The Impact of Accounting Factors on Earning Quality: A Case Study of Commercial Banks in Iraq

Prof. Alsheikh Imad* ,Manal Sulieman Abughniem1, Salih Zabar Aljuboury 2, Mohammad "Abd Alaffo" AlAdham3, Emad Yousef Alsheikh 4
1 Assistant Professor, Applied Science University, Amman, Jordan.
2 PhD Student, Sudan University of Science & Technology, Sudan.
3 Operations Director, Masader for Student Services, Amman, Jordan.
4 Professor – Accounting, Applied Science University, Amman, Jordan.
Correspondence Author: Prof. Alsheikh Imad; Accounting Dep. Applied Science Private University.

Abstract
This research has examined the impact of accounting factors (audit fees, ROA, EPS and debt ratio) on the earnings quality (EQ). The case was the commercial banks listed in Iraq stock exchange, for the period 2011-2015, and the sample was 15 commercial banks. We measured the EQ by using Richardson et al., (2003) model, and the main result were that audit fees, debt ratio, affect EQ, and also revealed that ROA and EPS have no effect on the EQ.

Keywords: Earnings Quality; Audit Fees; ROA, EPS and Debt Ratio; Iraq Stock Exchange.

Introduction
Using the accounting information become increasingly important in the last decades there were conflict about the usefulness’ and application of different approaches of accounting information, therefore, the study rely on some accounting factors there effect on earning quality of a Iraq commercial bank.

Earnings have changed dramatically over the past 40 years. Prior studies interpret this trend as a decline in earnings quality but disagree on whether it results from changes in the real economy or changes in accounting standards. (Srivastava, 2014).

Previous studies define earnings quality through certain characteristics of earnings such as persistence or sustainability, predictive ability, smoothness, conservatism, value-relevance, timeliness, earnings management or earnings manipulation and accrual quality ( Richardson, 2003, Sousa et.al.,2016). The literature emphasizes that the quality of earnings is very important as the earnings figure is widely used in many contractual agreements and investing decisions. Generally, earnings which are viewed as being of high quality are those that have a high level of persistence, are more predictable, less volatile, timelier, have lower level of earnings management and/or higher accrual quality.( Kamarudin and Ismail, 2014).

Literature Review
There were many studies on accounting factors, and their effect on EQ, with deferent variables, in different countries. The researchers have studying the earnings quality (Kalgo et. al., 2016), (Ismail et. al., 2013), (Dechow et. al., 2010), (Katz, 2008), (Abdelghany, 2005), (Nelson and Devi, 2013), (Demerjian et. al., 2013), (Shubita, 2015),(Asthana, 2014).

On the other hand (Mitra, 2016) found a conflicting results because the systematic risk, one of the components of a synchronicity, is highly correlated with earnings quality. After controlling for the systematic risk. And the result was that higher earnings quality is associated with lower firm-specific return volatility.

Perotti and wagenhofer, 2014, measures the earnings quality measures and the excess returns, for a large sample of US non-financial firms, they show that all measures except for smoothness are negatively associated with absolute excess returns, suggesting that smoothness is generally a favorable attribute of earnings.

While (Nakashima and Ziebart, 2015), investigate whether the differences in regulations, corporate governance and regulatory environment acceptance influence earnings management and earnings management of Japanese listed firms, relative to findings in the USA. They found the Japanese results to be slightly different from the results found in previous USA studies

Darjezi and Izadi (2016) found that average UK company behavior was quite similar to the behavior found earlier in the USA. This paper’s findings show that greater volatility of sales, cash flow, accruals and earnings results in a lower accrual quality.

While (Majeed and Zhang, 2016), found a positive relationship between Product market competition and earnings quality. They also documents that competition from existing rivals does not improve earnings quality by reducing real activity manipulation, but competition from potential entrants does. Moreover, the results suggest that market competition plays no role in improving the earnings quality of state-owned enterprises (State-owned enterprises).

(Ames et. al., 2014), study if the earnings quality attributes reflected in financial strength ratings? They measure the quality of reported earnings using three accounting-based measures: earnings persistence, accrual quality, and earnings smoothness. The main results that more persistent earnings are related to better insurer FSRs in our various tests. Accrual quality is associated with higher FSRs, although the effect is significantly weaker for public insurers. Earnings smoothness appears to be an attribute that is negatively viewed, although this effect is significantly weaker among public insurers.

(Sodan, 2015) study the impact of fair value accounting on earnings quality in eastern European countries, the study find preliminary empirical findings suggest that both firms and banks with increased exposure to fair value accounting in financial reporting have lower level of aggregate earnings quality.

Where (Zhu et. al. 2012), find that relationships between earnings quality and new short-term loans, long-term loans and total loans in listed companies changed significantly after the banking system reform, especially in state owned listed companies. Further investigation shows that due to the influence of rent-seeking, banks have eased the earnings requirements of non-state owned listed companies. These findings enhance our understanding of the economic consequences of the banking system reform and of credit discrimination under the new regime.

The main results of (Souza et.al., 2016), were consistent with the “demand” hypothesis and indicate that earnings represent a more consistent indicator of future performance when ownership structure becomes more dispersed. The result suggests that the quality of accounting numbers have to be assessed considering aspects related to ownership concentration (even when analyzing earnings from public firms).

**Accounting Indicators**

This study comes to investigate the impact of some accounting factors in (EQ) on the Iraq commercial bank for the period for 2011 to 2015 by using Return on Assets (ROA), Earning Per Share (EPS), and Debt Ratio (D/R), Audit Fees (AF).

The importance of return on assets as a measure of the firm performance is recognized in the specialized literature. where, (Lindo, 2008) believes that (ROA) is the general purpose financial ratio used to measure the relationship of profit earned to the investment in assets required to earn that profit. Returns on assets are the main indicators that provide the image on ability to recover after capital losses incurred. (Hardy and Schmieder, 2013), (Fantal et.al., 2013), assessed the relationship between selected internal and external corporate governance mechanisms, and bank performance as measured by ROA covering the period 2005 to 2011. (Kolapo and Ayeni, 2012), carried out an empirical investigation into the quantitative effect of credit risk on the performance of commercial banks in Nigeria over the period of 11 years (2000-2010). The main results were that an increase in non-performing loan and an increase in loan loss provision reduce (ROA) of banks while an increase in total loan and advances leads to increase (ROA).

(Torres et.al., 2017), (Mavridisa and Vatalisib, 2012), studied accounting factors, and (Muhammad and Tjiani, 2013), (Stainbank and Harrod, 2007), the studied earning per share, while (Chan et.al., 2006), (Holtpaul, 2013), study selected a single normative criterion related to earnings quality, that current and prior years’ earnings per share (EPS) should be reasonable predictors of future (EPS).

Debt ratio has a ‘positive influence’ on earnings quality through its effect on accruals, (Feltham et. al., 2007), (Bharath et. al., 2008), (Vatavu, 2015), (Valipour and Moradbeysi, 2011), and (Ghosh and Moon, 2010), analyze the relationship between total debt and earnings quality and found evidence that debt can either create incentives to manage earnings or improve their quality to influence financing conditions, particularly, the cost of debt.
Definitions and Measurement of Variables

The study examines the influence of factors (Debt ratio, EPS, ROA and audit fees) on EQ using modified Richardson (2003) model, on Iraq commercial banks from 2011 to 2015. For the purpose of this study, EQ is defined as the quality of earning lays in the degree of future sustainability. Thus, understanding the determinants of EQ may provide some insights into EQ efficiency. These measures of EQ in commercial banks were estimated as follows:

**Earning quality**: as defined is the probability of having a sustainable current income in the future (Richardson, 2003).

\[
TACC = \Delta WC + \Delta NCO + \Delta FIN
\]

Where:

\[
TACC = \text{Absolute value of total accruals}
\]

\[
\Delta WC = wc_t - wc_{t-1}
\]

\[
WC = (\text{current operating assets}) - \text{current operating liabilities}
\]

\[
\Delta NCO = nco_t - nco_{t-1}
\]

\[
NCO = (\text{noncurrent operating assets}) - (\text{noncurrent operating liabilities})
\]

\[
\Delta FIN = fin_t - fin_{t-1}
\]

\[
FIN = \frac{\text{financial assets} - \text{financial liabilities}}{\text{Total Assets}}
\]

The regression model to test the research questions of the study includes one dependent variable, EQ, and four independent variables, (Audit Fees, ROA, EPS, and Debt Ratio). The main model that was tested in this study is:

\[
EQ = \beta_0 + \beta_1 \times \text{Audit Fees} + \beta_2 \times \text{ROA} + \beta_3 \times \text{EPS} + \beta_4 \times \text{Debt Ratio} + \epsilon
\]

Research Hypotheses

This study has one main hypothesis which is:

**Ho**. There is no impact of accounting factors on EQ in the Iraq Commercial Banks.

The main hypotheses has sub-hypotheses the following:

**Ho**1. There is no impact of Audit Fees (AF) on EQ in the Iraq Commercial Banks.

**Ho**2. There is no impact of ROA on EQ in the Iraq Commercial Banks.

**Ho**3. There is no impact of EPS on EQ in the Iraq Commercial Banks.

**Ho**4. There is no impact of Debt Ratio (DR) on EQ in the Iraq Commercial Banks.

Main Results

Descriptive Tests

To evaluate investigate influence of factors on EQ, the disclosure Index was applied to the factors of the (15) commercial banks listed on Iraqi Stock Exchange during the period 2011-2015.
Table 1: Descriptive Statistics ($\sum n = 65$)

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ</td>
<td>0.14</td>
<td>0.12</td>
</tr>
<tr>
<td>Audit Fees</td>
<td>132092.63</td>
<td>135726.51</td>
</tr>
<tr>
<td>ROA</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>EPS</td>
<td>0.22</td>
<td>0.15</td>
</tr>
<tr>
<td>Debt Ratio</td>
<td>0.86</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Table (1) shows that descriptive analysis of the variables of the study. Where the arithmetic average of the independent variable was reached, audit fees (132092.63), and the standard deviation value reached (135726.51), and the average of the ROA is (0.01), and the standard deviation value reached (0.00), also the results of descriptive statistics show that the EPS was (0.22), and the standard deviation value reached (0.15). Moreover, the debt ratio was (0.86), and the standard deviation value reached (0.03), and the table shows that the dependent variable is reached, EQ (0.14), and the standard deviation value reached (0.12).

**Pearson Correlation Coefficient**

Table 2: Pearson Correlation Matrix of ($\sum n = 65$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>EQ</th>
<th>AF</th>
<th>ROA</th>
<th>EPS</th>
<th>DR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF</td>
<td>-0.127*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>-0.136</td>
<td>0.073</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPS</td>
<td>-0.267*</td>
<td>0.651**</td>
<td>0.557**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DR</td>
<td>0.285*</td>
<td>0.039</td>
<td>-0.268*</td>
<td>-0.035</td>
<td>1</td>
</tr>
</tbody>
</table>

* Statistically significant if the Sig $\leq$ 0.05.  ** Statistically significant if the Sig $\leq$ 0.01.

From table (2), find that there was a relationship between all variables, and the highest correlation between independent variables value was (65.1%) where (EPS) and (audit fees), and the lowest correlation between independent variables value was (-26.8%) which were between (Debt Ratio) and (ROA), also the results indicated that a significant relationship between some independent variables and dependent variable, the highest correlation between independent variables and dependent variable value has reached to (28.5**%) which was between (EQ) and (Debt Ratio), and the lowest correlation between dependent variables and dependent variable value were (-12.7%**) between (Debt Ratio) and (audit fees).

**Multiple Regression Test Hypotheses**

To accept or reject the study hypotheses, we used the multiple Regression method. We depended on $P$-value to accept or reject hypotheses, where $P$-value should be less than 0.05 to reject null hypothesis and accept alternative hypothesis, and relied on the coefficient of determination value (Adjusted R Square) in explanation of the extent of accuracy of interpreting dependent variables through each of independent variable.
Table 3: Multiple Regression Test Results for All Independent Variables Adjusted R Square = 0.133 \sum_{n=65}

<table>
<thead>
<tr>
<th>Variables</th>
<th>(\beta)</th>
<th>T-Value</th>
<th>Sig. T</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Fees (Log)</td>
<td>-0.561</td>
<td>-2.075</td>
<td>0.043</td>
<td>2.892</td>
</tr>
<tr>
<td>ROA</td>
<td>0.291</td>
<td>1.274</td>
<td>0.209</td>
<td>1.480</td>
</tr>
<tr>
<td>EPS</td>
<td>-0.359</td>
<td>-1.127</td>
<td>0.265</td>
<td>2.797</td>
</tr>
<tr>
<td>Debt Ratio</td>
<td>0.158</td>
<td>3.009</td>
<td>0.004</td>
<td>1.985</td>
</tr>
<tr>
<td>Constant</td>
<td>.......</td>
<td>-2.951</td>
<td>0.005</td>
<td>.......</td>
</tr>
</tbody>
</table>

Table (3) shows the results of the regression analysis, where the model was significant \(F = 2.269, p = .043\) with an Adjusted R Square of 0.133. That is mean 13.3% of the variation in the EQ of the Iraqi's Banks can be explained by the seven variables include four independent variables and three control variables. From table (3) the (Sig F< 5%) has the value (0.043). According to the decision rule which states to the rejection of the null hypothesis "Ho" If the value of Sig F less than (0.05), which means that there is effect of internal factors on EQ. Therefore, we reject the main hypotheses "Ho1" and accept the alternative hypothesis "Hα" which says "There is an impact of accounting factors on EQ in Iraqi Commercial Banks".

Also the results in table (3) show that Coefficient value is (-0.561) which indicates to an existence of a negative correlation between (Audit Fees) and total accruals which is reflected positively on EQ, and from table (3) that (P-value<5%) has the value (0.043); that is means, there is effect of audit fees on EQ, therefore the first null sub hypothesis is rejected "Ho1.1" and accept the alternative hypothesis "Hα" which says "There is an impact of audit fees on EQ in Iraqi Commercial Banks".

Also table (3) shows that Coefficient value is (0.291) which indicate no existence correlation between (ROA) and total accruals which is reflected negative on EQ, and the (P-value > 5%) has the value (0.209), then the second null sub hypothesis is accepted "Ho1.2", which says "there is no impact of ROA on EQ in the Iraqi commercial Banks".

Moreover, table (3) indicate that Coefficient value is (-0.359) which indicate no existence correlation between (EPS) and total accruals which is reflected positively on EQ. Which the (P-value > 5%) has the value (0.265), then the third null sub hypothesis is accepted "Ho1.3", which says "There is no impact of EPS on EQ in Iraqi Commercial Banks".

Table (3) shows that Coefficient value is (0.158) which indicates to an existence of a positive correlation between (Debt Ratio) and total accruals which is reflected negative on EQ, and the (P-value< 5%) has the value (0.004), which means we reject the fourth "Ho1.4" and accepted the alternative hypothesis "Hα" which says "There is an impact of debt ratio on EQ in Iraqi Commercial Banks", this finding is consistent with Zhu et al. (2012).

Conclusion

This study investigates the implication of several variables of accounting factors on the earnings quality (EQ) of the commercial banks listed in the ISE by conducting a quantitative investigation for the years 2011-2015.

i) One main null hypothesis and four sub hypothesis were tested. The test results rejected in general, the null hypothesis, and accepted the alternative one which states that there is an impact of internal factors on EQ.

ii) This study shows that the reason of the effect of audit fees is explained by the relation between fees to compensate the audit firms, and the quality of the audit service. As if, compensating audit firms with higher fees is considered a motive for them to conduct better professional quality, in order to sustain their superior reputation with the board of directors, Management, shareholders, and the external users of the financial statements.

iii) Will enhance the role of audit firms in increasing credibility of the reported information (namely, the financial statements) within the society. Higher audit fees lead to a positive impact on the quality of the audit by reducing the total discretionary accruals.

iv) The the nonexistence of an impact of EPS and ROA on EQ is explained by the outstanding profitability in the banking sector in comparison with other sectors listed in ISE. Moreover, the outstanding mean of the profitability ratios in the banking sector does not motivate the banks’ managements to rely on accruals to enhance these ratios.
Recommendations

This study has a few recommendations for future research. The first recommendation is obviously the sample size issue discussed in the limitations section. In determining the sample size for the research, we need to consider the power of the measurement in reflecting the true construct and variable it measures. However, the study does not suggest increasing sample size solely for achieving research question to be answered. There are many factors may affect research results, and merely increased sample size may cause researchers to lose the opportunities to detect some economic phenomena that are critical for the study. It may also cause researchers to overlook some important factors for the research design or measurements, which are important for the body of knowledge development. From this point of view, the small size selected for this study is not a true failure since it raised issues that are important for further research.

The study used balance sheet items to measure total accruals and it include current assets, current liabilities, cash and cash equivalents, and debt included in current liabilities. We suggest to considering on cash flow items, and further compare the power of these two choices. Second, we suggest to use a different accrual models, instead of the Modified Jones Model, may use other existing accrual models, or try to develop new models, as that will make additional contribution to the literature. Finally, the study suggests testing different features of earnings quality, such as earnings persistence and earnings smoothness.

References


