

European Journal of Economic and Financial Research

ISSN: 2501-9430 ISSN-L: 2501-9430

Available on-line at: http://www.oapub.org/soc

DOI: 10.46827/ejefr.v9i4.2037

Volume 9 | Issue 4 | 2025

OWNERSHIP STRUCTURE AND ACCRUAL EARNINGS MANAGEMENT: THE MODERATING EFFECT OF FIRM SIZE IN LISTED COMPANIES WITHIN THE OHADA MEMBER STATES

Pius Etuge Mekolle¹ⁱ, Michael Forzeh Fossung², Hanko Osee³ ¹PhD Student, Department of Accounting, Faculty of Social and Management Sciences, University of Buea, Buea, Cameroon ²Asociate Professor, Department of Accounting, Faculty of Social and Management Sciences, University of Buea, Buea, Cameroon ³Senior Lecturer, Department of Accounting, Faculty of Social and Management Sciences, University of Buea, Buea, Cameroon

Abstract:

This study investigates the effect of ownership structure on accrual earnings management of listed firms in Organisation for the Harmonisation of Business Law in Africa (OHADA) member states, taking into account company size as a moderator from 2018 to 2023. Using panel data from the financial statements of 23 companies listed on the BRVM and BVMAC exchanges, the study employed the estimated residuals of Kothari *et al.* (2005) to measure accrual earnings management. Ownership structure was measured as a percentage of shares held by each of the categories of ownership. The suggested effect (direct and moderated effect) of ownership structure on accrual earnings management was tested using the Prais–Winsten regression with Panel-Corrected Standard Errors (PCSE). The empirical evidence of the non-moderated PCSE has shown that the ownership structures examined in the study (ownership concentration, individual ownership and foreign ownership) do not have any significant effect on accrual earnings management. However, findings of the moderated effect show that individual ownership has a positive and significant effect on accrual earnings

ⁱCorrespondence: email <u>mekolle.pius@ubuea.cm</u>

Copyright © The Author(s). All Rights Reserved.

management, suggesting that individual ownership is generally linked to more accrual-based earnings manipulation. This positive correlation between accrual earnings management and individual ownership diminishes with increasing firm size. The study recommends, amongst others, that policymakers in OHADA jurisdictions should prioritize the development and implementation of targeted corporate governance frameworks that address ownership structure dynamics and their implications for earnings management practices.

JEL: M41 – Accounting, G32 – Financing Policy, Capital and Ownership Structure, C23 – Panel Data Models, G34 – Corporate Governance

Keywords: ownership structure, earnings management, listed companies, firm size, OHADA, corporate governance

1. Introduction

Earnings management, the manipulation of financial statements to achieve certain desired outcomes, is a pervasive practice in corporate finance. In the United States (US), research indicates that in an average year, 41% of companies misrepresent their financial reports, destroying 1.6% of the equity value of US public firms each year, totalling \$830 billion in 2021 (Dyck *et al.*, 2023). It has significant implications for the accuracy and reliability of financial reporting, influencing the decisions of investors, regulators, and other stakeholders. Ownership structure has long been identified as a key governance mechanism, influencing managerial behaviour and financial reporting outcomes (Ellili, 2020). Specifically, the distribution of ownership among block holders, individual shareholders and foreign investors can play a pivotal role in either deterring or facilitating earnings manipulation. While large shareholders are presumed to exercise effective oversight (Shleifer & Vishny, 1986; Warfield *et al.*, 1995), excessive concentration can lead to entrenchment and self-serving managerial alliance (Morck *et al.*, 1988).

Importantly, the moderating role of firm size adds another layer of complexity to this dynamic. Large firms often face heightened scrutiny from regulators, analysts, and institutional investors, which may discourage aggressive earnings management Yeo *et al.*, 2002). Conversely, small firms might escape such scrutiny and have greater latitude for discretionary accounting practices. Agency theory (Jensen & Meckling, 1976) provides a compelling framework, suggesting that in large firms where ownership is more diffused, the misalignment between managers and shareholders becomes more pronounced. Potentially incentivising earnings manipulation. Yet, the presence of robust external monitoring mechanisms in large firms, such as media attention, analyst coverage and regulatory oversight, may also limit opportunism (Yu, 2008; An, 2022).

Within the OHADA zone, foreign and concentrated ownership, which are common among large firms in the OHADA region, may exert stronger governance control in smaller firms where monitoring is more feasible, while becoming diluted in large firms due to increased organisational complexity (Boateng *et al.*, 2017). Moreover, as firm size increases, the visibility of firms attracts greater investors' attention and market pressure to meet earnings expectations, potentially pushing managers toward earnings manipulation (Roychowdhury, 2006)

Previous research has examined the linear relationship between earnings management and ownership structure, with varying degrees of success. Some researchers back the alignment hypothesis, claiming that ownership structures such as concentrated ownership help align managerial and shareholder interests, while others support the entrenchment hypothesis, which contends that concentrated ownership exacerbates managerial opportunism (Ding et al., 2007; Dong et al., 2020). More recently, researchers like Mazumder (2017) and Attia et al. (2023) have investigated nonlinear and conditional correlations, suggesting that the impact of ownership structure on earnings management may depend on contextual circumstances. Firm size is one of these understudied factors. Firm size might be a significant moderating factor, even though it is frequently regarded as a control variable. Larger firms may be subject to greater scrutiny and face more stringent reporting standards, which could mitigate earnings management. Conversely, they may also possess more complex operations and greater incentives or opportunities for earnings manipulation, especially when ownership is concentrated or foreign-controlled.

Given that businesses in the OHADA region range greatly in size and work in a variety of industries, the relationship between ownership structure and firm size is particularly pertinent there. Individual investors, foreign shareholding and concentrated ownership are the main ownership types of these businesses, while state ownership is rather uncommon (Wandji & Nebasi, 2022). Weak institutional frameworks, informal business practices, and changing legal frameworks in OHADA member states provide a fertile ground for earnings management, particularly when ownership arrangements do not enforce efficient governance. The interplay between ownership structure, firm size and earnings management in such contexts has not been adequately addressed in the literature, creating a significant research gap.

This study fills these gaps by examining how ownership structure affects accrual earnings management, paying special attention to how business size acts as a moderator. The originality of this study is grounded in this dual approach, looking at the direct (non-moderated) and interactive (moderated) effects of ownership concentration, foreign ownership, and individual ownership on accrual earnings management. Understanding the functioning of governance systems in emerging markets on a deeper and more contextual level is made possible by this integrated approach. This study adds to the current discussion on the quality of financial reporting by taking into account the particular regulatory and economic features of the OHADA zone. It also provides useful information for investors, regulators, and company boards looking to prevent earnings manipulation. The results are ultimately expected to improve the transparency and dependability of financial reporting in the OHADA member nations, deepen governance reforms, and influence policy. This study was guided by the following objectives:

- 1) To evaluate if ownership concentration significantly influences accrual earnings management of listed companies in OHADA member States.
- 2) To determine if individual ownership significantly affects accrual earnings management of listed companies in OHADA member States.
- 3) To examine the effect of foreign ownership on accrual earnings management of listed companies in OHADA member States.
- 4) To assess if firm size moderates the effect of ownership structure on accrual earnings management of listed companies in OHADA member States.

To attain these objectives, the following hypotheses were formulated:

- **H1:** Ownership concentration significantly influences accrual earnings management of listed companies in OHADA member States.
- **H2:** Individual ownership significantly affects accrual earnings management of listed companies in OHADA member States.
- **H3:** Foreign ownership significantly affects the earnings management of listed companies in OHADA member States.
- **H4:** Firm size significantly moderates the effect of ownership structure on accrual earnings management of listed companies in OHADA member States.

This paper is structured into five sections. Section one covers the introduction of the study, section two reviews relevant literature of the subject matter, while section three presents the materials and methods of the study. Part four presents the findings, while part five discusses and concludes the study.

2. Review of Literature

Ownership structure denotes the ownership arrangements and establishes the corporate control structure. Jensen and Meckling (1976) use the term "ownership structure" to refer to the capital held by members of the corporation (the direct management component) and outside the organization (investors not holding direct management roles). It is an essential part of corporate governance, impacting the allocation of resources and decision-making processes. The idea of ownership structure has been thoroughly studied in the literature, with researchers looking at how it affects a number of corporate behaviour factors. The ownership structure of the businesses is basically fractionated ownership, according to Tran and Dang (2021), with shareholders, for example, owning certain capital holdings. Jensen and Meckling (1976) claimed in their fundamental agency theory framework that ownership structure influences managerial incentives and their alignment or misalignment with shareholder interests. Empirical research has elaborated on this distinction over time, demonstrating that ownership composition has significant implications for corporate governance and financial reporting behaviours such as earnings management. This study adopted ownership concentration, foreign ownership and individual ownership as variables of ownership structure.

According to Jiang (2020), earnings management refers to the manipulation of financial statements by management to either increase or decrease reported earnings.

Healy and Wahlen (1999), postulated that earnings management occurs when managers use judgment in structuring transactions and financial reporting to alter financial reports in order to either influence contractual outcomes that depend on reported accounting numbers or mislead some stakeholders about the underlying economic performance of the company. Beneish (2001) made a distinction between informational earnings management, which aims to present a positive picture of a company's performance to investors and opportunistic earnings management, to mislead investors, in accordance with these beliefs. These variations might indicate that managing earnings isn't always a terrible thing to do.

Earnings management has also taken on a global dimension, with the incidence and shape differing greatly across developed and emerging markets. Based on the functionality of the earnings management, accrual and real earnings management are the two categories. while real earnings management practice is accomplished by manipulating the enterprise's real activities to affect reporting earnings by using techniques such as sales, overproduction, discretionary expenditures and gains from fixed asset sales (Brown et al., 2015; Roychowdhury, 2006; Zang, 2012), accrual earnings management occurs when the manager of a given firm uses his/her judgment based on changing accruals with the intention to alter the reported earnings and mislead stockholders about firm's performance (Healy & Wahlen, 1999; Jones, 1991). Any kind of earnings management will have an impact on the operation of the company. In sophisticated economies with strong regulatory structures, manipulation is subtler and frequently accrual-based. Furthermore, in emerging economies, cultural norms, institutional vacuum, and ownership concentration frequently exacerbate agency problems, making earnings manipulation more common and difficult to detect (Houge, & Monem, 2016). The scheme of earnings management involves reporting steady profit growth (income smoothing), minimising company profit (income minimisation), maximising company profit (income maximisation), and admitting costs for the future period in the current period (taking a bath).

There is a great deal of disagreement over the influence of company size. Dechow and Dichev (2002) find that accruals quality and firm size have a positive link. This implies that accruals that are less discretionary and more likely to be realised in the future are reported by larger organizations. Consistent data discovered by Lee and Choi (2002) indicates that smaller enterprises are more likely than larger businesses to manage earnings to avoid declaring losses. However, Lobo and Zhou (2006) argue that larger organisations may have a greater chance of managing their earnings than smaller enterprises since it is more difficult for outside users to uncover earnings management strategies in such complex financial reporting systems.

Theoretically, the Agency theory of Jensen and Meckling (1976) describes the interaction between principals (shareholders) and agents (managers), who are tasked with running the business on behalf of the principals. The theory holds that managers may act in their own self-interest rather than maximise shareholder profit, particularly when ownership and control are separated. This disparity in interests leads to agency

conflicts, which are primarily caused by information asymmetry, in which managers have more information than shareholders and may exploit this advantage. Empirical studies such as Warfield et al. (1995), Yeo et al. (2002), and Dong et al. (2020) have applied Agency Theory to earnings management, demonstrating that the quality and composition of ownership have a considerable impact on the degree of manipulation. However, the findings remain inconclusive. While certain evidence suggests that concentrated or foreign ownership reduces earnings management, other studies indicate that these structures might exacerbate agency concerns, particularly in weak institutional environments-making this analysis topical and necessary in the OHADA setting.

Stakeholder theory, as proposed by Freeman (1984), emphasizes the importance of stakeholders, arguing that corporations should consider the interests of a larger range of stakeholders-not just shareholders-in their decision-making processes. Employees, creditors, regulators, customers, and communities, according to the principle, are all groups to whom firms must answer. This theory prioritises diversity, transparency, and long-term sustainability. This perspective was strongly supported by Donaldson and Preston (1995) who argued that firms engaging in high-quality financial reporting seek to balance stakeholder interests, ensuring accountability to investors, creditors, and regulators. According to the authors, stakeholder theory provides a framework for understanding corporate governance practices that prioritize financial transparency. This theory has been applied in various studies to explore the relationship between corporate governance, financial reporting quality, and earnings management. This theory suggests that firms with strong stakeholder focus are more likely to produce high-quality financial reports to maintain trust and legitimacy.

DiMaggio and Powell (1983) introduced Institutional Theory to explain how organizations conform to institutional pressures to gain legitimacy, stability, and survival. The theory proposes three mechanisms-coercive, mimetic, and normative isomorphism-that cause organizations to adopt identical structures and practices. These include regulatory mandates, peer imitation, and professional norm adherence. In addition, Scott (1995) explained how regulatory requirements (e.g., accounting standards) and cultural norms affect corporate governance -ownership structure- and financial reporting quality. Regulatory Systems focus on formal rules, laws, and sanctions that govern behaviour. It establishes clear expectations, constraints, and consequences for non-compliance. Normative Systems focus on social norms, values, and expectations that shape behaviour, establishing standards for acceptable behaviour, influencing individual and organizational actions. Cultural-Cognitive Systems on its part focus on shared beliefs, mental models, and cognitive frameworks that shape perception and behaviour, providing a common language, classification systems, and interpretation frameworks.

These theories provide a comprehensive understanding of how ownership structures and institutional factors interact to drive profits management in OHADA member nations.

3. Materials and Methods

3.1 Research Design, Population of the Study and Sample Size

Given its time series causal nature, this study used an ex-post facto research design in a panel setting to gather and examine numerical data about accrual earnings management and ownership structure in the OHADA member states. Because it enables the statistical testing of hypotheses pertaining to ownership structure and accrual earnings management, the study is also quantitative in nature.

The 35 listed businesses in the OHADA zone make up the study's population. The aforementioned group consists of four firms that trade on the BVMAC security market and thirty-one entities that are listed on the BRVM market. The focus on listed companies is justified by their obligation to adhere to stringent financial reporting standards, making them suitable subjects for studying earnings management practices. To maintain consistency in the regulatory framework, financial institutions were excluded from the study

The availability and completeness of financial data throughout the chosen time, spanning 2018 to 2023, were taken into consideration when determining the sample size. The sample consists of twenty-three (23) companies in total, which is a thorough cross-section of the listed companies in the OHADA zone. 138 firm-year observations will be used for analysis based on the sample mentioned above.

3.2 Estimation of Accruals Earnings Management

Prior research has extensively employed aggregate accruals models to separate total accruals into two categories: non-discretionary accruals resulting from routine business transactions and discretionary accruals that are most likely to be managed. Amongst the accrual models, the Kothari *et al.* (2005) model yields the strongest power, and because it produces better outcomes than other models, this model has gained much popularity. The Kothari *et al.* (2005) model will therefore be used in this study to estimate discretionary accruals. The absolute values of regression residuals are interpreted as abnormal accruals, and the model predicts nondiscretionary accruals. This model preserves all three of the original explanatory variables as follows:

TAit/Ait-1 =
$$\alpha$$
0 + β 1i [1/Ait-1] + β 2i [(Δ REVit – Δ RECit)/Ait-1] + β 3i [PPEit/Ait-1] + β 4i ROAit(or it-1) + εit (1)

Where:

TAit = total accruals in year t for firm i, Ait-1 =total assets in year t – 1 for firm i, $\alpha 0$ = Intercept, ΔREV = revenues in year t less revenues in year t-1 for firm i, ΔREC = revenues in year t less revenues in year t-1 for firm i, PPE = net property, plant, and equipment in year t for firm i, ROA = Rate of return on assets, eit = error term in year t for firm i.

3.3 Measurement of the Independent Variable

Following an assessment of the sampled firms' ownership structures, this study looked at ownership concentration, foreign ownership, and individual ownership as major variables in ownership structure. This study only includes blockholders if their holdings account for 5% or more of the company's equity share capital. According to Nguyen *et al.* (2020), ownership concentration is measured by adding the ownership shares of blockholders and dividing by the total number of outstanding shares. Foreign ownership was calculated as the total percentage of common stock held by foreign (non-resident) shareholders. Kablan (2020) measured foreign ownership as the sum of foreign ownership shares divided by total outstanding shares. The total proportion of common stock held by individual shareholders will be utilized to determine individual ownership. Hendi and Lisniati (2020) define individual ownership as the percentage of individual shares with less than 5% ownership divided by total outstanding shares.

3.4 Model Specification

This study used two panel data regression models to investigate how ownership structure affects the accrual earnings management proxy. The first model evaluated the direct effect of the prediction variables on accrual earnings management, while the second model evaluated the moderating effect of firm size on the ownership-accrual earnings management relationship. These empirical models are stated as follows:

Model 1: Accrual Earning Management

AEM= α i + β1 CONCit + β2 FRGNit + β3 INDit + β4 SIZEit+ β5 GRWTHit + β6 LEVit + β7-12YRi

Model 2: Moderated AEM Model with Firm Size

AEMit = α i + β1CONCit + β2FRGNit + β3INDit + β4SIZEit + β5(CONC×SIZE)it +β6 (FRGN×SIZE)it + β7(IND×SIZE)it + β8GRWTHit + β9LEVit + β10-16 YRi

Where:

AEM = Accrual Earnings Management estimated using the Kothari et al. (2005) model,

CONC = Ownership concentration equals the proportion of common shares held by the largest shareholders and their relatives,

FRGN = FOREIGN ownership equals the proportion of common shares held by foreign (non-resident) shareholders,

IND = Individual ownership equals the proportion of common shares held by the individual shareholders,

SIZE = Natural logarithm of total assets,

GRWTH = Growth rate equals the change in total assets scaled by lagged total assets,

LEV = Leverage equals total liabilities scaled by total assets,

YR = Dummy variables based on the study period, which cover six years.

3.5 Data Analysis Procedure

The study employed panel regression in STATA to examine the effect of ownership structure on accrual earnings management (AEM) in OHADA-listed companies over time. Prior to estimation, continuous variables such as AEM, firm size, leverage, and growth were winsorised at the 5th and 95th percentiles to reduce skewness, kurtosis, and the impact of outliers, ensuring closer alignment with linear regression assumptions. The Prais-Winsten regression with Panel-Corrected Standard Errors (PCSE), as proposed by Beck and Katz (1995), was applied to account for common econometric issues in panel data, including heteroskedasticity, contemporaneous correlation across firms, and serial correlation within firms. The Prais-Winsten transformation specifically addressed firstorder autocorrelation in the error term, enhancing the robustness of estimates. The PCSE method adjusts standard errors to remain consistent and unbiased even when the assumption of independently and identically distributed errors is violated, making it particularly suited for corporate governance and financial reporting studies. This approach ensured more accurate inference and reliable coefficient estimates, strengthening the validity of conclusions drawn from the relationship between ownership structure and AEM in the OHADA context.

4. Results

4.1 Descriptive Statistics of Variables

The descriptive statistics of the dependent and explanatory variables are presented in Table 1 below.

Variables Std. Dev. Obs Mean Min Max **CONC** 138 17.523 24.987 0 73.16 **FRGN** 138 58.255 27.301 0 86.5 IND 138 21.617 7.624 7.56 37.16 **GRWTH** 138 .059 .138 -.191 .357 LEV 138 .636 .206 .291 .973 **REM** 138 .208 .124 .04 .494 **SIZE** 138 11.246 1.386 8.978 14.496

Table 1: Descriptive statistics of the key variables

Source: Computed by authors (2025).

The descriptive statistics in Table 1 reveal that the mean abnormal accruals (ABAC) of 0.046 suggest a modest level of accrual-based earnings management in OHADA-listed firms, with positive skewness (1.248) and high kurtosis (3.698) indicating a few extreme cases. Ownership concentration (CONC) averages 17.52%, but with substantial variation,

reflecting the presence of both highly concentrated and widely dispersed ownership structures. Foreign ownership (FRGN) is relatively high, averaging 58.26%, with significant differences across firms, while individual ownership (IND) averages 21.62% and is more evenly distributed. Control variables show that firms have an average growth rate (GRWTH) of 5.9%, though performance varies widely from –19.1% to 35.7%. Leverage (LEV) is high on average at 63.6%, with some firms almost fully debt-financed. Firm size (SIZE), measured in natural log form, averages 11.26, ranging from smaller firms (8.739) to significantly larger ones (14.496), indicating moderate variation. These statistics suggest a diverse sample in terms of ownership structure, capital structure, and operational scale, providing a rich context for analysing the relationship between ownership characteristics and earnings management in the OHADA zone.

4.2 Correlation Analysis

The correlation coefficients of pairwise correlation between the variables of earnings management models are presented in Table 2 below, with asterisks indicating the level of significance.

 Table 2: Pairwise correlation coefficients for independent variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) ABAC	1.000						
(2) CONC	-0.093	1.000					
	(0.276)						
(3) FRGN	0.122	-0.933*	1.000				
	(0.155)	(0.000)					
(4) IND	-0.077	0.230*	-0.491*	1.000			
	(0.367)	(0.007)	(0.000)				
(5) SIZE	-0.287*	-0.133	0.069	-0.114	1.000		
	(0.001)	(0.120)	(0.424)	(0.184)			
(6) GRWTH	-0.077	-0.182*	0.136	0.019	0.233*	1.000	
	(0.371)	(0.033)	(0.111)	(0.824)	(0.006)		
(7) LEV	0.140	-0.272*	0.211*	-0.094	0.424*	0.257*	1.000
	(0.103)	(0.001)	(0.013)	(0.273)	(0.000)	(0.002)	
*** p<0.01, ** p<0.05	5, * p<0.1		_				

Source: Computed by authors (2025).

The pairwise correlation results in Table 2 show that accrual-based earnings management (ABAC) is negatively correlated with ownership concentration (CONC), individual ownership (IND), firm growth (GRWTH), and firm size (SIZE), with only SIZE having a statistically significant relationship (r = -0.287, p = 0.001). This suggests that larger firms tend to engage less in accrual-based earnings manipulation, possibly due to stronger governance and greater scrutiny. Foreign ownership (FRGN) has a weak, positive, and insignificant correlation with ABAC (r = 0.122, p = 0.155). A key finding is the strong, negative, and highly significant correlation between FRGN and CONC (r = -0.933, p = 0.000), implying that higher foreign ownership is associated with lower ownership

concentration. Similarly, FRGN is strongly and negatively correlated with IND (r = -0.491, p = 0.000), suggesting a substitution effect between foreign and individual ownership. Additionally, both FRGN (r = 0.211, p = 0.013) and SIZE (r = 0.424, p = 0.000) are positively and significantly related to leverage (LEV), indicating that larger and foreign-owned firms tend to rely more on debt financing. These correlations highlight potential multicollinearity concerns and the interconnected nature of ownership and firm characteristics in OHADA-listed companies.

In the empirical models, ownership concentration (CONC), foreign ownership (FRGN), and individual ownership (IND) are the principal independent variables of interest. However, pairwise correlations, revealed a high degree of multicollinearity between ownership concentration (conc) and foreign ownership (FRGN) variables, indicating potential estimation bias and inflated standard errors. This multicollinearity stems from the strong inverse correlation between ownership concentration and foreign ownership in the sample of OHADA-listed firms, where an increase in foreign ownership typically corresponds with reduced concentration by local or family owners.

To mitigate this issue while preserving both theoretical constructs in the model, an orthogonalization technique was employed. Specifically, foreign ownership was regressed on ownership concentration to extract the residual component (CONC_resid), which captures the portion of ownership concentration that is uncorrelated with foreign ownership. By including both CONC_residual and FRGN in the regression model, we effectively disentangle the overlapping explanatory power and allow for an independent assessment of each variable's unique influence on earnings management.

4.3 Results of the Non-Moderated PCSE Regression of Ownership Structure and Accrual Earnings Management

PCSE estimation technique results for the test of the above hypotheses are presented in Table 3 below.

The Prais-Winsten PCSE regression results provide no statistical evidence for the three sub-hypotheses about the effect of ownership structure on accrual earnings management (ABAC) in publicly traded OHADA enterprises. Ownership concentration has a negative but minor effect, indicating that the presence of powerful shareholders does not routinely drive accrual-based manipulation, resulting in the rejection of H1. Similarly, individual ownership has an insignificant negative relationship with ABAC, showing that dispersed individual investors lack the ability to influence earnings management methods, leading to the rejection of H2. Foreign ownership, while positive, is statistically negligible, showing that foreign investors do not materially limit accrual manipulation in this scenario, and so rejecting H3. Overall, these findings suggest that in OHADA markets, ownership structure characteristics are not good predictors of accrual earnings management.

Table 3: Prais-Winsten regression, correlated panels corrected standard errors (PCSEs)

ABAC	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
CONC_resid	0001	.001	-0.16	.876	002	.001	
FRGN	.0001	.0001	1.13	.259	0001	.0003	
IND	0004	.001	-0.63	.531	002	.001	
SIZE	012	.002	-6.14	0	016	008	***
GRWTH	033	.027	-1.21	.225	086	.02	
Lev	.057	.018	3.25	.001	.023	.092	***
2018b	0		•	•	•		
2019	012	0	-67.62	0	012	011	***
2020	013	.001	-9.26	0	016	011	***
2021	008	.003	-2.40	.016	015	001	**
2022	007	.002	-3.93	0	01	003	***
2023	012	.001	-10.66	0	014	01	***
Constant	.157	.035	4.50	0	.089	.226	***
Mean dependent var		0.046		SD dependent var		0.041	
R-squared		0.181		Number of obs		138	
Chi-square		52.980		Prob > chi2		0.000	
*** p<.01, ** p<.05, * p<.1							

Source: Computed by authors (2025).

Regarding the control variables, business size has a substantial negative effect on ABAC, implying that larger firms are less likely to participate in accrual manipulation due to increased public awareness and regulatory scrutiny, which is consistent with stakeholder and legitimacy theory assumptions. Leverage, on the other hand, has a significant positive effect, supporting the debt covenant hypothesis that heavily leveraged enterprises may change accruals to meet loan terms. Firm growth has no significant association with ABAC, indicating that expansion pressures may not always drive accrual-based manipulation in OHADA enterprises. Furthermore, year impacts show a considerable and constant drop in accrual earnings management from 2019 to 2023 when compared to 2018, presumably reflecting the impact of amended SYSCOHADA regulations, increased oversight, and COVID-19's temporary disruption of business operations. The model explains 18.1% of the variation in ABAC ($R^2 = 0.1807$) and is statistically significant overall (Wald $\chi^2 = 52.98$, p < 0.001), suggesting good explanatory power for firm-level governance data.

The findings diverge from studies like Alves (2012) in Portugal and Grimaldi and Muserra (2017) in Italy, which found ownership concentration negatively linked to accrual earnings management, indicating better reporting quality. In the OHADA context, the absence of a significant relationship may stem from lower ownership concentration levels or weaker institutional enforcement, consistent with Fan and Wong's (2002) view that concentrated ownership alone does not ensure effective governance in weak institutional environments. The results also challenge agency theory expectations that dispersed (individual) or foreign ownership reduces earnings management through stronger monitoring, while concentration increases it via entrenchment. Instead, they suggest that institutional realities in OHADA, such as weak investor activism, lax rule

enforcement, and governance practices, dilute ownership's oversight role. The significant effects of firm size (negative) and leverage (positive) indicate that firm-specific financial factors play a stronger role in driving accrual earnings management than ownership structure.

4.4 Moderated PCSE Regression of AEM Model with Firm Size

The moderated PCSE regression of ownership structure and accrual earnings management is presented in Table 4 as follows:

Table 4: Prais-Winsten regression, correlated panels corrected standard errors (PCSEs)

ABAC	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
CONC_resid	004	.004	-1.05	.294	011	.003	
FRGN	.002	.002	1.26	.209	001	.006	
IND	.01	.004	2.24	.025	.001	.018	**
SIZE	.017	.016	1.05	.296	015	.049	
CONC_SIZE	.0003	.0003	1.22	.221	000	.001	
FRGN_SIZE	0002	.0002	-1.22	.224	001	0	
IND_SIZE	001	.0004	-2.25	.024	002	0	**
GRWTH	04	.027	-1.49	.136	092	.013	
LEV	.08	.021	3.78	0	.039	.122	***
2018b	0		•		•	•	
2019	011	0	-45.86	0	012	011	***
2020	012	.001	-8.38	0	015	01	***
2021	006	.004	-1.60	.109	013	.001	
2022	005	.002	-2.29	.022	009	001	**
2023	01	.002	-5.92	0	013	007	***
Constant	169	.179	-0.94	.347	52	.183	
Mean dependent var		0.046		SD dependent var		0.041	
R-squared		0.218		Number of obs		138	
Chi-square		250987.993		Prob > chi2		0.000	
*** p<.01, ** p<.05, * p<.1							

Source: Computed by authors (2025).

The moderated Prais-Winsten PCSE regression results lend some support to Hypothesis H4, which states that company size moderates the association between ownership structure and accrual earnings management (ABAC) in OHADA-listed companies. The model accounts for 21.8% of the variation in ABAC ($R^2 = 0.218$) and is statistically significant ($Chi^2 = 250,987.993$, p < 0.001).

Individual ownership (IND) has a positive and substantial direct effect on accrual earnings management (p = 0.025), suggesting that firms with more individual ownership are more likely to participate in accrual-based earnings manipulation. However, this link declines in larger enterprises, as evidenced by a significant negative interaction term between individual ownership and firm size (IND_SIZE; p = 0.024, Coef. = -0.001). This implies that, while individual ownership may encourage accrual manipulation in smaller organizations, the effect is minimized in larger corporations, potentially due to stronger

governance frameworks, increased openness, and more extensive external scrutiny. In contrast, firm size does not significantly attenuate the effects of foreign ownership (FRGN_SIZE) or ownership concentration (CONC_SIZE), and neither concentration nor foreign ownership has a significant direct impact on ABAC.

Leverage (LEV) shows a positive and significant relationship with ABAC (p < 0.001), aligning with the debt covenant hypothesis that highly leveraged firms manipulate accruals to meet debt obligations. Firm growth (GRWTH) and firm size exhibit no significant direct effect on ABAC. Year effects reveal a steady, significant decline in accrual earnings management from 2019 to 2023 relative to 2018, suggesting enhanced reporting standards or heightened transparency pressures in OHADA markets. These results support aspects of the monitoring hypothesis and agency theory, highlighting that the governance benefits of individual ownership are more pronounced in larger firms. Contextually, they emphasize that firm-level factors, particularly size, influence the effectiveness of ownership structures in curbing profit manipulation in OHADA's weaker institutional and investor protection environment.

5. Conclusion

The study examined the effect of ownership structure on accrual earnings management (AEM) in OHADA-listed companies, including the moderating role of firm size. Results from the non-moderated PCSE model show no significant effect of ownership concentration, individual ownership, or foreign ownership on AEM. However, in the moderated model, individual ownership has a positive and significant effect, indicating that it is generally associated with higher AEM. This effect weakens as firm size increases, suggesting stronger governance in larger firms. Firm size does not significantly moderate the effects of ownership concentration or foreign ownership, and neither shows a direct significant impact. Overall, individual ownership appears to drive AEM mainly in smaller firms within the OHADA region.

These findings carry important implications for regulators, investors, and corporate governance advocates across OHADA member states. Specifically, within the OHADA States, policymakers should prioritize the development and implementation of targeted corporate governance frameworks that address ownership structure dynamics and their implications for earnings management practices. Given the compelling evidence that individual ownership tends to promote accrual-based manipulation, especially in smaller businesses, policy should focus on enhancing individual investors' financial awareness and involvement so they can perform more effective monitoring.

Despite providing useful information, this study has drawbacks. The study's conclusions are limited in their relevance to the broader corporate sector, which includes SMEs and unlisted enterprises, due to its exclusive focus on listed businesses. Second, this research does not account for non-linearities or interaction effects between ownership types and other governance mechanisms, such as the independence of the board or the effectiveness of audit committees.

In order to present a more complete picture, future research could overcome these limitations by extending the sample to include financial institutions or non-listed companies. Future studies should further examine the moderating impacts of institutional gaps, legal origin, and governance quality at the national level across OHADA member states. Such expansions would strengthen the body of knowledge supporting policy and practice and contribute to the scholarly conversation on governance in emerging markets.

Creative Commons License Statement

This research work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit https://creativecommons.org/licenses/by-nc-nd/4.0/. To view the complete legal code, visit https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode.en. Under the terms of this license, members of the community may copy, distribute, and transmit the article, provided that proper, prominent, and unambiguous attribution is given to the authors, and the material is not used for commercial purposes or modified in any way. Reuse is only allowed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author(s)

Pius Etuge Mekolle is a PhD student in the Accounting Department of the University of Buea, Cameroon.

Michael Forzeh Fossung is an Associate Professor and the Director of Student Affairs of the University of Buea, Cameroon.

Hanko Osee is a Senior Lecturer in the Department of Accounting, Faculty of Social and Management Science of the University of Buea, Cameroon.

References

- Alves, S. (2012). Ownership structure and earnings management: Evidence from Portugal. *Australasian Accounting Business and Finance Journal*, 6(1), 57 74. Retrieved from https://www.researchgate.net/publication/290164653 Ownership Structure and Earnings Management Evidence from Portugal
- An, Y., Jin, H., Liu, Q., & Zheng, K. (2022). Media attention and agency costs: Evidence from listed companies in China. *Journal of International Money and Finance*, 124. Retrieved from https://doi.org/10.1016/j.jimonfin.2022.102609

- Attia, E. F., Khémiri, W., & Mehafdi, M. (2023). Does ownership structure reduce the earnings manipulation practice of Egyptian listed firms? Evidence from a dynamic panel threshold model. *Future Business Journal*, 9(1), 34. https://doi.org/10.1186/s43093-023-00213-4
- Boateng, A., Cai, H., Borgia, D., Gang Bi, X., & Ngwu, F. N. (2017). The influence of internal corporate governance mechanisms on capital structure decisions of Chinese listed firms. *Review of Accounting and Finance*, 16(4), 444-461. https://doi.org/10.1108/RAF-12-2015-0193
- Beck, N., & Katz, J. N. (1995). What to do (and not to do) with time-series cross-section data. *American Political Science Review*, 89(3), 634-647. Retrieved from https://www.cambridge.org/core/journals/american-political-science-review/article/abs/what-to-do-and-not-to-do-with-timeseries-crosssection-data/0E778B85AB008DAF8D13E0AC63505E37
- Beneish, M. D. (2001). Earnings management: A perspective. *Managerial finance*, 27(12), 3-17. https://dx.doi.org/10.2139/ssrn.269625
- Ding, Y., Zhang, H., & Zhang, J. (2007). Private vs state ownership and earnings management: Evidence from Chinese listed companies. *Corporate governance: an international review*, 15(2), 223-238. https://doi.org/10.1111/j.1467-8683.2007.00556.x
- Brown, K., Chen, V. Y., & Kim, M. (2015). Earnings management through real activities choices of firms near the investment–speculative grade borderline. *Journal of Accounting and Public Policy*, 34(1), 74-94. https://doi.org/10.1016/j.jaccpubpol.2014.09.002
- Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The accounting review*, 77(s-1), 35-59. Retrieved from https://www.jstor.org/stable/3203324
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 48(2), 147-160. https://doi.org/10.2307/2095101
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65-91. Retrieved from https://www.jstor.org/stable/258887
- Dong, N., Wang, F., Zhang, J., & Zhou, J. (2020). Ownership structure and real earnings management: Evidence from China. *Journal of Accounting and Public Policy*, 39(3). Retrieved from https://doi.org/10.1016/j.jaccpubpol.2020.106733
- Dyck, Alexander; Morse, Adair; Zingales, Luigi (2023). How pervasive is corporate fraud?. *Review of Accounting Studies*. 29: 736–769. https://doi.org/10.1007/s11142-022-09738-5
- Ellili, N. O. D (2020). Environmental, social, and governance disclosure, ownership structure and cost of capital: Evidence from the UAE. *Sustainability*, 12(18). https://doi.org/10.3390/su12187706

- Fan, J. P., & Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of accounting and economics*, 33(3), 401-425. https://doi.org/10.1016/S0165-4101(02)00047-2
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman. http://dx.doi.org/10.2139/ssrn.263511
- Grimaldi, F., & Muserra, A. L. (2017). The effect of the ownership concentration on earnings management. Empirical evidence from the Italian context. *Corporate Ownership & Control*, 14(3), 236-248. https://doi.org/10.22495/cocv14i3c1art9
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting horizons*, 13(4), 365-383. https://dx.doi.org/10.2139/ssrn.156445
- Hendi, H., & Lisniati, S. (2020). Analisis pengaruh karakteristik komite audit dan struktur kepemilikan terhadap manajemen laba pada perusahaan yang terdaftar di Bursa Efek Indonesia. *Global Financial Accounting Journal*, 4(1), 52-67. http://dx.doi.org/10.37253/gfa.v4i1.705
- Houqe, M. N., Monem, R. M., Tareq, M., & Van Zijl, T. (2016). Secrecy and the impact of mandatory IFRS adoption on earnings quality in Europe. *Pacific-Basin Finance Journal*, 40, 476-490. https://doi.org/10.1016/j.pacfin.2016.08.002
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305-360. https://doi.org/10.1016/0304-405X(76)90026-X
- Jiang, Y. (2020, December). Meanings, motivations and techniques of earnings management. In 2020 3rd International Conference on Humanities Education and Social Sciences (ICHESS 2020) (pp. 141-146). Atlantis Press. https://www.researchgate.net/deref/https%3A%2F%2Fcreativecommons.org%2Flicenses%2Fby-nc%2F4.0%2F? tp=eyIjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIi wicGFnZSI6InB1YmxpY2F0aW9uIn19
- Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193-228. https://doi.org/10.2307/2491047
- Kablan, M. A. (2020). The effect of ownership structure on earnings management practices toward achieving the real comprehensive income: An applied study on the listed companies in the Libyan stock market. *Journal of Accounting and Auditing: Research & Practice*, 2(2), 1-11. http://dx.doi.org/10.5171/2020.508160
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of accounting and economics*, 39(1), 163-197. https://doi.org/10.1016/j.jacceco.2004.11.002
- Lee, B. B., & Choi, B. (2002). Company size, auditor type, and earnings management. *Journal of Forensic Accounting*, 3, 27–50.
- Lobo, G. J., & Zhou, J. (2006). Did conservatism in financial reporting increase after the Sarbanes-Oxley Act? Initial evidence. *Accounting horizons*, 20(1), 57-73. http://dx.doi.org/10.2308/acch.2006.20.1.57

- Mazumder, M. M. (2017). Top-executives compensation: the role of corporate ownership structure in Japan. *The Journal of Asian Finance, Economics and Business,* 4(3), 35-43. Retrieved from https://koreascience.kr/article/JAKO201716463831077.pdf
- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20, 293-315. https://doi.org/10.1016/0304-405X(88)90048-7
- Nguyen, A. H., Nguyen, L. H., & Doan, D. T. (2020). Ownership structure and earnings management: Empirical evidence from the Vietnam real estate sector. *Real estate management and valuation*, 28(2), 37-51. https://doi.org/10.1080/23311975.2021.1908006
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of accounting and economics,* 42(3), 335-370. https://doi.org/10.1016/j.jacceco.2006.01.002
- Scott, A. J. (1995). The geographic foundations of industrial performance. *Competition & Change*, 1(1), 51-66. https://doi.org/10.1177/102452949500100104
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(3), 461-488. Retrieved from https://www.jstor.org/stable/1833044
- Tran, M. D., & Dang, N. H. (2021). The impact of ownership structure on earnings management: The case of Vietnam. *Sage Open,* 11(3). https://doi.org/10.1177/21582440211047248
- Wandji, G., & Nebasi, A. W. (2022). Situation of Earning Management After Revision of the OHADA Accounting Standards Adopted on January 26, 2017. *Law and Economy*, 1(4), 47-66. Retrieved from https://www.paradigmpress.org/le/article/view/296
- Warfield, T. D., Wild, J. J., & Wild, K. L. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of accounting and economics*, 20(1), 61-91. https://doi.org/10.1016/0165-4101(94)00393-J
- Yeo, G. H., Tan, P. M., Ho, K. W., & Chen, S. S. (2002). Corporate ownership structure and the informativeness of earnings. *Journal of Business Finance & Accounting*, 29(7-8), 1023-1046. Retrieved from https://doi.org/10.1016/S0165-4101(02)00047-2
- Yu, F. F. (2008). Analyst coverage and earnings management. *Journal of Financial Economics*, 88(2), 245-271. https://doi.org/10.1016/j.jfineco.2007.05.008
- Zang, A. Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The accounting review*, 87(2), 675-703. Retrieved from https://www.jstor.org/stable/23245619