

# International Financial Reporting Standards (IFRS) Compliance And Earning Predictability: Evidence From Banks In Ghana

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**Abstract:** *The paper empirically investigates earnings predictability and IFRS compliance of Banks in Ghana. The study was conducted following the inconclusive evidence about economic consequence of IFRS adoption and implementation and deficiency in the methodologies of prior research effort. The main objective of the paper is to provide evidence on the extent to which IFRS compliance predicts earnings of adopters. Audited financial statements from 2008 to 2014 of 20 Banks in Ghana were used. Generalised Method of Moment was used to estimate panel earning model formulated.*

*The findings showed that IFRS compliance significantly predicts earnings of Banks in Ghana. It was revealed that accounting quality and mandatory disclosure showed positive predictive power on earnings though accounting quality was insignificant. However, voluntary disclosure and presentational faithfulness revealed negative influence. It is recommended that Banks in Ghana should enhance mandatory disclosure and review implementation of recognition and measurement criteria of IFRS to improve earnings. It is suggested that voluntary disclosures should be minimal and include only data which may not be considered as noise. Institute of Chartered Account Ghana (ICAG) should revisit the individual IFRS to evaluate its recognition and measurement criteria and positive effect on adopters. ICAG should review the adoption policy as the results from presentational faithfulness suggest adopters incurred political visibility cost.*

**Keywords:** *Earnings Predictability, IFRS multidimensional model, IFRS accounting quality, mandatory disclosure, voluntary disclosure and presentational faithfulness*

## I. INTRODUCTION

The current trend of globalisation has affected all facets of economic infrastructure and every discipline. No economy or professional discipline operates on an island. The new outlook of the world is compelling every aspect of it to respond accordingly without fail. The accounting profession and its dimensions are continually responding to the pace of the world as well (Ahinful, Essumang, & Oppong-Boakye; 2012). One of the key responses to globalisation in the accounting profession is the quest for common accounting standards. As a language of business, it is expected that companies globally should adopt a common accounting standard so as to provide a uniform platform to communicate financial information. This suggests companies and other business enterprises all over the world should not be speaking in different business language to one another while

transferring, exchanging and sharing financial information of their business activities both local and international to stakeholders around the world for informed decisions (Gupta, 2012, p.5).

However, this harmonisation of accounting practice has been strained, as almost all countries in the world have had their own accounting standards setters either legislation, governmental assigned agency or the professionals themselves who make pronouncement to effect national accounting standards (Okpala, 2012). These differences in standards, principles and rules of accounting for the purposes of reporting financial performances and positions would not help businesses at all but rather, it would only serve as an impediment to a smooth flow of information. The emergence of International Financial Reporting Standards (IFRS) or International Accounting Standards (IAS) is seen as the

recognition that businesses need to talk to one another in a common language.

IFRSs are products of the establishment of the International Accounting Standard Board (IASB) which seeks to harmonise the world accounting standards. The IASB and IFRS have become increasingly influential and compelling force in the world of commerce. According to Queku (2015), it is quite essential to understand that international financial reporting convergence is an important issue for regulators of capital market, investors, governments and all other stakeholders who deal with financial information of companies. This raises the issue of the importance of the adoption of IFRS. Realising the importance of globalisation of accounting standards, Institute of Chartered Accountants Ghana (ICAG), the regulator of Ghanaian accounting practice and standard setter, migrated Ghana to full adoption of IFRS/IAS in January, 2007 making it one of the early adopters of IFRSs. This decision of full adoption follows recommendation of International Federation of accountants (IFAC) and qualitative review report by World Bank recommended (Report on Observance of Standards and Codes, ROSC-Ghana, 2004, p1). The World Bank report identified that the accounting and auditing practices in Ghana suffer from institutional weaknesses in regulation, compliance and enforcement of standards and rules. The report explained that adoption of IFRS would not only fulfil the needs for accounting reforms and boost investor confidence but also enhance economic value of shareholders.

Contrary to the obvious economic benefits from IFRS adoption, some researchers have argued that the improved economic value of IFRS compliance is doubtful (Daske, Hail, Leuz & Verdi, 2008). Access Bank (2010) and Armstrong, Barth, Jagonlinzer and Riedl (2007) argued that one set of accounting standard may sacrifice quality as it could not accommodate differences in national business practice and cultural diversity. Barth et al (2007) argued that the existing generally accepted accounting principles (GAAP) remain the golden standards and any effort to fully embrace IFRS could lead to value lost and sacrifice of quality. These inconsistencies create doubt about the real value of IFRS adoption and compliance. Some authors have argued that accounting is just an instrument of recording. So changing accounting standards does not cause a change of real economic situation of the adopters (Padrtova & Vochozka, 2011). The elements of financial statement such as assets, liabilities and equity remain physically the same as before the change of the standards. The only difference in the adopters' situation is in the method of their evaluation and definition under IFRS (Padrtova & Vochozka, 2011). This factually depreciates the value relevance of IFRS.

The controversial arguments about IFRS adoption dictate that adopters undertake evaluation of their economic situation vis-à-vis the content of IFRS prior to adoption. However, this seems to have been absent in the Ghanaian case as the ICAG's decision was largely determined the World Bank report and IFAC recommendations which were purely qualitative evaluation without economic benchmarks in Ghana. It is almost a decade since Ghana adopted IFRS, however, there is relatively very few literature on Ghana's adoption making post adoption evaluation difficult. The few studies include the

study conducted by Antwi (2010). Antwi (2010) focused on adoption of International Financial Reporting Standards (IFRS) in developing countries – the case of Ghana. Adjei (2012) also conducted a qualitative evaluation on the opportunities and challenges of IFRS adoption in Ghana using UT bank as case study. In addition, Ahinful et al (2012) also conducted a study on the determinants of IFRS compliance in Ghana. Though these studies are IFRS based studies, they do not provide economic evaluation of IFRS compliance. According to Queku (2016), the challenge in evaluating economic consequence of IFRS compliance quantitatively, is the absence of comprehensive model to measure the IFRS compliance. Queku (2016) therefore proposed multidimensional model for estimating compliance: accounting quality, mandatory disclosure, voluntary disclosure and presentational faithfulness. The present study contributes to the evaluation literature on IFRS in Ghana by investigating the direct consequence of IFRS compliance on earning predictability.

Earning is the bottom-line for assessing economic value. It is one of the key predictors of investors return and value of business. Most of the asset pricing models and theories such as Gordon's Dividend Discounted Model (DDM) and prospect theory demonstrate that the earning is primary determinant of investors or shareholders value (Qiu, 2014). For listed companies, share prices are the function of earnings. The unquoted companies rely heavily on earnings to determine their initial public offer and settlement decisions. Therefore, ability of IFRS compliance to predict earnings could be used as the basis to evaluate its relevance. Positive relationship between IFRS compliance constructs and earnings is clear evidence that IFRS improve economic value of adopters and vice-versa. The present study therefore seeks to empirically investigate how IFRS compliance predicts the level of earnings using data from banks in Ghana.

Although Ghana has officially adopted IFRS not all companies have fully embraced this new accounting standards in practice. The banking sector is noted for full migration due to regulatory directives from Bank of Ghana. Banks in Ghana have substantially complied with IFRS since 2008. Data availability of the banking sector is not constrained coupled with longitudinal trend. It is therefore; appropriate to evaluate the IFRS compliance in Ghana and earning predictability using data of banks in Ghana. The rest of the paper would be organised as follows: theoretical review and hypothesis development, empirical review, data and methodology, results and discussions and conclusion and recommendations.

## II. THEORETICAL REVIEW AND HYPOTHESIS DEVELOPMENT

Capital needs theory has been widely used to predict relationship between IFRS adoption and performance. The capital needs theory is founded on some tenets and assumptions. Some of these assumptions include: managers have the perception that higher financial information disclosures lead to easy access to financial needs; it is also assumed that higher financial disclosures lead to lower cost of capital; higher level of disclosures reduce investors risk of

investing in entity and financial information disclosures reduce information asymmetry and ultimately attract more investors (Choi, 1973; Firth, 1980; Cooke, 1993). It is believed that IFRS presents transparent, quality and substantial financial information to stakeholders. Therefore, following the capital need theory, IFRS compliance could reduce cost of debt (finance cost). Since finance cost is earning deductible, any reduction in this cost increases the level of earnings. It can therefore be hypothesised that IFRS compliance significantly increases the earning power of Banks in Ghana. Queku's 4-multidimensional model measures IFRS compliance from accounting quality, mandatory disclosure, voluntary disclosure and presentational faithfulness (Queku, 2016). By adopting Queku's model, the theoretical hypothesis to support the empirical investigation may be expressed as:

*H<sub>1</sub>: IFRS compliance (accounting quality, mandatory disclosure, voluntary disclosure and presentational faithfulness) has significant positive influence on earnings of banks in Ghana.*

Similarly, the popular agency theory also explains how IFRS compliance could predict the earnings of adopters. The agency theory examines the relationship between agents usually managers of companies and principals called the shareholders of the companies (Morris, 1987). The foundation of the agency theory was laid in the earlier study by Jensen and Meckling. Jensen and Meckling (1976, p.308) defined the agency relationship as a 'contract under which one or more persons (principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent'. The agency theory is also formed on some assumptions. These include: a company is formed on agent-principal relations; all shareholders have common claim of output; a company is made up of many contracts among various stakeholders; there is separation of control from ownership in company; the theory also assumes the existence of conflict between managers and shareholders; there is no goal congruence; managers are concerned with achieving personal wealth (Morris, 1987; Smith and Watts, 1983, p.3). According to Lambert (2001), agency theory examines how conflict of interest or agency problem between agents and principals affects companies. The author explained the possible causes of the conflict of interest to include shirking by the agent, diversion of companies resources entrusted by principals to the agent for personal consumption, differences in time horizon between the principals and the agents and differences in risk acceptability level or risk aversion between the principals and the agents.

The agency theory has also been employed in studies for evaluating IFRS compliance. It is argued that managers' main goal is to maximise their personal goal to the extent that the principals are unaware and this is made easy by the separation of business ownership and the business control (Tsalavoutas, 2009). This argument supports the agency theory provision and assertion made by Morris (1987). Morris explained that shareholders' goal can be met when there are monitoring mechanisms to check managers. Therefore, to mitigate the aberrant activities of the agents - managers, the principals - shareholders monitoring costs are paid by these principals and agents are also caused to pay bonding cost to give the

principals the guarantee or assurance of no harm to their best interest (Nermeen, 2014, p. 19). These costs (monitoring and bonding costs) would be absorbed by the companies and this reduces the earnings of the companies. However, IFRS compliance strengthens flow of financial communication, transparency and extensive disclosures (IASplus, 2008) and this cures the information asymmetry which is the primary cause of agency problem (Morris, 1987). Thus, IFRS compliance may reduce agency cost and increase the residual income of companies. This suggests that theoretically compliance to IFRS could predict the level of earnings of adopters-banks in Ghana. The agency theory affirms the hypothesis formulated under the capital need theory (H<sub>1</sub>).

### III. EMPIRICAL REVIEW

The empirical studies on IFRS compliance could be classified into two streams. One stream provides strong evidence to support IFRS compliance while the other studies have shown that there are no real values for IFRS compliance. The proponents of IFRS adoption argue that IFRS adoption enhances cross border comparability of financial information and this is associated with greater benefits. For instance, Barth (2007) revealed that complying with IFRS lowers the cost of processing financial information and auditing. The author explained that preparers, auditors and users of financial reports will become much familiar and conversant with financial statements when a common standard is applied uniformly worldwide. Similarly, in the study of Kunle, Omoruyi and Hamed (2011), they stated that IFRS adoption will serve as a common benchmark in accounting practice which can generate a greater momentum for general development.

A similar view is held by Deloitte (2008). Deloitte (2008) analyses the benefits associated with IFRS adoption on the level of performance of the insurance industry. The study concluded that IFRS adoption is relevant because adopters will have the potential to cover the initial cost of adoption. Generally, the adoption of IFRS in the developing economies has been seen as a total change in the norms of accounting practice. For instance Ashbaugh and Pincus (2001) argue that since IFRS limits alternative treatments in accounting, it limits the discretionary opportunities available to management which they often use to determine accounting values.

Despite the known benefits of IFRS adoption as explained above, there are other group of experts who frown over the worldwide crusade to acclaim IFRS adoption globally. The critics claim that all the above explained benefits are mere assumptions and have not been tested. For instance, critiques such as Barth et al, 2008 and Bartou et al, 2005 have argued that there is no conclusive evidence to the effect that IFRS compliance has contributed to improvement in the reporting system and accounting quality of adopters. It has further been argued that one set of accounting standards cannot accommodate the differences in national practices of business arising from institutional and cultural diversity (Access Bank, 2010; Armstrong et al, 2007). Similarly, Iyoha and Jimoh (2011) also oppose the adoption of IFRS as accounting standards in developing economies. They argued that the contents of accounting standard are determined by the

nature and the characteristics and institutional framework and strength of the country. This implies only countries with similar economic and institutional characteristics can adopt same accounting standards.

Although the two streams of studies differ in philosophy, one thing is common. These streams of studies evaluate IFRS compliance from subjective analysis. It is not surprising the results have been diverse. Owing to the mixed results, some researchers on the subjects have taken different approach. For instance, in the study conducted by Barth, Landsman and Lang (2008), the authors adopted quantitative approach where adopters and non-adopters were compared. The study reported that in the same country IFRS adopters exhibit higher value relevance compared to non-adopters. They concluded that the level of accounting quality with IFRS is higher than local accounting standards. This study although tested on IFRS accounting quality but failed to test the consequence of such accounting quality on earnings capability.

This test is important as quality comes with a price and this price could affect the level of adopters' earnings. The direct comparative analysis of adopters and non-adopters has its own challenges. It has been argued in the literature that the cost of adopting and implementing IFRS sometimes exceed the real benefits, therefore the arising question from the study of Barth, et al (2008) is: does the benefit of this quality exceed the cost of achieving this quality? Barth, et al (2008) failed to provide answers to this question. The test of the financial consequence of IFRS accounting quality is very critical because even some of the proponents of IFRS even recognises the cost involve (Deloitte, 2008). The present study extends and refines the study of Barth et al (2008) by quantitatively estimating the level of IFRS accounting quality and investigates its direct consequence of the earnings of adopters (Banks in Ghana).

Furthermore, the actual accounting standards in practice could affect investment policy and accounting quality. For instance, IFRS compliance mandates timely recognition of losses. Management of adopters could not defer losses and therefore inefficiency in investment decisions could timely be exposed. This may deter management from accepting negative net present value projects even if they could generate personal gains. This may not be case under non-IFRS. These qualitative characteristics could not be quantified in comparative analysis.

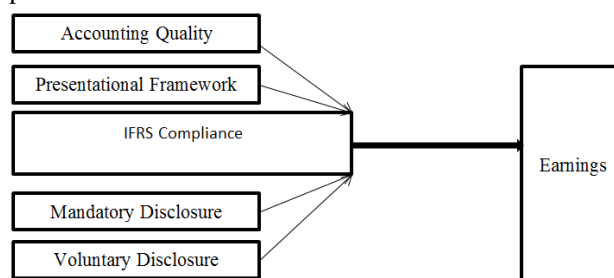
Other studies have also tried to determine the impact of IFRS compliance on the adopters using methods which capture a wider range of IFRS compliance indicators through ratio analysis (see Blanchette & Girard, 2011; Iatridis & Rouvolis, 2010; Lantto & Sahlström, 2009). For instance, a study conducted on the adopters of IFRS in Finland by Lantto and Sahlström (2009) also assessed the impact of IFRS adoption on firms. The primary objective of the study was to measure the impact of IFRS compliance on key financial ratios. The findings of their study revealed that IFRS adoption is associated with changes in key financial ratios. They specifically explained that compliance with IFRS provisions increase the adopters' profitability and gear ratios, increase income statement profits and decrease PE ratio.

The study of Lantto and Sahlström (2009) has methodological deficiency because of the following: the true consequence of IFRS cannot be seen from ratios as ratios

themselves are affected by managerial decisions; ratios are computed only from the face of financial statements and therefore does not capture other elements of IFRS compliance other than accounting quality and presentational faithfulness of financial information (Queku, 2016). Thus, other elements of IFRS: mandatory disclosure and voluntary disclosures are left out. The present study revises this methodology by adopting the 4-multidimensional measure of IFRS compliance. Another challenge in Lantto and Sahlström (2009)'s study and other studies that use ratio comparison is time varying effect. The changes in ratios following IFRS adoption could be attributed to time varying effect arising from general changes in economic and industry performance and other specific management decision. These changes may be erroneously classified as effect of IFRS compliance. In order to avoid this difficulty, this paper uses data within the sample time frame. These data are used to measure earning proxy and level of IFRS compliance. Subsequently, a directly causal relationship is estimated between IFRS proxies and the level of earnings.

A more closely related study is the study conducted by Tanko (2012). In Nigeria, Tanko (2012) also investigated the effect of IFRS adoption on performance. The author limited the selected firms to banks in Nigeria. The study measured IFRS from accounting quality and performance by financial indicators. The results showed that IFRS reduces the earnings of adopters. The author attributed the low earnings to the assertion that IFRS allows for early recognition of losses than pre IFRS periods. Like all other reviewed studies, the author only focuses on IFRS accounting quality which is just an aspect of IFRS but drew generalised conclusion for IFRS, this makes the implications inappropriate. It is therefore not surprising when Hubert and Heger (2011) stated that accounting researchers try to disentangle the "complete path" and still draw generalised conclusion. The present study seeks to employ the "the complete path" by expanding the scope of the IFRS compliance so as to make generalisation sounding.

Following the theoretical and empirical review, it is evident that IFRS compliance could predict earnings. However, the inconclusive debate is the direction of the effect. Though the theoretical reviews suggest positive effect of IFRS compliance on earnings, the empirical results have been mixed. This study borrows from the lessons in the literature and adopts Queku's 4-multidimensional model of IFRS compliance and conceptualises the study as depicted in Figure 1. IFRS is operationalised as multidimensional constructs using four facets (Queku, 2016) and these serve as the independent variable as against the earnings which denotes the dependent variable.



Source: Queku (2017), Developed from the Literature  
Figure 1: Framework for Earning Predictability and IFRS Compliance

#### IV. DATA AND METHODOLOGY

The data used in this study were annual data for all the sampled banks in Ghana. These data were constructed from the audited financial statements. The financial statements were collected from the Websites of the respective banks and Annual reports Ghana. The study period was from 2008 to 2014 using 20 sampled commercial banks in Ghana. A bank is included in the sample as long as it is licensed and has been in operation in the entire or substantial reflect the entire period under investigation; it has not been suspended during the period; it has enough data points to support meaningful data analysis. Earnings of the banks are used as the dependent variable and measured by return on asset (ROA). Scaling earnings by asset allows the effect of management efficiency to be incorporated. This is important a bank could generate reasonable earning with relatively low level of assets while another could generate same earning from high level of assets. Scaling the earning by the actual resources employed in generating such return is therefore meaningful and appropriate.

IFRS compliance is measured by Queku's 4-multidimensional model. The constructs used as the proxy are accounting quality, mandatory disclosure, voluntary disclosure and presentational framework or faithfulness (Queku, 2016). Accounting quality (AQ) is measured by the accrual method. Accrual method uses the deviation between earnings and operating cash flows within a given financial year to estimate accounting quality. It is measured as the difference between the net income and operating cash flow scaled by the average total assets (Bharath et al. 2008; Bhojraj & Swaminathan, 2009; Heidi, 2012). The choice of the accrual method is influenced by the industry. The banking industry is much concerned about cash flow to meet the customers' demands. Therefore, the accrual method that directly estimates how earnings produce operating cash flows is a better option.

The study constructed indices to measure mandatory disclosure (MD), voluntary disclosure (VD) and presentational framework or faithfulness (PF) using partial compliance method proposed by Shiab (2008) and Street and Gray (2001). Under the partial compliance approach, the level of compliance for each bank is measured by first dividing the sum of the number of items complied under a particular applicable standard by the sum of all items expected to be complied under that standard. Finally, the compliance index for the bank is determined as the sum of the score under the individual applicable standard divided by the number of standards applicable. This means that all applicable standards are treated equally.

The study employed panel technique to present the earning predictability model. The study used data from cross-sections (banks in Ghana) over relatively long period (time-series) making panel model more suitable. It followed Hausman approach (Hausman, 1978) to identify appropriate panel specifications. The general is presented as:

$$Y_{it} = \alpha_i + \beta_1 X_{it} + \varepsilon_{it} \quad (1)$$

Where:

The subscript 'i' and 't' represent the cross-sectional dimension (Ghanaian banks) and time-series dimension (years) respectively.

'Y', represents the dependent variable of the study

'X' represents the independent variables

' $\beta_1$ ' is the constant of the model and represents the coefficients of the independent variables

The study operationalised the model in equation (1) to form the empirical model capable to test the hypothesis formulated in this study:

*H<sub>1</sub>: IFRS compliance (accounting quality, mandatory disclosure, voluntary disclosure and presentational faithfulness) has significant positive influence on earnings of banks in Ghana.*

$$ROA_{it} = \alpha_i + \beta_1 AQ_{it} + \beta_2 MD_{it} + \beta_3 VD_{it} + \beta_4 PF_{it} + \varepsilon_{it} \quad (2)$$

Where:  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$  are the coefficients of Accounting Quality (AQ), Mandatory Disclosure (MD), Voluntary Disclosure (VD) and Presentational Framework or Faithfulness (PF) respectively.

The rest of the variables have already been described.

The Generalised Method of Moment (GMM) was employed in this study to estimate the empirical model in equation (2). GMM is one of the most widely used estimation technique for panel model (Chaussé, 2010). It is an estimation approach that combines the observed economic data with the data or the information contains in the population moment conditions to produce estimates of the unknown parameters of the relevant models of interest. GMM has relatively limited assumption making it easy to use and convenient (Garcia, Nielsen & Nock, 2000). It is capable to handle and analyse unknown parameters which are not captured in the sample moments making the results and estimates quite robust (Zhohar, 2012). This also provides general solution which approximates the population and enhances extrapolation and generalization of the findings, conclusions and applications of the evidence.

The study conducted investigation on the data to confirm some basic econometric considerations prior to the GMM estimation. Some of these tests included unit root, multicollinearity, heteroscedasticity, and autocorrelation. Besides these diagnostics, Hausman test was conducted to determine appropriate panel specification (either fixed effect or random effect).

#### V. EMPIRICAL RESULTS AND DISCUSSIONS

This section reports the empirical results, interprets the statistics and discusses the findings in relation to relevant theoretical and empirical literature. The relevant lessons and implications are also highlighted.

##### A. DESCRIPTIVE ANALYSIS

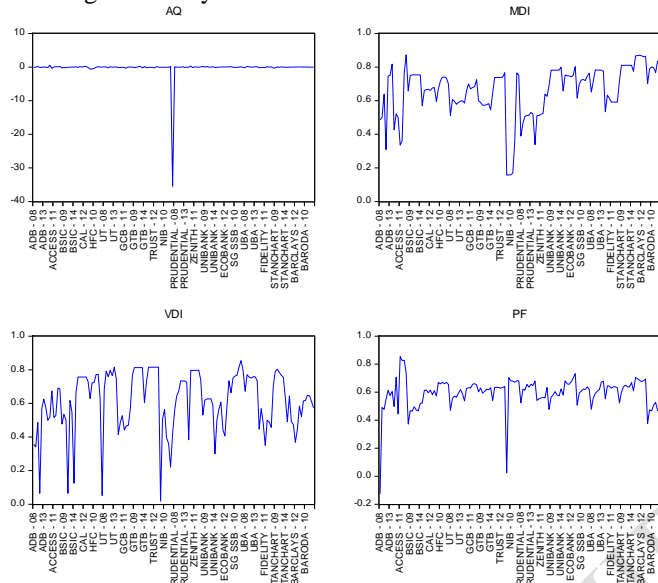
The statistical properties of all the study variables are presented in Table 1. The Table reports the mean, standard deviations, minimum and maximum values. The statistics are based on selected 20 banks in Ghana which have operated within the period of 2008 to 2014. It is observed that all the variables have positive means with relatively high standard deviation indicating volatility.

	ROA	AQ	MDI	VDI	PF
Mean	0.1275	0.4655	0.6819	0.5989	0.6230
Median	0.0283	-0.0385	0.7382	0.6277	0.6339
Maximum	13.1737	70.7576	0.8767	0.8548	0.8571
Minimum	-0.1710	-0.5673	0.1584	0.0212	0.4181
Std. Dev.	1.1112	6.0289	0.1478	0.2110	0.0741
Observations	138	138	138	138	138

Source: Queku (2017): Computed from Eviews 7 Package

Table 1: Descriptive Statistics of Variables (2008 to 2014)

The pictorial behaviour of the IFRS compliance variables has been displayed in Figure 2. Evidence from Figure 2 show varied behaviour of all the IFRS constructs. All the constructs show high volatility



Source: Generated from Eviews 7.0 package

Figure 2: Trend of IFRS Compliance of Banks in Ghana

### B. PANEL UNIT ROOT ANALYSIS

The study conducts panel unit root tests to verify the stationarity Augmented Dickey Fuller (ADF) test, Phillips-Perron test and Im, Pesaran and Shin W-stat (IPS). Im, Pesaran and Shin W-stat (IPS) is used to help make potent decision on rejecting or fail to reject unit root problem. Table 2 presents the results of these unit root tests. Table 2 reveals that whiles return on asset (earnings), accounting quality and presentational framework are stationary, mandatory disclosure and voluntary disclosure have unit roots.

	ADF	PP	IPS	Order
ROA	62.9658 (0.0117)	52.0380 (0.0962)	-1.9990 (0.0228)	I(0)
AQ	52.2046 (0.0936)	129.392 (0.0000)	-5.7907 (0.0000)	I(0)
MDI	20.3890 (0.9442)	39.2133 (0.1778)	1.6212 (0.9475)	I(1)
VDI	37.9303 (0.2171)	43.7014 (0.0814)	-0.2153 (0.4148)	I(1)
PF	73.5780 (0.0010)	70.5892 (0.0020)	-2.6890 (0.0036)	I(0)

Note: The statistics in the parenthesis are the p-values

Source: Queku (2017): Computed from Eviews 7 Package

Table 2: Stationarity Analysis of the Study Variables (2008-2014)

### C. MULTICOLLINEARITY DIAGNOSTIC

Multicollinearity problem is tested sing correlation matrix. This is important as existence of multicollinearity

problem makes it difficult to assess the predictive value of the individual IFRS constructs. The Table 3 indicates that there is no multicollinearity problem and therefore, the four constructs could be modelled and estimated together as non of the correlation coefficient is is equal to or greater than 0.8 (Malhora, 2007).

	AQ	MDI	VDI	PF
AQ	1			
MDI	0.0434	1		
VDI	-0.0570	0.0721	1	
PF	0.0676	-0.0895	-0.0315	1

Source: Queku (2017): Computed from Eviews 7 Package

Table 3: Correlation Matrix of Predictors (2008-2014)

### D. GENERALISED METHOD OF MOMENT (GMM) ESTIMATION

As discussed under the methodology, the paper employs Generalised Method of Moment (GMM) approach as the main method of estimation to test the hypotheses. To determine the appropriate panel specifications, the paper first runs the Hausman test to determine whether or not fixed or random estimation specifications are used. The Hausman results are reported in Table 4. The results indicate that the model is appropriate for two-way fixed effect specifications. The chi-square statistics for cross-section random of 9.2161 has probability value of 0.0502. This probability indicates that the statistics is significant at 95 percent confidence level. The study rejects the random cross-section and concludes that cross-section fixed effect is appropriate. The period random is also rejected at 95 percent confidence level. The test results on the joint specifications also reject random effect at 5 percent significance level.

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	9.2161	4	0.0502
Period random	12.1454	4	0.0345
Cross-section and period random	10.8379	4	0.0488

Source: Queku (2017): Computed from Eviews 7 Package

Table 4: Correlated Random Effects - Hausman Test on Earning Predictability Model (2008-2014)

Since the Hausman test indicates suitability of fixed effect specifications, the conducts the Generalised Method of Moment (GMM) using the fixed effect estimations. The results from the GMM estimation are displayed in Table 4. The preliminary statistics reported in Table 4 indicate that the earning predictability estimated has value relevance. This can be seen from the  $R^2$  of the model estimated which is 0.5164 and the adjusted  $R^2$  of 0.5082. This  $R^2$  statistic measures the overall success of the model in predicting the values of the earnings. It suggests that the predictors explain about 51.64 percent of variations in earnings. This is fairly good. The adjusted  $R^2$  which adjusts the  $R^2$  for regressors which do not contribute to the explanatory power of the model is also relatively good. The strong  $R^2$  and adjusted  $R^2$  provide evidence that IFRS compliance estimated by the multidimensional model has value relevance to earnings. The statistics explains that the model predicts about 50.82 percent of changes in earnings. The autocorrelation test result is also disclosed by the Table 3. This is shown by the Durbin-Watson

statistics. The DW statistics is 1.7216 which is closer to 2. It implies that there is no autocorrelation problem in the model estimated.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AQ	-0.0002	0.0004	-0.4069	0.6841
MD	0.0203***	0.0054	3.7750	0.0002
VD	-0.0755***	0.0258	-2.9289	0.0035
PF	-0.2118***	0.0580	-3.6528	0.0003
C	0.2240	0.0448	5.0021	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.5164	Mean dependent var		0.0645
Adjusted R-squared	0.5082	S.D. dependent var		0.4666
S.E. of regression	0.3480	Sum squared resid		315.7346
Durbin-Watson stat	1.7216	J-statistic		0.00003
Instrument rank	5			

Note: \*\*\*, \*\* & \* represents 1 percent, 5 percent and 10 percent significant levels respectively

Source: Queku (2017): Computed from Eviews 7 Package

Table 3: Generalised Method of Moment Estimation of the Earning Predictive Model (2008-2014)

Table 4 further provides results to the four hypotheses formulated in this paper. It is observed that accounting quality (AQ) has positive effect on earnings of banks in Ghana. This is shown by the negative coefficient of AQ which measures inverse value of accounting quality. Thus, a positive AQ suggests negative accounting quality and negative AQ is considered a positive accounting quality. This positive effect is however, insignificant even at 90 percent confidence level (10 percent significant level). Thus, the study fails to reject the null hypothesis that IFRS accounting does not have significant effect on the level of earnings of banks in Ghana.

The effect of mandatory disclosure (MD) on earnings is positive. The coefficient is 0.0203 and p-value of 0.0002. The p-value indicates that the coefficient is highly significant. The null hypothesis is strongly rejected at more than 99 percent confidence level (1 percent significant level). It is concluded that the level of IFRS mandatory disclosure has significant positive effect on the level of banks earnings in Ghana. The implication is that any other thing being constant, a point increase in the level of IFRS mandatory disclosure would significantly increase the level of earnings of banks by 0.0203 point at confidence level of 99 percent. On the other hand, when the banks in Ghana reduces the level of mandatory disclosure requirement by 1 percentage point, all other things remaining constant, they would sacrifice earnings by 0.0203 point.

The coefficient of voluntary disclosure (VD) unlike the mandatory disclosure changes its direction of the relationship from positive to negative in relation to the earnings. The statistics is -0.0755. The p-value of this statistics is 0.0035. Per the p-value, the coefficient of VD is highly significant. The null hypothesis is rejected for the alternative hypothesis at 1 percent significant level. This suggests that an increase in the level of voluntary disclosure by 1 percentage point impedes earnings by 0.0755 point at 1 percent level of significance. Similarly, a decrease in the level of voluntary

disclosure would enhance the earnings of Ghanaian banks by 0.0755. Thus, VD adversely affects the level of earnings of banks.

As it can be seen from Table 4, the presentational faithfulness or framework (PF) has negative effect. The coefficient is -0.2118 (0.0000). The probability or p-value in the parenthesis is less than 1 percent significant level. This provides strong evidence to reject the null hypothesis. The study concludes that the level of presentational faithfulness or framework adversely affects the level of earnings. The results indicate that when banks increase the presentational faithfulness by 1 percent, it would decrease the level of earnings by 0.2118 point and vice-versa.

The results of the earning predictability and the level of IFRS compliance are mixed. However, in collective sense, compliance with all the dimensions of IFRS has strong value relevance to the adopters. The findings showed that accounting quality has positive but insignificant effect on the level of earnings of banks in Ghana. The results also indicated that mandatory disclosure has significant positive effect on the level of banks earnings in Ghana. However, the study found that the level of voluntary disclosure unlike the mandatory disclosure has negative relation with earnings. Voluntary disclosure compliance therefore has adverse effects on the level of earnings of banks. Additionally, compliance with IFRS presentational faithfulness also has significant negative effect on earnings.

The findings are partially consistent and partly at inconsistent with the expectations of this study. The accounting quality and mandatory disclosure exhibiting positive contribution to earnings are consistent with the expectations in this study. However, the insignificant level of accounting quality is at variance with the expectation. Similarly, the study reveals no sufficient evidence to support the study apriori regarding the relationship between compliance with voluntary disclosure and presentational faithfulness as against earnings. Both voluntary disclosure and presentational faithfulness show significant negative influence on the level of earnings contrary to the expectations.

To explain why compliance with IFRS accounting quality and mandatory disclosure have positive effect on earnings, the capital needs theory may be considered. Drawing from the capital needs theory, high accounting quality and disclosures reduce operational expenses of banks through low finance cost (Bushee & Leuz, 2005; Leuz & Wysocki, 2008). The low operational expenses would reduce the bottom line returns (earnings). Additionally, the positive effect of compliance with IFRS accounting quality and mandatory disclosure on earnings may be explained by the propositions of signalling theory. Within this theoretical assumption, the accounting quality and mandatory disclosure are positive signallers to stakeholders. This would raise the reputation of adopters and could contribute to enhancing the earnings of the banks (Auronen, 2003).

Furthermore, these findings are supported by the propositions of agency theory. Following this theory, when managers are caused to provide quality accounting information and enhance their mandatory disclosures, they would be compelled to work towards achieving goal congruence since actions and inactions by managers can easily

be traced by shareholders. This would cause managers to undertake investments which have positive net present value and ultimately contribute positively to earnings. The compliance with these IFRS dimensions could also reduce the monitoring cost by shareholders and bonding cost by managers as explained by Nermeen (2014). This reduces operation expenses and increases the earnings.

Additionally, it is expected from the lessons learnt from the capital needs theory that voluntary disclosures and presentational faithfulness would positively contribute to the level of earnings but not the negative relationship as found in this study. Possible reason for this negative relationship can be found in the assumption of proprietary cost theory. The theory argues that minimum mandatory and quality information is necessary for the sustenance and performance enhancement of an entity anything above this has the potential to deplete the earnings and present value of expected cash flow from the entity (Leventis, 2001). To reconcile the theoretical conflicts between capital needs theory and the proprietary cost theory regarding the adverse contribution of the level of voluntary disclosure, cost-benefits theorem can be employed. When the cost of decision quantitatively exceeds the benefits, the incidence or the net effect would also be negative. Therefore, although compliance with voluntary disclosure generates benefits according to capital needs theory, the proprietary costs may exceed these benefits thereby revealing negative effect as reported in this study.

The negative contribution of voluntary disclosure to profitability could also be attributed to the content and information needs of the users or stakeholders. The negative effect of voluntary disclosures implies that there are other earnings drivers who may consider voluntary disclosures as noise (Hubert & Heger, 2011). This noise depletes earnings rather than enhancing earnings. It could mean that the voluntary information disclosed by the banks, even in increasing quantity is not useful to the earning drivers. The findings support the earlier assertion that quantity of information is not automatically linked with its quality (Hubert & Heger, 2011). Voluntary disclosure can be noise or useless to users and may adversely affect earnings as evident in this study when it does not reduce the analysts' dispersion of forecasts.

The negative effect of presentational faithfulness on the level of earnings could be attributed to the fact that when management provides extended levels of IFRS compliance in terms of measurement, recognition and presentation to communicate performance, inefficiencies from prior poor quality presentation and reporting are revealed. IFRS measurement, recognition and presentational criteria do not give room for creative accounting which otherwise would have enhanced the earnings of the banks. This is explained by the signalling effect. It means that that the companies might have performed well in terms of earnings but the accounting rules did not allow this to be reflected on the financial statements. Following Spence (1973), when managers try to screen the reporting, eventually it would serve as positive signal and ultimately make them attractive to stakeholders as these banks would separate themselves as non-lemon banks to avoid adverse selection problem. However, previously poor reporting practices may be revealed to expose possible lemon

characteristics and this might have contributed to the findings in this study as window dressing accounting such as off-balance sheet financing common in the banking sector is not entertained by IFRS compliance.

The findings are consistent partly with the results of Lantto and Sahlström (2009) which also assessed the impact of IFRS adoption on firms. These authors showed that the level of IFRS compliance is associated with changes in key financial ratios. They specifically concluded from their findings that IFRS provisions increase among others the adopters' profitability and increase income statement profits. Therefore the positive contributions of the level of IFRS compliance (accounting quality and mandatory disclosure) on the level of banks earnings are supported by the earlier study of Lantto and Sahlström (2009). However, the findings from the voluntary disclosure and presentational faithfulness are dissimilar to Lantto and Sahlström (2009) but affirm the findings of Tanko (2009). Tanko (2012) also investigated the effect of IFRS adoption on performance of Banks in Nigeria. The author found that IFRS reduces the earnings of adopters. In exploring reasons to the results, Tanko (2012) argued that IFRS reduces earnings because IFRS allows early recognition of losses. Since presentational faithfulness includes measurement, recognition and presentation, it is expected that it would capture early recognition of losses and this would reduce the earnings of the banks.

## VI. CONCLUSIONS AND RECOMMENDATION

The study investigated the earning predictability from the level of IFRS compliance of banks in Ghana. The study employed Queku' 4-multidimensional model to measure IFRS construct and examined the extent to which each of the constructs predicts the level of earnings of the banks. The main estimation technique used was Generalised Method of Moment (GMM). The conclusion was that IFRS compliance strongly predicts earnings of banks in Ghana; however, the direction of the effect is mixed. It was concluded that when adopters of IFRS (banks in Ghana) increase the level of compliance with the level of IFRS accounting quality and the level of mandatory disclosure, the banks' earnings could improve. However, when banks do not enhance the compliance with these IFRS dimensions, the earnings could be retard. Another conclusion was that compliance with voluntary disclosure and presentational faithfulness could decrease the value of earnings.

The findings from the study demonstrate that IFRS mandatory disclosure can be used to control agency cost. It is therefore recommended that stakeholders especially shareholders should ensure active implementation of IFRS compliance policy so as to mitigate against possible aberrant activities of managers and minimise the residual agency cost and maximise earnings. The negative effect of IFRS presentational framework and earnings found suggests that management of banks should tighten investment appraisal policy so as to pursue projects whose NPVs are reasonably positive since IFRS timely recognises losses and could easily exposes inefficiencies through the measurement, recognition and reporting (presentational framework). The study also



found evidence of proprietary cost problem regarding voluntary disclosures. Therefore, it is recommended that banks in Ghana should review the content of disclosures which are voluntary and presents the minimum content to obtain value for such disclosures. They should also identify the information needs so as not to present noise to stakeholders.

It is further recommended that management of banks in Ghana should review their day-to-day accounting practice and policy subsequent to adoption of IFRS as the findings suggest that the accounting quality, informative reporting and presentational faithfulness could expose activities of creative accounting. This may be demonstrated by negative relationship between the some of the dimensions of IFRS compliance and earnings. Creative accounting activities such as off-balance sheet transactions, overvaluation and undue deferment of losses may cause negative relationship between IFRS compliance and key performance indicators when IFRS compliance is enhanced.

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