

# EFFECTS OF CORPORATE GOVERNANCE ON SUSTAINABLE DEVELOPMENT REPORTING IN THAILAND

*Muttanachai Suttipun\*, Sirima Saelee*

## Abstract

The aims of this research are to investigate the extent of sustainable development reporting (SDR) by listed companies in the Stock Exchange of Thailand (SET), to determine the differences in the intra-group SDR scores, and to test for the relationships between corporate governance and the SDR scores. The study population was top-100 SET-listed companies and the research data were collected from their 2011-2013 annual reports. The results showed that the SET-listed sampled companies earned an average SDR score of 33.5 (out of a total of 70) during the study period of 2011-2013; and that state-owned companies had higher scores on SDR than private firms. In addition, significant relationships existed between the variables of family ownership, audit type and industry type and the SDR scores. The limitations include the sole dependence on the annual reports as the credible source of data, the length of study, and the type of research information. This research study is the first that attempts to examine the influence of corporate governance on SDR in the Thai context.

**Keywords:** Corporate Governance, Sustainable Development Reporting, Thailand

*\*Department of Accountancy, Faculty of Management Sciences, Prince of Songkla University, Thailand*

## 1 Introduction

The conventional financial information reporting generally overemphasizes the financial aspects of firms' performances while underemphasizes the non-financial aspects, a fact that contributes to less informed decision-making by corporate stakeholders. Thus, corporate information reporting should encompass both the financial and non-financial aspects to satisfy the stakeholders' expectations (Li, 2008; Miller, 2010). At present, there exists an array of non-financial information reporting tools from which to select, e.g. the corporate social responsibility reporting, environmental reporting, and sufficiency economy philosophy reporting. Nevertheless, the non-financial information is reported independently of corporate annual reports (i.e. as a stand-alone report), while the annual reports are reserved almost exclusively for financial information reporting. The division of reporting disconnects the links between the economic, social and environmental perspectives of corporate operations. Besides, the separation often presents the stakeholders with challenges in making the informed decisions.

The adoption of sustainable development reporting (SDR) could thus help address these issues since SDR provides information on corporate strategy, governance, performance, and future opportunities, which reflect the economic, social and environmental perspectives (Eccles and Kruz, 2010). An increasing number of organizations in advanced economies have

begun integrating both financial and non-financial information into one same annual report. However, the scope of SDR in Thailand, a less developed economy, is still debatable since it is a concept that extends beyond the economic aspect of corporate responsibility to several other important aspects.

Although the Stock Exchange of Thailand (SET) has imposed the comply-or-explain rule (Lint, 2009), by which all SET-listed companies are required to provide social and environmental disclosures in the annual reports (Suttipun, 2012), the nature of the information is overly narrative and qualitative (Retanajongkol et al., 2006). In addition, Standard & Poor's (2009) reported a low level of non-financial information disclosure in the annual reports of the top-50 Thai SET-listed companies, a phenomenon which was attributable to negligible pressure from both internal and external stakeholders.

SDR is a process by which information relating to corporate performance is made available to stakeholders; however, the reporting decision is considerably influenced by ownership structure and board composition, two of many components of corporate governance. In addition, the effective ownership structure and board composition enhance corporate internal control and promote more information disclosure, which could subsequently reduce the principal-agency conflicts (Jensen and Meckling 1976).

Akhtaruddin and Haron (2010) and Fan and Wong (2002) found a weak relationship between

corporate governance, transparency and information reporting in Southeast Asia. In Malaysia, studies were carried out to investigate the relationships between corporate governance and voluntary information reporting (Haniffa and Cooke 2002) and between corporate governance and mandatory reporting (Jalila and Davi 2012; Wan-Hussin 2009; Talha et al. 2008). No research has nevertheless attempted to examine the existence of such relationships in the Thai setting. In addition, existing research in Thailand has made no attempt to identify such relationships but focused chiefly on voluntary disclosure, e.g. corporate social responsibility disclosure (Suttipun and Nuttaphon, 2014) and environmental disclosure (Kungkajit and Suttipun 2014). Furthermore, studies in terms of SDR in the Thai context are very limited.

To fill the void, this research study thus aims to achieve the following three objectives: to investigate the extent of SDR of the SET-listed companies, to examine the differences in the intra-group SDR scores, and to determine the relationships between corporate governance and the SDR scores. Accordingly, this research work would provide the answers to the following three research questions: (1) What is the extent of sustainable development reporting (SDR) of the SET-listed companies?; (2) Are there differences in the intra-group SDR scores, e.g. between the state-owned and private companies, the high-profile and low-profile companies, and the family business and non-family business companies?; and (3) Which corporate governance factors influence the SDR scores of the top-100 SET-listed companies based on their 2011-2013 annual reports?

The research findings are expected to cast light on SDR in the Thai context. It is also believed that the research results on the relationships between ownership structure, board composition and SDR would lead to better comprehension of the connections between corporate governance and SDR of Thai businesses. Moreover, the discovery would help convince relevant Thai regulatory bodies to make necessary adjustments to the existing corporate governance practices to raise both quality and quantity of sustainable development reporting.

The organization of this research is as follows: Section 1 is the introduction. Section 2 is concerned with the theoretical perspective, and Section 3 deals with the hypothesis development. Section 4 outlines the research methodology, including sample selection, variable measurement and data analysis. Section 5 discusses the findings, while the concluding remarks, including the implications, limitations and future study, are provided in the final section.

## **2 Theoretical perspectives**

The SDR concept has been referred to in many financial and accounting theories and also numerous attempts have been made to identify the influencing

factors of the SDR level. Examples of those theories include the agency theory (Mele, 2008), the legitimacy theory (Ahmad and Sulaiman, 2004; Islam and Deegan, 2010), the stakeholder theory (Gray et al., 1998; Larrinaga et al., 2007), the media setting agenda theory (Brown et al., 2009), the institution theory (Amran and Devi, 2008), and the social political theory (Cheng and Fan, 2010). In this research, stakeholders' diverse demands for information are the area that both the extent of and score on sustainability information disclosures are investigated from both theoretical and empirical perspectives (Monteiro and Guzman, 2010). In addition, since the sustainability concept has gathered wider recognition, the stakeholder theory is thus employed in this research.

According to Cheng and Fan (2010), the stakeholder theory is concerned with the management of the relationships between diverse stakeholders and the corporate responsibility to the stakeholders. Since the effective management of stakeholder relationships proves crucial to positive corporate image and competitive advantages, more resources are allocated to managing such relationships, including the provision of more information, albeit often in the form of voluntary disclosures, in the annual reports. The justification is that stakeholders, i.e. those who have a stake in an organization (Collier, 2008), have something at risk as well as the power to influence the organization, including its actions, decisions, policies or goals. Generally, potential stakeholders refer to shareholders, creditors, suppliers, regulators, customers, competitors, employees, employees' families, the media, the local community, local charities, and future generations (Carrol and Bucholtz, 2006). At present, corporations are being closely monitored for their actions not only by shareholders and investors but also by several other stakeholders, e.g. customers, creditors, suppliers, the community, as well as environmentalists. This fact reflects the increased demands from numerous stakeholder groups and the significance of social and environmental problems associated with globalization (Soderstrom, 2013).

Gray et al. (1996) noted that the task of identifying stakeholder groups that require management to further the corporations' interests was mainly performed by the businesses. According to the stakeholder theory, business organizations should manage the relationships between diverse stakeholders based on the various factors, e.g. the nature of the task, the salience of stakeholder groups, and the influence of decision makers who determine the stakeholder ranking process (Donaldson and Preston, 1995). In addition, greater emphasis should be given to the information demands of stakeholders whose actions determine the corporation's survival, instead of adopting the practice of equal treatment (Nasi et al., 1997). The influence and expectations of stakeholders are constantly changing, so it is necessary that

businesses adjust their operating and reporting practices (Deegan, 2001). In short, the stakeholder theory views business corporations as part of a social system while focusing on the various stakeholder groups in the society (Ratanajongkol et al., 2006).

Moreover, the stakeholder theory views the sustainable development practice as a means to achieve wealth maximization. On the one hand, a corporation is obliged to provide the economic returns to the capital owners and to maximize the firm's market value. On the other hand, other stakeholders' demands, particularly those of customers and laborers, also dictate the directions of corporate activity and actions. Thus, based on this theory, the significance that firms attach to an activity or project is directly and positively correlated to the influence exerted by a particular stakeholder group.

### 3 Hypothesis development

The SDR of this research work is defined as corporations' public reporting to provide the internal and external stakeholders with a view of corporate position and activity on economic, social and environmental aspects. Previous literature on SDR offered the explanations why companies provided the sustainability information, e.g. Cowen et al., (1987); Hackston and Milne (1996). The sustainable development reporting is called by a variety of names, e.g. the sustainability reporting, the sustainable development reporting, the corporate social responsibility reporting, the triple bottom line reporting, and the accountability reporting. Jose and Lee (2007) and Kolk et al. (2001) observed that SDR varied by country. Ho and Taylor (2007) and Deegan and Rankin (1996) investigated the types and content of SDR in the annual reports. In addition, the influences of specific pressure groups (Deegan and Gordon, 1996) and media attention (Brown et al., 2009) on the content of SDR were investigated.

To examine the influences of corporate governance on the score of SDR contained in the 2011-2013 annual reports of Thai SET-listed companies, this research has tested eight hypotheses. There are six independent variables: family business ownership, managerial ownership, government ownership, size of committee, number of independent committee, and CEO duality; and two control variables: industry type and audit type.

Family business ownership is the most prevalent business structure in Asia, especially in Thailand (Thillainatan, 1999). According to Jalila and Devi (2012), family business ownership influenced the implementation of SDR due to the low bargaining power of general shareholders as a substantial portion of the shares were held by a handful of family members. However, the results on the relationship between family business ownership and SDR are inconclusive. Ho and Wong (2001) and Akhtaruddin

and Haron (2010) reported a negative relationship between the level of family ownership and SDR. On the contrary, Chau and Gray (2010) found a positive relationship between the two variables. It is thus hypothesized that:

*H1.* There is a relationship between family ownership and SDR.

The ownership of shares by a chief executive officer (CEO) provides the management with the voting rights in addition to the administrative mandate. As such, outside shareholders would be motivated to closely monitor the CEO's behavior (Jensen and Meckling 1976). The increased monitoring activity would subsequently pressure the CEO to implement disclosures. Nonetheless, the results of previous studies on the relationship between managerial ownership and SDR are indefinite. Eng and Mak (2003) and Chau and Gray (2010) found a negative correlation between a lower percentage of managerial ownership and voluntary disclosure. On the other hand, Classen et al. (2002) reported a positive association between a higher percentage of managerial ownership and sustainable development disclosure. This research study thus hypothesizes that:

*H2.* There is a positive relationship between managerial ownership and SDR.

Government ownership often received little attention in previous studies on SDR. This was probably due to the fact that prior studies were mostly conducted in the Anglo-American context where government ownership was less common (Tagesson et al., 2009). However, disparities in SDR exist between state-owned and private enterprises. In Canada, Cormier and Gordon (2001) reported that state-owned enterprises disclosed more social and environmental information than did their private counterparts. In Sweden, Tagesson et al. (2009) found that, due to more scrutiny from the major owner (i.e. the state) and the media, state-owned companies usually complied with the expectations of society by disclosing more social and environmental information relative to private organizations. Nonetheless, in less developed economies, the findings were the opposite. Balal (2000) argued that Bangladeshi private companies disclosed more environmental information than government companies. Despite the inconsistencies in the findings, this study hypothesizes that:

*H3.* There is a relationship between government ownership and SDR.

According to Eng and Mak (2003), size of the board influenced the level of SDR. This was because any information disclosures, including SDR, were the results of strategic decision and plan from the corporate board committee. Prior studies (e.g. Eng and Mak, 2003) reported a negative relationship between the size of board committee and SDR. However, Shamil et al. (2014) found a positive relationship between the two variables for Chinese listed companies, whereas Wan-Hussin (2009) found no

relationship between them. Therefore, this study hypothesizes that:

*H4.* There is a negative relationship between the size of board committee and SDR.

The principal-agency conflict could be lessened by the proportion of independent committee members since the demands of both groups are more aligned through corporate governance and internal control, including information disclosure. Haniffa and Cooke (2002) reported a positive relationship between the number of independent committee members and voluntary reporting, consistent with Leung and Horwitz (2004) and Akhtaruddin and Haron (2010). However, Eng and Mak (2003) reported a negative relationship. Hence, this study hypothesizes that:

*H5.* There is a positive relationship between the size of independent committee and SDR.

CEO duality refers to a situation in which a CEO also holds the position of board chairperson whose one of the responsibilities is to appoint the CEO and monitor his performance. Thus, a CEO who is also the board chairman could exert considerable influence in the SDR decision. Prior studies on the relationship between CEO duality and SDR, e.g. Gul and Leung (2004) and Gisbert and Navallas (2013), reported a negative association between the two variables. Therefore, this study hypothesizes that:

*H6.* There is a negative relationship between CEO duality and SDR.

#### 4 Research Methodology

This section deals with the selection of samples; the measurements of variables, i.e. dependent, independent and control variables; and data analysis including two regression models.

The population of this research study was the top-100 SET-listed companies, while the research samples were the companies which were ranked top-100 during the years 2011-2013 and made available their annual reports during the study period. In

addition, their accounting yearend fell on 31<sup>st</sup> December for both years. Thus, 72 firms met the criteria and were the study samples. The composition of the sampled firms were as follows: five firms belonged to the agriculture and food industry, three to the industrial industry, 10 to the financial industry, 17 to the services industry, eight to the technology industry, 10 to the natural industry, and 19 to the property and construction industry.

Content analysis was employed to extract the content related to SDR from the 2011-2013 annual reports according to three main categories of the checklist stipulated by the Global Reporting Initiative (GRI) version 3.1 Reporting Guidelines (2011), which is applicable to the Thai context and comprised of a total of 70 SDR items, consisting of 27 economic, 27 social and 16 environmental perspectives. The GRI was chosen as the measurement tool because of its wide recognition (Ho and Taylor, 2007). In the analysis, a score of 1 was given for the provision of SDR and 0 otherwise. The maximum total SDR score for a given firm was 70 points.

Independent variables could be classified into two main groups: the board composition and ownership structure, both of which are components of corporate governance. The independent variables belonging to the board composition group were size of committee (Chau and Gray 2010; Classen et al. 2002), number of independent committee members (Enk and Mak 2003; Haniffa and Cooke 2002) and CEO duality (Chau and Gray 2010; Haniffa and Cooke 2002). The ownership structure group included the independent variables of family ownership (Ho and Wang 2001; Charles and Bikki 2000), managerial ownership (Chau and Gray 2010; Classen et al. 2002) and government ownership (Huafang and Jianggro 2007; Haniffa and Cooke 2002). The independent-variables data were collected from the 2011-2013 annual reports of the sampled firms and the Stock Exchange of Thailand's website, i.e. SETSMART (SET 2012).

**Table I.** Summary of Variable Measurement

Dependent variable	Notation	Measurement
1. Sustainable development reporting	SDR	Average SDR score (scoring system) during 2011 and 2013
Independent variables:		
1. Family ownership	FAMOWN	1 = Family business company, 0 = otherwise
2. Managerial ownership	MANOWN	Percentage of shares held by executive directors
3. Government ownership	GOVOWN	1 = State-owned company, 0 = otherwise
4. Size of committee	CSIZE	Number of committee members
5. Number of independent committee	PID	Proportion of independent committee members to total number of committee
6. CEO duality	DUAL	1 = dual role, 0 = single role
Control variables:		
1. Industry type	INDUST	1 = low-profile industry, 0 = otherwise
2. Audit type	AUDIT	1 = Big4 auditors, 0 = otherwise

Type of industry and audit type were the control variables in this research study. Prior studies (e.g. Suttipun, 2012; Choi, 1999; Akhtaruddin and Haron, 2010; Inchusti 1997) reported that both variables influenced the level of SDR. Suttipun (2012) and Choi (1999) found that high social-and-environmental-impact firms tended to provide more SDR than low impact firms. With regard to auditor type, Big4 audit firms typically performed higher quality audit than non-big4 firms (Akhtaruddin and Haron 2010) and encouraged their client companies to disclose more sustainable development information (Inchusti 1997). Thus, in this study, dummy variables were used to measure the control variables, where 1 was assigned to a low social-and-environmental-impact firm and 0 otherwise for industry type (Suttipun 2012; Suttipun and Nuttaphon 2014), and for auditor type, 1 represented Big4 auditor and 0 non-Big4 auditor (Akhtaruddin and Haron, 2010).

Table I presents the definitions, abbreviations, and measurements of all variables in

Model A: SDR = a + b<sub>1</sub> FAMOWN + b<sub>2</sub> MANOWN + b<sub>3</sub> GOVOWN + b<sub>4</sub> CSIZE + b<sub>5</sub> PID + b<sub>6</sub> DUAL + e

Model B: SDR = a + b<sub>1</sub> FAMOWN + b<sub>2</sub> MANOWN + b<sub>3</sub> GOVOWN + b<sub>4</sub> CSIZE + b<sub>5</sub> PID + b<sub>6</sub> DUAL + b<sub>7</sub> INDUST + b<sub>8</sub> AUDIT + e

## 5 Results and Discussion

This section presents the findings on the extent of SDR in the annual reports, the descriptive analysis and independent sample *t*-test, and the multiple regression results of the two regression models. In addition, a summary of the hypothesis test results is provided.

this research, consisting of one dependent variable, six independent variables and two control variables.

In analysis of the data, this research utilized descriptive analysis, independent *t*-test, and multiple regression models. Descriptive analysis was used to investigate the extent of SDR during the study period of 2011 to 2013. Independent sample *t*-test was used to determine the differences in the intra-group SDR scores of family ownership, government ownership, CEO duality, industry type and audit type. Multiple regression was used to test the relationships between corporate governance and the scores of SDR in the 2011-2013 annual reports of Thai SET-listed sampled companies. Moreover, the relationship between corporate governance and sustainable development reporting (SDR) was determined using Model A, while Model B was for examination of the relationship, controlling for industry type (INDUST) and auditor type (AUDIT).

Table II presents the extent of SDR in the 2011-2013 annual reports of the 72 sampled firms. The findings revealed that the extent of SD reporting in the annual reports of the sampled SET-listed companies as reflected by the SDR scores increased from 32.86 points in 2011 to 34.28 points in 2013, equivalent to an increase of 4.32 percent in the three-year period.

**Table II.** The extent of SDR in the annual reports

Sustainable development perspectives	2011		2012		2013		Average Score	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Economic	16.6667	2.92633	16.6111	2.83119	16.4028	2.60908	16.5603	2.63185
Social	8.3750	3.04630	8.8056	3.13382	9.6528	2.92228	8.9446	2.77959
Environmental	7.8194	2.00932	7.9583	2.01010	8.2222	1.94446	7.9997	1.90937
SDR score	32.86	7.98	33.38	7.98	34.28	7.48	33.50	7.32

In addition, the proportion of economic, social and environmental information disclosures during the three-year period was, on average, 2.062: 1.125: 1.00. The economic aspect of SDR was the most common disclosure, followed by the social and environmental aspects. The results were consistent with Brown et al. (2009), who reported an increase in SDR of property and construction companies due to financial information demands from the shareholders and investors. This was because the owners of financial resources still exerted more influence than any other stakeholder with regard to corporate disclosure (Deegan, 2001).

Table III presents the descriptive analysis results, consisting of means, standard deviations, maximums and minimums of the dependent, independent and control variables. The lowest and highest SDR scores were 21.33 and 42.33 with the mean SDR score and standard deviation (S.D.), respectively, of 33.5046 and .13726. The percentage of shares held by executive directors varied greatly between insignificance and up to 66.67 percent. The average numbers of committee members and independent committee members were 39 and 10 persons, respectively.

**Table III.** Descriptive analysis and independent sample *t*-test

Variables	N	Mean	S.D.	Max.	Min.
Sustainable development reporting	72	33.5046	5.15427	42.33	21.33
Managerial ownership	72	29.8005	15.32545	66.67	.00
Size of committee	72	38.5088	12.89439	70.00	10.00
Number of independent committee	72	9.1181	5.42534	72.00	.00
Dummy variables	N	SDR Mean	S.D.	t	Sig
Family ownership					
- Family business firm	22	32.9394	5.76859	-.615	.541
- Non-family business firm	50	33.7533	4.90167		
Government ownership					
- Government company	9	37.1481	2.97728	2.337	.022*
- Private company	63	32.9841	5.20354		
CEO duality					
- Dual role	5	33.2667	5.52972	-.106	.916
- Single role	67	33.5224	5.16926		
Industry profile					
- Low profile industry	57	32.7602	3.79641	2.473	.016*
- High profile industry	15	36.3333	5.23183		
Audit type					
- Big 4 auditors	58	34.0057	5.11943	1.701	.093
- Non-Big 4 auditors	14	31.4286	4.91420		

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

To test for the differences in the intra-group SDR scores for the variables of family ownership, government ownership, CEO duality, industry type and audit type, this study utilized independent sample *t*-test (Table III). It is found that the intra-group SDR scores were significantly different for government ownership and industry type at the 0.05 significance level. However, the intra-group SDR scores were insignificantly different for the variables of family ownership, CEO duality and audit type ( $p$ -value > .05).

In Table IV, the total number of samples for running the regression models was 72 firms. In Model A, there was no significant relationship between

ownership structure, board composition, and the SDR score ( $p$ -value > .05). On the other hand, in Model B, family ownership significantly influenced the SDR score ( $p$ -value < .05), controlling for industry type and audit type. The results were consistent with Ho and Wong (2001); Akhtaruddin and Haron (2010); and Chau and Gray (2010), who reported that the family ownership structure influenced the level of SDR. According to Jalila and Devi (2012), the influence of family ownership on SDR could be attributed to the low bargaining power of general shareholders as substantial portions of the shares were held by a small group of family members.

**Table IV.** Multiple regression models

Variables	Expected direction	Model A	Model B
Intercept		5.242	6.611
FAMOWN	+, -	-1.587	-2.761**
MANOWN	+	.166	.624
GOVOWN	+, -	-.007	-.569
CSIZE	-	-.426	-.002
PID	+	.310	-.387
DUAL	-	-.088	.114
INDUST		-	-2.095*
AUDIT		-	-2.690**
<i>R Square</i>		.077	.229
Adjusted <i>R Square</i>		-.008	.131
<i>F</i> -value		.909	2.340**

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

The adjusted R-squared of both multiple regression models increased when the control variables (i.e. industry type and audit type) were incorporated into the analysis. In other words, the variables of industry type and audit type enhanced the predictive power of the models and played a significant role in the level of SDR. Moreover, Model B exhibited a significant relationship between the two control variables and the SDR score (p-value < .05).

Table V is the summary of hypothesis test results of this study. Of the six hypotheses (H1-H6) to investigate the relationships between the independent variables of ownership structure and board composition and the dependent variable of SDR, controlling for industry type audit type, only H1 (family ownership) was accepted, whereas the rest (H2 – H6) were rejected.

**Table V.** Summary of hypothesis test results

Hypothesis	Independent variables	Predicted sign	Results
1	FAMOWN	+, -	Accept
2	MANOWN	+	Reject
3	GOVOWN	+, -	Reject
4	CSIZE	-	Reject
5	PID	+	Reject
6	DUAL	-	Reject

## 6 Conclusions

This research study attempted to investigate the extent of SDR contained in the annual reports of SET-listed companies, to examine the differences in the intra-group SDR scores, and to test for the relationships between corporate governance and the SDR score. The results indicated that the top-100 Thai SET-listed companies scored an average of 33.5 (out of 70) points with regard to the level of SDR in their 2011-2013 annual reports. In addition, it was found that the state-owned companies received the higher SDR score than did the private firms. There were significant relationships between ownership structure, audit type, industry type, and the SDR scores.

This study was the first that endeavored to examine the influence of ownership structure and board composition on the level of SDR in the Thai context. Therefore, it is expected that the study findings would shed light on the SDR practices in Thailand, a less advanced economy with limited relevant evidence and of different business environment from advanced economies. In addition, the results on the relationships between ownership structure, board composition and SDR would contribute to a better understanding of the links between corporate governance and the implementation of SDR by Thai firms. Moreover, the discovery would help convince relevant Thai regulatory bodies to make necessary adjustments to the existing corporate governance practices to raise both quality and quantity of sustainable development reporting.

The research limitations include the sole dependence on the annual reports as the credible source of data, the length of study period, and type of research information. Firstly, the study relied solely upon the annual reports to determine the level of SDR. However, there are several other communication channels that firms could utilize for SDR purposes, e.g. websites and stand-alone reports. Secondly, the

period of three years could be viewed as too short a longitudinal study since a typical length of time is either five or ten years. Finally, this research focused on merely six independent variables to test for their influences on the level of SDR. However, there exist several other proxies representing the board composition and ownership structure, such as the committee's accounting background, number of independent audit committee, audit committee's accounting background, and foreign ownership.

To address the aforementioned limitations, future research should thus cover a longer period (e.g. 5 or 10 years) and also examine the SDR practices through other communication channels. Furthermore, it should extend to include additional independent variables representing corporate governance.

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