

Corporate and Strategic Information Disclosure and Earnings Management: Evidence from Listed Firms at the Uganda Securities Exchange

Robert O. Etengu^{1*}, Tobias O. Olweny², Josephat O. Oluoch³

¹Faculty of Management Sciences, Department of Business Management, Lira University, P.O. Box 1035, Lira, Uganda

²School of Business, Department of Economics, Accounting and Finance, Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000, 00200, City Square, Nairobi, Kenya

³School of Business, Department of Business Administration, Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000, 00200, City Square, Nairobi, Kenya

*Corresponding author: retengu@yahoo.com

Received August 16, 2019; Revised September 20, 2019; Accepted October 13, 2019

Abstract The purpose of this study is to examine the effect of corporate and strategic information disclosure on earnings management among listed firms at the Uganda Securities Exchange. We conduct our survey on a census of 9 non-financial listed firms spanning a period of 6 years (2012-2017). The study uses the magnitude of discretionary accruals obtained from the Dechow, Sloan and Sweeney (1995) model as a proxy for earnings management. The study's results show a negative and significant effect of corporate and strategic information disclosure on earnings management. The implication of this finding is that information disclosure related to corporate and strategic information constitutes a constraint to the proliferation of earnings management. The study could benefit regulatory bodies that are considering making disclosure regimes effective. For instance, we find that the disclosure of corporate and strategic information drives EM downwards. In addition, the results of this study might assist regulators and policy makers in understanding better the interconnections between corporate and strategic information disclosure and earnings management practices in Uganda. This study, however, has some limitations. First, because the study uses a self-constructed disclosure index, certain information items employed in prior studies might be omitted. Second, whereas hand collecting the necessary data on corporate and strategic information from the narrative section of the annual reports allows for a data set containing rich information, the exercise is costly and time-consuming.

Keywords: *corporate and strategic information disclosure, earnings management, Uganda securities exchange*

Cite This Article: Robert O. Etengu, Tobias O. Olweny, and Josephat O. Oluoch, "Corporate and Strategic Information Disclosure and Earnings Management: Evidence from Listed Firms at the Uganda Securities Exchange." *Journal of Finance and Economics*, vol. 7, no. 3 (2019): 100-105. doi: 10.12691/jfe-7-3-4.

1. Background of the Study

This study examines the effect of corporate and strategic information disclosure (CSID) on earnings management among listed firms at the Uganda Securities Exchange (USE). The study is based on the intuition that if you manage a better (more valuable) firm, you disclose more information because you have less to hide and more to advertise. The study shows, that this intuition is correct when it comes to the disclosure of corporate and strategic information (CSI) – better firms optimally disclose more.

According to Hashim, Nawawi and Salin [1], the disclosure of CSI is considered to be very useful for corporate financing in that it could reduce the costs of external financing, improve decision making and keep away the managers from exercising budgetary discretion for their personal interests. This type of disclosure is the

preference of corporate practices because it helps the investors and professional analysts to monitor and evaluate the company's position and performance (Hermalin & Weisbach [2]).

Both financial and non-financial firms frequently voluntarily disclose information on their corporate strategies. These disclosures are sometimes in the narrative section of the annual report and sometimes in communications with the press or analysts (Thakor [3]). Stakeholders need to have an insight into a company's strategy in order to assess a variety of factors such as the competence of management, whether the strategy incorporates sustainability issues, or simply whether the strategy seems viable (Ungerer [4]).

Much as corporate disclosure brings several advantages including, *inter alia*, greater stock market liquidity and a lower cost of capital (see for example, Lopes & Alencar [5]), managers are not always willing to increase the level of accounting disclosure. They may want to retain that

information to serve their personal interests (Consoni, Colauto & de Lima [6]). This leads to information asymmetry which creates ideal conditions for selective and distorted information reporting. According to Scott [7], information asymmetry can be reduced through voluntary disclosure and tighter regulation. Moreover, voluntary disclosure contributes to the reduction or elimination of information asymmetry and that lower information asymmetry makes it more difficult to engage in EM (Consoni et al. [6]).

Although voluntary disclosure and EM are recurring themes in empirical research in accounting, there is no empirical evidence on the effect of CSID on EM that is specific to the USE. Our study therefore extends the existing empirical literature on voluntary disclosure by analysing specifically whether CSID is a deterrent to EM practices. The study contributes to a very thin literature linking the disclosure of CSI and EM among listed firms at the USE.

The rest of the paper is organised as follows. Section 2 is on literature review. Section 3 explores the study's research methodology. Section 4 is on results and discussion, and in Section 5, we offer a summary and some conclusions.

2. Literature Review

2.1. Theoretical Review

2.1.1 Agency Theory

Agency theory is directed at the ubiquitous agency relationship, in which the principal delegates work to the agent, which performs that work (Jensen & Meckling [8]). The theory states that there is a potential for conflict of interest between managers and shareholders (Anis [9]). This conflict arises when managers undertake opportunistic actions, such as EM, to maximise their interests (Sun, Salama, Hussainey, & Habbash [10]).

According to Sun et al. [10], agency theory suggests that firms may use different methods, such as voluntary disclosure, to reduce conflicting interests between managers and shareholders. Moreover, one way of ensuring the agency problem is minimised especially if managers who possess confidential information about a firm are able to use their informational advantage to make dependable communication to interested parties in order to maximise firm value is to voluntarily disclose information (Barako [11]).

The implication of agency theory in the current study is that the principals will rely on the disclosure of CSI to monitor the agents in a bid to eliminate information asymmetry and, hence, EM practices.

2.1.2. Stakeholder Theory

Stakeholder theory is fundamentally a theory about how business works at its best, and how it could work (Freeman, Harrison, Wicks, Parmar & Colle [12]). The theory presumes that organisations serve a broader social purpose than just maximising the wealth of shareholders (Mulili & Wong [13]). The theoretical basis of stakeholder theory is that companies are so large, and their impact on society so pervasive, that they should discharge accountability to many more sectors of society than solely their shareholders (Chen & Roberts [14]).

According to Coebergh [15], this theory suggests that an organisation's management is expected to take on activities expected by those identifiable groups who can affect and who are affected by the achievement of an organisation's objectives. The implication of this is that stakeholders have an interest in assessing disclosed CSI of an organisation. Moreover, the theory offers the most promising building block to explain voluntary disclosure of corporate strategy as it connects stakeholder management with economic theory and economic performance (Coebergh [15]).

Since managers attempt to attend to a multilateral set of stakeholders' objectives, the information asymmetry between them and stakeholders is high and that the existence of information asymmetry provides managers an opportunity to practice EM (Grougiou, Leventis, Dedoulis & Owusu-Ansah [16]). In this regard voluntary disclosure of CSI can function as an instrument to reduce information asymmetries, leading to positive outcomes such as reduced adverse selection and EM practices.

2.2. Empirical Literature Review and Hypothesis Development

Although a number of prior studies have examined the effect of voluntary disclosure on EM, research focusing on the effect of voluntary disclosure of CSI on EM is not as widespread as overall voluntary disclosure research. Morris and Troness [17], for instance examines the role of country level characteristics and firm level characteristics in explaining variations in firms' voluntary strategy disclosures across 12 countries (Belgium, Denmark, France, Germany, Hong Kong, Japan, Malaysia, Netherlands, Norway, South Korea, Sweden and the UK) in 2005. Strategy disclosure in annual reports is measured using an index of 40 items in 204 companies' annual reports. The authors use OLS regression to test whether total disclosure score is associated with both country level and firm level characteristics. They find that strategy disclosures are more likely to occur in companies with greater economic incentives to disclose.

Sieber, Weißenberger, Oberdorster and Baetge [18] analyse the impact of voluntary strategy disclosure in management reports on the cost of equity capital using a sample of 100 German listed firms from 2002 to 2008. They measure strategy disclosure levels using hand-collected strategy disclosure scores. They find that higher disclosure levels are, on average, associated with lower cost of equity capital even after controlling for overall disclosure quality.

Hamrouni, Miloudi and Benkraiem [19] investigate whether the extent of corporate voluntary disclosure mitigates asymmetric information and adverse selection in the Euronext Paris Stock Exchange. They apply disclosure index as a proxy for the extent of voluntary disclosure and employ different measures to estimate both asymmetric and adverse selection proxies. They document a statistically significant effect of strategic information volume on effective bid-ask spreads.

Rezaee and Tuo [20] examine the association between the quantity and quality of sustainability disclosures and earnings quality in the context of corporate ethical value and culture. They collect a sample of 35,110 firm-year observations between 1999 and 2015 and use both the

difference-in-difference tests and OLS regression to analyse their data. They find that sustainability disclosure quantity is positively associated with innate earnings quality and negatively correlated with discretionary earnings quality in mitigating managerial earnings manipulation and unethical opportunistic reporting behaviour.

Ajay and Madhumathi [21] examine the link between diversification strategies and EM for firms operating in the manufacturing sector for a period of 10 years (2004 to 2013). Their final sample includes business groups affiliated firms and standalone firms. They employ both univariate analysis and multivariate analysis. They document that international diversification does not increase EM. However, diversification across product segment provides a favourable condition for managing earnings and consequently reduces the quality of reported earnings.

Houge, Kerr and Monem [22] investigate whether business strategy is associated with the quality of reported earnings in two U.S. listed companies over the period 1999-2009. They analyse 23,390 firm-years for testing the association between EM and business strategy. Their primary measure of EM is the absolute value of DACC based on the modified Jones model. They document that defender-strategy firms exhibit higher levels of EM.

Muktiyanto [23] investigates the influence of corporate strategy on EM. His final sample consists of 90 manufacturing companies listed on the Indonesian Stock exchange for a period of two years (2008-2010). The study adopts the discretionary revenue model developed by Stubben [24] as measure of EM. He finds that strategy orientation has an influence on EM. Based on the preceding discussion we hypothesize that:

H₁: CSID has a negative and significant effect on EM.

3. Methodology

3.1. Sample Selection and Data Sources

The study was conducted on a census of 9 non-financial firms listed on the floor of Uganda Securities Exchange (USE) over a 6-year period (2012-2017). The selection criteria for the sampled firms was based on (1) availability of annual reports of companies for all the entire 6-year period, and (2) the firms selected in 2012 must remain listed on the floor of the exchange for the rest of the years (2013-2017). All commercial banks and insurance companies were excluded from the study due to their additional disclosure requirements.

3.2. Earnings Management Measures

In this study we adopt the De Chow et al. [25] model to measure EM. The description of the model is shown in Equation 1:

$$\begin{aligned} TACC_{i,t} / A_{i,t-1} \\ = \beta_1 (1 / A_{i,t-1}) - \beta_2 (\Delta REV_{i,t} - \Delta REC_{i,t}) / A_{i,t-1} \\ + \beta_3 (PPE_{i,t} / A_{i,t-1}) + \varepsilon_{it} \end{aligned} \quad (1)$$

Where $TACC_{i,t}$ is the value of total accruals for firm i in year t (measured as shown in Equation 2), $\Delta REV_{i,t}$ is the

variation in the net revenue of firm i from time $t-1$ to time t , $\Delta REC_{i,t}$ is the variation in the accounts receivable of firm i from time $t-1$ to time t , $PPE_{i,t}$ is gross property, plant and equipment of firm i in year t , and $\varepsilon_{i,t}$ is the error term of firm i for time t .

All the variables are scaled by the lagged value of total assets in year $t-1$ ($A_{i,t-1}$) and regressed on total accruals. The method used for calculating total accruals is shown in Equation 2:

$$\begin{aligned} TACC_{i,t} = \Delta CA_{i,t} - \Delta CASH_{i,t} - \Delta CL_{i,t} \\ - DEPAMOR_{i,t} + \Delta STD_{i,t} \end{aligned} \quad (2)$$

Where $\Delta CA_{i,t}$ is change in current assets for firm i in year t , $\Delta CASH_{i,t}$ is change in cash and cash equivalents for firm i in year t , $\Delta CL_{i,t}$ is change in current liabilities for firm i in year t , $DEPAMOR_{i,t}$ is depreciation and amortisation expense for firm i in year t , and $\Delta STD_{i,t}$ is the change in short term debt for firm i in year t .

The residual from Equation 2 is used to capture discretionary accruals (DACC). This study uses the absolute (unsigned) value of DACC to proxy for EM.

3.3. CSID Measures

We compile a list of CSI items that firms might disclose after an analysis of strategy literature. This preliminary set of items was pilot-tested on a sample of four non-financial firms. We exclude all the items that did not apply to the sampled firms.

The final checklist comprises a comprehensive checklist of 15 CSI items. The overall CSID score for each firm was calculated by scoring 1 if an item is disclosed and 0 if otherwise, subject to the applicability of the item concerned. Thereafter each firm's CSID index defined as the ratio of actual number of disclosed items to the maximum possible disclosure items was calculated. The disclosure index calculated for each firm in each period, is expressed using the following equation:

$$CSIDI_{jt} = \frac{\text{Actual number of disclosed items}}{\text{Maximum possible disclosure items}} \quad (3)$$

Where $CSIDI_{jt}$ is corporate and strategic information disclosure index for firm j in year t .

3.4. Measures of Control Variables

Following the practice in prior studies, we include three standard control variables (leverage, firm size and profitability) in our statistical analysis to control for the simultaneous effect of CSI on EM. First, we expect that highly levered firms will disclose more information in their annual reports (see for example Ho & Taylor [26]). Leverage (LEV) is proxied as the ratio of total debt to total assets.

Second, large firms tend to disclose information more extensively because of exposure to public scrutiny (Schipper [27]) on the one hand, and the need to raise capital at a lower cost (Botosan [28]), on the other hand. In order to reduce the impact of skewed data in our statistical analysis, firm size (FSIZE) is proxied as the natural logarithm of total assets.

Third, disclosure is also likely to be related to the firm's profitability (PRFT). Although more profitable firms may signal this to the market via higher disclosure a firm's absolute performance might be neutral or even negatively associated with disclosure (Morris and Tronnes [17]). In this study PRFT is proxied as the ratio of net income to total assets.

3.5. Model Specification

In order to answer our research objective and to test the formulated hypothesis, we employ the following panel regression model:

$$DACC_j = \beta_0 + \beta_1 CSID_j + \beta_2 LEV_j + \beta_3 PRFT_j + \beta_4 FSIZE_j + \varepsilon_j \quad (4)$$

Where $DACC_j$ is the value of EM for sample j firm, β_0 is the intercept to be estimated from the data, β_1 to β_4 are the coefficients of the independent variables to be established from the data, $CSID_j$ represents corporate and strategic information disclosure score for sample j firm, LEV_j is the ratio of debt to total assets for sample j firm, $PRFT_j$ is the ratio of net income to total assets for sample j firm, $FSIZE_j$ is the value of total assets for sample j firm, and ε_j is the stochastic disturbance term for sample j firm.

4. Results and Discussion

4.1. Descriptive Statistics

The descriptive statistics in Table 1 shows that the average total CSID score is 0.84 (approximately 84%) with a standard deviation of 0.172. DACC as a proxy for EM has a small mean value of 0.03, which is comparable to that of prior literature on EM, for instance, 0.03 in Othman and Zeghal [29] and 0.049 in Yu [30].

LEV ranges from 0 to 0.83 and the mean value is 0.2937472 (29%). The results of PRFT, however, shows that it varies between a minimum of -0.165 and maximum of 0.4026 with a standard deviation of 0.1217. Finally, FSIZE as a proxy for firm size varies significantly with a minimum score of 24.7277 out of 29.39679, and a mean score of 26.56196 (approximately 27%).

Table 1. Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max	CV
CSID	0.840	0.172	0.5	1	0.205
DACC	0.026	0.012	0.007	0.053	0.474
LEV	0.294	0.261	0	0.83	0.889
PRFT	0.113	0.144	-0.165	0.403	1.275
FSIZE	26.562	1.667	24.728	29.397	1.452

4.2. Bivariate Analysis

Table 2 provides Pearson's pair-wise correlation for the control variables (PRFT, LEV and FSIZE), the independent variable (CSID), and the dependent variable (DACC). The table shows that CSID is negatively and significantly related to DACC (coef. = -0.3860, $p < 0.01$) implying that firms that provide CSI engage less in EM.

This result is consistent with the findings of Riahi and Arab [31] that exhibited a negative relationship between voluntary disclosure of strategic information (SI) and EM.

The positive and significant relationship between PRFT and CSID (coef. = 0.3338, $p < 0.01$) supports the hypothesis that profitability positively affects voluntary disclosure and is consistent with prior researchers like for instance Kent and Ung [32] who argue that more profitable firms may signal their profitability to the market via higher disclosure.

It is also notable that LEV and CSID are negatively significantly related (coef. = -0.4342, $p < 0.01$). A possible explanation for the negative relationship between LEV and CSID stems from the fact that debt is a mechanism for controlling the free cash flow problem, which reduces the need for disclosure. Lastly but not least, we also find a negative and significant relationship between FSIZE and CSID (coef. = -0.6483, $p < 0.01$).

Table 2. Correlation Matrix

	CSID	DACC	PRFT	LEV	FSIZE
CSID	1.0000				
DACC	-0.3860*	1.0000			
PRFT	0.3338*	-0.5929*	1.0000		
LEV	-0.4342*	0.5270*	-0.3978*	1.0000	
FSIZE	-0.6483*	0.3046	-0.1694	0.4771*	1.0000

The asterisk* shows that correlation is significant at the 1% level.

4.3. Multivariate Analysis

In order to determine the effect of CSID on EM among listed firms at the USE, two hierarchical multiple robust regression models were employed. Model 1 that tests for the effect of CSID per se on EM is stated as follows:

$$DACC_j = \beta_0 + \beta_1 CSID_j + \varepsilon_j \quad (5)$$

Where $DACC_j$ is the value of EM for sample j firm, β_0 is the intercept to be estimated from the data, β_1 is the coefficient of the independent variable to be established from the data, $CSID_j$ is the score for corporate and strategic information disclosure for sample j firm, and ε_j is the stochastic disturbance term for sample j firm.

Model 2 that tests for the effect of CSID on EM by incorporating the control variables is stated in the following Equation:

$$DACC_j = \beta_0 + \beta_1 CSID_j + \beta_2 LEV_j + \beta_3 PRFT_j + \beta_4 FSIZE_j + \varepsilon_j \quad (6)$$

Where $DACC_j$ is the value of EM for sample j firm, β_0 is the intercept to be estimated from the data, β_1 to β_4 are the coefficients of the independent variables to be established from the data, $CSID_j$ represents corporate and strategic information disclosure score for sample j firm, LEV_j is the ratio of debt to total assets for sample j firm, $PRFT_j$ is the ratio of net income to total assets for sample j firm, $FSIZE_j$ is the value of total assets for sample j firm, and ε_j is the stochastic disturbance term for sample j firm.

Table 3 reports the results of robust regression on the effect of CSID on EM. The findings in Model 1 indicates an adjusted R square of 12.4% implying that about 12% of the variations in EM can be explained by CSID. Results from Model 1 also shows that besides the model constant,

CSID has a statistically significant negative effect on EM (coef. = -0.027, $p < 0.05$). The implication of this finding is that the disclosure of CSI constrains EM.

In Model 2 the results of the hypothesis testing yielded an Adjusted R Square of 0.393 which indicates that about 39% of variations in EM practices of listed firms at the USE is brought about by the disclosure of CSI. The findings further reveal a negative and significant association between the disclosure of CSI and EM (coef. = -0.006, $p < 0.05$) suggesting that firms that disseminate their CSI tend to engage less in managing earnings through DACC. Moreover, the findings are consistent with agency theory perspectives, stakeholder value maximisation hypothesis and previous CSID studies (see for example, Muktiyanto [23]). On this basis we uphold our hypothesis that CSID has a negative and significant effect on EM.

In line with the control variables, LEV yielded an insignificant positive relationship with EM (coef. = 0.014, $p > 0.05$), implying that firms that are levered tend to engage more in EM. In addition, the results for PRFT and EM was negative and significant (coef. = -0.037), at the 1% level, that is, $p < 0.01$. The implication of this is that firms that are profitable tend to engage less in EM. Lastly but not least, we find no significant association at all between FSIZE and EM (coef. = 0.000).

Table 3. Regression for CSID and EM

Variables	Model 1 Coefficient	Model 2 Coefficient
CSID	-0.027*	-0.006*
LEV		0.014
PRFT		-0.037**
FSZE		0.000
CONSTANT	0.049***	0.025
r2_a	0.124	0.393

legend: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Notes: Notes: r2_a = Adjusted R squared; the asterisks *, **, and *** indicate significance at 5% level, 1% level, and 0.1 level.

5. Summary and Conclusion

With limited empirical evidence on the extent of CSID in the annual reports of listed firms at the USE, this study sets out to examine the effect of CSID on EM among listed firms at the USE. We conduct our survey on a census of 9 non-financial listed firms spanning a period of 6 years (2012-2017). Moreover, we apply disclosure index as a proxy for the extent of CSID in the narrative section of the annual reports and use the magnitude of DACC obtained from the De Chow et al. [25] model as a proxy for EM.

We hypothesize, *a priori*, that CSID has a negative and significant effect on EM. The results of our hypothesis test yielded an Adjusted R Square of 0.393 which is an indication that about 39% of variations in EM practices of listed firms at the USE is brought about by the disclosure of CSI. In addition, we find a negative and significant association between CSID and EM (coef. = -0.006, $p < 0.05$) when we run OLS robust regression, hence,

suggesting that firms that disseminate their CSI tend to engage less in managing earnings through DACC.

Our findings could benefit regulatory bodies that are considering making disclosure regimes effective. For instance, we find that the disclosure of CSI drives EM downwards. In addition, the results of this study might assist regulators and policy makers in understanding better the interconnections between CSID and earnings management practices in Uganda.

This study, however, has some limitations. Firstly, because the study uses a self-constructed disclosure index, certain information items employed in prior studies might be omitted. Moreover, the different key CSI items are solely constructed on the information disclosed in the annual reports. Certainly other alternative information avenues such as press releases and conference calls could be considered in future studies. Secondly, whereas hand collecting the necessary data on CSID from the narrative section of the annual reports allows for a data set containing rich information, the exercise is costly and time-consuming.

References

- [1] Hashim, M.H., Nawawi, A., & Salin, A.S.A.P. (2014). "Determinants of strategic information disclosure - Malaysian evidence." *International Journal of Business and Society*, 15(3), 547- 572.
- [2] Hermalin, B. E., & Weisbach, M. S. (2012). "Information disclosure and corporate governance." *The Journal of Finance*, 67(1), 195-233.
- [3] Thakor, A.V. (2013). "Strategic information disclosure when there is fundamental disagreement." Forthcoming. *Journal of Financial Intermediation*, 1-41.
- [4] Ungerer, M. (2013). "A comparative analysis of strategy disclosure reporting trends in South Africa in 2010." *Southern African Business Review*, 17(3), 27-56.
- [5] Lopes, A.B., & Alencar, R.C. (2010). "Disclosure and cost of equity capital in emerging markets: The Brazilian case." *The International Journal of Accounting*, 45(1), 443-464.
- [6] Consoni, S., Colauto, R.D., & de Lima, G.A.S. (2017). "Voluntary disclosure and earnings management: Evidence from the Brazilian capital market." *USP, São Paulo*, 28(74), 249-263.
- [7] Scott, W. R. (2012). *Financial accounting theory* (6th Ed.). Toronto: Pearson.
- [8] Jensen, M.C., Meckling, W.H. (1976). "Theory of the firm: managerial behavior, agency costs and ownership structure." *Journal of Financial Economics*, 305-60.
- [9] Anis, R.M.M. (2016). "Disclosure Quality, Corporate Governance Mechanisms and Firm Value", PhD thesis, University of Stirling.
- [10] Sun, N., Salama, A., Hussainey, K., & Habbash, M. (2010). "Corporate environmental disclosure, corporate governance and earnings management." *Managerial Auditing Journal*, 25(7), 679-700.
- [11] Barako, D. G. (2007). "Determinants of voluntary disclosure in Kenyan companies annual reports." *African Journal of Business Management*, 1(5), 113-128.
- [12] Freeman, R.E., Harrison, J.S., Wicks, A.C., Parmar, B.L., & Colle, de S. (2010). *Stakeholder theory – the state of the art*. Cambridge University Press.
- [13] Mulili, B. M., & Wong, P. (2011). "Corporate governance practices in developing countries: The Case for Kenya." *International Journal of Business Administration*, 2(1), 14-27.
- [14] Chen, J., & Roberts, R. (2010). "Toward a more coherent understanding of the organization society relationship: A theoretical consideration for social and environmental accounting research." *Journal of Business Ethics*, 97(4), 651-665.
- [15] Coebergh, H.P.T. (2011). "Voluntary Disclosure of Corporate Strategy: Determinants and Outcomes. An Empirical Study into

- the Risks and Payoffs of Communicating Corporate Strategy”, PhD Thesis, University of Bradford.
- [16] Grougiou, V., Leventis, S., Dedoulis, E., & Owusu-Ansah, S. (2014). “Corporate social responsibility and earnings management in U.S. banks.” *Accounting Forum*, 138(3), 155-169.
- [17] Morris, R.D. & Tronnes, P.C. (2018). “The determinants of voluntary strategy disclosure: An international comparison.” *Accounting Research Journal*, 31 (3), 423-441.
- [18] Sieber, T., Weißenberger, B.E., Oberdo’rster, T., & Baetge, J. (2014). “Let’s talk strategy: The impact of voluntary strategy disclosure on the cost of equity capital.” *Business Research*.
- [19] Hamrouni, A., Miloudi, A., & Benkraiem, R. (2015). “How does corporate voluntary disclosure affect asymmetric information and adverse selection?” *Corporate Ownership and Control*, 12(2), 419-431.
- [20] Rezaee, Z., & Tuo, L. (2017). “Are the quantity and quality of sustainability disclosures associated with the innate and discretionary earnings quality?” *Journal of Business Ethics*.
- [21] Ajay, R., & Madhumathi, R. (2013). “Diversification strategy and earnings management: An empirical investigation of firms in the manufacturing sector.” *International Journal of Social Science and Humanity*.
- [22] Houqe, M.N., Kerr, R., & Monem, R. (2014). “Business strategy, economic growth, and earnings quality.” *Social Science Research Network*.
- [23] Muktiyanto, A. (2017). “The effect of corporate strategy on earnings management.” *International Journal of Trade and Global Markets*, 10(1), 37-46.
- [24] Stubben, S.R. (2010). “Discretionary revenue as a measure of earnings management.” *The Accounting Review*, 85(2), 695-717.
- [25] Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). “Detecting earnings management.” *The Accounting Review*, 70(2), 193-225.
- [26] Ho, P-H, & Taylor, G. (2013). “Corporate governance and different types of voluntary disclosure: Evidence from Malaysian listed firms.” *Pacific Accounting Review*, 25 (1), 4-29.
- [27] Schipper, K. (1981). “Discussion of voluntary corporate disclosure: The case of interim reporting.” *Journal of Accounting Research*, 19, 85-88.
- [28] Botosan, C.A. (1997). “Disclosure level and the cost of capital.” *The Accounting Review*, 72(3), 323-349.
- [29] Othman, H.B., & Zeghal, D. (2006). “A study of earnings management motives in the Anglo-American and Euro-Continental accounting models: the Canadian and French cases.” *The International Journal of Accounting*, 41, 406-435.
- [30] Yu, F. (2008). “Analyst coverage and earnings management.” *Journal of Financial Economics*, 88(2), 245-271.
- [31] Riahi, Y., & Arab, M.B. (2011). “Disclosure frequency and earnings management: An analysis in the Tunisian context.” *Journal of Accounting and Taxation*, 3(3), 47-59.
- [32] Kent, P. and Ung, K. (2003). “Voluntary disclosure of forward-looking earnings information in Australia.” *Australian Journal of Management*, 28(3), 273-86.



© The Author(s) 2019. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).