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Accounting Programme,
Department of Economics and Management Studies,
College of Social and Management Sciences,
Afe Babalola University, Ado-Ekiti, Nigeria.

Prof. Adewale Alawiye-Adams
Provost, College of Social and Management Sciences,
Afe Babalola University, Ado-Ekiti

Prof. Samuel A. Igbatayo
Head of Department,
Economics and Management Studies,
Afe Babalola University, Ado-Ekiti

Mr. Jimba Kareem
Head, Accounting Programme
Afe Babalola University, Ado-Ekiti

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The effects of real earnings manipulation on the future operating performance: empirical evidence from the public listed companies in Nigeria

¹Badru, Olayemi Bazeet

²Jimoh Olajide Raji

³Abdulkadri, Rihanat Idowu

Abstract

This study analyses the aspects of real earnings management proxy that involves sales manipulation employed by companies to improve current performance against the future performance. The main objective was centred on whether manipulation of earnings to show good performance in the current period has implication on future performance. In order to achieve the objective, secondary data for a total number of 117 company year observations over a period from 2009 to 2011 was used. The empirical analysis in this study provide evidence that larger percentage of Nigerian companies engage in sales manipulation to mimic strong performance in the current period, which later have adverse consequences on their future performance. The implication is that real earnings management through sales manipulation has a negative effect on the future performance. Based on the results, it can be concluded that real earnings management has negative influence on the future performance of companies. The study infers that this explains why most of the Nigerian companies could not survive in the long term because managers deceive investors by managing earnings to falsify performance.

Introduction

Accounting numerals (earnings) are means of portraying the financial status of a company to investors and other users of financial accounting information (Beaver, 1968; Ball & Brown, 1968). In the financial statement of a company, earnings are one of the last items available in the income statement of a public listed company. Earnings reveal the financial capability, strength and stability of a company, and serve as a yardstick to

¹**Badru Olayemi Bazeet:** Othman Yeop Abdullah Graduate School of Business (OYAGSB), Universiti Utara Malaysia, Sintok, Malaysia.

² **Jimoh Olajide Raji:** School of Economics Finance and Banking, University Utara Malaysia

³ **Abdulkadri Rihanat Idowu:** Department of Finance, University of Ilorin, Kwara State, Nigeria.

measure the stakeholder's wealth (Degeorge, Patel & Zeckhauser, 1999; Gunny, 2010; Roychowdhury, 2006; Tabassum, Kaleem & Nazir, 2015). The information as well helps prospective investors in various relevant investment decisions and managers' compensation policies (Bernard & Skinner, 1996; Healy & Palepu, 2001; Roychowdhury, 2006). With the significant importance of the earnings figures, it is expected that the earnings figures should be devoid of any manipulation with the aim of increasing the reported earnings of a company and have integrity (Jooste, 2009). In contrast, the relevance of this information encourages managers who are being monitored by investors, directors and other stakeholder to have strong incentives to manage or distort reported earnings in order to fulfil the investors' earning expectation such as meet, exceed earning benchmark, or analyse forecasted earnings (Degeorge, Patel & Zeckhauser, 1999; Graham, Harvey & Rajgopal, 2005; Gunny, 2010; Haw, Ho & Li, 2011; Abdul Rahman & Ali, 2006). This type of action is often referred to as earning management (Dechow & Skinner, 2000; Healy & Wahlen, 1999).

There are two different strategies managers use in manipulating accounting information, especially the current period earnings as documented in the accounting and finance (Cohen, Dey & Lys, 2008; Cohen & Zarowin, 2010; Zang, 2011). The first strategy is referred to as accrual earnings management (AEM), while the second strategy is referred to real earnings management (REM). Accrual earnings management strategy relates to the managers' manipulation of accounting information through the use of discretionary accrual items that are legally allowed due to the fact that it is within the boundary and under the Generally Accepted Accounting Principles (GAAP) (Dechow, Sloan & Sweeney, 1996; Ewert & Wagenhofer, 2005; Gunny, 2010; Kim & Sohn, 2013; Roychowdhury, 2006). Managers employ this type of manipulation mostly at the end of an accounting period after all the real economic activities have virtually been completed. As a result, this type of action has no direct influence on the cash flow. In contrast, the second strategy is the real earnings management (REM), which involves the manipulation of earnings through the use of real economic activities of the company. This can be achieved through the distortion of certain real business activities such as production, sale, investment and financing activities over the accounting period in order to meet the targeted earnings. Examples of real earnings management activities are sales manipulation, overproduction, R&D expenditure and advertising expenses, while accrual earnings management includes the over or under provision for bad and doubtful debts, account receivable and timing of assets written off.

Real earnings management distorts the fundamentals of the business. By distorting business fundamentals, it misleads investors to believe that

certain financial reporting goals have been met in the course of normal business operation (Roychowdhury, 2006). Unlike the accrual earnings manipulation, real earnings manipulation has a direct consequence on the current and future cash flows and creates real economic cost, which may affect the future performance of the company negatively (Cohen & Zarowin, 2010; Gunny, 2005; Roychowdhury, 2006; Leggett, Parsons & Reitenga, 2009). Given the significance of the future performance of a company to the company long-term growth and stakeholders, the implication of real earnings management on the future performance of the company is worth consideration (Gunny, 2010).

There are several incidence of earnings management practices reported globally (Enron, Worldcom, Global Crossing, Xerox and Groupon in US), Satyam in India and Transmile, SimeDarby and Megan in Malaysia. Nigerian companies are not spared from such practices. (Cadbury Nigeria PLC, African Petroleum PLC, Wema Bank, FinBank and Spring Bank) (Okolie, Izedonmi, & Enofe, 2014). These companies were caught to have engaged in the financial irregularities during the preparation of their financial statements thereby created negative perception and investors' loss of confidence on the capital market. Despite that, the empirical analysis on the earnings management in the Nigerian context have focused majorly on the impact of corporate governance mechanism such as audit quality (Okolie, Izedonmi, & Enofe, 2014) and ownership structure (Usman & Yero, 2012) on the earnings management practices among the Nigerian companies. While Okolie et al. (2014) used the real earnings management, Usman and Yero (2012) focused on the accrual earnings management. A prior finding (Okolie et al., 2014) in Nigeria suggests that the Nigerian companies engage in earnings management through sales manipulation. Considering the consequence of manipulating earnings through sales manipulation, sales manipulation activities are associated with lower current period cash flows from operation than what is normal given the sales level (Sun, Lan & Liu, 2014). Due to the reduction in the current period cash flow, this may have negative influence on the future operating performance of the company. In fact, the negative consequences of real earnings management activities have been found to be more severe for subsequent stock returns and operating performance, and much greater than the consequences of accrual earnings management (Cohen & Zarowin, 2010) and positively associated with future crash risk in stock prices (Francis, Hassan & Li, 2014). Due to the severity of manipulating real earnings management over the accrual earnings management, the present study investigates the impact of managing earnings through sales manipulation on the operating performance of the Nigerian quoted companies. Based on the economic relevance of the real activities management, this study examines the consequences of earnings

management through the real earnings management strategy on the future performance of the Nigerian quoted companies, particularly on the area of sales manipulation strategy. The result shows that real earnings management through sales manipulation has a negative consequence on the future performance of the companies. This finding is consistent with the recent literature that shows real earnings management has a negative consequence on the future operating performance of the companies (Gunny, 2005; Tabassun et al., 2015; Cohen & Zarowin, 2010). Based on this result, the study contributes to earnings management literature by singling out the effect of a particular earnings manipulation strategy on the future performance of the company. By using a single model, it shows exactly that managers employ this strategy in manipulating earnings.

To the best of the researchers' knowledge, this study is the first to be conducted in the emerging market context, particularly in Nigeria that has been characterised with weak corporate governance, high level of corruption and political and economic instability (Ijaiya & Ijaiya, 2004). Other researchers have only examined whether corporate governance mechanism can mitigate earnings management practices and not the consequences of earnings management on the future performance of the company.

The remaining portion of the paper proceeds as follows: Section 2 discusses the literature review and develops the research hypothesis relevant for this paper. Section 3 demonstrates the sample and data sources, the model used for testing the research hypothesis and the description of the research variables. Section 4 shows the empirical results, while section 5 concludes the paper.

Related Literature and Hypothesis Development

Prior literature provides several meanings to the earnings management. For instance, Schipper (1989) claimed that earnings management is a purposeful effort by which managers manipulate the accounting numbers through the external financial reporting accounting process with the intention of obtaining some private gains such as achieving a higher stock price and meeting earnings targets. Healy and Wahlen (1999) explained that earnings management occurs when management apply their judgement in the financial reporting process and structuring of transactions to distort financial reports so as to mislead some stakeholders on the underlying economic performance of the company or to influence the contractual outcomes that are basically based or relied on the reported accounting numbers. These two definitions simply imply that managers can manipulate reported earnings not only through the accounting

procedure but also through the real operational decisions of the company such as the timing of investment or financial decisions.

However, several underlying reasons have been attached to the motive why managers alter (manage) their reported earnings, which are often referred to as earnings management. Examples of such reasons are to attract the external financing at lower cost (Dechow, Sloan & Sweeney, 1996), increase the stock value of the present shareholders of the company, encourage investors to buy stocks in the company, avoid reporting losses or earnings decline (Burgstahler & Dichev, 1997). This is because managers strive to attain or meet earnings target and analyst forecast. Others are when managers' incentives, remuneration or contractual obligation (De Jong, Mertens, van der Poel & van Dijk, 2014; Graham et al., 2005) otherwise known as bonus hypothesis and debt hypothesis (Watts & Zimmerman, 1990) are linked to their financial performance. Motive for earnings management can also be due to the managers' intention to survive in a competitive marketplace. For instance, a survey conducted by Habbash and Alghamdi (2015) revealed that Saudi managers' motive for engaging in earnings management are in order to increase remuneration, increase share prices, obtain bank loan and avoid reporting loss and report reasonable profit. Whatever the intended motive that leads managers to engage in earnings management, it has a negative consequence on the performance of the company or harm the long-term prospects of the company and can as well mislead financial statement users and investor perception about the company (De Jong, Mertens, van der Poel & van Dijk, 2014). Applying the theory of reasoned action from auditors' perspective to explain the motive why managers engage in earnings management, Hamid, Hashim and Salleh (2012) found that auditors engage in earnings management due to the pressure from other parties such as managers, directors, shareholders, creditors and co-workers and the altruistic motive (protecting the company performance).

In the recent times, a survey conducted by Graham, Harvey and Rajgopal (2005) on U.S. Chief Financial Officers (CFOs) revealed that almost two-third of managers relied on earnings as their key performance indicator. Additionally, they showed that due to the strong capital market incentives to meet or beat benchmarks, majority of the managers are much interested in managing earnings because it enhances investors' valuation of the company. To manage earnings, the participants further revealed that they used both discretionary accruals and real cash flow items in order to meet the earnings threshold, but they showed more willingness to manipulate earnings through the real operation activating activities rather than discretionary items. This was because real earnings manipulation does not attract the attention of auditor or regulatory authorities, making it more attractive compared to accrual earnings management. Consistent with this

finding, Jooste (2009) conducted a survey on the students' and business managers' perception regarding managing short-term earnings, and revealed that students and managers favoured changing the operating decisions of the company rather than managing short-term earnings by using the accounting method. Similarly, De Jong, Mertens, van der Poel and van Dijk (2014) survey evidence from 306 sell-side financial analysts with 48% response rate complemented by 21 interviews showed that financial analysts believes are consistent with CFOs believes that earnings management positively influence investors' perception about the company value.

Hewitt, Hodge and Pratt (2014) reported that investors react negatively to accrual earnings management compared to real earnings management. The negative reaction from the investors has been interpreted by Subramanyam (1996) who concluded that discretionary accruals are efficient because they have a positive impact on the future performance of the company profitability. Moreover, Dechow, Sloan and Sweeney (1996) pointed out that capital market imposes substantial cost on earnings manipulators. These ranges from an increase in bid-ask spread and dispersion of analyst earnings forecast, and a drop in the analysis following the company. Based on these consequences, a company may decide to use the real operating activities in order to avoid the capital market consequences.

Real earnings management refers to the management attempt to manage or alter the real economic activities of the business operation. This makes the company depart from the normal operating activities of the business. Examples of such activities involve the managers' attitude towards the reduction of discretionary expenses (e.g. selling distribution and administrative expenses, research and development), acceleration of sales and/or the grant of price discount to temporary boost sales or revenue and timing the sales of fixed assets to affect gain or losses as well as delaying the schedule of shipment (Gunny, 2005; Graham et al., 2005; Roychowdhury, 2006). Ball and Shivakumar (2006) indicated that managers are always interested in managing earnings through the real activities management. However, managing earnings through real activities of a company operation is costly to the company, but it is difficult to detect *in the sense that there is no criteria or benchmark on the appropriate operating decision that a company should undertake in the ordinary course of the business.* An example of such operating activities includes decision as to whether to implement a lenient credit term or discount to increase sales in order to meet the revenue targeted goal. Basically, Roychowdhury, (2006) developed three separate models to study real earnings management. These models involve sales manipulation,

overproduction and decrease in the discretionary expenses. Empirical analysis on these three models revealed that companies employed real earnings management in order to avoid reporting loss. Subsequent studies have employed these three models concurrently or the single model alone in identifying the real earnings management. Gunny (2010) extended the framework in Roychowdhury (2006) by modelling specifically, the general and abnormal R&D and selling, and the administrative expenses (SG&A), and by including sales of the fixed assets to report gains and abnormal production cost as a result of overproduction in order to cut down costs of goods sold. Gunny (2010) did not find statistical significance in the sales of fixed assets, and reported that while managers may engage in research and development (R&D) and selling, general, administrative and distribution (SG&A) real earnings management (REM) simultaneously, they do not engage in R&D and production REM at the same time. Giving the consistency of the previous studies documenting manipulations through R&D expenditure and overproduction REM is probably not pervasive among firms. Haga, Siekkinen, and Sundvik (2014) advanced the model by Roychowdhury (2006) using the neutral network based model to identify the real earnings management activities; they found that the multi-layer perceptron outperformed the linear regression model, especially regarding the comprehensive measures. However, this draws the researchers' attention to be cautious in employing the comprehensive measure of the real earnings management activities. However, they suggested that subsequent researchers should rely on the individual measures developed by Roychowdhury, 2006 when the linear method was employed.

A growing body of studies on the initial public offerings (IPO) and seasoned equity offerings (SEOs) showed that the managers of IPO and SEO companies manage their earnings upwards in order to meet the earnings threshold and benchmarks, which subsequently have a negative implication on the post-issue operating performance (Aharony, Lin & Loeb, 1993; Ahmad-Zaluki, Campbell & Goodacre, 2011; Kao, Wu & Yang, 2009; Lee and Masulis, 2011; Lee, Xie & Zhou, 2012; Roosenboom, van der Goot, & Mertens, 2003; Teoh, Welch & Wong, 1998a, 1998b). Similar evidence has also been documented in the public listed companies, where the companies' managers are much concerned on boosting the current period performance at the expense of the future performance (Defond & Jambalvo, 1994; Guidry, Leone, & Rock, 1999; Graham, Harvey & Rajgopal, 2005; Trejo-Pech, Weldon & Gunderson, 2014). This act of managerial opportunistic behaviour arises because the contractual incentives attributable to managers are associated with the ability of a company to meet the targeted or forecasted earnings or to prevent reporting losses (Roychowdhury, 2006; Siriviriyakul, 2014; Leggett, Parsons & Reitenga, 2009). Therefore, managers borrow the future

earnings into the current period to make the financial statement look as strong as possible in the current period. Ali and Zhang (2014) showed that CEOs prefer to overstate earnings in the early time of their tenure in order to attract outside investors and analyst because it is the current period earnings that would indicate the likely expectation of future period earnings as well as a good signalling mechanism of the company quality.

In addition, a paramount objective of Sarbanes-Oxley Act (SOX) is to restore investor confidence and integrity in the financial reporting process by encouraging companies to report earnings that really reflect the underlying economic performance of their business. Empirical researches on this angle found that the SOX only helps to mitigate accrual earnings management activities leading to a shift in the use of real earnings management activities in the post-SOX period. For instance, Cohen, Dey, and Lys (2008) documented that the level of earnings management in the United States is similar with the pre- and post- SOX period, but the intensity of the AEM decreased while there was a significant increase in the REM in the post-SOX period. As a result, they concluded that companies may be switching from managing earnings through accrual means to the real earnings management after the passage of the SOX. For example, certain regulatory authority such as the Department of Justice publicly discloses enforcement actions that are related to earnings management and major governance failures, suggesting that this may have increased the investors' and auditors' vigilance against deterrent managers. In other words, this suggests that real earnings management is more prevalent in the post-Sarbanes-Oxley era. Similarly, Francis, Hasan and Li (2014) found that the predictive power of deviation from the real operating activities against the industry norms was increased after the post-Sarbanes-Oxley era, while the predictive power of discretionary accruals decreased. In addition, the US dividend pay-out regulation requires real estate investment trusts (REITS) to distribute 80% of their taxable income as dividends to the common shareholders (Edelstein, Liu & Tsang, 2009). In order to mitigate the impact of this regulation, Edelstein, Liu and Tsang (2009) showed that the US real estate investment trusts (REITS) was engaged in the real earnings management activities such as reducing their revenue and increasing expenses to reduce the taxable income. Such activities include selling their fixed assets (even at loss) to generate cash so as to manage dividend payment regulation. Zang (2012) as well provided convincing evidence that managers use real and accrual earnings management interchangeably. Maturra (2008) also showed that managers in Japan use both discretionary accruals and real earnings management complementarily to smooth earnings. De Jong, Mertens, van der Poel and van Dijk (2014) survey report also showed that analysts found that it is difficult to detect earnings management practices. Meini and Siregar (2014)

used a sample of 155 Indonesian listed companies from 2001 to 2010. They found accrual earnings management has a positive effect on cost of equity, while real earnings management has a negative effect on cost of equity. As a result, they concluded that this may be because investors still remain unaware of the negative impact of the real earnings management activities like the accrual earnings management. However, in an in-depth interview conducted on 20 experienced auditors (19 partners and one senior auditor), Commerford, Hermanson, Houston and Peters (2014) revealed that auditors were aware of the use of real earnings management strategy by managers through their discussion with the management or their knowledge about the business operation. Thus auditors were much concerned primarily about this strategy because it may signal the use of other strategy in meeting earnings target. In particular, the auditors claimed that they were aware of the use of sales manipulation and inventory over production. Although they agreed that the real earnings management can be difficult to detect and that was why they engaged in the several risk assessments, auditors' scepticism and assessment of the management tone in the MD&A disclosure led to some resigning their engagement as a result of the real earnings management issue. In conclusion, they reported that auditors viewed the SOX as a means by which managers reduce the use of the accrual earnings management to the prevalence of the real earnings management because it is difficult to detect. This type of earnings management is less subjected to the regulatory, boards, auditor and other outside stakeholders' scrutiny (Gunny, 2005; Kim & Sohn, 2013).

The evidence from all the literature provides empirical evidence that companies manipulate their business activities when accounting regulation or standards monitoring regulation reduces accounting discretion and improves dividend pay-out regulations. This suggests that there was a switch in the use of the accrual earnings management to the real earnings management after the SOX. In contrast, Trejo-Pech, Weldon and Gunderson (2014) documented that the U.S. Agribusiness sector are suspicious of the earnings management every year, whereby, they report extreme earnings relative to their industry peer and also satisfy certain earnings threshold. The results showed that Agribusiness proprietors do not manage their earnings through the use of selling administrative and distribution expenses rather than the R&D expenses. Therefore they found little evidence for the real earnings, while there was a strong evidence for the accrual earnings management.

In manipulating the real economic activities of the company, managers may tend to deviate from the normal operating activities of the business. As such, this may subsequently have negative consequences on the future operating performance of the company (Ewert & Wagenhofer, 2005;

Roychowdhury, 2006) and company value (Graham, Harvey & Rajgopal (2005). Ewert and Wagenhofer (2005) pointed out that companies may alter their normal business practices and this may later result in subsequent decline in their operating performance. From the perspective of equity offerings, prior studies documented that real and accrual earnings management have severe negative consequences for the post-IPO and SEO stock returns and operating performance (Cohen & Zarowin, 2010; Rangan, 1998 Teoh et al. 1998a, 1998b). Cohen and Zarowin (2010) detected both the AEM and REM in firms around seasoned equity offerings, and found that the effects of REM are more severe than those of AEM. Taylor and Xu (2010) identified companies that might have engaged in the real earnings management activities and examined the consequences of this action on the subsequent operating performance of these companies in terms of the return on assets (ROA) and cash flow from operating activities scaled by assets (CFOA). They found that managers of the identified companies manipulated their operating activities only occasionally⁴ and that these manipulations do not have, on average, significant negative consequences on the subsequent operating performance of the companies. Leggett, Parsons and Reitenga (2009) found that the REM has a negative impact on the subsequent performance and cash flows from the operation of the company. Tabassum, Kaleem and Nazir (2014; 2015) found that the REM has a negative impact on future performance of the companies. The study documented that companies that over produced and were engaged in sales manipulation were associated with negative lower performance in the subsequent years. Francis, Hasan and Li (2014) found that companies that depart from the normal operating activities against the industry norms are positively associated with future stock price crash risk. However, it is not in all cases that manipulation of current performance of the company would lead to subsequent future underperformance of the company. For example, Cheng (2004) showed that the compensation committee were aware that managers had engaged in certain myopic behaviour such as manipulating the R&D expenses and adjusts the executive compensation packages concurrently to mitigate the real earnings management activities. Similarly, De Jong, Mertens, van der Poel and van Dijk (2014) survey evidence revealed that financial analysts believe in the positive consequences of smoothing earnings because this reduces the perceived riskiness and achieving the result benefit is worth a small sacrifice in value. Therefore if companies manage earnings in the current period through the real operating activities of the business and

⁴ They reported that 88% managed their operating activities only one or two times during the 16-year sample period. On the other hand, 12% performs multiple instances of the real earnings management during the sample period.

revert back to the normal operating strategies in the subsequent period, there is a tendency that this may not really have a negative consequence on the subsequent operating performance of the company. Alternatively, if manipulating the real activities of the business is engaged on a regular basis, it may result to the subsequent decline in the operating performance of the company. As such, this posits an empirical question as to whether the manipulation of the real economic activities has a significant negative impact on the company performance. Chen, Lin and Weng (2014) considered the income increasing real earnings management and income decreasing real earnings management. They found that income increasing real earnings management has a negative consequence on the operating performance, while the income decreasing real earnings management has a positive association with the subsequent performance in some settings.

Earnings management studies in the Nigerian context have received limited attention empirically. For example, Okolie, Izedonmi and Enofe, (2014) used a sample of companies listed on the Nigerian stock exchange and found that audit quality has a negative relationship with the cash-based earnings management. Usman and Yero (2012) found that the ownership structure has a negative influence on the earnings management. However these studies have only focused on the accrual earnings management using the Jones model.

Taking together all the existing empirical literature, there is a tendency that managers will manage the current period earnings against the future period earnings in order to mimic a strong performance in the current period. In other words, to enhance the current earnings of the company. In this vein, manipulating the current period earnings would likely pose a negative influence on the future performance of the companies. Upon this proposition, the present study examines the impact of manipulating earnings through sales that is abnormal cash flow from operation on the future performance of the companies measured by ROA.

Research Design Methodology

Sample Selection

The main focus of the study is to investigate the association between the real earnings management proxy through sales manipulation on the future performance of the companies. The study focused strictly on the manufacturing companies in consistent with studies on real earnings management activities (Cohen, et al., 2008; Kang & Kim, 2012; Visvanathan, 2008; Tabassum et al., 2015) real earnings management activities. Apart from the financial industries⁵ that have the highest market

⁵ Finance companies are excluded because they use a different accruals method (Park & Shin, 2004) and have unique disclosure requirements that makes it difficult for them to engage in the earnings

capitalisation at a value of ₦2.010 Trillion, the next industries are the consumer goods (₦2.001 Trillion), industrial goods (₦1.912 Trillion) followed by conglomerates and other industries (Fact Book, 2011/2012). This shows that the consumer goods and the industrial sectors cannot be simply ignored when conducting an investigation into companies listed on the Nigerian stock exchange. As a result, the study considered the consumer good and industrial goods sectors. Although the conglomerate sectors rank next based on the ranking of the total market capitalisation, since the number of companies in this sector is below the benchmark, which is expected to be for ten companies, for the cross-sectional industry-year regression model as suggested by Rocychowdhury (2006) and followed by subsequent researchers such as Kang and Kim (2012), we decided to include the service sectors as part of the industries considered.

In addition, the data used in this study is a secondary data for a total number of 117 company-year observations over a period from 2009 to 2011. In calculating the cross-sectional industrial year regression, the starting year was from 2008 to 2012. Data were extracted from the annual reports of the companies and Fact Book of the NSE.

Measurement of the real earnings management through sales manipulation

Following is the development of the real earnings management, with measurement by Rocychowdhury (2006) and subsequent extension by Gunny (2010). Prior researchers use abnormal cash flow from operations, abnormal production costs and abnormal discretionary expenses as the proxy for the real earnings management (Cohen, et al., 2008; Cohen & Zarowin, 2010; Graham, et al., 2005; Kang & Kim, 2012). However, some studies have as well employed a single model out of the three models proposed by Rocychowdhury (2006) to investigate the real economic activities of the company. For instance, Trejo-Pech, Weldon and Gunderson (2014) used the discretionary expense model, Maturra (2008) used discretionary cash flow model from the operation as a proxy for the real earnings management activities in Japan, while Tabassum et al. (2015) also used the discretionary cash flow model, Tabassum, Kaleem and Nazir (2014) used the abnormal cost of production, while Leggett, Parsons and Reitenga, (2009) used discretionary expenses model. Following these sets of researchers, this study decides to use the operating cash flow model. Rocychowdhury (2006) indicated that the first approach used by managers in manipulating the accounting numerals is through sales manipulation, whereby excessive price discount or lenient credit terms are given so as to

management, since they are highly regulated and are governed by Banking and other Financial Institutions Act (Hashim & Devi, 2008; He, et al., 2009; Jalil & Rahman, 2010; Mohamad, et al., 2012; Pae & Quinn, 2009)

increase the sales figure. By increasing the sales figure, the total earnings of the company increase but lead to lower profit margin and cash flows. Therefore, manipulation of earnings through sales reduces the current cash flow attributable to the company because the increase in sales figure was just a temporary increment. In order to investigate whether the real earnings management exists, the abnormal level of cash flow from operation is computed as follows using the proposed model of Dechow, Kothari, Watts (1998), and used by, Roychowdhury (2006) and Kang and Kim (2012) Tabassum et al. (2015) and Sun, Lan and Liu (2014).

Abnormal cash flow from operation = Actual cash flow from operation – Normal level of cash flow from operation using the estimated coefficient in equation 1.

Normal cash flow is subjected to a linear function of sales and changes in sales

$$\frac{CFO_t}{ASSETS_{t-1}} = a_0 + a_1 \left(\frac{1}{A_{t-1}} \right) + \beta_1 \left(\frac{S_t}{A_{t-1}} \right) + \beta_2 \left(\frac{\Delta S_t}{A_{t-1}} \right) + \varepsilon_t \dots \dots \dots (1)$$

Where, CFO_t = Cash flow from operations, A = Total Asset, A_{t-1} = Total assets at the beginning of the year, S = Sales, S_{t-1} = Sales at the beginning of the year, ΔS_{t-1} = lagged change in sales,

Regression model

The next stage is to test for the association between real earnings management and the future performance of the company using this regression model

$$ROA_{t+1} = a_0 + \beta_1 REM_t + \beta_2 ROA_t + \beta_3 LGTAST_{t+i} + \beta_4 GRWTH_{t+i} + \varepsilon_{it}$$

Where:

ROA_{t+1} = future performance of the company

REM_t = real earnings management, measured as abnormal cash flows from operation

ROA_t = return on assets, measured as income before extraordinary items divided by total assets

$LGTAST_{t+i}$ = company size, measured as natural logarithm of total assets

$GRWTH_{t+i}$ = Growth opportunities, measured as sales of the current year minus sales of the previous sales scaled by the sales of previous year

Description of variables

This section describes the dependent variable, the main explanatory variable and other likely variables that may influence the dependent variable. In this study, the dependent variable is the future operating performance measurements; the independent variable is the real earnings management through the sales manipulation while other influential variables are company size and growth opportunities available to the company.

Dependent Variable

Extant literature has identified various performance measurements. The performance measurements are classified into two; 1) accounting performance measurement and 2) market performance measurement. Accounting performance measurement includes proxies such as return on assets, return on equity, while the market performance measurement includes Tobin Q, PE ratio and EPS (Tabassum et al., 2015). The accounting performance measurement has mostly been used in corporate governance and company performance literature as well as capital structure literature. Among these are Kyereboah-Coleman (2007) and Ebaid (2009) who used ROA and ROE to measure performance. These measures reflect the profitability, as well as the financial performance of the company. Numerous studies have as well employed ROA as a measurement of the company performance when investigating the impact of real earnings management on the company performance. The use of ROA has been considered to be the best and most reliable measure of the company performance (Gunny, 2010; Taylor & Xu, 2010; Kao, Wu & Yang, 2009; Leggett, Parsons & Reitenga, 2009).

Independent Variables

The main explanatory variable in this study is the real earnings management through sales manipulation measured as abnormal level of operating cash flows. In addition, following the prior literature, growth and company size can be important variables that may have significant influence on the operating performance of the company and the ability of the company to engage in earnings management practices (Gunny, 2010). For instance, Smith, Chen and Anderson (2012), Abor (2005) and Sheikh and Wang (2012) defined used sales growth as proxy for the growth opportunities, measured as changes in the company sales in year t minus sales in year $t-1$ divided by sales in year $t-1$. They found that growth has a positive impact on the corporate performance measured by ROA.

Furthermore, company size has also been considered as a variable that could influence the performance of the company. Abor (2005), Chen and Yu (2012) found that company size has a positive impact on the company

performance. In contrast Ebaid (2009) found that it is not significant. Fama and French (1995) documented that larger companies have greater earnings than smaller companies. This suggests that smaller companies may likely engage in the earnings management practices. Similarly, Mansor, Che-Ahmad, Ahmad-Zaluki and Osman (2013) found that company size has a negative impact on the accrual earnings management. Gunny (2010) found that company size has a negative impact on the real earnings management. In contrast, Sun, Lan and Liu (2014) and Kang and Kim (2012) found that company size has a positive influence on the real earnings management through abnormal cash flow from operation. Studies that examine the association between the real earnings management on the company performance have also employed company size as a control variable. Gunny (2010), Tabassum et al. (2015) used the natural logarithm of the total assets. While Gunny (2010) found that size has positive impact on company performance, Tabassum et al. (2015) found that company size has no significant relationship on the company performance. Okolie, Izedonmi, and Enofe, (2014) used natural log of the total assets. In line with prior studies, this study considers company size measured as the natural logarithm of the company assets as an influential variable on the company performance.

Measurement of the real earnings management

Identification of the Real Earnings Management

Table 1. The sample distribution of companies that involve in real earnings management through sales manipulation

Year	Frequency	%	Cumulative %
2009	29	27.62	28
2010	26	24.76	52
2011	27	25.71	78
2012	23	21.90	100
Total	105	100	

Source: Authors computation based on the results from the model used to measure sales manipulation

Empirical Results and Discussion

In this study, the first line of action is to identify whether the real earnings management through sales manipulation really exists, followed by the impact of the REM through sales manipulation on the subsequent operating performance of the Nigerian quoted companies. To estimate the abnormal cash flow from the operations (ACFOt), we reverted on the cross-sectional industrial year regression. Table 1 provides the computation of the REM through sales manipulation on the year wise basis.

Following prior researches such as Roychowdhury (2006) and Kang and Kim (2012), Table 2 reports the regression coefficients used to estimate the normal level of proxies for the operating activities. The coefficient value of the sales manipulation activities has a significant negative relationship with the current period cash flows, indicating that sales manipulation activities are associated with the lower current period cash flow from the operations than the normal given level of sales (Sun, Lan & Liu, 2014). It simply means that the Nigerian companies may likely have been engaging in offering price discounts or offering a more lenient credit terms with unattractive interest payment, which leads to lower cash flow.

Table 3 provides a detailed description of the 117 firm year observations used in this study. The dependent variable in this study is the future performance of the company, which is ROA_{t+1} , while the main independent variable is the real earnings management through sales manipulation, followed by other variables such as the current performance, size and growth of the company. The ROA is measured as income before the extraordinary items divided by the total assets of the company and serve as the current performance of the company. The minimum and maximum values of ROA_t are -0.29 and 1.57. A minus sign occurred in the ROA_t because some companies suffer losses in the selected period of analysis. On average, the ROA_t value showed 0.092, meaning that the average profitability of the Nigerian companies is 9%. The standard deviation shows a value of 0.21. The minimum and maximum values of ROA_{t+1} are -0.55 and 1.57. This shows that ROA_t and ROA_{t+1} have the same maximum values, which may imply that the Nigerian companies engage in earnings smoothing. However, the average value of ROA_{t+1} is lower than average value of ROA_t . The average value of ROA_{t+1} is 0.085, while that of ROA_t is 0.092. This suggests that the average ROA in the future is reduced and this may be as a result of the earnings management through sales manipulation. Another variable that is employed in this study to control the individual characteristics of the company is the size of the company that is measured as the natural logarithm of total assets. The minimum and maximum values are 12.08 and 19.34, while an average size of a Nigerian company is 15.99. The standard deviation of this variable is 1.76. This indicates that there is a wide variation on the size of the Nigerian companies.

Table 4 provides the correlation analysis among the variables considered in this study. The results show that the real earnings management variable is negatively correlated with the dependent variable but insignificant, while the current performance of the company has a significant positive correlation with the future performance of the company. Likewise the size

of the company is positively correlated with the real earnings management. This may imply that large companies are likely to engage in the earnings manipulation through sales in order to boost their current performance. Both the current performance and size of the company have a significant value at 1%. In addition, the variance inflation factors (VIF) are used in this study to test for multicollinearity diagnosis of all the independent variables. The average VIF result is less than 10. Moreover, each of the VIF variables is less than 10. This provides an indication that the multicollinearity issue is not a problem in this study.

In order to find the association between the dependent and the independent variables, a regression analysis is employed. In the regression analysis, the study followed various econometric tests before deciding on whether the standard pooled OLS, the Random or Fixed effect model is more appropriate. The first process used in this study is to test between the pooled OLS and the Random effect model using the Breusch and Pagan Lagrangian multiplier test for random effects (B&G LM Test). This is to test whether there are company specific effects in the data attributes. The two basic hypotheses in the B&G LM Test are $H_0: \sigma^2_\lambda = 0$ (pooled OLS model), $H_A: \sigma^2_\lambda > 0$ (random effects). From the B&G LM Test results in the Table, the P-value is 0.386, which is > 0.05 . This implies that there are no firm specific effects in the data. Therefore, the OLS result is more appropriate. As a result of that, the explanation in this study is based on the OLS regression model. This model is used to investigate the association between the real earnings management through sales manipulation and the future performance of the company with the additions of other variables that are likely to affect the outcome according to prior literature. In the OLS result model in Table 5, the main explanatory variable, that is the REM has a significant negative relationship on the future performance of the company (ROA_{t+1}) at 5% (t-statistics = -2.14, p-value > 0.001). This finding implies that the presence of one unit reduction in the operating cash flows as compared to sales would lead to 0.048 unit decreases in the future performance of the company (ROA_{t+1}). The ROA_t is also highly significant and positively related to the future performance of the company at 1%. Likewise, the company growth has a significant positive relationship on the future performance of the company at 1%. However, the company size, measured as the natural log of the total assets of the company has no significant relationship on the future performance of the company. The adjusted R-square of the model is 0.809, which indicates that the explanatory variables in the model explain almost 81% of the dependent variable. That is to say, the variables that make up the model are well fitted for the regression analysis. With the result in Table 5, there is clear evidence that managers' manipulation of earnings through sales

manipulation has a negative impact on the future performance of the companies.

In a nutshell, the real earnings management has a negative influence on the companies' future return on assets. Therefore, the managers' manipulation of earnings through sales manipulation has an adverse effect on the future performance of the company by reducing their performance in the future years. A take away from this study is that, similar evidence was found in relation to other studies conducted in the developed and emerging countries. This reveals that the Nigerian companies' managers seem to behave in the same manner when it comes to the manipulation of accounting numbers. As such the effects of inflation of accounting numerals and the estimation of real earnings management through sales manipulation of quoted companies in Nigeria were ignored.

Table 2

Variables	CFO/TA-1 Estimate	P-Value
Intercept	.0156631	0.941
ast	74075.64	0.586
sta	-.0408707	0.007
chsta	.0667097	0.193
Adjusted R2	0.9132	

Table 3 Descriptive Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA_{t+1}	117	.0853846	.2535763	-.55	1.57
abnormal	117	-.2634188	.492669	-2.19	.47
ROA_t	117	.0920513	.2111036	-.29	1.57
LGTAST	117	15.99427	1.762346	12.08	19.34
GRTH	117	8.824701	25.17154	-79.55	164.71

Notes:

ROA_{t+1} is the future return on assets of the company, REM is the real earnings management, measured as a deviation from the normal operating cash flow of the industry year regression which equals the abnormal operating cash flow from operations, ROA_t is the current return on assets for the year, measured as profit before interest and tax scaled by the total assets. LGTAST is the size, measured as the natural logarithm of the total assets of the company; GRTH is the company's growth, measured as the sales in year t minus sales in year t-1 scaled by sales in year t minus 1.

Table 4. Correlations Matrix

Variables	ROA _{t+1}	Abnormal ROA _t	Lgtast
Abnormal ROA _t	-0.016		
Lgtast	.888**	0.083	
Grth	-0.067	.321**	-0.021
	0.142	0.103	0.046 0.04

Notes: ** Correlation is significant at the 0.01 level (2-tailed).

Table 5: Results summary of the Model

Dependent Variable: ROA_{t+1}

	Pooled OLS		Random Effect		Fixed Effect	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Constant	0.016 (0.876)		0.008 (0.950)		-1.260 (0.950)	
REM	-0.048 (0.035)		-0.059 (0.035)		0.228 (0.830)	
ROA _t	1.069 (0.000)		0.931 (0.000)		0.083 (0.007)	
LGTAST	-0.003 (0.607)		-0.002 (0.803)		0.083 (0.803)	
GRTW	0.001 (0.009)		0.001 (0.016)		0.001 (0.016)	
Adjusted R-Squared	0.803					
Breusch-pagan LM test	0.386					
Hausman test			0.000			
Observations	117					
Multicollinearity	1.07					
Heteroskedasticity					0.000	
Serial correlation					0.341	

Conclusion

In financial statement analysis studies, scholars are interested in how current, past earnings or earnings components are useful in forecasting future earnings or cash flows, which are important contributors to the valuation models. Issues related to earnings management practices have become an interesting topic among accounting and finance researchers. Most especially in financial statement analysis studies where much

emphasis dwell on how current, past earnings or earnings components are useful in forecasting future earnings or cash flows, which are important contributors to valuation models (Gunny (2010) pg 886). Earnings management being a weapon used by management to inflate the net income reported in the financial statement may provide no economic advantage to the company and affect the long-term growth prospect of the company. In fact, earlier empirical studies have provided evidence that managers manipulate earnings using two facets, which are the accrual earnings management and real earnings management. The accrual earnings management has been mostly examined by prior researchers around the globe.

However, the study of Graham et al. (2005) broadened the subsequent researchers' knowledge on the use of real earnings management by managers in practice. Despite that there has not been extensive literature on the aspects of real earnings management, especially in the Nigeria context, where almost large numbers of companies were delisted recently by the regulatory commission. As a result of that, this study investigates the association between the aspects of real earnings management proxy that involves sales manipulation, which manufacturing companies are likely to employ in boosting their current performance against the future performance of companies.

The empirical analysis in this study indicates that almost the larger percentage of the Nigerian companies engage in sales manipulation and this has adverse consequences on the performance of the Nigerian companies. The results indicate that real earnings management through sales manipulation has a negative effect on the future performance of the companies. This makes the results consistent with the notion that real earnings management has a negative influence on the future performance of the companies, which could even be one of the reasons why most of the Nigeria companies could not survive in the long term because managers deceive investors by managing earnings in order to show a good picture but which otherwise in future have negative consequence. In consistent with our results, Alhadad, Clacher and Keasey (2015) documented that UK IPO companies that manage earnings upward through real and/or accrual earnings management during the IPO year have higher probability of failure and lower survival rates in the subsequent periods. In addition, companies that manipulate earnings through the real activities are associated with a higher probability of IPO failure and lower survival rates in the subsequent periods compared to the accrual earnings manipulation during the IPO year.

However, our study has its own limitations; first, it would be more appropriate if future researchers can examine how earnings management affect the future performance of the company using the three proxy of earnings management. It will also be interesting whether real earnings management can as well be a good predictor of the company survival. Future study can also consider other industries apart from manufacturing sectors. More so, the study provides additional information for investors, analysts and regulators on the new avenue used by managers in manipulating the accounting numerals. As a result, regulators, professional bodies and standard setters should look beyond the discretionary expenses of the company but rather the operational activities of the company because one of the negative impacts of these activities is its long-term effects on the company's prospects. As such, this could be detrimental to the shareholders as information provided by companies would be put in doubt. Moreso, there is need to enforce a mandatory regulation on earnings restatement for easy checks and balance on the managers as well as the necessary corporate governance mechanisms that could help in mitigating the severe consequence of manipulating earnings through the real economic activities of the company. Furthermore, one cannot rule out calculating errors that might arise during the measurement of the real earnings management. Therefore, future research should expand the years for sampling and use a larger population. In conclusion, this study shows that companies use real earnings management through sales manipulation to alter their current performance in anticipation of a better future performance but this has a significant negative consequence on future performance and detrimental to the long term value of Nigerian publicly listed companies.

References

- Abdul Rahman, R., & Haneem Mohamed Ali, F. (2006). Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 21(7), 783-804.
- Abor, J. (2005). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana. *The journal of risk finance*, 6(5), 438-445.
- Aharony, J., Lin, C. J., & Loeb, M. P. (1993). Initial Public Offerings, Accounting Choices, and Earnings Management. *Contemporary Accounting Research*, 10(1), 61-81.
- Ahmad-Zaluki, N. A., Campbell, K., & Goodacre, A. (2011). Earnings management in Malaysian IPOs: The East Asian crisis, ownership control, and post-IPO performance. *The International Journal of Accounting*, 46(2), 111-137.

- Ahmed Sheikh, N., & Wang, Z. (2012). Effects of corporate governance on capital structure: empirical evidence from Pakistan. *Corporate Governance: The international journal of business in society*, 12(5), 629-641.
- Alhadab, M., Clacher, I., & Keasey, K. (2015). Real and accrual earnings management and IPO failure risk. *Accounting and Business Research*, 45(1), 55-92.
- Ali, A., & Zhang, W. (2015). CEO tenure and earnings management. *Journal of Accounting and Economics*, 59(1), 60-79.
- Albrecht, W. D., & Richardson, F. M. (1990, Winter). Income smoothing by economy sector. *Journal of Business Finance and Accounting*, 17(5), 713-730
- Ball, R., & Brown, P. (1968). An empirical evaluation of accounting income numbers. *Journal of Accounting Research*, 159-178.
- Ball, R., & Shivakumar, L. (2006). The role of accruals in asymmetrically timely gain and loss recognition. *Journal of Accounting Research*, 44(2), 207-242.
- Beaver, W. H. (1968). The information content of annual earnings announcements. *Journal of Accounting Research*, 67-92.
- Bernard, V. L., & Skinner, D. J. (1996). What motivates managers' choice of discretionary accruals?. *Journal of Accounting and Economics*, 22(1), 313-325.
- Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24(1), 99-126.
- Chen, C. L., Lin, P. Y., & Weng, P. Y. (2014). Real Activities Manipulation and Subsequent Accounting Performance---Yes, the Manipulating Direction Matters. *Review of Economics & Finance*, 4, 81-97.
- Chen, C. J., & Yu, C. M. J. (2012). Managerial ownership, diversification, and firm performance: Evidence from an emerging market. *International Business Review*, 21(3), 518-534.
- Cheng, S. (2004). R&D expenditures and CEO compensation. *The Accounting Review*, 79, 305-328.

- Cohen, D. A., Dey, A., & Lys, T. Z. (2008). Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. *The Accounting Review*, 83(3), 757-787.
- Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1), 2-19.
- Commerford, B. P., Hermanson, D. R., Houston, R. W., & Peters, M. F. (2014). Real Earnings Management: the Auditor's perspective. Available at SSRN 2384525.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13(1), 1-36.
- Dechow, P. M., Kothari, S. P., & Watts, R. L. (1998). The relation between earnings and cash flows. *Journal of Accounting and Economics*, 25(2), 133-168.
- Dechow, P. M., & Skinner, D. J. (2000). Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons*, 14(2), 235-250.
- Degeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings management to exceed thresholds. *The Journal of Business*, 72(1), 1-33.
- De Jong, A., Mertens, G., Van der Poel, M., & Van Dijk, R. (2014). How does earnings management influence investor's perceptions of firm value? Survey evidence from financial analysts. *Review of Accounting Studies*, 19(2), 606-627.
- Edelstein, R. H., Liu, P., & Tsang, D. (2008). Real earnings management and dividend payout signals: A study for US real estate investment trusts. In CAAA) 2008 Annual Conference Paper.
- El-Sayed Ebaid, I. (2009). The impact of capital-structure choice on firm performance: empirical evidence from Egypt. *The Journal of Risk Finance*, 10(5), 477-487.
- Ewert, R., & Wagenhofer, A. (2005). Economic effects of tightening accounting standards to restrict earnings management. *The Accounting Review*, 80, 1101-1124.
- Fama, E. F., & French, K. R. (1995). Size and book-to-market factors in earnings and returns. *The Journal of Finance*, 50(1), 131-155.

- Francis, B., Hasan, I., & Li, L. (2014). Abnormal real operations, real earnings management, and subsequent crashes in stock prices. *Review of Quantitative Finance and Accounting*, 1-44.
- Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of accounting and economics*, 40(1), 3-73.
- Gunny, K. A. (2005). What are the consequences of real earnings management?. w4.stern.nyu.edu
- Gunny, K. A. (2010). The Relation Between Earnings Management Using Real Activities Manipulation and Future Performance: Evidence from Meeting Earnings Benchmarks. *Contemporary Accounting Research*, 27(3), 855-888.
- Habbash, M., & Alghamdi, S. (2015). The perception of earnings management motivations in Saudi public firms. *Journal of Accounting in Emerging Economies*, 5(1), 122-147.
- Haga, J., Siekkinen, J., Sundvik, D., A neural network approach to measure real activities manipulation, Expert Systems with Applications(2014), doi: <http://dx.doi.org/10.1016/j.eswa.2014.10.047>
- Hamid, F., Hashim, H. A., & Salleh, Z. (2012). Motivation for earnings management among auditors in Malaysia. *Procedia-Social and Behavioral Sciences*, 65, 239-246.
- Haw, I. M., Ho, S. S., & Li, A. Y. (2011). Corporate Governance and Earnings Management by Classification Shifting. *Contemporary Accounting Research*, 28(2), 517-553.
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of accounting and economics*, 31(1), 405-440.
- 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.
- Hewitt, M. R., Hodge, F. D., & Pratt, J. H. (2014). How the Discovery of Accruals-Based versus Real Earnings Management Affects Investment Decisions: The Importance of Trust. Available at SSRN 2245204.

- Ijaiya, G. T., & Ijaiya, M. A. (2004). Foreign aid and poverty reduction in Sub-Saharan Africa: a cross-country investigation. *South African Journal of Economic and Management Sciences= Suid-Afrikaanse Tydskrif vir Ekonomiese en Bestuurswetenskappe*, 7(3), p-542.
- Jooste, L. (2010). Accounting ethics-an empirical investigation of managing short-term earnings: financial management. *South African Journal of Economic and Management Sciences= Suid-Afrikaanse Tydskrif vir Ekonomiese en Bestuurswetenskappe*, 13(1), 98-111.
- Kim, J. B., & Sohn, B. C. (2013). Real earnings management and cost of capital. *Journal of Accounting and Public Policy*, 32(6), 518-543.
- Kang, S. A., & Kim, Y. S. (2012). Effect of corporate governance on real activity-based earnings management: evidence from Korea. *Journal of Business Economics and Management*, 13(1), 29-52.
- Kao, J. L., Wu, D., & Yang, Z. (2009). Regulations, earnings management, and post-IPO performance: The Chinese evidence. *Journal of Banking & Finance*, 33(1), 63-76.
- Kyereboah-Coleman, A. (2007). The impact of capital structure on the performance of microfinance institutions. *The Journal of Risk Finance*, 8(1), 56-71.
- Leggett, D., Parsons, L. M., & Reitenga, A. L. (2009). Real Earnings Management and Subsequent Operating Performance*. Available at SSRN 1466411.
- Lee, G., & Masulis, R. W. (2011). Do more reputable financial institutions reduce earnings management by IPO issuers?. *Journal of Corporate Finance*, 17(4), 982-1000.
- Lee, H. W., Xie, Y. A., & Zhou, J. (2012). Role of underwriters in restraining earnings management in initial public offerings. *Journal of Applied Business Research (JABR)*, 28(4), 709-724.
- Matsuura, S. (2008). On the relation between real earnings management and accounting earnings management: Income smoothing perspective. *Journal of International Business Research*, 7(3), 63.
- Meini, Z., & Siregar, S. V. (2014). The effect of accrual earnings management and real earnings management on earnings persistence and cost of equity. *Journal of Economics, Business, and Accountancy | Ventura*, 17(2), 269-280.

- Mohammad Alhadab, Iain Clacher & Kevin Keasey (2015) Real and accrual earnings management and IPO failure risk, *Accounting and Business Research*, 45:1, 55-92, DOI: 10.1080/00014788.2014.969187
- Mansor, N., Che-Ahmad, A., Ahmad-Zaluki, N. A., & Osman, A. H. (2013). Corporate Governance and Earnings Management: A Study on the Malaysian Family and Non-family Owned PLCs. *Procedia Economics and Finance*, 7, 221-229.
- Okolie, A. O., Izedonmi, F. O., & Enofe, A. O. Audit Quality and Cash-Based Earnings Management of Quoted Companies in Nigeria.
- Rangan, S. (1998). Earnings management and the performance of seasoned equity offerings. *Journal of Financial Economics*, 50(1), 101-122.
- Roosenboom, P., van der Goot, T., & Mertens, G. (2003). Earnings management and initial public offerings: evidence from the Netherlands. *The International Journal of Accounting*, 38(3), 243-266.
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3), 335-370.
- Schipper, K. (1989). Commentary on earnings management. *Accounting Horizons*, 3(4), 91-102.
- Siriviriyakul, S. (2013). Re-Examining real earnings management to avoid losses. *Available at SSRN 2359813*.
- Smith, D. J., Chen, J., & Anderson, H. D. (2012). The relationship between capital structure and product markets: evidence from New Zealand. *Review of Quantitative Finance and Accounting*, 38(1), 1-24.
- Subramanyam, K. R. (1996). The pricing of discretionary accruals. *Journal of accounting and economics*, 22(1), 249-281.
- Sun, J., Lan, G., & Liu, G. (2014). Independent audit committee characteristics and real earnings management. *Managerial Auditing Journal*, 29(2), 153-172.
- Tabassum, N., Kaleem, A., & Nazir, M. S. (2015). Real Earnings Management and Future Performance. *Global Business Review*, 16(1), 21-34.
- Tabassum, N., Kaleem, A., & Nazir, M. S. (2014). Earnings management through overproduction and subsequent performance: an empirical

- study in Pakistan. *International Journal of Indian Culture and Business Management*, 9(3), 267-282.
- Teoh, S. H., Welch, I., & Wong, T. J. (1998). Earnings management and the underperformance of seasoned equity offerings. *Journal of Financial economics*, 50(1), 63-99.
- Teoh, S. H., Welch, I., & Wong, T. J. (1998). Earnings management and the long-run market performance of initial public offerings. *The Journal of Finance*, 53(6), 1935-1974.
- Trejo-Pech, C. J., Weldon, R. N., & Gunderson, M. A. (2015). Earnings Management through Specific Accruals and Discretionary Expenses: Evidence from US Agribusiness Firms. *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie*.
- Usman, S. H., & Yero, J. I. (2012). Ownership concentration and earnings management practice of Nigerian listed conglomerates. *American International Journal of Contemporary Research*, 2(7), 157-171.
- Visvanathan, G. (2008). Corporate governance and real earnings management. *Academy of Accounting and Financial Studies Journal*, 12(1), 9.
- Watts, R. L., & Zimmerman, J. L. (1990). Positive accounting theory: a ten year perspective. *Accounting review*, 131-156.
- Zang, A. Y. (2011). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The Accounting Review*, 87(2), 675-703.