# THE IMPACT OF AAOIFI ACCOUNTING STANDARDS ON EARNINGS QUALITY: THE CASE OF ISLAMIC BANKS IN BAHRAIN

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#### Abstract

The purpose of this paper is to examine the change in earnings quality after the adoption of AAOIFI Accounting Standards in Islamic Banks of Bahrain. In this paper, we hypothesize that, adoption of AAOIFI accounting standards could lead to high level of earnings quality. However, data were collected from the annual reports of 5 Islamic banks in Bahrain during 2002-2011. The findings indicate that the change in earnings quality after the adoption of AAOIFI in Islamic Banks of Bahrain is higher due to the improvement of the quality of financial reporting. The Adoption of AAOIFI accounting standards is expected to lead to high level of earnings quality among Islamic Financial Institutions and play a significant role in attracting global investors' interest in the local markets, especially in a developing country like Bahrain.

**Keywords:** Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) Accounting standards, Earnings Quality, Islamic Financial Institutions, Bahrain

#### 1. INTRODUCTION

Prior studies on the global accounting standards made tremendous efforts to ensure practical and standardized international financial statements. The standardization of financial reporting becomes more increasingly important to researchers, academics, investors and users of financial reports. However, the major challenges faced by financial institutions lie in the preparation of financial reporting under a variety of accounting standards which may result to problems of recognition, measurement disclosure. Therefore, understanding the factors affecting the impact of AAOIFI adoption on the earnings quality need to be investigated. The acceptance and understanding of AAOIFI accounting standards can be of high significance for policy implications, regulators, and standard setters. The literature on the level of compliance with AAOIFI accounting standards has also generated a heated debate among the researchers. However, it is uncertain to determine whether there is any impact of AAOIFI adoption of AAOIFI accounting standards on earnings quality among the banks in Bahrain. It is therefore necessary that we should ask the following question: Does the adoption of AAOIFI accounting standards have a positive/negative impact on the earnings quality?.

The current study differs from other studies that examined the impact of accounting standards on earnings quality of banks. All other research studied earnings quality of conventional banks by using international accounting standards, whereas this study used a different set of accounting standards named AAOIFI accounting standards and non-conventional banks. Therefore, this study is unique to examine the impact of accounting

standards for Islamic financial institutions on earnings quality in Bahrain.

## 2. LITERATURE REVIEW

This paper investigates the impact of AAOIFI adoption on earnings quality in Islamic Banks of Bahrain. The review of the literature shows that only a few researchers have been conducted to examine the impact of global accounting standards such as IFRS adoption on earnings quality, but no studies have been conducted to examine the impact of adoption of the AAOIFI accounting standards on earnings quality regionally and globally. In the international context for instance, study conducted by Sun, Cahan and Emanuel (2011) examined the effect of IFRS adoption on earnings quality from cross-listed firms in the U.S. and investors concerned with earnings quality increased during the last decade after many international companies announced about non-authentic and temporary earnings as part of their quarterly reports. Thus, investors became more cautious in considering net earnings. In another study, Ohlson & Feltham (1995) defines earnings quality as investor's ability to predict future abnormal earnings based on recent data. In line with that, Dechow et al. (2010) as quoted from (Sun et al, 2011) defines high-quality earnings as earnings that could provide adequate information about the features of a firm's financial performance that are relevant to a specific decision made by a specific decision-maker.

Accounting standard setters commonly perceive earnings management as undesirable to reduce management's discretion for earnings management by tightening accounting standards (Ewert and Wagenhofer, 2005). According to De-jun (2009), six factors affect earnings quality; accounting

standards, firm characteristics, board and auditing committees' characteristics, managerial characteristics, auditing firm characteristics and others. Additionally, Ewert and Wagenhofer (2005) documented that IFRS adoption led to an improvement in earnings quality for cross-listed firms relative to matched firms in the U.S.

The significance of earnings quality stems from earnings on which many parties depend on their decision (Dechow & Dichev, 2002). According to Dechow & Schrand (2004) as quoted from (Hamdan, 2013) understanding earnings quality plays an important role in the process of financial analysis; earnings of high quality help financial analysts in analyzing three basic information which are: present functional performance of the company, future functional performance and value of the company.

There are different views regarding concept of earnings quality, while some use earnings continuity as a standard of its quality as explained by (Altamuro& Beatty, 2006). The continuity of earnings refers to the relationship between present earnings with future ones. As earnings are divided into cash flows and accruals, quality earnings is when cash flows are more than accruals (Sloan, 1996). Others indicate that earnings quality is better once free from earnings management practices; the less discretionary accruals also reflect better quality (Francis et al, 2004; Dechow & Dichev, 2002; Al-Sharif, 2008).

According to Dechow & Schrand (2004) as quoted from (Hamdan, 2012) the standard setters, regulators and auditors consider earnings quality to be good if information disclosed is in accordance with the generally accepted accounting principles. Also, the creditors consider earnings quality to be good whenever the company enjoyed a greater capacity to transfer its cash flows.

In a related study by Tony et al (2012), the earnings quality increases for mandatory IFRS adoption when a country's investor protection regime provides stronger protection. This study extends the current literature to show that accounting practices are influenced by country-level macro settings. The results highlight the importance of investor protection for financial reporting quality and the need for regulators to design mechanisms that limit manager's earnings management practices.

However, most of the previous studies focused on the impact of IFRS adoption on earnings quality globally. The impact of AAOIFI adoption on earnings quality in the Middle East, particularly in Bahrain has never been examined. Thus, it is interesting to study the impact of AAOIFI adoption on earnings quality. We consider this to be the first study to examine the impact of AAOIFI adoption on earnings quality in the kingdom of Bahrain. In Bahrain, for instance, Al-Mudhahki and Joshi (2001) found that, certain listed companies in Bahrain were complying with the international accounting standards. In addition, it was found that, size, auditors' reputation, the percentage of foreign sales, levels of foreign activity, listing, and profitability are the main determinants of the compliance with international accounting standards. However, to date there are no related studies to explain the impact of AAOIFI standards on earnings quality. Accordingly, we conducted this study to examine the impact of AAOIFI adoption on earnings quality to contribute to the body of knowledge.

#### 3. RESEARCH METHODOLOGY

In this paper we hypothesize that, adoption of AAOIFI accounting standards could lead to high level of earnings quality. This paper uses the Richardson Sloan model in examining the change in earnings quality after the adoption of AAOIFI standards in Islamic Banks of Bahrain. This paper uses 5 years period before and 5 years period after the adoption of AAOIFI accounting standards. Data were collected from the annual reports of 5 Islamic banks in Bahrain during 2002-2011.

## 3.1. Research Design

The study sample included all Islamic Banks in Bahrain which their data is available and never been merged or deleted throughout the period of the study. The number of Islamic banks that met such conditions from 2002–2011 was five, Annual reports of 5 selected Islamic banking have been analysed. This study period was therefore selected to examine the impact of pre and post adoption of AAOIFI accounting standards on earnings quality among Islamic banks in Bahrain.

This study aims to measure the impact of AAOIFI adoption on earnings quality. The first step, we measured adoption of AAOIFI accounting standards and then the level of earnings quality. We also analyzed the relation between them.

The dichotomous disclosure index is employed in this paper for determining the dependent variable. The dichotomous technique used whereby a one score was given for pre-adoption and zero for post-adoption. The results reveal an overall compliance of 81% by the Islamic banks in Bahrain to the requirements of AAOIFI accounting standards.

# 3.2. Research Model

There are different interpretations of earnings quality, for instance, according to Sloan (1996) earnings quality implies continuity of cash flows more than accruals. Richardson Sloan model developed to determine the range of earnings continuity in the future as equation number 1 shows below.

$$ROI_{i,t+1} = \gamma_0 + \gamma_1 \left(ROI_{i,t} - TACC_{i,t}\right) + \gamma_2 TACC_{i,t} + \upsilon_{i,t+1} (1)$$

Where:

 $ROI_{i,t+1}$ : is return on investment for firm (i) in the next year (t+1):

 $\gamma_0$ : is constant;

 $\gamma_1$ : is continuity of cash flows;

 $\gamma_2$ : is continuity of accruals;

ROI<sub>i,i</sub>: is return on investment for firm (i) in year (t); TAAC<sub>ij</sub>: is total accruals for firm (i) in year (t).

Earnings quality means that next year's earnings represents returns on investment (ROI $_{i,t+1}$  dependent variable in equation no.1) which is affected by earnings of the current year, represented in  $\gamma_1$  coefficient more than total accruals represented in  $\gamma_2$  (coefficient). Then, the hypothesis in the

previous equation is  $\gamma_2$ - $\gamma_1$ <0, which indicates continuity of earnings in the coming years is more than the continuity of accruals as  $\gamma_2$ < $\gamma_1$  known as earnings quality. Therefore, equation no.1 is modified as follows:

$$ROI_{i,t+1} = \rho_0 + \rho_1 ROI_{i,t} + \rho_2 TACC_{i,t} + \upsilon_{i,t+1}$$
 (2)

This equation is then rewritten after taking into consideration the accruals in equation no.1 as follows:

$$ROI_{i,t+1} = \gamma_0 + \gamma_1 (ROA_{i,t}) + (\gamma_2 - \gamma_1) TACC_{i,t} + \nu_{i,t+1}$$
 (3)

As  $\rho_1 = \gamma_1$  and  $\rho_2 = (\gamma_2 - \gamma_1)$ , this evaluation saves us the direct evaluation for  $\gamma_1 - \gamma_2$  in equation no.2. The hypothesis is  $\rho_2 < 0$  as it is more negative in accruals representing earnings that imply the presence of high quality earnings.

#### 4. RESULTS, ANALYSIS AND DISCUSSION

Table 1 reports the mean, standard deviation, Skewness and Kurtosis for all variables. Skewness and Kurtosis were conducted to test the Normal Distribution of data as shown in Table 1. Moreover, Durban-Watson (DW) test was used in order to test the presence of correlations. As a result, DW test results 1.138 as shown in Table 2, and this shows that DW is located within the range of the data normality according to (Gujarati, 2003). In addition to that and to test the independency for all independent variables, Multicollinearity test was conducted to measure the tolerance of each variables through Variance Inflation Factor (VIF) test. The result as shown in Table 2 shows that, the VIF scores reported indicate that no score exceeds 10 for any variable in the model. It was, therefore, concluded that collinearity was not problematic. Thus, all variables less than 10 values; which mean the model doesn't have any Multicollinearity problem according to Gujarati (2003). Furthermore, Table 1 shows the descriptive statistics of all variables. Overall, the mean of all variables is positive and that reflects the adoption of the AAOIFI accounting standards could lead to high level of earnings quality and play a significant role in attracting global investors' interest to the local markets, especially in a developing country like Bahrain.

**Table 1.** Descriptive statistics for the dependent and independent variables

	Absolute value	ROE Profitability	LIQ Liquidity	SIZE (Ln)	AGE
N	50	50	50	50	50
Mean	2,184,213	8.662	3.329	4.782	19.35
Std. Deviation	8.243	1.223	4.340	5.443	11.272
Skewness	1.323	1.817	1.614	1.238	.652
Kurtosis	2.476	2.323	3.342	4.201	.326
Minimum	43725	4.123	0.118	2.626	6
Maximum	4,325,382	6.09604	1.955	2.541	43

Table 1 summarizes the mean of the dependent and independent variables of the sample size of Islamic banks listed in Bahrain BourseBB. The mean was indicating the relationship between the adoption of AAOIFI and earnings quality in Islamic banks in Bahrain. as well as a minimum and a maximum of the levels of which also indicate the relationships between the dependent and independent variables in study model as shown in table 1.

In addition to, a check for multicollinearity involves conducting the Variance Inflation Factor (VIF) as is shownin Table 2, indicating that no score exceeds 10 for any variable in the model. It was, therefore, concluded that collinearity was not problematic as discussed above.

Table 2 presents also the results of the regression analysis. This result statistically supports the significance of the regression model. The results also reveal that R-Square is 0.413, which suggests that independent variables included in the model explain 41% of the variation in the study. Furthermore, in relation to the relationship between the adoption of AAOIFI accounting standards and earnings quality in Islamic banks in Bahrain, the results indicate that the coefficient is low with a negative value indicating a high level of earnings quality declared by Islamic banks of Bahrain after adopting AAOIFI standards.

Table 2. Regression Analysis

Ind. Variables		t-statistics	Sig.	VIF
(Constant)		2.721	0.004	
ROE		2.523	0.008	5.86
LIQ		3.224	0.001	4.00
SIZE		2.321	0.009	4.68
AGE		1.987	0.010	1.073
Durban-Watson DW	1.138			
R	0.632			
R-Square	0.413			
No. of Observations	49			

Table 2 presents the results of the regression model that examine the relationship between the adoption of AAOIFI accounting standards and earnings quality in Islamic banks in Bahrain in terms of independent variables. The model is significant with R2 of 0.413. This means, the independent variables as identified in the literature review are influencing 41% of the relationship between the adoption of AAOIFI accounting standards and earnings quality. Furthermore, the results reveal that, there is a relationship between the adoption of AAOIFI accounting standards and earnings quality. The results support the research hypotheses that, the higher absolute value of discretionary accruals suggests lower earnings quality and vise versa. This has been supported by many previous studies such as Wan Ismail et al (2015) which concluded in their research using Malaysian listed firms at KL Stock Exchange; that the that adoption of accounting standards such as IFRS is associated with higher quality of reported earnings. It is found that earnings reported during the period after the adoption of IFRS is associated with lower earnings management and higher value relevant.

In related study conducted by Quttainah & Song (2013) they using a sample of Islamic banks and their matched non-Islamic banks in 15 countries, however, they found Islamic Banks are less likely to conduct earnings management as measured by both

earnings loss avoidance and abnormal loan loss provisions.

Furthermore, in table 3, independent sample t-test results show the methods for measuring earnings quality. Thus,  $\beta$  or  $\rho$ 2<0, is more negative in representing accruals of returns in equation 3 and this implies high earnings quality.

The results indicate that the coefficient is low with a negative value indicating a high level of earnings quality declared by Islamic banks of Bahrain after adopting AAOIFI standards. We used independent sample t-test in order to test the impact of AAOIFI adoption on earnings quality. The sample consisting of 50 observations were then divided into two groups:

First group consisted of Islamic banks before the adoption of the AAOIFI accounting standards, and the second group after the adoption. The mean values as shown in Table 3 were  $\rho 2$ = 0.00085 for before adoption and  $\rho 2$ = -0.00012 after adoption. A decrease in the mean value after adoption indicates a high adoption of AAOIFI accounting standards and also earnings quality. However, in order to study the relationship between the impact of adoption of AAOIFI accounting standards on earnings quality the independent sample t-test was carried out and the findings are shown in Table 3:

**Table 3.** Independent sample t-test results

Mean of EQR (ρ2) before adoption	T-test	Sig.	β	Df	T- Critical	Mean of EQR (ρ2) after adoption
$\rho 2 = 0.00085$	2.318	0.03	- 4.820008	50-1=49	1.68	ρ2= -0.00012

#### 4.1. Implication of the study

This research may be considered as a first attempt to contribute to the Islamic Accounting literature in terms of examining the impact of pre and post adoption of AAOIFI accounting standards in Bahrain. According to Dechow & Schrand (2004) as quoted from (Hamdan, 2012) the standard setters, regulators and auditors consider earnings quality to be good if information disclosed is in accordance with the generally accepted accounting principles.

The findings of this research are consistent with accounting literature, and can be concluded that the adoption of accounting standards issued by an international accounting body will enhance the earnings quality and reporting of an organization. Accordingly, the findings should also be beneficial to regulators and researchers to adopt and undertake further studies on the impact of AAOIFI adoption on earnings quality in other developing and Muslim countries.

## 4.2. Implications for Theory and Practice

The findings show significant support for the impact of AAOIFI adoption on earnings quality. Logically, Islamic financial institutions comply with Shari'ah requirements due to religious necessities in the Muslim community. Thus, the results are expected to have a high level of earnings quality if Islamic financial institutions adopt accounting standards based on Shari'ah principles and the findings could

serve as a guide to the regulatory bodies such as the Central Bank of Bahrain (CBB) and regulators of accounting standards for Islamic financial institutions. Therefore, adoption of the AAOIFI accounting standards could lead to a high level of earnings quality and could play a significant role in attracting global investors' interest in the local market, especially in a developing country like

The results indicate that Islamic banks in Bahrain have a high level of earnings quality after adopting the AAOIFI accounting standards. These findings are relevant to bridge the gap between theory and practice.

## 4.3. Data Limitations

This research like many other studies faces data limitations. Sample size employed for this study contains only Islamic banks of Bahrain, and did not include other Islamic financial institutions such as Takaful (Islamic insurance) companies.

# 4.4. Recommendations

The study focuses on Islamic banks in Bahrain. Thus, Islamic Banks in GCC should be included in future research. Also future research may consider auditing, governance, ethics and other Shari'ah standards issued by the AAOIFI to examine the impact of the AAOIFI accounting standards on earnings quality. In addition, future research could

include Islamic banks from the Organization of Islamic Countries (OIC) in order to elicit international evidence. Furthermore, due to lack of prior research in this area, future studies can be extended by looking at AAOIFI standards adoption by Islamic banks in other countries where AAOIFI standards are mandatory or voluntary. Moreover, other factors should be included in future research to reflect the change in earnings quality after the adoption of AAOIFI accounting standards by Islamic Banks of Bahrain.

#### REFERENCES

- 1. AAOIFI (2008), Financial Accounting Standards, Accounting and Auditing Organization for Islamic Financial Institutions, Manama, Bahrain.
- 2. AAOIFI (2010), Financial Accounting Standards, Accounting and Auditing Organization for Islamic Financial Institutions. Manama, Bahrain.
- 3. Abdelghany, K. (2005). Measuring the Quality of Earningss. Managerial Auditing Journal. 20(9): 1001-1015.
- Ahmed, E. (2002). Accounting issues for Islamic banks. In Archer, S. and Rifaat Ahmed Abdel Karim (ed.). Islamic finance Innovation and Growth. Euro money books and AAOIFI: Nestor House. London.
- 5. Al-Mudhahki, Jawaher & Joshi, PremLal (2001). "Empirical study of compliance with international accounting standards (IAS-1) by stock exchange listed companies in Bahrain". Journal of financial management and analysis. Vol. 14 Issue 2; ABI/INFORM Global. pp. 43-54
- 6. Al-Sharif, I. (2008). Quality of earnings and their relationship to corporate governance: An Empirical Study on the Industrial Sector Firms Listed at Amman Stock Exchange (Unpublished Ph.D thesis). Arab Academy for Banking and Financial Sciences, Amman, Jordan.
- 7. Altamuro, J., & Beatty, A. (2006). Do Internal Control Reforms Improve Earningss Quality? Working Paper, www.ssrn.com
- 8. Charles, F. Haarman, A and Schmid, S, (2006) "the stakeholder theory". Available at http://www.edalys.fr/documents/Stakeholders%20 theory.pdf (Accessed on 20 May 2012)
- 9. Craven, B. M. & Marston, C. L. (1999). Social and environmental reporting on the internet by leading UK companies. European Accounting Review. No. 8 (2): pp. 321-323.
- Dechow, P. &Dichev, I. (2002). The Quality of Accruals and Earningss: the Role of Accrual Estimation Errors. Accounting Review, 77(September): 35-59.
- 11. Dechow, P., &Schrand, C. (2004). Earningss Quality. The Research Foundation of CFA Institute.
- 12. De-jun, WU. (2009). What are affecting earningss quality: A summarization. Journal of Modern Accounting and Auditing, 5(5): 53-58.
- Ernst & Young (2011). Islamic funds & investments report 2011, Achieving growth in challenging

- Times. The 7th Annual World Islamic Funds and Financial Markets Conference (WIFFMC 2011), IFIR 2011, with a principal focus on "achieving growth in challenging times"
- 14. Ewert, R. & A. Wagenhofer. (2005). Economic effects of tightening accounting standards to restrict earningss management. The Accounting Review, 80(4), 1101-1124.
- 15. Farinha, J. & Moreira, A. (2007). Dividends and Earningss Quality: The Missing Link? Working Paper, University of Porto.
- 16. Freeman, R.E. (1984) "Strategic management: A stakeholder approach", Boston: Pitman Publishing.
- 17. Gujarati, D. (2003). Basic Econometrics. New York: McGraw Hill Book Co.
- 18. Hamdan, A (2013). The relationship of Earnings Quality to accounting conservatism. Studies in business and economics journal.16 (2).101-123.
- 19. Hamdan, A., & Abu Ijela, I. (2012). Auditing Quality in Jordan and its Impact on Earningss Management and Earningss Quality. The Arab Journal of Accounting. 15(1), 25-48.
- Jensen, M. C. & W. H. Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure". Journal of Financial Economics .Vol. 3.pp.305-360.
- 21. Ohlson, J., &Feltham, J. (1995). Valuation and clean surplus accounting for operating and financial activities. Contemporary Accounting Research, 11(2): 689–731.
- 22. Quttainah, M & Song, L (2013), Do Islamic banks employ less earnings management?, Journal of International Financial Management & Accounting. 24 (3): pp 203–233
- Richardson, S., Sloan, R., Soliman, M., & Tuna, I. (2005). Accrual Reliability, Earningss Persistence and Stock Prices, Journal of Accounting and Economics. 39 (3): 473-485.
- 24. Sarea, A. M. (2012). The Level of Compliance with AAOIFI Accounting Standards: The Evidence of Bahrain. International Management Review, 8 (2): 27-32
- Sloan, R. (1996). Do stock prices fully reflect information in accruals and cash flows about future earningss? The Accounting Review, 71 (3): 289-315.
- 26. Sun, Jerry. Steven F. Cahan, & David Emanuel (2011) How Would the Mandatory Adoption of IFRS Affect the Earningss Quality of U.S. Firms? Evidence from Cross-Listed Firms in the U.S. Accounting Horizons, 25 (4): pp. 837–860
- Tony van Zijl, Keitha Dunstan, &Waresul Karim, (2012), The Effect of IFRS Adoption and Investor Protection on Earnings Quality around the World, the International Journal of Accounting, 47 (3). pp 333–355
- 28. Wan Adibah Wan Ismail, Khairul Anuar Kamarudin, Tony van Zijl, Keitha Dunstan, (2013) "Earnings quality and the adoption of IFRS-based accounting standards: Evidence from an emerging market", Asian Review of Accounting, 21 (1), pp.53 73.