

## METHODS

## Corporate attributes and creative accounting of listed consumer firms in Nigeria

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This study looks into the relationship between corporate characteristics and inventive accounting in Nigeria's listed consumer firms. A correlational research design was employed, and the size of the sample consisted of 20 consumer firms listed on the Nigerian Exchange Group for a period of 10 years (2011–2020), both inclusive. A regression model was employed as the technique for data analysis. The findings of the study reveal that financial distress, surplus cash flows, and audit remuneration have a statistically significant effect on the creative accounting of listed consumer firms in Nigeria, while only gearing ratio was found to have an insignificant effect on the creative accounting of listed consumer firms in Nigeria. Therefore, it is necessary and desirable for the management of the listed consumer firms in Nigeria to expand their asset base and increase the scheme of their functions with a view to having effective and efficient management of their scarce resources (surplus cash flows) while decreasing the quantum of remunerations paid to auditors, as they have empirically been found to be of strong influence on the creative accounting of listed consumer firms in Nigeria. The boards of directors of the listed consumer goods firms in Nigeria, in collaboration with the Securities and Exchange Commission and the Financial Reporting Council of Nigeria, should come up with a whistleblowing strategy aimed at ensuring strict compliance with the local and global reporting standards, as this will assist in reducing managerial opportunistic tendencies among the listed consumer firms in Nigeria.

**Keywords:** surplus cash flow, audit remuneration, creative accounting, consumer firms, Nigeria

### Introduction

Creative accounting is considered by various researchers as an effort by managers to intentionally change or adjust the annual reports and accounts through the application of certain accounting techniques and procedures, such as determining long-term assets, adjusting financial commitments (expenses) or income items, or adopting available procedures with a view to maneuvering non-long-term dividends (1). The primary essence of creative accounting is to prevent the manipulation of non-internal accounting disclosure procedures with a view to encouraging specific demands from interested parties. Therefore, creative

accounting is an unethical activity perpetrated in the financial statements and accounts that could compromise the users' confidence in the amounts altered as financial information (2, 3).

Creative accounting is indeed considered a complex and prominent field in financial accounting. It is not usually regarded as an abnormal practice of accounting information since it is not a profit-based manipulation of accounting information, but it is often perceived as an attempt at data manipulations. This is more likely related to the choice of accounting approaches that are intentionally selected by the managers for particular motives under the constraints of Statement of Accounting Standards (SAS),

which management adopts in the event of not reaching their targeted profit (3). Moreso, managers seize their positions and capabilities stipulated as per the SAS in gathering financial information so as to adjust the financial figures (4).

Corporate managers usually maneuver their accounting information with a view to satisfying their parochial yearnings and aspirations (5). For that reason, the groundwork of accounting information may be carried out in a distinct manner based on its ability to satisfy various interested parties' demands (both interior and exterior stakeholders). The accounting information, therefore, must be consistent with the prevailing reporting ethics before it is made available to the external stakeholders. These ethics allow managers autonomy and flexibility in selecting the appropriate procedure of financial evaluation upon which accounting information preparation is based (6). It was revealed that, as a result of unethical financial misappropriations, specific international firms along with domestic entities were liquidated. The most popular of such financial misappropriations is the possibility of adjustments brought about by creative reporting, which is adopted as a parameter being put in place by managers with a view to taking full advantage of the company's resources and thereby reducing the creativity in accounting information. This can be perpetrated through adjusting or maneuvering the adoption of [Generally Accepted Accounting Practices (GAAP), (2, 3)].

Indeed, the latest scenarios were those of Intercontinental Bank Plc and Oceanic Bank Plc, which were caught guilty of diverting and embezzling their equity holders' funds devoid of compliance with legal and regulatory frameworks (2). Although the banks have been disclosing favorably and continuously increasing dividends, which is clearly non-regular during periods in general. Similarly, the current economic recession in Nigeria, which has resulted in severe economic hardships and an unfavorable investment landscape that has led to the winding up of numerous corporate entities, is a strong driver of aggressive or creative accounting. These events, in tandem with available scenarios, were also perceived to occur, albeit with a lack of proper control and supervision by both interior and exterior auditors (7). This has resulted in numerous conflicts and debates on the part of shareholders. Consequently, there are a lot of controversies in the minds of shareholders about the effectiveness and validity of financial information disclosed or made available by the firms' managers.

More so, for the purpose of safeguarding the aspirations of both existing and prospective shareholders, the demand for stringent interior and exterior control instruments should be put in place with a view to tackling the managerial functions in order to lower the agency cost (3, 8). The majority of companies finance their activities through debt options in order to strengthen their profitability. If a company tries to employ new credit financing, lenders often employ several measures to make their doubts about the borrowing entity's

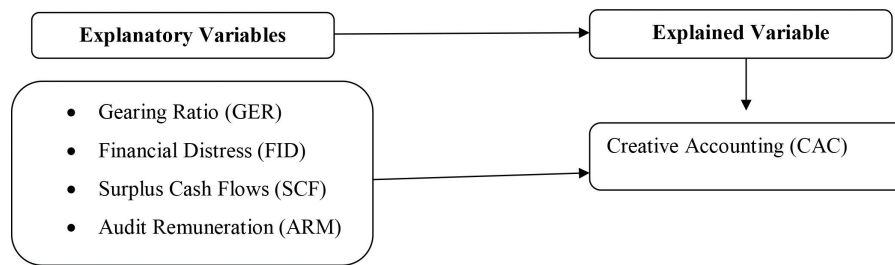
capability of refunding their borrowed funds understandable (8, 9). Again, they also make sure that the borrowed funds are effectively utilized for the stated purpose instead of being diverted for contrary objectives.

Furthermore, the changing functional areas of the company will be conducted by the lending institutions in order to ensure strict and effective compliance with the debt servicing terms and conditions (10). In a situation where the company is found to have too many credit obligations, the first evidence of financial syndrome has been exposed. Financial distress is the combination of debt service obligations and an inability or decrease in dividend payouts (11). Similarly, where the entities recorded huge cash receipts (inflows), managers can decide to inject a portion of such available funds into nonviable investments, albeit for their own selfish gains, which results in making the entity unprofitable. This event occurs due to inefficiencies in the controlling measures of relevant interested parties and how the company's surplus cash resources can be effectively utilized (12).

Indeed, the quantum of audit remunerations may support the symbiotic association involving management and auditors and thus interfere with the auditor's autonomy, leading to anomalous company profitability (3, 6). The world financial crisis that has revealed numerous companies' their creative attitudes in an effort to deepen their competitive advantage has clearly exposed the accounting information to enquiry, and the listed consumer firms in Nigeria were not an exception. Based on the aforementioned arguments and debates, this study seeks to examine if corporate attributes and audit fees can help curb the creative tendencies of listed consumer firms in Nigeria.

Most importantly, the accounting scandals of Skye Bank, Sterling Bank in 2016, and Arik Airlines among others, have cost the Asset Management Corporation of Nigeria (AMCON) the whopping sum of US\$366 million to salvage the company from collapse (4). Examples of such topical issues are the Nigerian Code of Corporate Governance (NCCG) reports, social responsibility reports, and remuneration reports (13). Existing and prospective shareholders have lost numerous billions of dollars through the involvement of financial analysts and professionals with firm management and board members to fabricate and intentionally overestimate firms' financial reports and accounts (2, 3, 6).

As a result of unscrupulous activities by relevant stakeholders that have culminated in the illiquidity or sporadically the winding up of corporate entities. Other domestic managing directors of foreign companies, including Lever Brothers and Cadbury Plc, were dismissed and replaced with foreigners. Other corporate entities positioned within bankruptcy were mentioned as having sacrificed huge amounts of money as a result of professional misbehavior by their official receivers (2, 3). Contrary to the right of safeguarding the expectations of relevant stakeholders,



**FIGURE 1** | Conceptualization of variables. Compiled by the researchers (2022).

accountants and auditors could be partially accountable for issues of bankruptcy and liquidation of corporate entities in particular and financial institutions in the country at large.

Thus, the primary objective of this research study is to examine the effect of corporate attributes on creative accounting of listed consumer firms in Nigeria. The study hypothesized in null form that corporate attributes on the creative accounting of listed consumer firms in Nigeria.

The present study seeks to examine the effect of corporate attributes on the creative accounting of listed consumer firms in Nigeria. Other relevant sections of this study were arranged thus: section two is based on a literature review, and section three discusses the methodology. It follows with the analysis and interpretation of data in the fourth section, while the conclusion and recommendations are discussed in the final section.

## Review of literature and theoretical explanations

This section discusses prior studies on corporate attributes and creative accounting of listed consumer firms in Nigeria. Accordingly, special emphasis was placed on the connection between corporate attributes and creative accounting of listed consumer firms in Nigeria. Hence, the majority of the prior literature has focused much effort on investigating the correlation linking monitoring characteristics and creative accounting in an economy that varies from a developing country such as Nigeria, choosing various combinations of explanatory/explained variables, study periods, and industries that are clearly distinct from the current study. Hence, there is a dearth of evidence, while the literature has been inconsistent and grossly inadequate, indicating practical, theoretical, and methodological flaws for future studies to investigate the nexus flanked by corporate attributes and creative accounting of listed consumer firms in Nigeria (2).

## Gearing and creative accounting

Gearing can be used as a strong control parameter to tackle the attitude of huge creative accounting that could possibly

affect the firm (14). Argued that creditors may usually monitor the managerial function due to the fact that it is the major driver encouraging repayment of borrowed funds. Extant studies revealed that small noncurrent emoluments are being disbursed to the managers of great levered companies. The company may embark on acquiring huge leverage if the amount of debt is greater than the credit limit (15). Assert that a company with a strong dimension of debt will be more inclined to greater risk, which may likely bring about a huge interest rate. The latest research revealed that gearing expands the possibility for creative accounting, which adjusts to prevent credit terms and conditions contraventions (16–18). Gearing improves greatly due to changes in debt level (7, 19, 20). The practice of employing debt to finance the company's investment or project indicates that, too much gearing has significantly affected the creative accounting of listed firms (10).

Similarly, Ref. (21) investigated the influence of gearing on the level of creative accounting employed and revealed a negative correlation with creative accounting (4). It reveals that debts influence creative accounting negatively. When creditors are making strict supervision on the companies, the managers will have little or no enthusiasm to perpetrate creative accounting (22–24). On the contrary, some existing research has revealed no significant association between corporate attributes and creative accounting practices (25–27). Consistent with the debates, there are conflicting results on whether gearing ratio (leverage) can influence the capacity of managers in order to embrace creative accounting.

## Financial distress and creative accounting

If a firm is too highly leveraged and cannot satisfy its financial expectations, it might fall into a liquidity crisis. Entities that are inclined to insolvency are, in most cases, rocked by financial predicaments that may lead them to financial distress. According to Ref. (28), the company might face liquidation or be reorganized (11). Perceived financial distressed companies as a situation where a memorandum of understanding with lenders of a company is not complied with (infringed) as earlier prescribed by both parties. Again, Ref. (29) considers distressed companies as those entities

with a higher gearing ratio than one or lower interest coverage than one. There exist conflicting views on the association linking financial distress and creative accounting. While some scholars assert that managers embark on creative accounting when the company is sound and healthy financially, others are of the opinion that creative accounting occurs when the company is bankrupt. Managers would perpetrate creative accounting if the company was profitably sound and its financial condition was stable (10).

According to Ref. (30), managers would have no capacity to perpetrate creative accounting prior to insolvency, and thus, they cannot speculate on the potential of such unscrupulous activities. Conversely, managers usually embark on creative accounting in order to hide forbidden activities (11, 21). It was asserted that creative accounting emanated from companies that experienced financial distress situation, and this may create room for managers to maneuver accounting information (31).

## Surplus cash flow and creative accounting

Under this perspective, firms that inject funds at a negative net present value may cause the company's share price to drastically fall to the barest minimum, and if such an event occurs, equity-holders can exercise their influence to push them out of their respective offices (19). In order to curtail this scenario, managers have a propensity to employ creative accounting in disclosing their company's earnings in order to portray positive and remarkable performance (32). Thus, managers are more inclined to provide exaggerated accounting information in lieu of dividends with the sole objective of facilitating the prediction of the shareholders, with emphasis on share price and potential growth of the company (9).

Accordingly, a larger proportion of creative accounting practices that were recorded in companies with surplus cash might be attributed to companies having unrestricted accruals. However, Ref. (33) argues that surplus cash available may establish room for the management to perpetrate creative accounting. Hence, there exists a significant positive correlation between surplus cash flow and creative accounting (5, 16).

## Audit remuneration and creative accounting

Prior literature has focused more effort on examining the nexus linking audit fees and creative accounting. There are literature findings that firms investigated by the "Big Four" audit companies are more inclined to alleviate the possibility of creative accounting largely because of

sufficient and well-packaged fees (34). However, Ref. (24) investigated that practicing accountant can participate fully in preventing creative accounting by means of unrestricted earnings if they are economically autonomous. According to Ref. (35), creative accounting in companies audited by Big Four companies has a statistically positive connection with potential financial performance compared to companies audited by non-Big Four audit firms. A professionally trained auditor has more skills and capabilities to uncover unrealistic financial maneuvers, disclose substantial discrepancies and misappropriations than an incompetent auditor, due to their skills, capabilities, professionalism, and resources to safeguard the financial report from imperfections.

Similarly, Ref. (35) asserts that auditors can strengthen the effectiveness of financial disclosure by tackling creative accounting disclosure of dividends by the management. This finding shows that auditors contribute immensely to prohibiting and reducing creative accounting. However, Ref. (36) indicates that there is a negative connection linking creative accounting and auditor remunerations. Hence, managers may not be able to perpetrate creative accounting in respect of income smoothing, especially when their companies are supervised or investigated by Big Four audit companies. However, Ref. (5) examines and reveals no significant correlation that audit remuneration has in mediating the influence on the association with creative accounting. The empirical results indicate that sufficient audit remuneration paid to auditors is likely to eradicate creative accounting practices by managers (6).

By and large, the review of the prior studies shows that the effect of corporate attributes on the creative accounting of listed consumer firms in Nigeria remains unresolved, conflicting, and inconclusive. Based on the earlier theoretical explanations, the opportunistic theory was employed as the major underpinning theory of the study.

## Methods and design

In this section, both correlational and analytical designs were used in studying the effect of corporate attributes on the creative accounting of listed consumer firms in Nigeria. A correlational design was used as it seeks to explain the association between the independent variables (individually and cumulatively) as well as the dependent variable. Indeed, post-positivism was adopted as the paradigm of this study. Moreso, quantitative and deductive reasoning were used as the research approach and method, respectively. The population of the study consisted of the 28 listed consumer firms in Nigeria as of December 31, 2020, out of which a sample size of 20 listed consumer firms were captured for a period of 10 years (2011–2020). Therefore, filtering was employed as the sampling technique for this study, as it assisted in capturing only those companies with complete and available data throughout the period of the study.



Most importantly, the rationale behind the selection of the 10-year study period was based on the fact that a series of socio-economic, political, and financial crises have taken place during the period, such as the country's general elections in 2011, 2015, and 2019; the country's economic recession of 2016 through 2017; and the global corona virus pandemic (COVID-19) from 2019 through 2020, which are highly imperative to be mentioned at this juncture. Thus, they have direct or indirect, positive, or negative, bearing on the creative accounting practices by corporate entities during the period.

Moreso, consumer firms, particularly in the Nigerian context as an emerging economy, have been considered one of the critical sectors whose contribution to the economic growth of Nigeria, especially in terms of gross domestic product (GDP), cannot be overestimated. Specifically, the annual financial reports for most of the listed consumer firms in Nigeria were associated with several forms of creative accounting practices that have become a serious impediment to the going concern principle of most quoted firms in Nigeria. A typical form of this scenario was the financial scandals perpetrated by the management of Cadbury Nigeria Plc and Lever Brothers Nigeria Plc in 2006, among others.

The underlisted regression model is adopted to integrate the hypotheses of the study.

$$\text{Table 1 } CAC_{it} = \beta_0 + \beta_1 GER_{it} + \beta_2 FID_{it} + \beta_3 SCF_{it} + \beta_4 ARM_{it} + U_{it}$$

CAC = Creative accounting proxied by (discretionary accruals), GER = Gearing ratio, FID = Financial distress, SCF = Surplus cash flows, ARM = Audit remuneration,  $\beta_1$ — $\beta_4$  = Coefficients of the predictor variables,  $\beta_0$  = Intercept, and  $\mu$  = Idiosyncratic error term (disturbance term).

## Results and discussion

**Table 2** shows that the average level for creative accounting is 0.058, with minimum and maximum values of 0.05 and 0.23, respectively. The gearing ratio's standard deviation was calculated to be 0.453; the minimum and maximum values were 0.09 and 0, respectively. This shows that a significant portion of the listed consumer companies' capital was financed by debt, though at a lower level than equity capital. As claimed by Ref. (30), the average of financial distress is determined to be 2.013, which is marginally higher than the ideal value of 1.8 for a firm classified as financially healthy. The outcome demonstrates that surplus cash flows are simultaneously varying from 0.35 to 0.88 as minimum and maximum values. This means that the positive result portrays the firm as experiencing free surplus cash flow, which means the consumer firms are making surplus earnings, while the negative result shows that the

firms are experiencing cash flow difficulties to finance their investments while facilitating the value and growth of the firms. The value of 0.468 describes the average of surplus cash flows, while 0.459 signifies a slight change in surplus cash flows from the standard value. Audit remuneration shows minimum and maximum values of 4.83 and 13.56, respectively. The average value of 9.386 signifies a slight change in the amount of audit remunerations relative to the standard audit remuneration estimates.

**Table 3** depicts the association linking the regressors and regressands individually and cumulatively. It portrays that gearing, financial distress, and audit remuneration have positive correlations with creative accounting, while surplus cash flows have indicated a negative correlation with creative accounting for the listed consumer firms in Nigeria. Regarding the outcome shown in the correlation matrix, it is evident that there is a positive link between gearing ratio, financial distress, and surplus cash flows; however, there is a negative correlation between audit remuneration and financial distress. However, there is a positive correlation between excess cash flows and financial distress, indicating that businesses with surplus free cash flows are robust and economically viable. Finally, financial distress and audit remuneration reveal a negative correlation. Interestingly, the correlation matrix also reveals that all the explanatory variables (GER, FID, SCF, and ARM) have an approximate correlation value of 0.27, 0.39, 0.23, and 0.18, respectively. This signifies that the explanatory variables have values that are lower (i.e., not greater) than 0.50, implying the absence of high correlation or a lack of redundancy in the selection of the explanatory variables.

Moreover, the multicollinearity test was carried out, and it depicts the expected output of VIF and tolerance values of less than 10 and 1, respectively. Meanwhile, the data employed in this study does not have any serial or multicollinearity issues among the regressors.

**TABLE 1 |** Operationalization of variables' measurement and definition.

S/Nos.	Variables' Name	Acronyms	Measurements	Source(s)
1.	Creative accounting	CAC	Using modified Jones model	(3, 5, 6, 17, 22)
2.	Gearing	GER	Proportion of firm's total debt to total assets	(10, 16, 18, 37, 38)
3.	Financial distress	FID	Using Altman Z-score model	(16, 37)
4.	Surplus cash flows	SCF	Proportion of firm's net cash flows from operation to total assets	(16, 19, 37)
5.	Audit remuneration	ARM	Natural logarithm of audit remuneration	(13)

Nigerian Exchange Group (NGX), (39).

From **Table 4**, it indicates the total level of association linking the criterion variable and parameters (regressors) is described by the coefficient of determination ( $R^2$ ) as 0.7864. It signifies that corporate attributes explain approximately 79% of the variance, and the modified coefficient of determination (modified  $R^2$ ) is 0.7281, amounting to 73% of the variance in managerial opportunistic tendencies. This signifies that about 73% of the entire variations in creative tendencies of listed consumer firms in Nigeria are explained by the cumulative effect of corporate attributes. The residual (outstanding value) of 27% is determined by other variables not included in the econometric model. The Fisher's value is 80.17 with a probability value of 0.0000, signifying a 1% significance level. This indicates that the model employed in the study is better, adequate, and compatible with the explanatory variables of the study.

## Gearing and creative accounting

From the regression result in **Table 4**, gearing has a positive but insignificant effect on the creative accounting of listed consumer firms in Nigeria. The beta value is 0.0816, with a corresponding  $T$ -value and  $P$ -value of 4.74 and 0.301, respectively. This portrays that there is no significant association linking gearing ratio and creative accounting. By implication, any adjustment/alteration in the level of gearing ratio could not likely influence the creative tendency of the

**TABLE 2** | Descriptive statistics.

Variables	Minimum	Maximum	Mean	Std. deviation	Observations
CAC	0.05	0.23	0.058	0.046	200
GER	0.09	0.38	0.486	0.453	200
FID	0.06	9.01	2.013	1.901	200
SCF	0.35	0.88	0.468	0.459	200
ARM	4.83	13.56	9.386	8.475	200

Stata output results.

**TABLE 4** | Summary of regression results.

Variables	Coefficients	$T$ -values	$P$ -values	Tolerance/VIF	Hypotheses decision
(Constant)	-0.0477	-5.32	0.012	-	-
GER	0.0816	4.74	0.301	0.731563/1.56	Rejection failed
FID	0.0683	3.88	0.000	0.348362/1.68	Rejected
SCF	0.0824	5.16	0.000	0.583148/1.59	Rejected
ARM	0.0307	6.18	0.000	0.613816/1.63	Rejected
$R^2$			0.7864		
Adjusted $R^2$			0.7281		
$F$ -Statistics			80.17		
$F$ -Significance			0.0000		

Stata output results.

**TABLE 3** | Correlation matrix.

Variables	CAC	GER	FID	SCF	ARM
CAC	1.0000				
GER	0.2736	1.0000			
FID	0.3852	0.1906	1.0000		
SCF	-0.2314	0.1381	0.1544	1.0000	
ARM	0.1843	0.1182	-0.3106	0.4108	1.0000

Stata output results.

listed consumer firms in Nigeria. Hence, it is highlighted that if the gearing ratio is strengthened, it might likely influence creative accounting positively and significantly. Thus, surplus funds can be channeled to viable investments, or projects that optimize value and performance. The implication of this action is that the regulatory agencies of the listed consumer firms should put in place proactive measures aimed at revamping the gearing ratio, which may encourage creditors to design effective controlling instruments to check managers' activities. The finding is in tandem with the study conducted by (25–27). Nevertheless, it contradicted the findings documented by (4, 7, 10, 22–24). Hence, the finding fails to discard Hypothesis one ( $H_{01}$ ), which stated that there is no significant influence of gearing ratio on the creative accounting of listed consumer firms in Nigeria.

## Financial distress and creative accounting

To ascertain the impact of the aforementioned relationship, a probability statistic of 0.000 with a corresponding  $t$ -value of 3.88 and beta statistic of 0.0683 were revealed. This shows a statistically positive and significant correlation with the creative accounting of the listed consumer firms in Nigeria. Because financial distress and creative accounting have a favorable link, the management of the consumer enterprises on the list will use creative accounting when the firms

are experiencing financial distress. This is compatible with the arguments of (2, 9, 21, 31). However, it is contrary to Ref. (30), among others. The policy implication for the managements of listed consumer firms is that effective measures should be put in place to focus on investments that generate more cash inflows, wrap the gearing ratio, and implement strategies that can sustain the financial condition of the companies, such as effective supervision of the financial transactions, target-setting that could increase earnings, and encourage the human resources financially. The results demonstrate that the study's second hypothesis (H02), which asserts that the financial crisis has no bearing on the creative accounting of listed consumer enterprises in Nigeria, was ignored.

## Surplus cash flows and creative accounting

The statistical results show that the beta statistic of surplus cash flows is 0.0824 and the  $t$ -statistic is 5.16, respectively, in an attempt to evaluate the claim that such flows have no appreciable influence on the innovative accounting of listed consumer firms in Nigeria (i.e., a probability statistic of 0.0000). This demonstrates that the creative accounting of listed consumer companies in Nigeria is statistically influenced by surplus cash flow. This means that for any 8% increment in the surplus cash flow of listed consumer firms in Nigeria, it will bring about 5% increases in creative accounting. This is not surprising at all, as the larger the SCF, the more managers of the listed consumer firms will be tempted to use creative accounting and vice versa. The relevant agencies should be advised when formulating their strategy on surplus cash flow. This can be carried out by focusing on the drivers that may result in optimizing the company's profit through reinvestment of the surplus cash flows in other profitable ventures. The finding is in tandem with the work documented by (32, 33). However, it is contrary to the findings documented by (11, 15, 37). This finding demonstrates why hypothesis three (H03) should be disregarded. Consequently, the H03 is removed.

## Audit remuneration and creative accounting

From the regression result illustrated earlier, audit remuneration revealed a beta-value and  $t$ -value of 0.0307 and 6.18, respectively. This indicates a 1% significance level. This shows that audit remuneration has a positive and significant influence on the creative accounting of consumer firms in Nigeria. By implication, any 3% increment in auditors' remuneration at the listed consumer firms in Nigeria will bring about 6% changes in creative accounting.

This is not strange at all, simply because the higher the amount of audit remuneration paid to external auditors, the less or no influence (independence) such external auditors can exercise over the financial reports of the listed consumer firms, and hence, the greater the level of creative tendencies. Nevertheless, the policy implications of the listed consumer firms underline the need to lower the amount offered to auditors as remuneration. This is to drastically minimize the creative accounting practices by managers of the quoted consumer goods companies in Nigeria. However, the empirical result is contrary to the work of Refs. (35, 36). Hence, the hypothesis four (H04) of the study is rejected.

Sequel to the empirical findings of the study, the relevant regulatory agencies, and institutions, especially the Financial Reporting Council of Nigeria (FRCN) and the Securities and Exchange Commission (SEC), should work assiduously by initiating a whistle-blowing strategy tailored at facilitating quality assurance in corporate accounting information disclosure and strict adherence to legal and regulatory frameworks by the listed consumer firms. If well articulated and implemented, it will assist tremendously in minimizing the extent of creative accounting practices by the listed Nigerian consumer firms.

## Conclusion and recommendations

In tandem with the results of the study, it is concluded that gearing ratios, have a negative and insignificant effect on the creative accounting of listed consumer firms in Nigeria. Indeed, it is also concluded that financial distress has a positive but insignificant impact on the creative accounting of listed consumer firms in Nigeria. It is concluded that SCF have a negative significant influence on the creative accounting of listed consumer firms in Nigeria. Finally, it is concluded that audit remuneration has a positive and significant impact on the creative accounting of listed consumer firms in Nigeria.

Since the empirical finding shows that creative accounting could be perpetrated when the firm is in bankruptcy with inadequate surplus cash flows and huge audit fees, the practice of creative accounting reduces the effectiveness and reliability of accounting information. This could possibly mislead the potential shareholders in their decision-making process. There is an urgent need for regulatory institutions and policy-making agencies to fine-tune and initiate better laws that enhance the reliability and effectiveness of accounting information disclosures. This is in order to safeguard the aspirations of various decision-makers within and outside the firms.

Hence, it is very necessary and desirable for the management of the listed consumer firms to maintain the present gearing ratio so as to have a stable financial position and solvency level. The management should,

as a matter of urgency, focus on increasing their asset base. It is also imperative that they deepen the coverage of their transactions. This will ultimately enhance the surplus cash inflows while minimizing the remuneration offered to auditors.

## Author contributions

JY Contributed to the creation of the research construct, the formulation of the research topic, the drafting of the abstract, the introduction, the literature review and methodology of the manuscript, and the general review of the manuscripts. MA Contributed to the areas of downloading relevant and scholarly research manuscripts for subsequent review, data entry in the excel sheet, and data analysis. MS Contributed to the drafting of section five (conclusion and recommendations); the article references; and the article review. All authors contributed to the article and approved the submitted version.

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## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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