10a and 10d were supported. The contribution of corporate governance awareness requires the respondents to indicate the extent to which they perceived and emphasized on social responsibility and governance practice. Surprisingly, it did not significantly affect reasonable accounting practice (β_{68}= 0.058) and regulation accounting compliance (β_{73}= 0.047). Thus, hypotheses 10b and 10c were not supported. Steele and Powel (2002) suggested that corporate governance was the tools for controlling corporate behavior that cannot generate a firm's rights by concentrating on responsibility of their stakeholders such as ethics and justices, including accountability of information disclosure.

Moreover, the results indicate that the executive vision for sustainability has a significant and positively effect on accordance with environment value (β_{64}= 0.140), reasonable accounting practice (β_{69}= 0.168), regulation accounting compliance (β_{74}= 0.256), and social involvement concerns (β_{79}= 0.139). Therefore, hypotheses 11a-11d were supported. Prior researches indicate that executive vision for sustainability focused on the balance of firm's economy, reasonable accounting practice and environmental development by incorporating their vision in the firm's practices. In addition, the findings show that perceived public requirement has a significant and positive relationship with accordance with environment value (β_{65}= 0.132), and social involvement concerns (β_{70}= 0.241). Surprisingly, it did not significantly affect reasonable accounting practice (β_{75}= 0.034), and regulation accounting compliance (β_{80}= 0.068). Therefore, hypotheses 12a and 12d were supported but hypotheses 12b and 12c were not supported.

Nielsen and Madsen (2009) suggested that the level of perceived public enforcement as institute, culture legal, law and social to operate some activity has a direct or indirect effect on firms' practices in the future.

Table 4 The Results of OLS Regression Analysis [a]

Independent Variables	Dependent Variables			
	Equation 10 : Accordance of Environment Value (AEV)	Equation 11: Reasonable Accounting Practice (RAP)	Equation 12: Regulation Accounting Compliance (RAC)	Equation 13: Social Involvement Concerns (SIC)
Corporate Governance Awareness (CGA)	.248** (β_{63})	.058 (β_{68})	.047 (β_{73})	.267** (β_{78})
	(.084)	(.072)	(.077)	(.077)
Executive Vision for Sustainability (EVS)	.140* (β_{64})	.168* (β_{69})	.256** (β_{74})	.139* (β_{79})
	(.094)	(.080)	(.085)	(.085)
Perceived Public Requirement (PPR)	.132* (β_{65})	.034 (β_{70})	.068 (β_{80})	.241** (β_{70})
	(.064)	(.055)	(.059)	(.059)
Firm Size (FS)	.018	-.081	.006	-.007
	(.103)	(.088)	(.094)	(.094)
Firm Capital (FC)	.018	-.024	.009	-.018
	(.105)	(.090)	(.095)	(.096)
Adjusted R square	.385	.374	.336	.357
Maximum VIF	3.198	3.198	3.198	3.198

Note: The value of the beta coefficients are in the first row. Below are the values of standard error in the parenthesis.
$^{*}p < 0.10$, $^{**}p < 0.05$ $^{***}p < 0.01$

Implications of Research

The results of this research can be one of the evidences that suggest the improvement for accounting practice that concerns social and environmental responsibility. Moreover, managers can use these results to support their decision making for several reasons such as eco-efficiency strategy and cleaner production strategy. Furthermore, accounting professionalism was increasingly emphasized on social responsibility accounting behavior to improve accounting outcomes. Finally, higher education institutes on accounting can use these findings as a guideline for accounting practices and enhance accounting profession competency based on social responsibility.

Conclusion

The results indicate that accordance with environment value, reasonable accounting practice, regulation accounting compliance and social involvement concerns have a positive impact on accounting information disclosure, corporate reputation, and respect of stakeholder benefit. In addition, the results show that accounting information disclosure was significantly and positively related with corporate reputation. Meanwhile, corporate reputation was also significantly and positively related with stakeholder benefits. Moreover, regarding three antecedents, executive vision for sustainability has a positive and significant effect on CSR accounting practices. Likewise, corporate governance awareness and perceived public requirement has a positive and partial significant effect on accordance with environment value and social involvement concerns. The moderating effect of corporate communication has a higher effect on CSR accounting practices (accounting information disclosure, corporate reputation, and respect of stakeholder benefit). Finally, this research can be used to improve the accounting practices that concern with social and environmental management. Moreover, managers can use the results to support their decision making for firm value.

Limitations and Future Directions for Research

Future research should employ CSR as a whole or explore other consequences. Limitations of this research concern an attempt to study other potential moderating variables, in which data were collected using self-administered questionnaires and that may lead to bias and halo effect. Other methods may apply in-depth interviews or case studies and collect data from different but comparative groups of samples in order to verify the generalizability of the research and to increase reliability. Likewise, future research could add the business citizenship as an independent variable or a moderator to firm sustainability.

References

Aaker, D. A., Kumar, V., & Day, G. S. (2011). *Marketing research* (10th ed.). New York: John Wiley & Son.

Azzone, G., Brophy, M., Noci, G., Welford, R., & Young, W. (1997). A stakeholders' view of environmental reporting. *Long Range Planning, 30*(5), 699-709.

Bandura, A. (1977). *Social learning theory*. New York: General Learning Press.

Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research, 46*(3), 467-498.

Branco, M. C., & Rodrigues, L. L. (2008). Factors influencing social responsibility disclosure by Portuguese Companies. *Journal of Business Ethics*, *83*(4), 685-701.

Bromley, D. B. (2002). Comparing corporate reputation: League tables, quotients, benchmarks, or case studies? *Corporate Reputation Review, 5*(1), 35-51.

Castka, P., & Balzarova, M. A. (2008). ISO 26000 and supply chain-on the diffusion of the social responsibility standard. *International of Production Economics*, *111*(2), 274-286.

Cormier, D., Aerts, W., Ledoux, M. J., & Magnan, M. (2009). Attributes of social and human capital disclosure and information asymmetry between managers and investors. *Canadian Journal of Administrative Sciences Revue Canadienne des Sciences de*, *26*(1), 71-88.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrical, 16*(3), 297-334.

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implication. *Academy of Management Review*, *20*(1), 65-91.

Fox, K. A., Nobles, M. R., & Akers, R. L. (2011). Is stalking a learned phenomenon? An empirical test of social learning theory. *Journal of Criminal Justice*, *39*(1), 39-47.

Gluld, J. P. (1974). Risk stochastic preference and the value of information. *Journal of Economic Theory*, *8*(1), 64-84.

Haigh, M., & Jones, M. T. (2006). The drivers of corporate social responsibility: A critical review. *The Business Review, Cambridge*, *5*(2), 245-253.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). New Jersey: Pearson Prentice Hall.

Hill, C. W. L. (1990). Co-operation, opportunism, and the invisible hand: Implications for transaction cost theory. *Academy of Management Review*, *15*(3), 500-513.

Hirst, D. E., Koonce, L., & Simko, P. J. (1995). Investor reactions to financial analysts' research reports. *Journal of Accounting Research*, *33*(2), 335-351.

Hooghiemstra, R. (2000). Corporate communication and impression management-new perspectives why companies engage in corporate social reporting. *Journal of Business Ethics*, *27*(1-2), 55-68.

Jenkins, H., & Yakovleva, N. (2006). Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, *14*(3-4), 271-284.

Klein, J. G., & Dawar, N. (2004). Corporate social responsibility and consumers' attributions and brand evaluations in production-harm crisis. *International Journal of Research in Marketing, 21*(3), 203-217.

Kuckertz, A., & Wagner, M. (2010). The influence of sustainability orientation on entrepreneurial intentions-investigating the role of business experience. *Journal of Business Venturing*, *25*(5), 524-539.

Maines, L. A., & Wahlen, J. M. (2006). The nature of accounting information reliability: Inferences from archival and experimental research. *Accounting Horizons*, *20*(4), 399-425.

Mathews, M. R. (1995). Social and environmental accounting: A practical demonstration of ethical concern? *Journal of Business Ethics*, *14*(8), 663-671.

McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *The Academy of Management Review, 26*(1), 117-127.

Nazli. A., Mohd. G., & Pauline, W. (2006). Perpetuating traditional influences: Voluntary disclosure in Malaysia following the economic crisis. *Journal of International Accounting Auditing & Taxation*, *15*(2), 226-248.

Neuman, W. L. (2006). *Social research methods qualitative and quantitative approaches* (6th ed.). New York, NY: Pearson Education Inc.

Nielsen, C., & Madsen, M. T. (2009). Discourses of transparency in the intellectual capital reporting debate: Moving from generic reporting models to management defined information. *Critical Perspectives on Accounting*, *20*(7), 847-854.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

Prayukvong, P., & Olsen, M. (2009). Research on the CSR development in Thailand. In *Thailand, Research paper on promoting corporate social responsibility in Thailand and the role of volunteerism* (pp. 1-41). *The Network of NGO and Business Partnerships for Sustainable Development (The NETWORK Thailand).*

Rahahleh, M. Y., & Sharairi, J. A. (2008). The extent of social responsibility accounting application in the qualified industrial zones in Jordan. *International Management Review*, *4*(2), 1-17.

Schaltegger, S., Bennett, M., Burritt, R. L., & Jasch, C. M. (2008). Environmental management accounting (EMA) as a support for cleaner production. In *environmental management accounting for cleaner production* (pp. 3-26). UK: Springer.

Steele, A. P., & Powell, J. R. (2002). Environmental accounting: Applications for local authorities to quantify internal and external costs of alternative waste management strategies. *Environmental Management Accounting Network Europe,* Fifth Annual Conference, Gloucestershire Business School, 11/12 February.

Thai Industrial Standards Institute Ministry of Industry. (2013). ISO 14000 business data based 2012. Retrieved August 19, 2013 from http://app.tisi.go.th/syscer/14000_t.html

Ullmann, A. A. (1985). Data in search of a theory: A critical examination of the relationships among social performance, social disclosure, and economic performance of U.S. firms. *Academy of Management Review*, *10*(3), 540-557.

Waldman, D. A., Siegel, D, S., & Javidan, M. (2006). Components of CEO transformational leadership and corporate social responsibility. *Journal of Management Studies, 43*(8), 1703-1725.

Weber, M. (2008). The business case for corporate social responsibility: A company-level measurement approach for CSR. *European Management Journal*, *26*, 247-261.

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