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IMPACT OF THE AUDIT COMMITTEE AND EXTERNAL AUDIT SERVICE PROVIDER ON EARNINGS MANAGEMENT: EVIDENCE FROM PUBLIC LISTED COMPANIES IN SRI LANKA

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ABSTRACT

This study aims to identify the impact of the audit committee and external audit service provider on the level of earnings management among listed companies on the Colombo Stock Exchange (CSE) of Sri Lanka. Using the stratified random sampling method, fifty companies with financial years ending on 31st March were selected for this study, representing various industry groups as of 26th April 2021, covering the period from 2018 to 2020. Companies within the banking, diversified financials, and insurance industry groups were excluded due to inherent limitations. Descriptive analysis, along with Ordinary Least Squares (OLS) linear and panel regression analyses were performed in this study. The descriptive analysis revealed that the chosen listed companies comply with the principles of the code of best practices of Corporate Governance in Sri Lanka, with 81% of these companies being audited by one of the Big 4 firms operating in Sri Lanka. Both OLS and panel regression analyses demonstrated that larger audit committees and the engagement of Big 4 audit firms are negatively associated with earnings management practices. The findings of this study provide useful insights for companies, policymakers and regulators in setting policy guidelines on audit committee characteristics. This study extends previous literature on earnings management by examining the impact of the audit committee and external audit service provider on earnings management in listed companies in Sri Lanka.

Keywords: Audit Committee Characteristics, Discretionary Accruals, External Audit, Earnings Management

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1 INTRODUCTION

Over the last few decades, massive corporate collapses such as Enron, Wirecard and Lehman Brothers have come to light as a consequence of management's manipulation of reported earnings for their benefit. These corporate collapses have universal, severe, and harmful effects on the stakeholders of those organisations (Alleyne & Elson 2013), causing fallout throughout the entire financial world. In Sri Lanka, significant corporate collapses due to manipulation by higher-level managers have been reported, including cases such as Edirisinghe Trust Investment Finance Limited, Pramuka Bank and Golden Key Credit Card Company (De Silva et al. 2017).

Research literature shows that the manipulation of reported earnings can be minimised by establishing good corporate governance systems. Earnings management decreases when an organisation has a well-established corporate governance system (Bekiris & Doukakis 2011). The auditing process is assumed to serve as a monitoring method to reduce managers' incentives to manipulate reported earnings (Chan et al. 1993). The audit committee plays a crucial role in restraining earnings management. Xie et al. (2003) stated that monitoring earnings management becomes more effective if there is a large audit committee with a significant proportion of independent directors.

According to Sri Lanka Auditing Standards (SLAuSs) 700: The Auditor's Report on Financial Statements, the external audit is equally significant, as auditors act as independent parties and provide assurance regarding the true and fair view of financial statements. Becker et al. (1998) found that discretionary accruals are less frequently reported in companies audited by Big 6 auditors (currently Big 4) compared to other auditors. Although numerous researchers have focused on the link between corporate governance attributes and the level of earnings management (Francis et al. 1999, Klein 2002, Peasnell et al. 2005, Piot & Janin 2007, Zgarni et al. 2016), there is a dearth of studies examining the impact of the audit committee and external audit service provider on accrual-based earnings management in developing countries such as Sri Lanka.

Addressing this gap in the literature, the present study aims to explore the impact of the audit committee and external audit service provider on the level of earnings management in selected public listed entities in Sri Lanka. Specifically, this study has three research objectives. The first objective is to identify the significant characteristics of the audit committee and external audit service provider in public listed companies. The second objective is to evaluate the association between the selected audit committee characteristics and the level of earnings management. The final objective is to evaluate the association between the external audit service provider and the level of earnings management.

The rest of the paper is organised as follows: Section 2 reviews the existing literature on the phenomenon examined in the current study. Section 3 presents the research approach, population, sample, and data collection methods. It also details the conceptual framework, the study's hypotheses, the operationalisation of variable measurements, and the method of analysis. Section 4, the most crucial part of the study, contains an analysis of the gathered data and a discussion of the key findings. The final section presents the conclusion, implications, limitations, and suggestions for future research.

2 LITERATURE REVIEW

This section delves into the literature concerning earnings management, agency theory and the relationship between audit committees, external audits and earnings management. Through a review of prior research, this section aims to pinpoint gaps in the existing literature and elucidate how the current study addresses these gaps.

2.1 Earnings Management

Earnings management is defined as a technique used by high-level managers to manipulate financial statements (Riwayati et al. 2016). These practices directly influence the market valuation of a firm because managers use them to inflate the firm's profits, which can lead to higher share prices. Asghar et al. (2020) stated that earnings management practices pose a threat to not only the financial sector but also to non-financial industries. Significant corporate collapses have occurred worldwide as a result of these manipulations.

The literature broadly classifies earnings management practices into two, namely accrual earnings management and real earnings management. Accrual earnings management is executed using accounting rules and policies, while real earnings management is implemented through the firm's actual operating cash flows (Darmawan et al. 2019). The accrual earnings management does not directly impact the real cash flow of the organisation. There are primarily two types of accruals: discretionary accruals and non-discretionary accruals. Xiong (2006) points out that accruals determined by the ordinary economic circumstances of the firm are known as non-discretionary accruals. Conversely, discretionary accruals are those that are not structured in the contract and are the executive's chosen strategy (Asghar et al. 2020). To mitigate the discretionary actions of managers, corporate governance arrives as a control mechanism and ruling system.

2.2 Agency Theory

The primary cause for strict compliance with corporate governance mechanisms such as audit committees and external audit is the agency problem, which has been identified by researchers in both developed and developing countries. Agency theory is central to resolving the conflict of interest between the agent and the principal. Corporate governance codes and principles play a crucial role in addressing this agency problem, ensuring a balance between the interests of both parties. Alves (2013) emphasised that monitoring mechanisms, as suggested by agency theory, are essential for reducing conflicts of interest and maintaining this balance. Specifically, audit committees, external audits, and the management of earnings are key components in this framework. Audit committees oversee the financial reporting process, ensuring transparency and accountability. External audits provide an independent evaluation of the financial statements, reinforcing the credibility of the reported information. Together, these mechanisms help mitigate earnings management practices, thereby aligning the interests of management (agents) with those of shareholders (principals).

2.3 Audit Committee and Earnings Management

Referring to a sample of 252 U.S. firms during the period 1994 to 2000, Vafeas (2005) found that the size of the audit committee is negatively associated with earnings management. Similarly, Abbott et al. 2004 (as cited in De Silva et al. 2017), found that the size of the audit committee is negatively associated with earnings management. Accordingly, consistent with

agency theory and the empirical findings in the literature, the present study hypothesises that,

H_1: The audit committee size is negatively associated with the level of accrual earnings management.

Through a study conducted on the New York Stock Exchange, Klein (2002) discovered that audit committee independence is inversely associated with the degree of earnings management. This study emphasised the significant role of the audit committee in maintaining transparency and reliability. In a similar vein, Sri Lanka's amended Code of Best Practice of Corporate Governance (2017) stipulates that the audit committee should comprise a higher proportion of non-executive directors, with a significant number being independent. This emphasis is due to their constant focus on achieving financial and accounting excellence, which reduces management's involvement in earnings manipulations by mitigating their incentives to maintain or enhance their status (Vafeas 2005). Therefore, consistent with agency theory and existing literature, the present study hypothesises that,

H_2: The audit committee independence is negatively associated with the level of accrual earnings management.

Xie et al. (2003, as cited in De Silva et al. 2017) found an inverse relationship between the degree of earnings management and the frequency of audit committee meetings. In a similar vein, Abbott et al. (2004, as cited in De Silva et al. 2017) found an inverse relationship between the degree of earnings management and the frequency of audit committee meetings. Therefore, in line with the agency theory and existing literature findings, the present study hypothesises that,

H_3: The frequency of audit committee meetings is negatively associated with the level of accrual earnings management.

Previous literature indicates that audit committee attributes, such as size, frequency of meetings, and independence, influence the extent of earnings management. However, these studies are predominantly taken place in the context of developed countries. Therefore, this study aims to extend the existing literature by investigating the relationship between these audit committee attributes and earnings management in a developing country context, referring to public listed entities in Sri Lanka.

2.4 External Audit and Earnings Management

It is generally accepted that big audit firms offer more opportunities to detect and disclose management manipulations, as they are typically monitored more effectively by knowledgeable partners (Watts & Zimmerman 1983). Additionally, they face greater scrutiny in the event of an audit failure (Bauwhede et al. 2003). In a similar vein, Francis et al. (1999) found that companies engaging Big 6 auditors exhibit lower discretionary accruals compared to those with non-Big 6 auditors. Consistent with the agency theory and findings in the literature the present study hypothesises that,

H_4: The engagement of Big 4 audit service providers is negatively associated with earnings management.

2.5 Control Variables and Earnings Management

The literature identifies several factors beyond audit committee characteristics and external audit service providers, notably including the board of directors (BOD), CEO-chairperson duality and firm growth which influence earnings management. Klein (2002) underscored a negative relationship between earnings management and outside directors. Similarly, Cornett et al. (2009) highlighted an inverse correlation between board independence and earnings management. Earnings management can be mitigated when the board consists mostly of external directors who bring valuable expertise to the organisation (Uadiale & Fagbemi 2012).

Based on a study of Malaysian companies, Mohamad et al. (2012, as cited in De Silva et al. 2017) found that earnings management decreases when there is a separation between the CEO and chairperson roles, reducing the CEO's control. Financial quality and performance may improve through the CEO-chairman duality arrangement (Chen & Zhang 2012). Ji et al. (2015) considered firm growth as an important control variable concerning earnings management. Accordingly, the present study identifies BOD, CEO-chairperson duality, and firm growth as control variables in this study.

The literature review reveals a dearth of studies examining the effect of audit committees and external audits on earnings management in a developing country context. Therefore, the present study aims to extend the existing literature on earnings management by examining how the audit committee and the external audit service provider impact earnings management practices in public listed companies from a developing country perspective, considering Sri Lanka as the case study.

3 RESEARCH DESIGN AND METHODS

This section primarily examines the research design and conceptual framework of the research study. It begins by explaining the research approach, justifying the chosen approach, and discussing the research paradigm. The conceptual framework is then presented. Subsequently, definitions and measurements of variables are described within this section. Finally, the population and sample, sources of data collection, and the strategies used to analyse data will be explained.

3.1 Research Approach

This study aims to explore the association between selected characteristics of the audit committee and external audit service provider on the level of accrual-based earnings management, utilising a positivistic quantitative approach. There are several reasons for selecting a positivistic quantitative approach for this research study. One primary reason is that only the quantitative approach allows the researcher to statistically establish associations among variables. Additionally, compared to the qualitative approach, the quantitative approach facilitates hypothesis testing with a large sample, thus enabling the generalisation of findings. Moreover, as noted by De Silva et al. (2017), the quantitative approach is widely employed by most researchers (Klein 2002, Chen et al. 2007, Xie et al. 2003) to examine the impact of corporate governance attributes on earnings management. Following this rationale, the present study also adopts the same approach.

3.2 Conceptual Framework

Figure 1 illustrates the conceptual framework of this study.

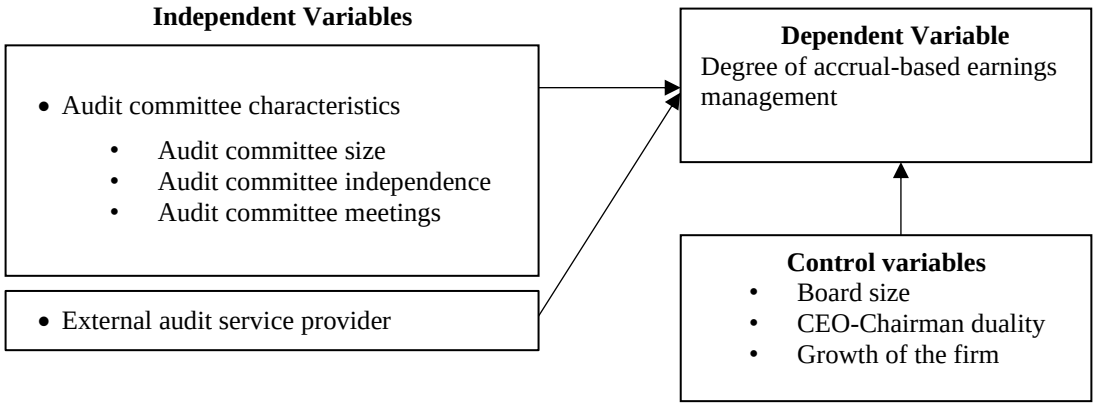

Figure 1: Conceptual Framework
Source: Author Constructed

The hypotheses were formulated in the current study, as detailed in sections 2.3 and 2.4 of the literature review.

3.3 Measurement of Variables

3.3.1 Dependent variable

This research identifies discretionary accruals as a proxy for earnings management. Dechow et al. (1995) highlight that when identifying earnings management modified Jones model is stronger than the substitute methods.

As stated by De Silva et al. (2017) four steps can be used to measure the discretionary accruals.

Step 1 - To take the total amount of accruals from net income deduct the cash flows which is generated from operating activities.

$$TA_{i,t} = NI_{i,t} - CFO_{i,t} \qquad \textit{Equation 1}$$

Step 2 - The coefficient (α values) of every industry were measured by operating regressing Equation 2 (Modified Jones Model)

$$\frac{TA\ i,t}{A_{i,t-1}} = \propto_1 \left(\frac{1}{A_{i,t-1}}\right) + \propto_2 \left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}}\right) + \propto_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + \varepsilon_{i,t} \qquad \textit{Equation 2}$$

Step 3 - Using Equation 3, assign the above-considered industry average α to every firm-year variable.

$$\frac{NDA\ i,t}{A_{i,t-1}} = \propto_1 \left(\frac{1}{A_{i,t-1}}\right) + \propto_2 \left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}}\right) + \propto_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) \qquad \textit{Equation 3}$$

Step 4 - From Total accruals (Equation 1) subtracted non-discretionary accruals to get the value of discretionary accruals. The absolute amount obtained here is reflected as the measurement of earnings management in this study.

$$\frac{DA_{i,t}}{A_{i,t-1}} = \frac{TA_{i,t}}{A_{i,t-1}} - \frac{NDA_{i,t}}{A_{i,t-1}} \qquad \textit{Equation 4}$$

$TA_{i,t} =$ Sum of Accruals at the end of year *t* of the firm *i*.

$NI_{i,t} =$ Net income for the year *t* of the firm *i*.

$CFO_{i,t}$ = Cash flows generated from total operations for the year *t* of the firm *i*.

$\Delta REV_{i,t} =$ Difference in revenue from year *t*-1 to *t* for the firm *i*.

$\Delta REC_{i,t}$ =Difference in receivables from year *t*-1 to *t* for the firm *i*.

$PPE_{i,t}$ = Total of the property, plant, and equipment at the end of year *t* for the firm *i*.

$A_{i,t-1}$= Sum of assets at the end of year *t* for the firm *i*.

$NDA\ i,t$ = Non-Discretionary Accruals calculated for the year *t* company *i*.

$DA_{i,t}$ = Discretionary Accruals calculated for the year *t* company *i*.

$\varepsilon_{i,t}$ = Residual calculated for the year *t* company *i*.

To control possible scale bias, every accrual variable is deflated by lagged assets.

3.3.2 Independent variables

The present study identifies audit committee size, frequency of audit committee meetings, audit committee independence, and the external audit service provider as independent variables. According to Vafeas (2005), the size of the audit committee is defined as the total number of executive and non-executive directors serving on the committee throughout the fiscal year. Accordingly, the size of the audit committee can be measured by counting the number of members in the audit committee during a particular financial year. Previous literature has predominantly assessed audit committee effectiveness based on the frequency of meetings held by the audit committee within the year. Vafeas (2005) notes that the number of committee meetings held during a financial year is considered a measure of audit committee effectiveness. A robust and impartial audit committee is crucial for monitoring the board's actions and ensuring the accurate representation of information to shareholders and other stakeholders (Levitt & March 1988). This is quantified by counting the number of independent non-executive directors in the audit committee within the selected sample of entities.

The external audit variable is measured in accordance with previous literature (Alves 2013, Chen et al. 2006, Becker et al. 1998, Lin & Zhou 2005) as a binary variable. It is coded as "1" if the corporation was audited by a Big 4 audit firm (i.e., Deloitte Sri Lanka, Ernst & Young, KPMG, and PricewaterhouseCoopers), and "0" otherwise.

3.3.3 Control variables

The present study identifies board size, CEO-chairperson duality and firm growth as control variables. Jensen and Meckling (1976, as cited in Alves 2013) emphasised that a large board generates conflicts of interest between shareholders and management as it hinders consensual decision-making. In this study, board size is measured as the total number of directors on the board. Following prior literature (Xie et al. 2003), CEO-chairperson duality is measured using a dichotomous variable, coded as "1" if the CEO's duties and responsibilities are separated from the chairperson, and "0" otherwise. The firm's growth is measured by comparing incremental sales of the company in the current fiscal year to the previous financial year.

Table 1 exemplifies the definitions and measurement of the chosen dependent variables, independent variables, and control variables.

Table 1: Definitions and Measurements

Variable	Working Definition	Measurement	Related Studies
Dependent variable			
Earnings management *($DA_{i,t}$)*	A technique that is used by high-level managers to manipulate financial statements Riwayati et al. (2016).	Abnormal Discretionary Accruals used as a substitute for earnings management for period *t*, firm *i*.	De Silva et al. (2017), Larcker et al. (2007)
Independent variables			
Audit committee size *($ACSIZE_{i,t}$)*	The members of the audit committee in a particular period.	Number of audit committee members for period *t*, firm *i*.	Vafeas (2005), Sun et al. (2014)
Audit committee meetings *($ACMEET_{i,t}$)*	To minimise the degree of earnings management practices, audit committee meeting frequency is also taken as a mechanism (Xie et al. 2003)	Frequency of audit committee meetings for period *t*, firm *i*.	De Silva et al. (2017, Vafeas (2005)
Audit committee independence *($INDAC_{i,t}$)*	A greater number of participants are independent of management (Klein 2000).	Audit committee independence is computed as the sum of independent non-executive directors on the	Klein (2002), Sun et al. (2014)

		committee for period *t*, firm *i*.	
BIG4 Auditors *($BIG4_{i,t}$)*	In listed companies, the Big 4 Audit firms have a leading position (Campa 2013).	"1" for if the auditor is Big 4 and "0" otherwise for period *t*, firm *i*.	Alves (2013), Lisic et al. (2011)
Control Variables			
Board Size *($BSIZE_{i,t}$)*	The number of directors representing the board for a particular period.	The total amount of directors representing the board for period *t*, firm *i*.	De Silva et al. (2017), Klein (2002)
CEO Chairperson duality *($CEOCHAIR_{i,t}$)*	There is no restriction to CEO Chairman duality according to the code of best practice in Sri Lanka besides disclosures need to be made (Weerasinghe & Ajward 2017)	'1', if CEO and chairperson responsibilities are segregated, and '0' otherwise, for period *t*, firm *i*.	De Silva et al. (2017), Chen and Zhang (2012)
Growth of the firm *($GROWTH_{i,t}$)*	Increment in gains compared to the preceding year is considered a growth.	Growth is measured using the sales revenue of firm *i* from the period *t*-1 to *t*.	De Silva et al. (2017)

Source: Author Constructed

3.4 Population and Study Sample

3.4.1 Population

The population for this research study comprised listed entities in the CSE, with the exclusion of companies in the banking & finance and insurance sectors. This exclusion is due to inherent boundaries, including highly regulated rules and regulations, as well as diverse financial and accounting components compared to entities in other sectors.

3.4.2 Sample size and selection of sample

The research sample consisted of listed entities registered in the CSE, selected from the aforementioned population. As of 31 March 2021, there are 282 quoted entities in the CSE, representing 19 GICS industry groups. Fifty companies have been chosen for this study to represent each industry, excluding banking, finance, and insurance sector companies, as of 26 April 2021 (Table 2). These companies cover the periods from 2018/2019 to 2020/2021, with

fiscal years ending on 31st March. A stratified random sampling method has been employed to select companies from each industry.

Table 1: Sample Selection

Industry	No. of Companies	No. of Companies Selected
Material	20	6
Energy	2	0
Capital goods	29	7
Commercial and professional services	5	1
Transportation	2	0
Automobile and components	1	0
Consumer durables and apparel	12	3
Consumer services	36	9
Retailing	13	3
Food and staples retailing	4	1
Food beverage and tobacco	47	11
Household and personal products	2	0
Healthcare equipment and services	8	2
Telecommunication services	2	0
Utilities	8	2
Real state	19	5
Total	**210**	**50**

Source: Author Constructed

3.5 Sources and Collection of Data

This study utilised secondary data for analysing variables, as secondary data is considered more credible and easily accessible. All data were gathered from entities' annual reports published on the CSE website.

3.6 Data Analysis Strategies

The data gathered from annual reports were analysed using IBM Statistical Package for the Social Sciences (SPSS 23) and Stata software to determine the effect of the audit committee and external audit service provider on earnings management in selected listed entities. Descriptive statistics and inferential statistics were applied in the analysis. Inferential statistics simplify the population by deriving statistics from the sample. In data analysis, this research study employed techniques such as descriptive analysis, correlation analysis, OLS regression analysis, and panel regression analysis.

4 ANALYSIS AND RESULTS

This section primarily focuses on the results from the statistical analysis and the discussion of the study's findings. It includes a descriptive analysis of the variables involved, correlation analysis, OLS regression analysis, and panel versions of regression analysis, followed by a detailed discussion of the results.

4.1 Descriptive Statistics

The results from the descriptive analysis are presented in Table 3.

Table 3: Descriptive Statistics

Variables[a]	N	Minimum	Maximum	Mean	Medium	Std. Deviation	Skewness	Kurtosis
Dependent variable								
DA_{it}[b]	150	0.000096	0.283	0.117	0.098	0.0854	0.664	-0.476
Independent variables								
$ACSIZE_{it}$[c]	150	3.000	4.000	3.310	3.000	0.463	0.847	-1.300
$ACMEET_{it}$[c]	150	3.000	6.000	4.330	4.000	0.880	0.550	-0.358
INDACit[d]	150	1.000	3.000	2.390	2.000	0.663	-0.622	-0.637
BIG4it	150	0.000	1.000	0.810	1.000	0.396	-1.568	0.467
Control variables								
BSIZEit[e]	150	4.000	13.000	7.870	8.000	2.077	0.339	-0.534
CEOCHAIRit	150	0.000	1.000	0.600	1.000	0.492	-0.412	-1.854
GROWTHit[b]	150	9.818	9.868	9.841	9.839	0.014	0.441	0.074

[a] Definitions of the variables are provided in Table 1

[b] These variables are replaced with natural logarithm transformation due to the presence of outliers

[c] These variables were winsorized at 10% due to the presence of outliers

[d] These variables were winsorized at 5% due to the presence of outliers

[e] These variables were winsorized at 1% due to the presence of outliers

Source: Author Constructed

4.1.1 Degree of earnings management

The descriptive analysis indicates that the mean value of discretionary accruals for the selected samples is 0.117, with a range from 0.000096 to 0.283 (Table 3). A one-sample t-test was conducted to determine whether discretionary accruals differ significantly from 0 at a 95% confidence level. The results show a significant value of 0.000, leading to the rejection of the null hypothesis, which stated there is no considerable difference between the mean value and 0. This indicates a significant difference between the mean value of 0.117 and 0, providing evidence of earnings management among the companies listed on the CSE.

4.1.2 Independent variables

When analysing the descriptive statistics for independent variables, several factors are highlighted. The audit committee size ranges from a minimum of 3 to a maximum of 4, with a mean value of 3.31 and a standard deviation of 0.463. This indicates that the selected sample of companies generally adheres to the principles set by the code of best practices in corporate governance in Sri Lanka (2017) regarding the minimum representation in the audit committee. Additionally, there are minimal variations in audit committee size across the selected sample.

The audit committee meetings variable ranges from 3 to 6, with a mean value of 4.33. The results show that these companies comply with the code of best practices in Sri Lanka, which mandates that audit committees should meet at least four times a year. The median number of meetings is 4, with a low standard deviation of 0.88.

Audit committee independence has a mean value of 2.39 and a standard deviation of 0.663. The minimum value of 1 indicates that there is at least one independent non-executive member in the audit committee, while the maximum value is 3.

Regarding the Big 4 auditors, 81% of the listed entities in the sample are audited by Big 4 firms in Sri Lanka: KPMG, Ernst & Young, PricewaterhouseCoopers, and Deloitte. The remaining 19% of the listed companies in the sample are audited by non-Big 4 auditors. Similar trends were observed in other countries, with 86% of listed entities in Singapore (Rusmin 2010), 81% in Malaysia (Rahman & Ali 2006), and 83% in France (Piot & Janin 2007) being audited by Big 4 firms.

4.1.3 Controls variables

When considering the descriptive statistics of control variables, the BOD typically consists of approximately 8 members, with a minimum of 4 and a maximum of 13 members. In 60% of the selected sample companies, the roles of CEO and Chairperson are separate, reflecting a stronger adherence to corporate governance practices. This separation is intended to reduce earnings manipulation, a view supported by empirical evidence from Klein (2002), who found that separating these roles decreases discretionary accruals. The company's growth, measured by the change in sales revenue from the previous period to the current period using the natural logarithm, has a mean value of 9.841, within a range of 9.818 to 9.868. The standard deviation of 0.014 indicates minimal deviation from the mean value.

4.2 Multivariate Regression Analysis

The association among audit committee characteristics, external audits, and earnings management, along with the impact of control variables, will be assessed using the following regression equation.

$$DA_{i,t} = \beta_1 ACSIZE_{i,t} + \beta_2 ACMEET_{i,t} + \beta_3 INDAC_{i,t} + \beta_4 BSIZE_{i,t} + \beta_5 CEOCHAIR_{i,t} + \beta_6 GROWTH_{i,t} + \varepsilon$$

Table 5 presents the results of the OLS regression analysis, with absolute discretionary accruals as the dependent variable and audit committee characteristics, external audit, board size, CEO-Chairperson duality, and firm growth as independent variables. The OLS regression analysis indicates a very low R^2 value, reflecting the explanatory power of the independent variables. In this analysis, the independent variables account for 18.7% ($R^2 = 0.187$) of the variation in the dependent variable, discretionary accruals. Furthermore, Table 7 presents the panel regression results.

Table 5: OLS Regression Analysis

Variables[a]	Coef.	T	Sig
Intercept	7.996201763	1.654	.100
ACSIZEit	-0.2497*	3.091	.062
ACMEETit	-.043	-.540	.590
INDACit	.120	1.452	.149
BIG4it	-0.2036**	-2.612	.042
BSIZEit	-.063	-.779	.437
CEOCHAIRit	.087	1.096	.275
GROWTHit	-.130	-1.653	.101
F value		3.581	
Significance of F value		0.001	
R^2		.187	
N		150.000	

[a] Definitions of the variables are provided in Table 1
Source: Author Constructed

The results of the regression analysis indicate that audit committee size has a significant (p<0.1) negative relationship with absolute discretionary accruals at the 90% confidence level. This implies that larger audit committees are associated with lower levels of earnings management through discretionary accruals. Additionally, there is a significant (p<0.05) negative association between Big 4 auditors and the level of earnings management at the 95% confidence level, suggesting that companies audited by Big 4 firms have lower discretionary accruals.

Other variables do not show a systematic association with the degree of earnings management. Specifically, the OLS regression analysis indicates that audit committee meetings do not have a significant relationship with discretionary accruals. This finding contradicts the second hypothesis and the results of several studies (Alves 2013, Rusmin 2010). Similarly, the analysis reports no significant relationship between audit committee independence and discretionary accruals, failing to support the third hypothesis of the study.

None of the control variables show a significant association with accrual-based earnings management. Although board size has a negative but insignificant association with the dependent variable, and CEO-Chairperson duality has a positive but insignificant association with the degree of earnings management, these findings indicate that the board size and separation of CEO and Chairperson roles do not influence discretionary accruals. This result contrasts with earlier literature by Klein (2002) and Jensen, and Meckling (1976 cited in Alves 2013) but aligns with findings by Lin and Hwang (2010) and Xie et al. (2003). Additionally, the growth of the firm shows no association with the level of discretionary accruals.

Panel Regression Analysis

The Hausman test was conducted to determine the appropriate panel regression model. Since the probability value was less than 0.05, a fixed effect model was identified as suitable. Table 6 presents the results of the Hausman test.

Table 6: Hausman Test

Variables[a]	Fixed	Random	Difference
$ACSIZE_{it}$	-0.021	0.026	-0.047
$ACMEET_{it}$	-0.004	-0.006	0.002
$INDAC_{it}$	0.048	0.029	0.019
$BIG4_{it}$	0.152	-0.024	0.176
$BSIZE_{it}$	0.011	-0.003	0.134
$CEOCHAIR_{it}$	0.012	-0.013	0.025
$GROWTH_{it}$	-0.640	-0.550	-0.090
Prob>chi2	0.041		
N	150		

[a] Definitions of the variables are provided in Table 1
Source: Author Constructed

Table 7 illustrates the results of the panel regression of the study.

Table 7: Panel Regression Analysis

Variables	Coefficients	P
$ACSIZE_{it}$	-0.021*	0.069
$ACMEET_{it}$	-0.004	0.686
$INDAC_{it}$	0.048	0.153
$BIG4_{it}$	-0.152**	0.048
$BSIZE_{it}$	0.0106	0.611
$CEOCHAIR_{it}$	0.012	0.526
$GROWTH_{it}$	-0.640	0.198
Prob>F	0.0176	
R	.185	
N	150	

*p<0.10
**p<0.05
***p<0.01

Source: Author Constructed

The study reveals a significant (p<0.1) inverse relationship between audit committee size and the level of discretionary accruals under panel regression. Additionally, it identifies a significant (p<0.05) negative association between Big 4 audit firms and the degree of earnings management. This finding is consistent with Francis et al. (1999) who found that companies engaging Big 6 auditors exhibit lower discretionary accruals compared to those with non-Big 6 auditors. However, this finding may differ from previous literature, as Li and Line (2005) and Antle et al. (2006) reported that companies audited by Big 4 audit firms exhibited higher absolute discretionary accruals than those audited by other firms. Except for the aforementioned two variables, all other independent and control variables do not exhibit a significant relationship with earnings management at any of the significance levels (p<0.01,

$p<0.05$, and $p<0.1$). When considering the overall impact of audit committee characteristics and external audit on earnings management, the hypotheses relating to audit committee size and Big 4 audit firms are supported by this study.

5 CONCLUSION

This study aimed to investigate the impact of audit committee characteristics and external audit service providers on earnings management. For this, fifty companies were selected to represent each industry, excluding banking, finance, and insurance sector companies, for the periods of 2018/2019 to 2020/2021, with financial years ending on 31st March. The study utilised descriptive statistics, OLS linear and panel regression to analyse data.

The study had three specific objectives. The first was to identify significant characteristics of the audit committee and external audit in listed companies on the CSE. Descriptive statistics revealed that most audit committee characteristics and selected variables aligned with the principles of the code of best practice of corporate governance (2017) in Sri Lanka. Specifically, 81% of the selected sample companies were audited by Big 4 auditors, and 60% operated with separate CEO and chairperson roles, indicating a strong emphasis on corporate governance practices. The second objective was to evaluate the association between selected audit committee characteristics and earnings management. Both OLS and panel regression analyses indicated a significant ($p<0.1$) negative association between audit committee size and the level of discretionary accruals. This suggests that larger audit committees are associated with lower levels of earnings management, a finding supported by Rusmin (2010). Finally, the study aimed to assess the association between external audit service providers and earnings management. The study found a significant ($p<0.05$) negative association between Big 4 auditors and earnings management at a 95% confidence level, indicating that companies audited by Big 4 firms exhibit lower levels of earnings management. Except for audit committee size and Big 4 auditors, no other variables exhibited a systematic association with the degree of earnings management.

The aforementioned findings hold both empirical and practical policy implications. Empirically, this study contributes to the existing literature by examining the association between audit committee characteristics, external audit service providers, and earnings management through discretionary accruals. Moreover, these findings are expected to inform policymakers, regulators, shareholders, and other stakeholders in practical terms. Policymakers should consider appointing a higher number of non-executive directors to audit committees to potentially restrict negative earnings management practices.

However, this research study has several limitations. Firstly, banking, finance, and insurance sector companies were excluded from the sample, representing only about 25.53% of the whole population. Therefore, drawing conclusions based on the entire population may be challenging, as it is uncertain whether the sample accurately represents the population. Additionally, government sector and non-listed companies were excluded from the study, limiting its generalisability. Furthermore, the study only analysed three years of data to assess the effect of the audit committee and the external audit on earnings management in listed companies. Lastly, the study utilised the modified Jones model to quantify discretionary accruals as a proxy for earnings management, potentially introducing bias as other alternative models exist. Future research could address these limitations. For instance, future studies could replicate this study in banking, finance, and insurance sector companies, especially given recent corporate governance malpractices observed in the financial segment in Sri Lanka.

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