

ACCRUAL ANOMALY: A CONCEPTUAL PERSPECTIVE

Eveyn OHIDOA-TOUWA

Department of Accounting, Faculty of Management Sciences
University of Benin, Benin City, Nigeria
E-mail: evetolambassador@gmail.com

Abstract: *The study investigates the occurrence of accrual anomaly globally with specific attention on other countries factors beyond the informatory aspect of stocks price prediction, that account for accrual anomaly worldwide. The conceptual approach methodology was adopted; materials were sourced online and journals of accounting and finance researches from where the findings of most previous related studies were reviewed. We observed that, accrual anomaly is not only associated with the United States and countries that share common characteristics with United States, but with code law countries; country legal system, changes in accounting regimes, influenced accrual anomaly occurrence globally; also, we observed some methodological deficiencies in accrual anomaly measurement in prior studies and a limitation of Sloan coexistence hypothesis of accrual and cash flow anomalies. Hence, we recommend that; first, a pre and post study of International Financial Reporting Standard (IFRS) on accrual anomaly is necessary in order to establish the effect of changes in accounting regimes on accrual anomaly in Nigeria. Second, a validation of Mishkin-test commonly accrual anomaly test and Sloan 1996 coexistence of accrual and cash flow anomalies. Finally, a future study that will include profit and loss firms as sample is encouraged.*

Keywords: *Accounting Regime, Accrual Anomaly, Corporate Governance, Efficient Market, and Misspricing.*

JEL Classification: *M41.*

1. Introduction

The reality of modern accounting practice has a reflect of a mismatch between the timing and amount of cash payment versus the delivery of services. This has led accountants to use estimates to align revenue and cost in a specific period; which is called accrual accounting. The existence of such situation creates some level of discretion in companies' accounts. Operationally, corporate entities have a discrete financial reporting time lag, such as financial year end; this timely frame is mandatory for all corporate business entities that have continuous operating activities. In reality, cash flow effects of the financial transactions of such entities mostly fall outside the circumference of this imposed time lag. Therefore, measurement of entities' performances alone by its cash flows, would definitely amount to a distorted picture, since the cash flows generated alone would not be able to represent the whole economic relevance of the financial transactions executed within a given period. This timing problem is one factor that gave credence to the use of accrual basis of accounting, which is thought to be a proxy for the misdated cash flows.

Therefore, accrual anomaly is the failure of any of the pricing models such as, Capital Asset Pricing Model (CAPM), to hold in relation to stocks prices and returns. Accrual anomaly is a great discovery in the academic field of research. The pricing models relied on the assumption of efficient market hypothesis, which allows the exchange of realized earnings for expected return. However, in the midst of the increasing evidence revealing the existence of this phenomenon in various markets, the rationale for the occurrences of this anomaly still remains an unresolved issue with inconclusive findings. The term anomaly (mispricing) is normally used to describe a situation or behaviour that negates or contradict existing theories. One of the foremost studies in prior literatures on accrual anomaly that aroused researchers' interest among academics and practitioners is that of Sloan (2001). The period of globalization started with a perpetual era of investing in stocks of companies with the unstableness of stocks prices around the world markets. A great numbers of investors all over the globe are involved in stocks transaction for daily survival. Therefore, investors' knowledge about stock market anomalies and causes is of a great relevant as it enables

investors to make informed decisions and avert losses, as relates to stocks trading. Therefore, the attraction of researches in this direction in most developed economies and scarcely in emerging economies like Nigeria as revealed in our literature review section.

In literature, there exist three anomaly situations. First, Dodd (1934), asserts that accrual anomaly occurred when stocks with high fundamental to price ratio perform above stocks with low fundamental to price ratios. This kind of stocks behaviour is referred to as Glamour stock. Second, Chan, Chan, Jegadeesh, and Lakonishok, (2006) and (Uwuigbe (2018) identified another situation of anomaly where stock with low market capitalization (small stocks) yield returns in abnormally high average returns. Third, Fama and French (1970) described another anomaly situation as where stocks that have high book value in relation to market value of stocks have high average equity revenues. These anomalies, situations that defy existing price models are the focus of this study. It is important to note that, the subject of analysis of financial statements is to predict future earnings, and emphasis is on the element of accrual and cash flow. Also, it is pertinent to know that, one of the main concerns and focus of investors is on reported earnings of entities. The decisions of these investors and other stakeholders as it relate to stock pricing and returns do not correlate with their expectations even after exploitation of the knowledge of capital assets pricing models and efficient market hypothesis in accrual anomaly research.

In the light of efficient market hypothesis, market prices of stocks are expected to reflect all the relevant information available. Therefore, investors cannot make abnormal returns. However, in reality, the reverse is the case, as in most markets in the world; stocks returns are showed some anomalies that contradict the efficient market hypothesis assumption. At same time, the capital assets pricing theories have been defiled by the practical behaviours of stocks returns over time, even in the environments of strong efficient markets as evidenced in literature (Lafond, 2005). More so, there is a limit to which we can generalize the causes of accrual anomaly. The reason is that, most studies in accrual anomaly are focused on developed countries' capital markets, unlike, emerging capital market such as Nigeria's, which have different organisational settings. Also, the reason for the existence of different results by different researchers across countries as it relates to accrual anomaly is an issue that worth investigating. Therefore, the continuous occurrence of this phenomenon despite the application of capital assets pricing models in a given efficient markets environment implies that, there are other possible factors that could be responsible for the occurrence of accrual anomaly or there exist some limitations in past accrual anomaly studies (measurement deficiency, omitted variable issue, sample selection bias).

Hence, the relevance of this study is that, to the best of our knowledge, this is the first conceptual study in the direction of addressing countries' specific factors responsible for the occurrence of accrual anomaly and methodological deficiencies in prior accrual anomalies studies in an emerging economy. This study is motivated and driven to conceptually respond to the following questions: First, is accrual anomaly a global phenomenon? Second, are there changes in the level of accrual anomaly across accounting regimes? Third, what are the country's specific factors that influence accrual anomalies? Fourth, does accrual anomaly imply cash flow anomaly? Lastly, are there some methodological deficiencies in accrual anomalies' prior studies following this introduction, is the conceptual definition of accrual anomalies, local and international evidence of accrual anomalies, factors that influences accrual anomaly, methodological deficiencies in accrual anomalies prior studies, theoretical background of accrual anomalies, conclusions, and recommendations for further research.

2. Literature Review: Accrual Anomaly

Seminar work on accrual anomaly began with Sloan (2001). He described accrual anomaly as the representation of the negative relation that exist between stocks returns and accruals. To him, the occurrence of this phenomenon arises from the narrow fixation of investors as relate to stocks returns and accruals. In other words, he asserts that the occurrence of this phenomenon is attributable to a situation where stock market players are unable to perceive accurately or are not aware of the persistence between cash flow and accrual component of earnings. Richardson, Tuna, and Wysochi (2010), defined the concept of accrual anomaly as the misinterpretation of information relating to cash flow and accrual, when stock market participants predict stocks returns. The outcome of this misconception is a biased prediction of future returns and inaccurate current prices of equities.

Kothari and Sabino (2005) theory on accrual anomaly states that investors fixate too high on corporate earnings of firms to establish stocks returns. This assertion was later validated by Sloan (1996). In affirmation, Arewa, Nwakanma and Torbira (2014) provided some proof for the earnings fixation hypothesis of Graham, Campbell and Rajgopal (2005), Doddy (1934), carried out analysis to examine the sell-side analysts and auditors' utilization of information in accruals. The study seeks to find out whether the earnings prediction of these analysts anticipated the less persistence of the accrual element of current earnings. The outcome of the study showed that sell-side analysts looked to be largely unaware to the less persistence of accruals. In furthering the explanation of this concept, several researchers have given their own views (Fairfield, Whisenant, and Yohn 2003); and (Richardson, Tuna and Wysochi, 2010). In their opinion, they argued that there exists no relationship between accrual and future earnings but there exists a strong correlation between growths of employed assets invested in previous stocks to scale future returns. Richardson et al. (2005), opined that the calculated error in accruals subscribe to the lesser accruals persistence as explained in the growth element of Fairfield *et al.* (2003). This truly represents the extension of the definition of accrual anomaly that was explained by (Sloan, 2001). Looking in this same direction, Ricardson *et al.* (2005) classified accruals on the basis of reliability and discover that the accrual anomaly is more prominent for the less reliable class of non-current operating accruals and working capital accruals.

However, the outcome of these studies are not universal (Pincus, Rajgopal, & Venkatachalam, 2007). By extension, Pincus, et al. (2005) investigated the simultaneous occurrence of accrual and cash flow anomalies, on the basis of their findings; they asserted that accrual anomaly (mispricing), not the cash flow anomaly, occurs in some countries like the United Kingdom, United States, Canada and Australia while the reverse holds in eight other countries in their study. In addition to these findings, Pincus et al., (2007) equally revealed in their study that the occurrence of this phenomenon (accrual anomaly) appears to be more pronounced in countries with certain institutional and accounting structures, and common law settings. Uwuigbe, Fagbemi & Anusiem (2018) investigated the specific statement of financial position elements of Sloan's accrual estimate in order to identify which element is majorly accountable for the occurrence of accrual anomaly. The study revealed that inventory accrual was more visible in correlation to future stock earnings. In the same vein, Chan, Chan, Jegadeesh, and Lakonishok (2006) could not provide an explicit reason for their result, rather, they attributed this shortcoming in their finding to the economic magnitude of stock accruals and the slow move of some managers to document stock in the face of prevailing slowing demand.

3. Local and International Evidence of Accrual Anomaly

Recent study by Amna and Danish (2020) showed that, information on the aspect of accrual anomaly and its relationship with conditional conservatism on the pricing of accrual during a profit year. Arewa, Nwakanma and Torbira (2014) observe that accrual anomaly means the failure of the existing stocks pricing models to hold in relation to prediction of stock returns. This study investigates the existence of accrual anomaly in Nigerian stock market. They reported that, the factors that account for market anomalies in Nigerian stock market are traceable to volatility clustering, information gap and heteroskedastic nature of Nigeria stock prices. Also Akenbor and Ibanichuka (2018), Fonseca and Gonzales (2008) and Uwuigbe, Fagbemi and Anusiem (2018) reviewed extant literature on the determinants of accruals, specifically non-discretionary accruals and provided the basis for modifying existing discretionary accruals models.

Sloan (1996) is acclaimed as an eye opener in accrual anomaly research in accounting and finance. In his first investigation of the existence of this phenomenon (accrual anomaly), he asserts the presence of accrual anomaly in United States. From that time, the research on accrual anomaly has spread. He opined that the phenomenon is only associated with the U.S and countries that shared same similarities with the U.S, that is, countries that operate the common law system or accruals accounting system. Contrary to this assertion, studies such as that of Leippold and Lohre (2010); and LaFond (2005) empirically evidenced that the phenomenon is equally presents outside the United States, that is, it also exists in countries that operate the code law systems. Therefore, if this latter assertion holds, it means that accrual anomaly is a global phenomenon. The question that immediately comes to mind and which demands a further investigation is; what are the factors that could be responsible for this mispricing (accruals anomaly)? In response to this question, Pincus et al. (2007); and Leippold and LaFond (2005) attributed the occurrence of accrual anomaly to accrual accounting system, low ownership concentration and weak shareholder protection. These studies test for specific factors that could be responsible for the differences in the occurrence of accrual anomaly in countries in order to establish potential differences among countries in relation to the incidence of accruals mispricing. In Pincus et al. (2007); (Leippold and LaFond (2009) employed Ordinary Least Square (OLS) regression analysis and concluded that accruals anomaly (mispricing) is associated to countries that shared common characteristics with US, countries that operate accrual accounting system, and which have wide share ownership. They opined that these results are strengthened by the different accruals estimate and accounting operating systems that can significantly result to country's earnings differences. In furthering research on possible causes of accrual anomaly, Leippold and Lohre (2010); and Dechow, Patricia, Natalya and Sloan (2011) report that accruals anomaly may be experience in countries where earnings have a lower relevance for stock prices and that the occurrence of this phenomenon is attributed to the prompt reaction to the release of news about earnings respectively.

However, Akenbor and Ibanichuka (2018) opined that countries with high accruals are predisposed to tax revenues, less volatility are easier to forecast compare to countries that have low level of accruals. Clinch, Fuller, Govendir and Wells (2012) found accrual anomaly in Australian market. Kaserer and Klingler (2008) investigated the existence of accrual anomaly in Germany, and the study showed that, the phenomenon exists under fair value accounting, which create opportunity for managerial discretion. Li, Niu, Zhang and Largay (2011) examined the presence of accrual mispricing in China. The study sampled only firms that made profit, and firms with losses in the year of the study were excluded from the investigation. It is obvious that, there is sample selection bias in this study. This prompts us to ask; is accrual anomaly peculiar to profit firms alone? Furthermore, Lafond (2005)

randomly selected seventeen countries to investigate the existence of accrual anomaly. The study revealed that accrual anomaly was found associated with countries with accrual accounting system; and that the existence of the phenomenon is a global issue. Furthermore, they found that the occurrence of accrual anomaly among countries are accounted for by different factors such as; legal system, corporate governance and changes in accounting regimes. Pincuset al. (2007), examined the global existence of accrual anomaly using a sample of 20 countries; they concluded that accrual anomaly exists only in the United Kingdom, United States, Canada and Australia, contrary to Lafond (2005). The alternative explanation to their findings is that accrual mispricing arises from earning management and limits arbitrage. In addition, Pincus, et al., (2007) found that the anomaly is expected to occur more among countries where the practice of accrual basis of accounting is predominantly used, a lesser ownership concentration of share and common law system exist. Also from the international scene, Tatiana, Zvi and Theodore (2019) assert that, there is a behavioural explanation for accrual anomaly that is consistent with mispricing of originating accrual. Another prominent and recent study by Tiago and Carlos (2020) empirically evidence that, accrual anomaly does not persist on the European market, also, this study negates previous assertion about underweighting of accrual component of earnings as, accrual is not best prediction of future stock returns. Therefore, this leads us to look at some possible country-specific factors capable of influencing accrual anomaly.

4. Factors that influences Accrual Anomaly

4.1 Country's Legal System and Accrual Anomaly

The discovery of accrual anomaly has raised an open-ended question as to the reason for the occurrence of this phenomenon in stock markets globally. With respect to the legal system of a country, Uwuigbe et al., (2018) examined the possible influence of a country's legal system on accrual anomaly. The study found that the nature of legal system put in place in a country impacts accrual anomaly. According to the authors, the legal system in countries that share common characteristics with common law nations tends to aimed at all shareholders by intense use of financial statements disclosures to address the problem of information asymmetric. However, this is not same in code law settings. The common law legal system operation is directed to care for only the welfare of the major financial interest holders. These variations in legal system, affect the relevance of accounting information in respect to the intensity with which the conservatism and opportunity result from the approval of the legal setting. Pincuset al. (2007) state that, the legal system is used as a measure for the institutional structure. They indicated the divergence of countries' institutional characteristics such as legal system and shareholders' rights protection is a likely cause of accrual anomaly. With respect to the legal system, they state that common law traditions are relatively more relax, that is, more flexible in relation to accrual anomaly compare to that of the code law tradition. In respect to shareholders' rights, they explained that, countries where legal protection of shareholders' is weak (code law countries) have more avenues for managerial manipulation to the disfavour of the interest of the minority shareholders. By these findings, we aligned with these view, though subject to empirical validation that the occurrence of accrual anomaly is not just a global phenomenon, but associated with a country's type of legal system in operation. In their study, they reported that, the government system of a country affects accruals anomaly. Furthermore, Dechow et al. (2011) found that countries that operate a legal system that share same features with that of United States, that is, the common law system is more prone to experience accruals anomaly compare to the code law countries.

On the contrary, Xu and Lacina (2009) and LaFond (2005) explained that, accrual anomaly is not restricted to a particular country or continent but is a global issue that is

associated with accrual basis of accounting system; independent of the type of legal system or investor protection. Leippold and Lohre (2010) and Pincuset al. (2007) conducted separate researches using different countries categorized by their legal systems on the existence of the phenomenon; accrual anomaly in twenty-six (26) developed, covering the period of 1994 to 2008. The findings of their analyses showed that accrual mispricing (anomaly) has a direct relationship with the type of a country's legal system in place. The question we ask here is, if accrual anomaly is investigated in relation to the legal system in emerging country in Africa, will the result be same or different to prior findings in developed countries? Hence, another call for future empirical investigation in emerging economy.

4.2 Corporate Governance and Accrual Anomaly Persistence

Lev and Nissim (2006) investigated the investor response to accruals anomalies and the reasons for the persistency of accrual anomaly. They first established that accrual anomaly continues and that its level has not reduced over the sample period from 1965 to 2003. What this insinuate is that, the reaction to accruals information by institutional investors has been untimely. They classify institutional investors into two groups (transient institutional investors and non-transient institutional investors) by their trading intensity. In order to investigate the timeliness and magnitude of accruals-based trading by institutional investors in the time period from 1982 to 2001. They observed that transient institutions (short duration institutions), trading frequently for short-term profits from price changes, do indeed react to accruals anomalies expediently. The reaction of transient institutions is stronger in the first quarter of the coming year, in which one year returns and accruals of most entities are publicly disclosed. The response to accruals anomalies was also quite firm in the second and final quarter of the subsequent period.

The role of institutional investors to value accrual was also examined by Hribar and Collins (2002). They found that firms with large institutional ownership along with a minimum threshold level of actively trading institutions show low anomaly compare to low institutional ownership firms. This implies that, accrual based hedge portfolio's one year ahead returns are smaller for high institutional ownership firms than lower institutional ownership firms. Moreover, the reaction for the 1992 to 2001 period has been double as large as that for that of ten years before Lev and Nissim (2006). The response by transient institutions to accruals information is shown to precede the change in stock price (Lev & Nissim, 2006). The response to accruals anomalies by non-transient institutions has appeared only in the 1990s and only in the first quarter of the subsequent year. The reaction by non-transient institutions (long duration institutions) in the first quarter has however been greater in magnitude to that of the transient institutions. Their study shows that entities as a whole traded more actively on accruals information during the 1990s than in the previous decade (Lev & Nissim, 2006). Transient institutions are shown to trade actively and expediently on accruals information, yet, accrual anomaly persists. Lev and Nissim (2006) calculated that accruals-related ownership change for extreme-accrual firm's amounts to lower than ten percent of the mean ownership variation in the first quarter and about ten percent of the median variation magnitudes not enough to affect the accrual anomaly (Lev & Nissim, 2006). Furthermore, the study investigates the characteristics of extreme-accrual firms that conclude small size and low book-to-market ratio keep institutional investors from taking significant positions in these firms. They opined that information processing and transaction costs prevent individual investors from implementing an accruals-based trading strategy. They concluded that because of these hindrances for both institutional and individual investors, the accrual anomaly will endure for quite some time.

Contrary to these findings, Li et al. (2011) present evidence that accrual anomaly has demised from its peak in 2000. Green et al. (2011) reported a contradictory finding among academics and practitioners regarding the enforcement of accruals-based trading strategy, academics being skeptical while practitioners actually applying accrual-based models. They further proceed to investigate the degree to which accrual anomaly has persisted to yield positive abnormal earnings. They propose several alternative explanations for the extinction of accrual anomaly, with their primary explanatory factor being the attention of hedge funds towards exploiting the anomaly (Green et al., 2011). They divide their sample period into three sub-periods: one, the pre-Sloan sub-period from the month of July 1970 to the month December 1995; two, the early post-Sloan sub- period from the month of January 1996 to the month of December 2003, which is the last year of returns; and three, the late post-Sloan sub-period from the month of January 2004 to the month of March 2010. Most of the annual returns to implementing an accruals based trading strategy were positive for the first two sub-periods. However, for the last sub-period starting in 2004, returns were not typically positive anymore. (Green et al., 2011) then investigate various explanations for this demise, inferred that it stems from an increase over time in the capital invested by hedge funds into exploiting the accrual anomaly, and in part from a decline over time in the size of the mispricing of accruals. Under weak corporate governance systems fair value accounting might result in more extensive accrual manipulation. Due to a lack of empirical evidence, they leave open to future research to the question of the effect on accrual anomaly of introducing fair value accounting standards under a stronger corporate governance regime (Green et al., 2011).

4.3 Changes in Accounting Regimes and Accrual Anomaly

The few existing international studies offer some evidence on the relationship between accounting standards and accrual anomaly (Kaserer & Klingler, 2008). Specifically, common law accounting standards have been found to be connected with the accrual anomaly. It is however difficult to disentangle the effects of accounting standards from the complexities that every institutional setting presents. Ideally, to disentangle the effects that accounting standards have on the accrual anomaly, one would need to construct a *ceteris paribus* experiment where all other factors excluding the accounting standards stay constant (Kaserer & Klingler, 2008). The closest approximation to this ideal experimental setting as is available to a researcher is to investigate a transition from one accounting standard to another in a single institutional setting in Nigeria. International Financial Reporting Standard (IFRS) became mandatory in the first phase application in 2011 fiscal year (Clinch, 2012). This transition represents a transition from Statement of Accounting Standard (SAS) to the fair value accounting framework of IFRS. Kaserer & Klingler, (2008) investigated the reaction of accrual mispricing in Germany, after the adoption of the International Accounting Standards along with the German local Generally Accepted Accounting Principle (GAAP). They asserted that, the German local GAAP revealed same magnitude persistence for both accrual components and cash flow return. They opined that, accrual anomaly was present in the regime of fair value accounting because it creates room for managerial discretion. Therefore, the introduction of fair value accounting framework introduced accrual anomaly into German institutional setting. Kaserer & Klingler (2021) qualify their results by presuming that the effects of adopting a particular accounting framework depend on the corporate governance system under which the accounting framework is implemented.

On the contrary, Kraft, Andrew, and Wassley (2007) investigate this phenomenon in relation to earnings persistence in Finland and came up with a finding that, those differences in earnings persistence came about over the period of voluntary switching to international accounting standards. Their second set of empirical tests investigates whether stock prices

correctly reflect the implications of current earnings components for future annual earnings, and whether the introduction of IFRS has any effects on this. The preliminary results indicate overweighting of the accrual component in the pre-IFRS sub-period under the domestic accounting standards. Overweighing of accruals vanishes by the introduction of IFRS standards. These results are the reverse of those of Kaserer and Klingler (2008) which indicated accrual overweighting only for the post-IFRS sub-period.

Notwithstanding, on the basis of mix findings in prior studies as regards to the effect of changes in accounting regimes on accrual anomaly, we strongly canvass for a future empirical study to validate the conflicting assertions in countries like Nigeria where a transition from local standards; Statement of Accounting Standard (SAS) to the International Financial Reporting Standard (IFRS) has taken place.

5. Methodological Deficiencies in Accrual Anomaly Prior Studies

Upon our critical review of accrual anomaly literature, we discovered some methodological shortcomings along with (Kothari, Sabino & Zach, 2005); and Kraft et al. (2007). These limitations include cases like; sample selection bias, omitted potential variables from the commonly used accrual anomaly Mishkin-test, automatic coexistence of accrual and cash flow anomalies etc. To support our conceptual observation as to these methodological deficiencies, Kraft et.al(2005); and Kothari, et al. (2005), opined in both studies that, most past researches on accrual mispricing suffer some methodological limitations such as, sample selection bias. Also in the study of Kraft et al. (2005) reveals that cash flow and accrual anomaly are associated with companies that buy and hold annual earnings of above two hundred percent (200%) after the elimination of outliers that account for below one percent (1%) of their total samples observed. They found that both the high and low accrual portfolios earned negative abnormal earnings. Also in Kraft et al. (2007) investigation, they criticized previous research on accrual anomaly for not taking into account the potential omitted variable bias resulting from the commonly applied accrual anomaly Mishkin-test (1983). This Mishkin-test only recognizes the current earnings components as explanatory variables for the variance of future abnormal returns. They argue that this might lead to omitted variable bias in the results. On the basis of this, we therefore join our opinion with Kraft et al., (2007) that, to address the observed deficiency, additional control variables such as: earnings-to-price ratio, book-to-market ratio, logarithm of the market value and the beta factor for each of the individual securities should be considered. The first three of these variables have been shown by previous research to earn abnormal returns and the beta factor is included to control for systematic risk differences between the variables (Kraft et al., 2007). The question of interest here is that, whether the results indicating overweighting of accruals anomaly will survive the addition of these control variables to the model? Accrual overweighting may be weakens by the inclusion of additional control variables, but remains substantial and statistically significant for the pre-IFRS sub-period. The overweighting once again vanishes in the post-IFRS sub-period (Kraft et al., 2007). The control variables shown by earlier research to earn abnormal returns are attributed significantly to the coefficients in the abnormal return regression tests. The coefficient of determination also rises to the level common in abnormal return.

Conceptually, from these backdrops, we align our view to this critique that, the earlier Mishkin test model has suffered from omitted variable bias. Therefore, for a future robust result on accrual anomaly studies, we are of the opinion that, the aforementioned control variables of Kraft et al. (2007) should be considered. More also, there has been some criticism on the lack of robustness testing in accrual anomaly related research. Kraft et al., (2006) list several of the most influential accrual anomaly related studies such as the study of

Sloan (1996), as not assessing the sensitivity of their results to extreme abnormal return observations by excluding a small number of extreme company-year observations which showed an inverted U-shaped interaction between abnormal returns and total accruals, instead of a steadily ascending relationship. The same extreme firm-year observations that drove the total accrual anomaly of Sloan (1996) are reported to clarify also the abnormal accrual and growth-related approaches (Kraft et al., 2006). Richardson et al. (2010) hold this inference of the accrual anomaly as being sensitive to outliers as incorrect, since they hold all return realizations other than data errors as valid observations. The average return of an entire portfolio may be influenced substantially by extreme returns, which cannot be considered invalid since they are nevertheless truly realized returns to the portfolio (Richardson *et al.*, 2010). Kothari et al. (2005) report that, the active trimming of data by researchers contributes to a bias in favour of finding systematic mispricing in tests of market efficiency. Due to the fact that most of the preceding researches on accrual anomaly have omitted robustness testing, the effects of outliers to the result are worth investigating. Furthermore, in this context, another deficiency we observed in accrual anomaly literature is the hypothesis and postulate of Sloan, Sloan (1996), he states that the accrual and cash flow anomalies are coexistence. That is, the occurrence of one automatically implies the other. On the contrary, Xu and Lacina (2009) opined that, the attributes of cash flows based portfolios vary from accruals based portfolios. That, the characteristics of accrual based portfolios are different from those of cash flow. This evidence revealed that, though, they are both negatively correlated but may not arise exactly from the same reason. Also, Pincus et al. (2005) reported that the incidence of accruals anomaly does not automatically mean the occurrence of cash flows anomaly, or vice - versa, and that, there is no cross-border proof on the mutual existence of these phenomena in prior studies. Kraft et al. (2006); Goncharov, and Jacob (2014) recognize this to be the correct position when estimating the profit of a trading strategy. However, the need for a conventional robust test is necessary when a researching a theory on a particular hypothesized cause of an anomaly. According to him, the hypothesized cause-and-effect of any relation should not be driven by only a small size of observations.

Therefore, these mixed findings have cast a doubt on the postulate and hypothesis of coexistence of these two anomalies of Sloan (1996). In our own opinion, one of the scenario that can cause a change in cash flow value without a corresponding change in accrual is, if an asset is exchanged for cash without resulting to increase or decrease in the value of assets and liabilities of an entity. In this case, the mutual occurrence of these anomalies will not be automatic. Hence, we humbly suggest that, there should be a future empirical verification on the mutual existence of these two phenomenons in order to ascertain whether these anomalies arise from same cause or not.

6. Theoretical Background on Accrual Anomaly

6.1 Efficient Market Hypothesis

The Efficient Market Hypothesis (EMH) of Fama (1970) asserts that all information, both public and private is reflected in current prices of stocks. It states that financial assets prices are based on past and current information and this information are used to predict the future prices without any biases. This hypothesis also demonstrated whether it reflects all type of information (private and public). The EMH classified information into three types: strong (which possesses all type of information), semi (which has only publicly announced information) and weak form (which is based only on past data). The assumption of this hypothesis concludes that current prices of stock have been adjusted for all known information about a firm. Subsequently, efficient market hypothesis views that analyzing company's financial reports, stocks outlines is meaningless. Since all prices are fair and

efficient in light of the fact that the smart investors have already offered prices to their appropriate levels, that there is never an error between price and value. According Sloan (2001), practically EMH does not exist in security markets, so there is always a margin for the market players to earn the unusual or abnormal return, whatever an investor earns above the average return of market is due to anomalous behavior of stock prices. He is recognized in literature as the first researcher that documents the accrual anomaly. The later study of Graham, Campbell and Rajgopal (2005) confirmed the outcome of his study. To them, market does not correctly price the securities as a result of the accrual anomaly existence and markets no longer remain efficient. Investors are usually unable to differentiate among persistence of accrual and cash flow while making the future forecast of earning, investors on the basis of current returns make the decision as a result of it, and they get future abnormal loss and profit.

7. Conclusion and recommendations

Accrual anomaly research has attracted lot researchers owing to the proportion of current earnings that is controllable by management despite the given number of empirical studies as relates to accrual anomaly. Researches on this phenomenon are still incipient in Nigeria. In our review, we found that, the earlier studies on this subject revealed that, accrual anomaly was only associated with the United States and countries that shared common characteristics with the U.S. But in our conceptual investigation, we discovered that, these assertions were later refuted by other studies. We found that, the occurrence of accrual anomaly is a global phenomenon that is accounted for by some country's specific factors such as; Country's legal institutional difference, types of government, corporate governance mechanisms and changes in accounting regimes. Therefore, in this study, we aligned with the assertions that, accrual anomaly is not only U.S based phenomenon but a global concept that is attributed to other factors. Also, there exist, some methodological deficiencies in accrual anomaly prior studies as conceptually observed in literature. Consequent upon our conceptual findings, the study therefore makes the following recommendations:

1. A domesticated Study of pre and post IFRS on accrual anomaly is necessary in Nigeria in order to validate the effect of changes in accounting regimes on this phenomenon.
2. There is need to carry out an empirical validation study on the coexistence of accrual and cash flow anomalies hypothesis of Sloan (1996) by future researchers in order to improve accrual anomaly literature
3. Future studies in this direction should include both the profit and the loss firms as sample rather than considering only profit firms in order to address the problem of variables outliers for a better result that will aid an informed judgment by stakeholders.
4. Finally, to address the problem of omitted variable bias associated with the commonly accrual anomaly Mishkin-Test (1983), additional variables such as; earning to price ratio, book to market ratio, logarithm of the market value and beta factor of individual securities should be considered to get a better predictive results.

References

1. Amna, A. and Danish, A.S., 2020. Asymmetrically timely loss recognition and the accrual anomaly: Evidence from Pakistan's non-financial sector. *Journal of Accounting and Financial reporting*, 10(3), pp.1-5.
2. Fama, E.F. and French, K.R., 2014. The cross-section of expected stock returns. *The Journal of Finance*, 47(2), pp.427-465.
3. Chan, K., Chan, L.K., Jegadeesh, N. and Lakonishok, J., 2006. Earnings quality and stock returns. *Journal of Business*, 79(3), pp.1041-1082.

4. Clinch, G., Fuller, D., Govendir, B. and Wells, P., 2012. The accrual anomaly: Australian evidence. *Accounting and Finance*, 52(2), pp.377-394.
5. Dodd, D.L.F., Graham, B. And Cottle, S., 1934. *Security Analysis*. New York: McGraw-Hill.
6. Fairfield, P.M., Whisenants, J.S. and Yohn, T.L., 2003. Accrual earnings and growth: implication for future profitability and market mispricing. *The Accounting Review*, 78(1), pp.353-371.
7. Fama, E.F.,1970. Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, 25(2), pp.383-417.
8. Goncharov, I. and Jacob, M., 2014. *Why do countries mandate accounting accruals for tax purposes*. [online] Available at: <http://papers.ssrn.com/so13/papers.cfm?abstract_id1912003> [Accessed 15 March 2023].
9. Graham, J.R., Campbell R.H. and Rajgopal, S., 2005. The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40(1-3), pp.3-73.
10. Kothari, S.P., Sabino, J.S. and Zach, T., 2005. Implications of survival and data trimming for tests of market efficiency. *Journal of Accounting and Economics*, 39(1), pp.129-161.
11. LaFond, R., 2005. Is the accrual anomaly a global anomaly? *MIT Sloan School of Management. Working paper*.
12. Li, Y., Niu, J., Zhang, R. and Largay, J.A., 2011. Earnings management and the accrual anomaly: evidence from Ghana. *Journal of International Financial Management and Accounting*, 22(3), pp.205-245.
13. Pincus, M., Rajgopal, S. and Venkatachalam, M., 2007. The accrual anomaly international evidence, *The Accounting Review*, 82(1), pp.169-203
14. Richardson, S.A., Sloan, R. G., Soliman, M.T. and Tuna, I., 2005. Accrual reliability, earnings persistence and stock prices. *Journal of Accounting and Economics*, 39(3), 437-485.
15. Richardson, S.A., Tuna, I. and Wysocki, P., 2010. Accounting anomalies and fundamental analysis A review of research advances. *Journal of Accounting and Economics*, 50(2-3), pp.410-454.
16. Sloan, R.G., 2001. Do stock prices fully reflect information in accruals and cash flows about future earnings? *Accounting Review*, pp.284-315.
17. Uwuigbe, O.R., Fagbemi, T.O. and Anusiem, U.F., 2018. *The effect of Audit committee and ownership structure on income smoothening in Nigeria*. Research.
18. Xu, R. and Lacina, M., 2009. Explaining the accrual anomaly by market expectations of future returns and earnings. *Advances in Accounting*, 25(2), pp.190–199.