

Creative Accounting and Creative Entrepreneurship

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Abstract

This study investigated creative accounting and creative entrepreneurship in the manufacturing enterprise in Nigeria from 2011-2022 using Panel Data from annual financial statement of quoted companies. Data for the study were obtained from secondary sources and analysed using Eview10 statistical package namely: Unit Root Test, Cointegration test; among others. Data for the work were drawn with purposive sampling techniques from samples of observations in Nigeria stock exchange statistical Bulletins. The co-integration .test revealed a long-term relationship among the explanatory variable (discretionary accruals and related party transaction) and response variable (return on equity). Therefore, overall we reject null hypothesis and alternate that there is significant (short-run and long-run) relationship between employed variables but in favour with creative accounting and creative entrepreneurship strong correlates. It can be recommended that it can be recommended that accountants should absorbed product innovation, process innovation and market innovation in the enterprise to boost the return on equity in the long-term and short-term. Business enterprise should provide all necessary resources needed to understand the impact of creative innovation on stimulating growth and development on entrepreneurship sensitivity in the firms. Business merchandizing expert should work together to tighten compliance in the firms in order to enhance possible innovation strategies on product, process and market to increase the return on equity of the enterprise. Creative entrepreneurship training should be conducted frequently among accountants.

Keywords: *Creative Accounting, Return on Equity, Creative Entrepreneurship, Discretionary Accruals, Related Party Transactions*

BACKGROUND

The manufacturing sector is one of the biggest cornerstones of many national economies; it is a crucial sector to the generation of structural change, productive jobs and a sustained economy (Herman, 2015). Supportive of the above assertion is the notion that highlights the creative entrepreneurship of this sector. According to Naz (2016), the concept “performance” is a word that is coined from the original French word “parfounir”; which means to bring through, to carry out, to do or to bring forth. Khan, *et al.* (2015) asserts that performance is used to indicate

work towards the attainment of a particular goal, which include the combination of human, fiscal and natural resources. Nirmal (2004) posits that performance not only indicates the demonstration of an action but also connotes the satisfactory monetary output of an organization.

Conceptually, Khan, *et al.* (2015) asserts that creative accounting represents operation of an organization to carry out monetary actions. It principally reflects business sector outcomes and results that show overall financial health of the sector over a specific period of time (Naz, 2016). In a broader sense, creative accounting is the process of measuring the results of a firm's policies and operations in monetary terms (Verma, 2018). It also refers to the degree to which financial objectives have been accomplished. Company's creative accounting not only plays a role in increasing the market value of that specific organization but also results to growth of the whole industry which ultimately leads to the overall prosperity of the economy (Banafa, *et al.* 2015). Creative accounting has been the primary concern of business practitioners as it relates to an organization's health and ultimate survival. It is also defined as the measurement of the results of a firm's strategies, policies and operations in monetary terms; the results reflected in return on assets and return on investments (Audax, 2018). Creative accounting is also measured by profitability, financial efficiency and repayment capacity (McWilliams & Sugel, 2010). In addition, Charles, *et al.* (2018) posit that creative accounting is the measurement of how well a firm use its assets from its primary mode of business to generate income. At microeconomic level, creative accounting is the direct result of managing various economic resources and of their efficient use within operational, investment and financing activities (Burja, 2010). Pointedly, Singh and Pandey (2008) assessed creative accounting with econometric indicators of current ratio, liquid ratio, receivables turnover ratio and working capital to total asset. Whereas, Rayan (2008) consider creative accounting assessment expressed by earnings before interests and taxes (EBIT). Akintoye (2008) opines that, creative accounting correlates with economic value added (EVA), return on equity (ROE), operating profit margin (OPM) and earnings per share (EPS). More so, recent literature from various countries have expressed the metrics of creative accounting of companies as net operating profit (Rahoman, *et al.* 2010), return on total assets, return on invested capital and return on assets.

Conventionally, the performance of an organization shows the level of improvement made by a firm within a period of time. This implies that firms' creative accounting serves as a barometer that measures the success of the company which is used as a bench mark for investors (Eitokpa, 2015). The question about financial decision of a company also borders on firm's performance with all agents namely, owners, managers, potential investors, banks, creditors, business partners, employees and government are always interested in models that help to analyse and predict the performance of companies. According to Kolawole (2013), organizations seek to improve creative accounting, create value in terms of additional wealth for their shareholders and increase satisfaction to their customers and other stakeholder. In Nigeria, the analysis of corporate creative accounting has a special significance for management in their attempt to maintain the company's stability and to increase its market share (Costae, 2006).

Closely related to creative accounting is the phenomenon of creative accounting. Accounting, generally referred to as the language of business is a process by which data relating to economic activities of an organization are recorded, classified, selected, measured, interpreted and

communicated to intended users through financial reports. Bankole, *et al.* (2018) posits that financial reports are produced to show the true and fair state of affairs of business entities so that shareholders and other users of such information can make informed decisions. What has become worrisome, however, is that the validity of the reporting objective is questioned by the users of accounting information as meeting and beating earnings benchmarks has become very important to Chief Finance Officers (CFOs) and managers (Graham, *et al.* 2006). Certain loopholes in the accounting standards provide avenues for the use of creative accounting techniques, such as the flexibility in the International Financial Reporting Standards (IFRS) that allow companies to choose method and rate of depreciation of assets (Bankole, *et al.* 2018). According to Osisoma and Enahoro (2006), accounting processes and choice of policies resulting from many judgments at the same time are capable of manipulations which have resulted in creative accounting. Companies show different depreciation method, life of assets and residual value of assets within the purview of applicable laws and prevailing accounting standards (Bhasin, 2016).

Consequently, creative accounting has also resulted in big corporate failures as in the cases of Enron Scandal (2001); WorldCom (2002) which led to the introduction of Sarbanes – Oxley Act in USA, Saytam Computer Services Limited (2009) in India and American Insurance Group (2005). In Nigeria, Akintola Williams and Deloitte were reportedly indicted for facilitating the falsification of accounts of Afribank Plc, Main Stream Bank Plc and for deliberately overstating the profits of Cadbury Nigeria Plc (Bankole, *et al.* 2018). It is also reported that between 1990 and 1994, Nigeria lost more than N6 billion (\$42.9 million) occasioned by creative accounting techniques (Oluwagbuyi & Olowolaju, 2013). This has not only led to loss of investment and jobs but has also made users of financial statements from companies to doubt the truth and fairness of accounting information and the accounting profession as a whole (Bankole, *et al.* 2018).

Based on these problems, this research therefore investigates the relationship between creative accounting and creative entrepreneurship of listed manufacturing companies in Nigeria during the period 2011 to 2022.

Aims and objectives of the Study

The main aim of this study is to investigate the degree of relationship between creative accounting and creative entrepreneurship of listed manufacturing firms in Nigeria. The specific objectives of the study are:

- i. examine the relationship between discretionary accruals and return on equity of listed manufacturing firms in Nigeria;
- ii. identify the relationship between related party transactions and return on equity of listed manufacturing firms in Nigeria;

CONCEPTUAL/THEORETICAL PARADIGM

Conceptual Review

The concept of creative accounting is widely used to describe accepted accounting techniques which permit corporations to report financial results that may not accurately portray the substance of their business activities (Akenbor & Ibanichuka, 2012). Creative accounting has

also been defined as the deliberate distortion of the communication between entities and shareholders by the activities of financial statement preparers who wish to change the content of the information being transmitted. Thus, creative accounting does not violate the law or the standards of accounting. It is mainly based on finding loopholes in accounting rules that enable the professional accountant to alter the financial income of companies. When no fraud is involved, creative accounting in its strict sense involves the transformation of financial accounts using accounting choices, estimates and other practices allowed by accounting regulations (Idris, *et al.* 2012). Most importantly, creative accounting practice described the application of inappropriate accounting policies or entering into complex or “special purpose” transactions with the objective of making a company’s financial statements appear to disclose a more favourable position, particularly in relation to the calculation of certain “key” ratios (Kumar, 2017). Following the regulations, standards (IASs, IFRS) and the recommended practice and even with the results audited by external companies, the scope for creative accounting remains large. This is because shareholders and market reactions depend more and more on manager’s actions as directors are increasingly judged on profit and growth of their company (Kumar, 2017).

Discretionary Accruals

Discretionary accruals models have been widely used in the literature, and are often considered to be a proxy for earnings management, or earnings quality. Jones (1991) defines the accrual process as a function of sales growth (ΔREV) and PPE. While sales growth and investment in PPE are reasonable and intuitive drivers of firm value, and the estimation of the Jones model confirms a correlation between these fundamental firm attributes and accruals, the explanatory power of the Jones model is low, explaining only about 10% of the variation in accruals. One interpretation of the low explanatory power is that managers have considerable discretion over the accrual process, which they use to mask fundamental performance.

Dechow, *et al.* (1995) modify the Jones model to adjust for growth in credit sales ($\Delta\text{REV} - \Delta\text{REC}$) in an attempt to reduce Type II errors, the failure to detect earnings management when it is present. Credit sales are frequently manipulated; thus, this modification increases the power of the Jones model to yield a residual that is uncorrelated with expected (normal) revenue accruals and better reflects revenue manipulation. However, the modified Jones model still suffers from Type I errors, the identification of earnings management when it is not present.

To combat concerns about the correlations between performance and the Jones, and modified Jones models, Kothari, *et al.* (2005) suggest controlling for the normal level of accruals conditional on ROA. They identify a firm from the same industry with the closest level of ROA to that of the sample firm and deduct the control firms’ discretionary accruals from those of the sample firm to generate ‘performance-matched’ residuals. Because the models of normal accruals that generate the residuals explain only 10-12% of the variation in accruals, this approach is likely to add noise to the measure of discretionary accruals.

In addition, the performance matching can extract too much discretion when earnings are being managed, resulting in low power tests (Dechow, *et al.* 2010). Rather than applying the matching, however, many studies simply include ROA (or lagged ROA) as another variable into the modified Jones model.

Related Party Transaction

Given the relevance of operational definition, Amzaleg and Barak (2013) posits that related party transactions is the common term for deals between a company and one (or more) of its controlling entities (that is, major shareholders and or management). Related party transactions have equally been explained as the transfer of resources, services or obligations between a reporting entity and a related party (IASB, 2009 cited in Pizzo, 2011). However, according to (IAS) -24 cited in Beerbaum and Piechocki (2017), a related party transactions is defined as “transfer of resources, services or obligations between related parties, regardless of whether a price is charged”. The definition. of related party transactions substantially includes controlling shareholders, directors and every other group which can exercise a degree of influence over the company (such as affiliates, joint ventures and close members of the related party’s family). A related party may enter into transactions with the related company using different economic terms compared to an independent party. In other words, a related party may use these transactions to transfer resources in or out of the company (Venuti &Pozzoli, 2014). When related party transactions are carried out properly and with good purpose, it can increase organizational efficiency by reducing transaction costs. However, related party transactions are also used by companies to commit fraud (Magdalena & Dananjaya, 2015). According to Coase (1937), related party transactions between group members might be cost effective as they help in reducing transaction costs and enhance the enforcement of contracts and property rights (Tudor & Corlaci, 2011). When this happens, the related party transactions are “propping” in nature. Some related party transactions can be problematic because they can be potentially value destroying such as “tunnelling” and squeeze outs (Khanna, 2015).

THEORETICAL REVIEW

Information Asymmetry Theory

The concept of asymmetric information was introduced by George, A. Akerlof in 1970 during the publication of the paper *The Market for “Lemons”; Quality Uncertainty and the Market Mechanism* (Elbadry, *et al.* (2010). Akerlof relates quality, uncertainty and develops the notion. of asymmetric information, using the automobile market as example. The main idea in Akerlof’s paper is that the parties to a transaction have unequal amounts of information about the other party. Many researchers in different areas, have explored the concept of asymmetric information and different definitions have emerged depending on the area of application. In 1973, Michael Spence developed the concept of signalling. In 1975 Joseph Stiglitz introduced the idea of screening, which can be used for example by an employer to classify individuals into levels that replicated their efficiency or some other ability. Stiglitz (1975) applied this idea to the insurance market, which is characterised by asymmetric information problems, leading to both moral hazard and adverse selection.

Auronen (2003) opines that the concept of information asymmetry was able to explain many common phenomena that could not be otherwise explained when it was first introduced in the early 1970s. Since then it has become a valuable tool in the field of economics and it is used to explain a diverse set of phenomena.

Interestingly, Akerlof begins the explanation of asymmetric information by assuming a model of the automobiles market where there are two kinds of cars; new cars and old cars, which both can be good or bad (the bad cars are commonly known as “Lemon”). When buying a car there

is a probability that it is a good car and probability $1-q$ that it will be a Lemon (Auronen, 2003). After owning the car for some time, the owner acquires more information about the condition of the car and can assign a new probability to the event of the car being a lemon. As this probability can be assumed to be more accurate than the initial q , an information asymmetry between the owner and potential buyers has developed (Auronen, 2003). Akerlof notes that the process of the worse individuals (q -cars) starting to dominate the market is called adverse selection. As a further note, Akerlof posit that information asymmetry does not always lead to adverse selection. Under specific conditions favourable selection may take place (Jovanovic, 1982).

Kanuna (2015) succinctly explain that information asymmetry is the possibility in which the manager has better information about the financial position of the firm than the shareholders and other users. From the informational perspective, the information asymmetry creates corporate conflict between advantaged managers and stakeholders (Munene, 2014). The assumption is that the accounting disclosures contain information that is valuable and material in nature to stakeholders in providing signals. The accountant has to portray a 'true and fair' view of transactions in the accounting statements. The managers owing to the privileged information and managerial position take advantage that directs the enterprise into a course suitable to them (Munene, 2004). In addition, Munene (2004) argue in information asymmetry theory, two parties have access to different information that is managers and stakeholders. The manager chooses what to communicate in the financial information, while the users of that information must choose how to deduce the signal.

In credit markets, asymmetric information problems arise when borrowers have private information about their creditworthiness that is not observable by lenders. In general, the price of a loan is based on the lender's cost plus a risk premium. The cost of funds is often linked to a short-term market rate, which represents a common benchmark for all borrowers regardless of their credit history. Lenders will often charge an additional risk premium over the market rate as compensation for bearing the risk of slow, partial, or fully delinquent loan repayments. Some losses are expected in any risk group of loans and are in effect, paid for by the risk premium. The size of this premium depends on the lender's ability to properly assess the creditworthiness of the borrower. As a result, differences across borrowers in the final interest rate charged are based upon largely the lender's perceived repayment risk (Leitner, 2006).

When lenders lack the necessary information to distinguish between good and bad borrowers, it is said that there exist "adverse selection" and "moral hazard" problems in the market for credit. Adverse selection occurs when a borrower's private information about their own credit risk adversely affects uninformed lenders. For instance, with limited credit information, there are likely to be more bad borrowers taking loans at any given interest rate. Moral hazard entails hidden information following the extension of a loan to a borrower. For instance, if a borrower knows that a lender cannot monitor repayment behaviour, this can induce the borrower to make a material change in income or spending that affects their ability to repay the loan. Using panel data Thomas (2015) examined the impact of information asymmetry and client credit on lending performance. The empirical results showed that: First, MLBs with good information transparency tend to establish relationships with banks that are characterized by huge losses from bad debts and from credit card lending. Second, Small foreign firms, as well as MLBs with high profitability, cash and R and D expenditure ratios prefer having relationships with banks with good lending performance and low credit risk. Third, MLBs and MSBs with poor

credit records prefer having relationships with banks that have good lending performance and low credit risk. Bolton, *et al.* (2013), studied how relationship lending and transaction lending vary over the business cycle. They were able to study how relationship and transaction-banks responded to the crisis and tested existing theories of relationship banking. The empirical results established that relationship banks charged a higher spread before the crisis, offered more favourable continuation-lending terms in response to the crisis, and suffered fewer defaults, thus confirming the informational advantage of relationship banking. In Kenya, Gaitho (2013) explored the effect of credit reference bureaus (CRBs) on credit access. The study found out that CRB reduces borrowing cost and loan delinquencies to a moderate extent. It further established that CRB has enhanced effective risk identification/monitoring and microcredit extension in Kenya. It was therefore recommended that lenders and CRB should work closely to ensure that there is no information asymmetry and therefore ensure that credit flows to deserving borrowers. In another Kenyan study, Kwambai and Wandera (2013) sought to find out the effects of credit information sharing on nonperforming loans in KCB Kenya and specifically to establish the trend of bad loans before and after the introduction of CRB, to identify the factors that account for bad loans and to determine the economic sector that records higher bad loans and the efforts taken to reduce the risk in this sector. The study concluded that credit information sharing and level of nonperforming loans are indeed related. Credit Information Sharing, increases transparency among financial institutions, helps the banks lend prudently, lowers the risk level to the banks, acts as a borrower's discipline against defaulting and it also reduces the borrowing cost, that is, interest charged on loans.

Stiglitz (1980). O'Hara (2003) focuses on the differences in the election of the portfolio between informed and uninformed agents, as well as the effects of asymmetric information on the size of the risk-premium (O'Hara, 2003; Biais *et al.*, 2004). Easley, O'Hara (2004) prove that information asymmetry affects the prices of assets in the balance. Wang (1993, 1994) also studied the effect of information asymmetry on the desired return in his dynamic model.

Signalling Theory

Signalling theory is fundamentally concerned with reducing information asymmetry between two parties (Spence, 2002). For example, Spence's (1973) seminal work on labour markets, demonstrated how a job applicant might engage in behaviours to reduce information asymmetry that hampers the selection ability of prospective employers. Spence illustrated how high-quality prospective employees distinguish themselves from low-quality prospects via the costly signal of rigorous higher education. This work triggered an enormous volume of literature applying signalling theory to selection scenarios that occur in a range of disciplines from anthropology to zoology. Management scholars have also applied signalling theory to help explain the influence of information asymmetry in a wide array of research contexts. A recent study of corporate governance, for example, shows how CEOs signal the unobservable quality of their firms to potential investors via the observable quality of their financial statements (Zhang & Wiersema, 2009).

Diversity researchers use signalling theory to explain how firms use heterogeneous boards to communicate adherence to social values to a range of organizational stakeholders. Signalling theory is frequently used in the entrepreneurship literature, where scholars have examined the signalling value of board characteristics, top management team (TMT) characteristics, venture capitalist and angel investor presence and founder involvement. Signalling theory is also

important to human resource management, where a number of studies have examined signalling that occurs during the recruitment process (Suazo, *et al.* 2009).

The use of signalling theory has gained momentum in the management literature in recent years as scholars have expanded the range of potential signals and the contexts in which signalling occurs. Despite the emergence of signalling theory in management research, as of yet there exists no concise review in the management literature. As a result, management scholars almost universally refer to either Spence's (1973) examination of signalling in job markets or Ross's (2007) study of managerial incentives as signals to describe the theory's central tenets.

METHODOLOGY

The study adopted descriptive study and correlation design. The descriptive study is based on quantitative analysis in order to achieve the desired research objectives. The researcher utilizes secondary data from the published annual reports and accounts of manufacturing listed companies in the Nigeria` stock. This method is consistent with other research in the literature. The use of secondary data is justified by the fact that written or printed document are more accurate and reliable in ascertaining compliance to principles in research work than primary data gathered through personal interview or questionnaire administration.

Thus, this study will be base on time horizon with longitudinal design because it is structure on the stochastic models and pool empirical data from value added statement of companies. The sample frame of this study entails the selected period of the pool data in form of staked and empirical data. This period is slated from 2011-2022 with data generated from the six selected firms annual financial position. The study adopted the co-integrated method to analyze the panel data on the predictor variable dimensions (discretionary accruals, related party transactions), while the criterion variable measure is return on equity.

The population of this study comprises of all the listed companies in the manufacturing companies of Nigeria that are quoted firms with the Nigeria Stock Exchange. The study targeted population is generated from corporate quoted companies listed and included in the Nigeria Stock Exchange as per December 31st 2022. Non-probability sampling method in form of availability sampling technique was used in selecting the listed quoted companies as only companies that meet the criteria of being listed on the Nigeria Stock. A reasonable size of the population of firms' space was randomly selected for the study using purposive sampling techniques. This includes manufacturing enterprise that exhibits high level of creativity and innovativeness in their product, process, service, market and administrative. This study covers 22years financial statements using 22years financial statements from 2011 – 2022. The six years each represents a sufficient time period to factor in seasonality and full reporting cycles.

Model Specification

The Multiple Regression Model is appropriate for our analysis because all the variables in this study are measured in ratio scale.

Where; Return on Equity (ROE), Discretionary Accruals (DAC), Related Party Transactions (RPT)

Thus, $ROE_t = f(DAC_t, RPT_t, \dots) \dots \dots \dots (1)$

-Linear Equation

$$ROE_t = a_0 + a_1(DAC_t) + a_2(RPT_t) + U_t \dots \text{equ}(2)$$

-Log Linear Equation

$$\log ROE_t = \log a_0 + a_1 \log(DAC_t) + a_2 \log(RPT_t) + U_t \dots \text{equ}(3)$$

The dimension of the predictor variable being used in the study is DAC and RPT, whereas the determinant of the criterion variable is based on the ROE. The subscript t represents the time period whereas Logn indicates natural log - the parameters to be estimated and u_t is an error term. The variables are transformed into logarithmic form if necessary to minimize the scale effect of numbers. The test of relevant research hypotheses is also carried out trying to give answers to the research questions. Using tools such as the descriptive statistics utilizing charts and graphs, the ordinary least square regression estimate, the co-integration estimation.

4. RESULTS AND DISCUSSION

The results and discussion are as followed

4.1 Data Analysis (Stochastic Statistics)

In analysing the above data set, it is just right to determine the successful capture of the model by the employed variable towards determining the relevance and worthiness of employed variables. We therefore utilize the Preceded by unit root testing, and proceed towards the Co-integration..

Results of Co-integration Test (Johansen Co-integration)

Date: 11/28/23 Time: 09:54
 Sample (adjusted): 6 650
 Included observations: 627 after adjustments
 Trend assumption: Linear deterministic trend
 Series: ROE RPT DAC
 Lags interval (in first differences): 1 to 4

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value
None *	0.399131	746.8141	159.5297
At most 1 *	0.180909	427.4342	125.6154
At most 2 *	0.129015	302.3100	95.75366
At most 3 *	0.095225	215.7023	69.81889
At most 4 *	0.084326	152.9588	47.85613
At most 5 *	0.061286	97.72356	29.79707
At most 6 *	0.046571	58.06925	15.49471
At most 7 *	0.043930	28.16753	3.841466

Trace test indicates 8 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value
None *	0.399131	319.3799	52.36261
At most 1 *	0.180909	125.1242	46.23142
At most 2 *	0.129015	86.60768	40.07757
At most 3 *	0.095225	62.74356	33.87687
At most 4 *	0.084326	55.23522	27.58434
At most 5 *	0.061286	39.65431	21.13162
At most 6 *	0.046571	29.90172	14.26460
At most 7 *	0.043930	28.16753	3.841466

Max-eigenvalue test indicates 8 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Date: 11/28/23 Time: 09:54

Sample (adjusted): 6 650

Included observations: 627 after adjustment

Trend assumption: Linear deterministic tren

Series: ROE RPT DAC

Lags interval (in first differences): 1 to 4

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic
None *	0.399131	746.8141
At most 1 *	0.180909	427.4342
At most 2 *	0.129015	302.3100
At most 3 *	0.095225	215.7023
At most 4 *	0.084326	152.9588
At most 5 *	0.061286	97.72356
At most 6 *	0.046571	58.06925
At most 7 *	0.043930	28.16753

Trace test indicates 8 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.399131	319.3799	52.36261	0.0001
At most 1 *	0.180909	125.1242	46.23142	0.0000
At most 2 *	0.129015	86.60768	40.07757	0.0000
At most 3 *	0.095225	62.74356	33.87687	0.0000
At most 4 *	0.084326	55.23522	27.58434	0.0000
At most 5 *	0.061286	39.65431	21.13162	0.0001
At most 6 *	0.046571	29.90172	14.26460	0.0001
At most 7 *	0.043930	28.16753	3.841466	0.0000

Max-eigenvalue test indicates 8 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: E-view 10 Output (Authors Computation).

The co-integration test seeks to empirically define the Long-run association/relationship between a given set of variables i.e. identifying the stochastic drift amongst variable (to know if the variables move together). Carried out using the johansen cointegration output. Assuming all study variable as endogenous using the trace and Eigenvalue test.

From the trace test output above, it can be seen that there exists more than one cointegrating equation, which were all signed respectively, judging by the signed rank, there exist a long run association and movement amongst employed variables, indicating that there is a presence of long run cointegration amongst employed variable since the probability level exhibit values greater than 0.05 level of significance in which case we do not proceed to Vector Error Correction.

Although the Maximum Eigenvalue denotes rejection of the null hypothesis at all cointegration equation level going against the output of the Trace statistics, as it could therefore be established that there exist evidence of long run relationship amongst employed variables, the study therefore chooses the trace statistics.

Testing of Hypotheses One

H₀₁: Discretionary accruals does not significantly relates to return on equity in Nigeria

H₁₁: Discretionary accruals does significantly relates to return on equity in Nigeria

Interpretation of Results

From the result of the regression estimates the outcome is less than the 0.05 alpha level of significance; when considering on the plight of co-integration output. This shows the presence of long-term impact of the explanatory variable on response variable. Hence, it is advisable in

the long-term consideration to reject the null hypotheses and accept the directional hypotheses which states that discretionary accruals does significantly relates to return on equity in the long-term.

Testing of Hypotheses Two

H₀₂: Related party transactions not significantly relates to return on equity in Nigeria

H_{i2}: Related party transactions does significantly relates to return on equity in Nigeria

Interpretation of Result

From the result of the regression estimates the outcome is less than the 0.05 alpha level of significance; when considering on the co-integration output. This shows the presence of long-term impact of the explanatory variable on response variable. Hence, it is advisable in the long-term consideration to reject the null hypotheses and accept the directional hypotheses which states that related party transactions does significantly relates to return on equity in the long-term.

5. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusions

This study examined the relationship between creative accounting and creative entrepreneurship to show the value relevance of accounting information in Nigeria for the period 2011–2022. The study investigated the long run and short run relationship between the variables by using Johansen Co-integration approach. It was held that accounting innovation is a credible means of sharpening the entrepreneurship innovations on product, process and market via return on equity

5.2. Recommendations

Base on the findings of this study, the following recommendations are advanced:

1. Accountants should absorbed product innovation, process innovation and market innovation in the enterprise to boost the return on equity in the long-term and short-term.
2. Business enterprise should provide all necessary resources needed to understand the impact of creative innovation on stimulating growth and development on entrepreneurship sensitivity in the firms
3. Business merchandizing expert should work together to tighten compliance in the firms in order to enhance possible innovation strategies on product, process and market to increase the return on equity of the enterprise.
4. Creative entrepreneurship training should be conducted frequently among accountants.

REFERENCES

- Akenbor, C.O. & Ibanichula, E.A.L. (2012). Creating accounting practices in Nigeria banks. *An International Multidisciplinary Journal, Ethiopia*, 6(3), 23-41.
- Akintoye, I.R. (2008). Sensitivity of performance to capital structure. *European Journal of Social Sciences*, 7(1), 1-18.
- Amat, O. & Gowthorpe, C. (2004). Creative accounting: nature, incidence and ethical issues. *Journal of Business Ethics*, 57(4), 55-64.
- Audax, A. (2018). *Factors affecting financial performance of manufacturing firms listed in Nairobi securities exchange, Kenya*. Retrieved from <http://erepo.usiu.ac.ke/botstream/handle/117323952/ANTHA%20AUDAX%20AUDAX%20MBA%202018.pdf?sequence>.
- Auronen, L. (2003). *Asymmetric information: Theory and application*, Helsinki University of Technology.
- Banafa, A., Muturi, W. & Ngugi, K. (2015). The impact of leverage on financial firm in Kenya. *International Journal of Finance and Accounting*, 4(7), 1-20.
- Bankole, K.O., Ukolobi, I.O. & McDubus, O.F. (2018). Creative accounting practices and shareholders' wealth. *International Accounting and Taxation Review*, 2(4), 58-74.
- Beerbaum, D. & Piechocki, M. (2017). Related party transactions-empirical study based on IFRS and SEC disclosure. Retrieved <https://www.researchgate.net/publication/319914398>
- Bhasin, M.L. (2015). Creative accounting practices in the hidden corporate sector: an empirical study. *International Journal of Management Sciences and Business Research*, 4(10), 35-52
- Bird, R. B., & Smith, E. A. (2005). Signalling theory, strategic interaction, and symbolic capital. *Current Anthropology*, 46: 221-248.
- Burja, V. (2010). *The analysis of the financial statements of companies*, Aeternitas Publishing, Alba Iulia.
- Charles, D., Ahmed, M.N. & Joshua, O. (2018). Effect of firm characteristics on profitability of listed consumer goods companies in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 4(2), 14-31.
- Costae, V. (2006). Determinants of corporate financial performance. *Electronic Journal*, 1(1), 123-135.
- Eitokpa, O.H. (2015). *Determinants of financial performance of listed foods and beverages company in Nigeria*. Retrieved from

<https://kubanni.abu.edu.ng/ispui/bitstream/12345678061/vvDETERMINANTS%20OF%20FINANCIAL%20PERFORMANCE%20OF%20LISTED%20OFFOOD%20.pdf>

- Elbadry, A., Gounopoulos, D. & Skinner, F. (2010). *Governance quality and information alignment*. Retrieved from <http://www.mfsociety.org/>
- Graham, J.R., Harvey, C.R. & Rajgopal, S. (2006). Value destruction and financial reporting decision. Retrieved from https://wwwO.gsb.columbia.edu/mygsb/faculty/research/pubfiles/12924/Rajgopal_value.pdf
- Hermen, E. (2015). The importance of manufacturing sector in the Romanian economy. *9th International Conference of Interdisciplinarity in Engineering*, 22(4), 976-983.
- Idris, A.A., Khinde, J.S., Ajemunigbohun, S.S. & Gabriel, J.M.O. (2012). The nature, techniques and prevention of creative accounting empirical evidence from Nigeria. *Canadian Journal of Accounting and Finance*, 1(1), 26-31.
- Jones, M. (2011). *Creative accounting, trend and international scandals*. John Wiley and Sons, Chichester, England.
- Jovanovic, B. (1982). Favourable solution with asymmetric information. *The Quarterly Journal of Economics*, 97(3), 535-539.
- Khan, M.K., Nouman, M.S. & Imran, M.K. (2015). *Determinants of financial performance of financial sectors: An assessment through economic value added*. Retrieved from <https://impra.uib.unimillenen.de/81659/>
- Khanna, V. (2015). Related part transactions. *Quarterly Briefing*, 8(2), 1-7.
- Kolawole, O.O. (2013). Determinants of value creation in the Nigerian banking industry: Panel evidence. *International Journal of Business and Social Science*, 4(3), 89-101.
- Kumar, K. (2017). Analysis of the effects of return on equity and debt to equity ratio on stock price on cement industry listed in Indonesia stock exchange in the year of 2011-2015. *Journal of Business and Management*, 19(5), 66-76.
- Kumar, P. (2017). *Creating accounting*. Retrieved from <https://www.shdeshare.net/nikhil.larshavandham/creative-accounting-76009759>
- Latridis, G. (2008). Accounting disclosure and firms' financial attributes: Evidence from UK stock market. *International Review of Financial Analysis*, 17(2), 219-241.
- Maduagufor, U. (2008). *Stock market news*. Retrieved from <https://www.stockmarketnigeria.com>

- Magdalema, R. & Damanyaya, Y. (2015). Effect of related party transactions to the value of enterprises listed on Indonesian stock exchange. *European Journal of Business and Management*, 7(6), 47-56.
- McWilliam, H. & Siegel, T. (2010). *Econometric analysis of panel data*. John Wiley & Sons, Chichester.
- Munene, J.W. (2016). *The effects of creative accounting on shareholders' wealth in listed companies in Kenya*. Retrieved from <https://erepository.uonbi.ac.ke/bitstream/handle/11295/munenethe%20Effect%20of%20Creative%20Accounting%20Shareholders%20wealth>, pdf.
- Naz, F. (2016). Financial performance of firms: Evidence from Pakistan cement industry. *Journal of Teaching and Education*, 5(1), 81-94.
- Osisioma, B.L. & Enahroro, J.A. (2006). Creative accounting and option of total quality accounting in Nigeria. *Journal of Global Accounting*, 2(1), 5-15.
- Rahoman, A., Afza, T., Qayyum, A. & Bodla, M.A. (2010). Working capital management and corporate performance of manufacturing sector in Pakistan. *International Research Journal of Finance and Economics*, 7(4), 47-70.
- Rayan, K. (2008). *Financial leverage and firm value*. Gordon Institute of Business Science, University Pretoria.
- Rose, S. (1973). The economic theory of agency: The principals' problem. *American Economic Review*, 63(2), 134-139.
- Ross, S. A. (1977). The determination of financial structure: The incentive signalling structure. *Bell Journal of Economics*, 8: 23-40.
- Singh, J.P. & Pandey, S. (2008). Impact of working capital management in the profitability of Hindaleo industries limited. *Icfar University Journal of Financial Economics*, 6(4), 62-69.
- Spence, A. & Zeckhauser, R. (1971). Insurance, information and individual action. *American Economic Review*, 61(2), 380-387.
- Spence, M. (1973). Job market signalling. *The Quarterly Journal of Economics*, 87(3), 355-374.
- Spence, M. (2002). Signalling in retrospect and the informational structure of markets. *American Economic Review*, 9(2), 434-459.
- Stiglitz, J. (1975). The theory of "screaming", education, and the distribution of income. *The American Economic Review*, 65(3), 283-300.

- Suazo, M. M., Martinez, P. G., & Sandoval, R. (2009). Creating psychological and legal contracts through human resource practices: a signalling theory perspective. *Human Resource Management Review*, 1(9), 154-166.
- Thomas, D. A (2015). Bad debts, doubtful debts and investment growth among Nigerian Banks: an empirical analysis *International Journal of Economics Commerce and Management*, 3(5), 1130-
- Tudor, T.A. & Corlaciuc, A. (2011). Related party transactions: Overview. *Annales Universitatis Apulensis Series Oeconomica*, 13(2), 241-248.
- Verma, E. (2018). *Financial performance: Understanding its concepts and importance*. Retrieved from <https://www.sumphlearncom/financial-performance-rar21-article>
- Vintila, G. & Nenu, E.A. (2015). An analysis of determinants of corporate financial performance: Evidence from the Bucharest stock exchange listed companies. *International Issues*, 5(3), 732-759.
- Zhang, L. (2009). *Economic consequences of recognising off-balance sheet activities*, September 11, Financial Accounting and Reporting Section FARS Paper, Retrieved from <https://ssrn.com/abstract=1266456>
- Zhang, Y., & Wiersema, M. F. (2009). *Stock market reaction to CEO certification: The signalling role of CEO background*. Strategic Man Ltd
- Ovharhe, O.H. (2024). *Business intelligence and innovation moderating roles on entrepreneurship and management using champiopreneurship approach*. In K. Kankaew, P. Nakpathom, A. Chnitphattana, K. Pitchayadejanant, & S. Kunnapapdeelert (Eds.), *Applying business intelligence and innovation to entrepreneurship advances in business strategy and competitive advantage* (p. 171-223). IGI Global.com .<https://doi.org/10.4018/979-8-3693-1846-1.ch009>.
- Ahunanya, V, Ovharhe, O. H., Emenike, C. G., & Otto, G. (2022a). Consignment inventory system and entrepreneurial success among micro warehousing firms. *International Journal of Social Science & Management Research*. 8(5), 18-28.DOI:10.56201/ijssmr.v8.no5.2022.pg18.28
- Ahunanya, V., Ovharhe., O. H., Emenike, C. G., & Otto, G. (2022b). Consignment inventory system and obsolescence management in the drilling fluid firms in Nigeria. *International Journal of Social Science & Management Research*, 8(5),1-27.DOI: 10.56201/ijssmr.v8.no5.2022.pg1.17
- Chibuikwe, C. U., & Ovharhe, O. H. (2022). Emergence of risk culture and lean culture in Nigeria during pandemic and crisis era: Using confirmatory analysis. *International Journal of Multidisciplinary Research and Growth Evaluation*, 3(1), 263-271. DOI: <https://doi.org/10.54660/anfo.2021.3.1.14>
- Chibuikwe, C. U., Ovharhe, O. H., & Abada, A. M. (2022). Synchronization of lean accounting alert and entrepreneurial sustainability among micro firms in Nigeria during pandemic

- and catastrophe: Using confirmatory factor analysis. *The International Journal of Business & Management*, 10(1), 1- 13. <https://doi.org/10.54660/anfo.2021.2.6.15>
- Effa, G. A., Ovharhe, O. H., Ezirim, A. C., & Igwe, S. (2023a). Procurement sustainability policy and logistics performance in Nigeria. *International Journal of Marketing and Communication Studies (IJMCS)*, 7(1), 56-72. DOI: 10.56201/ijmcs.v7.no1.2023.pg56.72
- Effa, G. A., Ovharhe, O. H., Ezirim, A. C., & Igwe, S. (2023b). Strategic procurement initiatives and logistics performance in Nigeria. *International Journal of Marketing and Communication Studies (IJMCS)*, 7(1), 38-55. DOI: 10.56201/ijmcs.v7.no1.2023.pg38.55.
- Ovharhe, O. H. (2022a). Sustainable development goals: Multicollinearity between therapeutic entrepreneurship and rehabilitation therapy among African nations. *International Journal of Small Business and Entrepreneurship Research*, 10(3), 1-59. DOI: <https://doi.org/10.37745/ijssber.2013/vol10n3157>
- Ovharhe, O. H., Woko, E. B., & Ezeocha, V. U. (2021). Remote working: Entrepreneurial risk and entrepreneurial survival in the micro firms in Niger-Delta, Nigeria (COVID-19 Pandemic Prospects). *International Journal of Small Business and Entrepreneurship Research*, 9(4), 11-28. DOI: <https://doi.org/10.37745/ijssber.2013/vol9n11-28>
- Ovharhe, O. H., & Chukwuemeka, S. P. (2023). Sustainable Development Goals: Therapeutic Entrepreneurship and Mental Health Conditions. *British Journal of Multidisciplinary and Advanced Studies*, 4(1), 81–119. <https://doi.org/10.37745/bjmas.2022.0107>
- Ovharhe, O. H., & Igbokwe, E. L. (2021). Analytical intervention of remote working correlates on risk culture and entrepreneurial adaptability in South-South Geopolitical Zone, Nigeria: Covid-19 Perspective. *Journal of Education and Practice, IISTE*, 12(3), 34-44, DOI: 10.7176/JEP/12-34-05
- Ovharhe, O. H., & Okolo, B. S. (2022). Sustainable development goals: Lean entrepreneurship and Green entrepreneurship. *International Journal of Research and Scientific Innovation*, 9(10), 59-71. ISSN: 2321-2705
- Ovharhe, O. H., Ahunanya, V., Woko, E. B. (2022). Consignment inventory system and entrepreneurial survival in Lagos State. *International Journal of Social Science & Management Research*, 8(5), 29-42. DOI: 10.56201/ijssmr.v8.no5.2022.pg29.42
- Ovharhe, O. H., & Abada, A. M. (2023). [IFRS: Entrepreneurial Exit and Entrepreneurial Entre.](#) *American Journal of Social Development and Entrepreneurship*, 2(2) 1-8, DOI: <https://doi.org/10.54536/ajsde.v2i2.1578>
- Ovharhe, O. H., Chibuike, C. U., Abada, A. M. (2023). [Lean Accounting And Lean Entrepreneurship.](#) *American Journal of Social Development and Entrepreneurship*, 2(2) 1-8, DOI: <https://doi.org/10.54536/ajsde.v2i2.1578>
- Ovharhe, O. H., Okolo, B. S., Woko, E. B., Igbokwe, L. (2022). Light entrepreneurship and customer funded business model. *International Journal of Social Sciences and Management Research*, 8(5), 87-106. DOI: 10.56201/ijssmr.v8.no5.2022.pg87.106
- Ovharhe, O. H., Woko, E. B., & Ogolo, T. M. (2021). Competitive risk strategy and entrepreneurial satisfaction among fast moving consuming goods in Nigeria during covid-19 pandemic using confirmatory factor analysis. *International Journal of*

Multidisciplinary Research and Growth Evaluation, 2(6), 267-272. <https://doi.org/10.54660/anfo.2021.3.1.14>

Ovharhe, O. H., & Abada, A. M. (2023). [IFRS adoptions on entrepreneurship entry and entrepreneurship exit: The Nigeria experience from 2006-2017](#). 2(2), *American Journal of Social Development and Entrepreneurship*. DOI: <https://doi.org/10.54536/ajsde.v2i2>

Ovharhe, O.H. (2022b). Sustainable development goals: Therapeutic entrepreneurship and entrepreneurship Injelititis among West Africa Countries. *World Journal of Entrepreneurial Development Studies (WJEDS)* 7(1), 87-113. DOI: 10.56201/wjeds.v7.no1.2022.pg87.113

Ovharhe, O. H., & Woko, B. E. (2024a). Environmental pollution and life expectancy among Intrepreneurs. *International Journal of Medical Evaluation and Physical Report (IJMEPR)*, 10(2), 9-32. DOI: 10.56201/ijmepr.v8.no3.2024.pg9.32

Ovharhe, O. H., & Woko, B. E. (2024b). Environmental pollution and infant mortality on entrepreneurial opportunities: A champiopreneurship approach. *International Journal of Geography and Environmental Management (IJGEM)*, 10(2),144-169. 10.56201/ijgem.v10.no3.2024.pg144.169

Ovharhe, O. H., & Odepeli, S. (2024). Environmental pollution and maternal mortality among female entrepreneurs. *International Journal of Geography and Environmental Management (IJGEM)*, 10(2), 170-195.10.56201/ijgem.v10.no3.2024.pg170.195