

## IFRS Adoption and Earnings Quality in Sub-Saharan Africa

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### ABSTRACT

This study perused the correlation between IFRS adoption and earnings quality of listed firms in Sub-Saharan Africa, Ghana. The study used secondary data collected from sixteen non-financial listed firms over pre-adoption periods of IFRS and immediate post-adoption periods of IFRS. The study used logistic regression to examine the impact of pre-and-post adoption of IFRS's on earnings quality. The results showed that firms managed to manipulate earnings toward a positive target more frequently in the pre-IFRS adoption period than the post-adoption period, and firms recognized large losses more frequently in the post-IFRS adoption period when they occurred as compared to the pre-IFRS adoption period. The study reinforces that adoption of IFRS prevents manipulation of earnings, limits possible flexibilities and accounting choices, and provide clearer rules that signal high quality accounting information and transparency.

**Keywords:** International Financial Reporting Standards (IFRSs); Earnings quality; Non-financial firms; Emerging markets; Ghana

## INTRODUCTION

The auditing environment has been subject to plethora of public backlash in recent times, especially following the collapse of Enron, Worldcom etc in the USA, Parmalat in Europe and even DKM in Ghana. Several stakeholders especially investors have lost confidence and trust in financial reporting due to the corporate fraud practices by organizations. It thus becomes eminent that changes in auditing and accounting standards would build stakeholder's confidence in financial reports and the accounting profession as a whole. Some of these changes involve the convergence of local accounting standards with international accounting standards such as the International Financial Reporting Standards (IFRSs).

Before the adoption of IFRS in emerging market such as Ghana; the Generally Accepted Accounting Principles (GAAP) used was the Ghana National Accounting Standards (GNAS) until in 2004 when the World Bank undertook a review of accounting and auditing practices in Ghana and identified weaknesses in their report to the effect that, the GNASs were outdated and differed significantly with International Accounting Standards.

The Institute of Chartered Accountants-Ghana, announced that all financial reports should comply with the IFRSs following recommendations by the World Bank.

IFRSs are accounting standards developed by the International Accounting Standards Board (IASB) aimed at enhancing the accuracy, comparability and uniformity of accounting information among firms and economies. Also, IFRSs help to minimize earnings management and hence, improve earnings quality of corporate entities. IFRSs are principles-based standards that urge managers to use discretion over accounting choices for their own interests that reduces earnings quality. These inconclusive findings and arguments made the researchers to find out the impacts of pre and post adoption of IFRSs on earnings quality in Ghana. Previous empirical studies on the impact of IFRSs adoption on the quality of earnings concentrated on listed firms on the European market, United States of America to the neglect of developing markets such as Ghana. Hence, the need to conduct this study to determine the impact of IFRSs adoption on earnings quality of listed firms in the context of the Ghanaian economy. Practically, the study is beneficial to help regulators such as the Ghana Securities and

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Exchange Commission (GSE) and the Institute of Chartered Accountants, Ghana (ICAG) know the impact of adoption of IFRSs, and the findings would bestow relevant information to understand the factors that influence earnings quality reported in financial statements. Also, the findings can help IASB to amend existing standards or develop new standards aim at removing emerging markets allowable accounting alternatives that can limit managements' discretion in manipulating earnings. Finally, the study contributes to knowledge due to extant literature in emerging markets, and can serve as reference document on the impact of IFRS adoption on earnings quality of listed firms in emerging markets.

The rest of the paper is organized as follows. The section 2 reviews extant literature. Section 3 outlines method including the justification of dataset, choice of variables and models used for the study. Section 4 presents and discusses empirical results and finally, Section 5 gives the conclusion and implications of the study.

## LITERATURE REVIEW

### IFRS context in Ghana

Zureigat conducted a research on the effect of financial structure among Jordanian listed firms on earnings quality, sampling 198 companies, and his analysis using logistic regression indicated a significant direct relationship between earnings quality and financial structure influenced by IFRS's. Nam, also examined the relationship between earnings quality as a proxy for auditor independence and audit quality of firms in New Zealand. Adopting three multiple regression models for a sample of New Zealand companies, his study discovered that the provision of non-audit services by the auditors of a firm comprises the auditor's independence, abnormal audit fee charge rate is negatively associated with earnings quality and auditor's independence of the previous year impacts on the audit fee that is negotiated in the current year thereby affecting the quality of financial reporting in recent times.

Ghana adopted IFRS as recommended by the World Bank, through the Institute of Chartered Accountants ,Ghana's (ICAG) declaration that all financial reports effective 2007 should comply with IFRS. It was also reinforced by the then Minister of Finance and Economic Planning in January 2007 that by December 2007, listed companies, financial institutions, public or government enterprises are projected to formulate their financial reports in agreement with the IFRS. Arguably, one would expect a reduction in earnings management hence, earnings quality following the mandatory adoption of IFRSs especially by listed firms due to the fact that adopting IFRSs can yield quality accounting information. Also, adopting IFRSs could help minimize earnings smoothing and foster earnings quality, that boosts investors' confidence. Thus, the researchers seek to peruse the impact of the pre and post adoption of IFRSs on earnings quality of listed non- financial firms on the Ghana Stock Exchange. The next sections on literature review dwell on earnings quality and its determinants, and extant review on IFRSs and earnings quality.

### Earnings quality and its determinants

Earnings Quality is regarded as a firm's reported earnings, which are purged of extraordinary items as being good quality if it is a good indicator of future earnings. Quality earnings are therefore, irrelevant unless they are linked to a specific decision because stakeholders, particularly investors, rely on the earnings numbers to make their economic decisions. Dechow and Schrand defined earnings to be of high quality when the earnings number accurately annuitizes the intrinsic value of the firm and further described a high-quality earnings number as one that accurately reflects the company's current operating performance, is a good indicator of future operating performance, and is a useful summary measure for examining firm value.

Different measures consequently have been used to measure earnings quality in empirical studies. Earnings quality can be measured using either market-based measures or accounting-based measures. The accounting based measures comprise various properties of earnings such as persistence and predictability of earnings accruals and earnings management income smoothing and accounting conservatism. The market-based measures reflect investor reaction to earnings announcements including earnings response coefficients and value relevance. The other measures may take the following forms: earnings restatement fraudulent financial reporting releases from regulators and internal control deficiencies.

### Extant review on IFRS and earnings quality

Debate on the effects of IFRS adoption in all settings whether developed or emerging countries has not been conclusive. Daske and Gebhardt (2006) found that earnings quality had improved following the adoption of IFRS in Austria, Germany and Switzerland as compared with the pre-IFRS adoption period. Another study that employed 15 proxies to measure earnings management in 17 European countries found that there was less earnings management after the adoption of IFRS in Central European countries, although there was no change for companies in the UK, Ireland or Northern Europe. Similarly, that accounting quality enhanced after companies adopted IFRS, for a sample drawn from 21 countries, in that there was less earnings management and more timely loss recognition. To this end, less earnings management would result to earnings quality and hence, boosts investor confidence on reported earnings.

On the contrary, conducted a study in Germany and concluded that adoption of IFRS did not constrain earnings management compared to German GAAP; companies that did adopt IFRS subsequently engaged in more income smoothing, not less, although the effect was not as apparent among firms with a Big 4 auditor. Similarly, it was found that accounting quality, indicated by several proxies for the degree of earnings management, did not improve in Germany following adoption of IFRS. Chen used five indicators to compare changes in accounting quality of companies in 15 European countries following adoption of IFRS, and reported mixed results in that on one hand, 'quality' augmented, since the absolute size of

discretionary accruals declined and there appeared to be less managing of earnings towards targets. On the other hand, 'quality' appeared to decline, since earnings smoothing evidently increased while losses were recognised in a less timely manner.

Ahmed in his study using a sample of over 1600 companies in 21 countries where IFRS were adopted in 2005, reported firms exhibited more income smoothing, less conservatism in their accruals and less timely loss recognition after adopting IFRS. In brief, it is obvious that not all studies have reached the same conclusion. According to accounting standards and more importantly accounting practice have long been imbued with one of the two sides of 'fair value' accounting, namely, timely loss recognition, of which expected future cash losses are charged against current earnings and book value of equity, has been a long-standing property of financial reporting.

Another study realised a decrease in financial reporting quality, an increase in earnings management, and a reduction in timeliness of loss recognition in Germany following mandatory IFRS adoption. Similarly, both found evidence of income smoothing and a reduction in timeliness of loss recognition following mandatory IFRS, and consistent with these findings, found evidence of lower earnings management, higher value relevance and more timely recognition of losses after the introduction of IFRS, compared to the pre-transition local GAAP accounting period. From the above extant literature shows that there are varied results on IFRS adoption and earnings quality of firms. This current study will add to existing literature to examine the impact of IFRS adoption and earnings quality of non-financial firms in Ghana. The next section gives research methodology used to achieve the results of the study

## MATERIALS AND METHODS

This study employs quantitative approach using secondary dataset of sixteen (16) non-financial listed firms with at least two years of existence prior to IFRS adoption in Ghana. Specifically, the research focuses on non-banking and non-insurance firms because the financial institutions and the banking firms are highly regulated and the parameters that determine earnings are totally different from the banking and insurance sectors. The year 2007 marks the official year of the adoption of IFRS in Ghana, and that all listed companies, banks, and insurance firms in Ghana were mandated to apply IFRSs in the preparation of financial statements ended 31 December, 2007. For the purpose of the study, the study uses the years 2005 and 2006 as the pre-adoption of IFRS, and 2007 and 2008 as the years denoted for post-adoption of IFRS. It should be noted that Ghanaian firms were using Ghana National Accounting Standards (GNAS) prior to the adoption of IFRSs in 2007.

The study uses binary logistic regression to analyze pre-adoption periods of IFRS and the post-adoption periods of IFRS in Ghana. Below outlines the econometrics models for the dependent and independent variables (including control variables) for both pre-adoption and post-adoption of IFRS. Table 1 shows the definition of variables and measurements of the econometric models.

$$IFRS(0,1)_{i,t} = \beta_0 + \beta_1 SPOS_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 GROWTH_{i,t} + \beta_4 LEV_{i,t} + \beta_5 TURN_{i,t} + \beta_6 CF_{i,t} + \beta_7 BIG4_{i,t} + \epsilon_{i,t} \dots\dots(1)$$

$$IFRS(0,1)_{i,t} = \beta_0 + \beta_1 LNEG_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 GROWTH_{i,t} + \beta_4 LEV_{i,t} + \beta_5 TURN_{i,t} + \beta_6 CF_{i,t} + \beta_7 BIG4_{i,t} + \epsilon_{i,t} \dots\dots(2)$$

Variable	Definition
<b>Dependent Variable</b>	
IFRS(0,1)	IFRS (0,1) is an indicator variable that equals one for observations in the post-IFRS adoption period and zero otherwise.
<b>Independent Variables</b>	
SPOS	The metric for managing towards positive earnings and it's an indicator variable that equals one (1) if net income scaled by total assets is between 0 and 0.01
LNEG	LNEG is an indicator variable that equals one (1) for observations for which annual net income scaled by total assets is less than 0.20, and zero otherwise.
<b>Control Variables</b>	
SIZE	Natural logarithm of total assets at end of financial year
GROWTH	GROWTH is annual percentage change in sales
TURN	TURN is sales divided by end of year total assets
LEV	Ratio of total liabilities to total assets
CF	CF is annual net cash flow from operating activities, scaled by end of year total assets.

BIG4	Auditor type which equals 1 if the current auditor is a BIG4 or 0 otherwise
Ē	Error term

Table 1: Variable Definition and Measurement

## RESULTS AND DISCUSSION

### Descriptive statistics

Table 2 represents the descriptive and inferential statistics among the variables used for the study. For the control variables comparing the pre-and-post adoption periods of IFRS, the result shows a sharp decline of growth from 44.62% in the pre-adoption period to 28.55% in the post-adoption period. This implies a sharp reduction of the percentage change in annual turnover in the pre-adoption period as compared to the post-adoption period.

Similarly, turnover and cash flow reduced from 1.69 and 0.11 in the pre-adoption period to 1.24 and 0.09 in the post-adoption period respectively. This indicates a marginal reduction in sales with respect to total assets, as well as a reduction in net operating cash flow with respect to total assets from the pre-adoption period to the post-adoption period.

However, the result in Table 2 shows a marginal increase in leverage, representing a slight increase in total liabilities scaled by total assets in the post-adoption period as compared to the pre-adoption period. It is worthy of note from this discussion that IFRSs adoption by Ghanaian listed firms has had positive impact on earnings quality since reported earnings are subject to little or no managerial manipulation or discretion.

Also, from Table 3, the study shows a comparison of the variables for the pre-and-post-adoption periods of IFRS using t-test. The results show that the p-values of all the variables are significant at the 0.05 (5%) level of significance. Thus, the impact of IFRS adoption has been significantly noticed in size, growth, turnover, leverage, cash flow, and auditor type since their respective p-values are all less than 0.05 ( $p < .05$ ).

IFRS Adoption	Descriptive	SIZE	GRO WTH	TUR N	LEV	CF
Pre-adoption	N	32	32	32	32	32
	Mean	15.31	44.62	1.69	0.53	0.11
	S.D	2.54	166.1	2.51	0.24	0.24
	Skewness	-0.66	8	3.68	0.09	1.43
Post-adoption	N	32	32	32	32	32
	Mean	14.76	28.55	1.27	0.60	0.09
	S.D	2.81	46.53	2.13	-0.19	-0.06
		-0.23	1.67			

Variables	T	Df	Sig. (2-tailed)	Mean Difference	SE of Difference
SIZE***	45.02	63	0.000	15.03	0.334
GROWTH**	2.412	63	0.019	36.59	15.166
TURNOVER**	6.072	63	0.000	1.48	0.244
TURNOVER***	18.445	63	0.000	0.56	0.031
LEV***	4.000	63	0.000	0.10	0.021
CF**	11.77*	63	0.000	0.69	0.055
BIG4***					8

Table 2: Inferential Statistics for Control Variables.

Table 3: Descriptive Statistics for Control Variables

Significant levels: \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$ .

### Regression analysis

Table 4 and Table 5 shows the regression results for the post-adoption of IFRS. From the binary logistic regression of Equation 1, the p-values of the Wald test in the last column of Table 4 shows that all the variables are not statistically significant ( $p > 0.05$ ) except for leverage that recorded p-value of 0.037 ( $p < 0.05$ ). Furthermore, since the coefficient of SPOS is negative, it shows that firms managed earnings toward a positive target more frequently in the pre-IFRS adoption period as compared to the post-adoption period. In other words, firms managed earnings towards a positive target less frequently in the post-IFRS adoption period as compared to the pre-adoption period.

Surprisingly, the result of the binary logistic regression of Equation 2 shows that none of variables were statistically significant ( $p > 0.05$ ), since all p-values of the Wald test is greater than 0.05. From Table 5, the positive coefficient on LNEG in the estimated regression model indicates that firms manipulated earnings quality in the post-IFRS adoption period than in the pre-IFRS adoption period. In other words, firms frequently deferred the recognition of large losses when they occurred in the pre-IFRS adoption period than in the post-adoption period.

Variables	Coefficients	Std.Error	Wald	Sig
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(Constant)	1.370	1.794	0.583	0.445
SPOS (0,1)	-1.704	1.011	2.843	0.092
SIZE	-0.151	0.110	1.889	0.169
GROWTH	-0.003	0.003	1.300	0.254
TURNO	-0.308	0.212	2.124	0.145
LEV	3.011	1.445	4.343	0.037
CF	0.369	1.634	0.051	0.821
BIG4	-0.163	0.635	0.066	0.798

Table 4: Model Coefficients for Equation 1.

Variables	Coefficients	Std. Error	Wald	Sig
(Constant)	0.919	1.783	0.265	0.606
LNEG (0,1)	1.077	0.794	1.838	0.175
SIZE	-0.163	0.107	2.321	0.128
GROWTH	-0.003	0.003	0.996	0.318
TURN	-0.221	0.207	1.140	0.286
LEV	1.962	1.302	2.273	0.132
CF	0.940	1.718	0.300	0.584
BIG4	-0.169	0.628	0.072	0.788

Table 5: Model Coefficients for Equation 2.

## DISCUSSION OF FINDINGS

The negative coefficient of SPOS as found in this study suggests that firms managed earnings toward a positive target more frequently in the pre-IFRS adoption period as compared to the post-adoption period, indicating an improvement in earnings quality in the post adoption period. This finding is consistent with the findings who examined accounting quality before and after the introduction of IFRS for a sample of 327 firms (1,896 observations) that voluntarily adopted IAS between 1994 and 2003 and found evidence of improved earnings quality, higher value relevance and more timely recognition of losses after the introduction of IFRS, compared to the pre-transition local GAAP accounting.

Similarly, The impacts of IFRSs adoption on the quality of financial statement information in Indonesia using earnings management, timely loss recognition, and value relevance of accounting information as proxies corroborate the findings of this study. He found that the implementation of IFRS has decreased the scope of earnings management and increased the value relevance of reported earnings. Again, the findings of this

study are consistent with the findings of who found that earnings quality had improved following the adoption of IFRS in Austria, Germany and Switzerland as compared with the pre-IFRS adoption period.

Timely loss recognition that was used as another indicator of earnings management represents the measure for prevalence of large negative earnings where the large negative results suggest that the loss recognition is not timely in the post-adoption period. For this study, it was found that the coefficient of LNEG in the estimated regression model was positive thereby signifying that firms recognized losses more frequently in the post-adoption period than they did in the pre-adoption period. This also indicates evidence of improvement in earnings quality in the post-IFRS adoption period. This finding again are consistent Loss recognition is noted to be more timely in common law than code law countries and for firms that use IAS, found in their study that timely loss recognition is higher for firms with Big-four auditors.

Notwithstanding the above consistencies, the findings of this study contradict found a decrease in financial reporting quality, a decrease in earnings quality, and a reduction in timeliness of loss recognition in Germany following mandatory IFRS adoption. Similarly, found evidence of income smoothing and a reduction in timeliness of loss recognition following mandatory IFRS adoption. Thus, although IFRS has been reported to increase earnings quality in some studies, other studies report otherwise. This study seeks to align with that IFRSs adoption by listed firms in Ghana has improved earnings quality hence, it was right and apt that there was a mandatory adoption of IFRSs by Ghanaian listed and public institutions in (2007).

## CONCLUSION AND RECOMMENDATIONS

The adoption of the IFRS have several objectives of which one is to develop high quality, understandable and enforceable global accounting standards that require high quality, transparency and comparable information. This study analyzed whether the mandatory introduction of IFRSs had an impact on earnings quality. The descriptive results showed a sharp decline in growth of firms from 44.62% in the pre-adoption period to 28.55% in the post-adoption period, indicating a sharp reduction in the percentage change in annual turnover in the pre-adoption period as compared to the post-adoption period. Similarly, turnover and cash flow declined in the post-adoption period, indicating a marginal reduction in sales with respect to total assets, as well as a reduction in net operating cash flow with respect to total assets in the post-adoption period respectively. However, there was evidence of a marginal increase in leverage, representing a slight increase in total liabilities scaled by total assets in the post-adoption period as compared to the pre-adoption period.

The analyses provide evidence that when using SPOS as a proxy for earnings management, firms managed earnings toward a positive target more frequently in the pre-IFRS adoption period as compared to the post-adoption period, indicating a decreasing effect on earnings management or an increase in earnings quality. Again, using LNEG as a proxy for timely loss

recognition in the estimated regression model indicated that firms recognized large losses more frequently in the post-IFRS adoption period when they occurred as compared to the pre-IFRS adoption period. These findings provide evidence that the adoption of IFRS has met the objective of increasing the quality of financial statements when focusing on earnings management. Thus, after the adoption of IFRS the quality of financial reporting has increased by lowering the untimeliness of recognizing large losses when they occurred, and the undesirable practice of managing earnings towards a target. It can be concluded that the quality of IFRS is higher than most domestic accounting standards such as the GNASs. This is because firms significantly reported improved earnings in the post-IFRSs adoption period than the pre adoption period. Again, it can be concluded that IFRSs are stricter, limits possible flexibilities and accounting choices, and provide clearer rules and hence signal of high quality accounting information and transparency than most domestic standards such as the GNASs since the findings of the study indicates an increase in earnings quality in the post-adoption period. The researchers also conclude that the mere adoption of IFRS is not sufficient to guarantee a better quality of accounting information, but also other variables such as security laws, legal enforcement, and auditor type might be more fundamental institutions in determining the quality of reported financial information.

Based on the findings and conclusions, the researchers recommend that there should be a comprehensive implementation of the IFRSs to its totality by all firms (including small, medium and large) in the country since it has the potential of increasing the quality of earnings and other information reported in the financial statements of firms. This can enhance the comparability of the performance of similar firms and also the consistency in financial reporting rules and principles within firms, that in effect can improve the investment decisions. Also, the study recommends that regulatory bodies such as the SEC and GSE should strictly monitor compliance with IFRS by firms in order to reduce the impact of management discretions on reported earnings in the financial statements of listed firms in the country. This can have effect of enhancing the quality of decisions made by financial statement users, particularly investors on the basis of the financial statements. Finally, listed firms in Ghana that seek to go global should engage the services of the big four auditors since sampled firms in this study that engaged the services of the big four auditors show increased earnings quality. Investors are attracted to invest in an environment that can guarantee the quality of their reported earnings and returns on investment.

## Limitation and suggestions for future research

This study, just like any other research work has some limitations, some of which are stated in this section. Firstly, by the nature of the study, it suffers from a sample selection bias, as only non-financial (excluding banking and insurance) listed firms were included in the study. This selection bias potentially limits the over generalization of the benefits of the transition to

IFRS, which are inferred solely from just specific types of firms listed on the GSE. Secondly, the findings of the study are dependent on the proxies used for earnings quality: managing earnings towards a target and the desire to defer the recognition of large losses. However, the use of other metrics (such as the discretionary accruals model) could yield different results. Hence, the researcher cautions over reliance on the findings of this study.

Based on these limitations, future studies can focus only on financial listed firms on the GSE. Therefore, the researcher recommends future studies to be conducted either in the area of financial institutions or a pool of both financial and non-financial firms listed on the GSE. This can show how its findings will confirm or contradict with the findings of this study.

Also, this study was conducted from a quantitative research approach. Hence, future research can adopt a qualitative approach by the use of an in-depth interview. Soliciting information about the behaviour of managers and the accounting decisions they make is needed to have strong evidence as to whether the adoption of IFRS have had an impact on their judgments and decisions, and therefore increases earnings quality. Finally, the researcher suggests future research to be conducted on the institutional and country specific factors that influence the effective implementation of any single set of standards such as the IFRSs. This is because some researchers argue that standards alone do not result in quality of reported earnings but also other factors such as strict enforcement regimes and institutional structures provide strong incentives for high-quality financial reports after the introduction of IFRS reporting.

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