

JOURNAL OF ACCOUNTING, FINANCE AND AUDITING STUDIES

http://www.jafas.org

Audit quality and Earnings Management in Quoted Nigerian Banks

Sylvester ERIABIE^a Eyesan Leslie DABOR^b

- ^a Ph.D., Department of Accounting, Benson Idahosa University, Nigeria, seriabie@biu.edu.ng
- ^b Ph.D., Department of Accounting, University of Benin, Nigeria, dabor_el@yahoo.com

Keywords

Audit quality, earnings management, abnormal loan loss provision, audit fees.

<u>**Iel Classification**</u> M41, M49.

Abstract

The objective of the study is to find out the impact of audit quality on earnings management. The study used a sample of all eighteen banks quoted on the stock exchange as at December, 2010. Data was gathered for the period 2005 to 2010. The cross-sectional year by year regression analysis was performed. Audit quality is measured by using audit fees and auditor change, and abnormal loan loss provision is used to measure earnings management. Though the result was mixed, however, based on the frequency of results for the period of the study, both audit fee and auditor change were positively related to abnormal loan loss provision. This suggests that high audit fee and change in auditor tenure will aggravate earnings management. We recommend that auditor change should not be ceremonial but based on fact of inefficiency and audit fee from each auditor client should be monitored to enforce the five per cent maximum from each client as suggested by Institute of Chartered Accountants code of ethics.

Introduction

Banks generally have the incentive to engage in earnings management. There are three hypotheses that explain banks' incentive to manage earnings (Diamond and Dybvig, 1983; Morgan, 2002). These include the customer confidence hypothesis, the asset substitution hypothesis, and the regulation hypothesis. The customer confidence hypotheses explains that banks manage earnings to gain customer confidence give the challenge of illiquidity that constantly confronts banks. The asset substitution hypothesis explains that because banks engage in risky asset substitution behaviour, they engage in earnings management to hide such risks. Finally, the regulation hypothesis state that banks engage in earnings management to beat or meet regulations, which are rife in the banking sector.

Arguably banks in Nigeria occupy a very important position in the economy and in the financial system in particular. Bank distresses in Nigeria are a recurring decimal. Adewakun (2010) noted that the Central Bank of Nigeria (CBN) has identified poor corporate governance and unethical practices as one of the major causes of distress in the nation's banking industry. Unethical practices here include accounts manipulation.

The Prudential Guideline (2010) is meant to improve audit and financial reporting quality in banks. One of the focuses of this Prudential Guideline is to deal with accounts manipulation occasioned by earnings management. The Prudential Guideline (2010) regulated the tenure of external auditors. The guideline states that the tenure of the external audit should not exceed ten years from the date of first appointment. This is because there are empirical and practical evidences that long audit tenure compromise audit and quality leads corporate failure (Becker, DeFond, Jiambalvo and Subramanyam, 1998; Gerayli, Yanesari and Ma'atoofi, 2011). In particular, the demise of Enron and Anderson clearly shows the importance of audit quality in constraining accounts manipulation. The Cadbury and Akintola Williams Delloite (AWD) case of fraudulent financial reporting also demonstrates the relationship between audit quality and account manipulation. In that case Administrative Proceedings Committee (APC) found the parties guilty of preparation of fraudulent financial statements, outright fraud and gross negligence.

DeAngelo (1981) defined audit quality as the joint probability that the external auditor detects an anomaly in financial statements, and then reveals it to the users of these statements. This definition ascribes audit quality to both competence and integrity of auditor. It takes competence to detect anomaly and integrity to disclose it. Audit

competence and auditor integrity are difficult to operationalize. However, prior research have used such proxies as auditor size, auditor specialization, length of auditor-client relationship and auditor reputation to measure audit quality (DeAngelo, 1981; Klein and Leffler, 1981; Knapp, 1991). Relating these measures to abnormal accruals, as a measure of earnings management has provided mixed results (Piot and Janin, 2005; Chen, Lin and Zhou, 2005; Gerayli, *et al.*, 2011).

The main objective of the study is to ascertain relationship between abnormal loan loss provision (proxy for earnings management) to audit quality (measured by auditor tenure and audit fees. Abnormal loan loss provision has been adjudged as more suitable than abnormal accruals as a measure of earnings management for banks because banks have generally insignificant accruals (Fonseca and González, 2008; Kanagaretnam, Krishnan and Lobo, 2010; Oosterbosch, 2009). The study is unique because to our knowledge, there is no study that relates abnormal loan loss provision to audit quality using data from the Nigerian banking study. Beside, we use a dummy variable to capture auditor tenure. Specific objectives of the study are to:

- i. find out the effect of auditor tenure on earnings management; and
- ii. ascertain whether the effect of audit fees on earnings management is significant.On the basis of these objectives, the study formulates the following hypothesis:
- i. auditor tenure has no significant effect on earnings management and
- ii. the effects of audit fees on audit tenure is not significant.

Literature review

Prior studies, like Chen *et al.*, (2005), Piot and Janin (2005) and Gerayli, Yanesari and Ma'atoofi, (2011) examined whether there is a nexus between earnings management and audit quality. Chen *et al.* (2011) examined the influence of audit quality on earnings management and cost of equity capital. They employed two sets of firms: state-owned enterprises (SOEs) and non-state-owned enterprises (NSOEs). They find that high-quality auditors play governance role in China. The role is however, restricted to a subgroup of organisations and even under identical legal jurisdiction, the impact of audit quality (in the form of lower earnings management and cost of equity capital) fluctuate among firms with diverse ownership arrangements.

Piot and Janin (2005) did not find a substantial link between earnings management and audit quality. They used abnormal accruals to measure earnings management and presence of big five as a proxy for audit quality. Gerayli *et al.* (2011) considered the

influence of audit quality on earnings management using data from quoted Iranian firms. They used auditor size, auditor industry specialization and independence to proxy audit quality, and discretionary accruals to proxy earnings management. Discretionary accruals showed a negative association with auditor size and auditor industry Specialization. Furthermore, they find negative association between auditor independence and discretionary accruals. Summarily, their study suggests that high audit quality is more likely to constrain earnings management than low quality. This result agrees with prior research (Teoh and Wong, 1993; Becker, DeFond, Jiambalvo and Subramanyam, 1998; Rusmin 2010; Francis, Maydew and Sparks, 1999; Li and Lin, 2005). Further indications of the negative link between audit quality and size of abnormal accruals is provided by the studies of Ebrahim (2001) and Tendeloo and Vanstraelen (2001).

Carcello and Nagy (2004) find that dishonest financial reporting arises early in an auditor-client affiliation. Geiger and Raghunandan (2002) finds that corporate failure occurs considerably more often in the first five years of an auditor-client association. Myers, Myers and Omer (2003) find that risky accounting choices are inhibited more effectively by longer auditor term. In conclusion, Gosh and Moon (2005) find that investors and rating agencies depend on audited financial reports more strongly as auditor tenure rises. These studies suggest that longer auditor tenure increases audit quality and by extension the lowers earnings management propensity.

However, standard setters and regulatory authorities believe that longer audit tenure encourages earnings management. They therefore make audit-client rotation mandatory. In the United States, the Sabane-Oxley Act 2002 reduced the auditor tenure from seven to five years. While the Prudential Guideline 2010 in Nigeria limits auditor tenure to ten years and the European Commission limits it to seven-year.

Audit fee is often used to proxy auditor independence and hence audit quality. Kanagaretnam *et al.* (2010) examine auditor independence in the banking industry by analysing the relation between fees paid to auditors and the extent of earnings management through loan loss provisions LLP. They find that unexpected audit fees are unrelated to earnings management for large banks. For small banks, they find greater earnings management via under-provisioning of LLP by banks that pay higher unexpected total and non-audit fees to the auditor. Their results suggest that auditor fee dependence on the audit client is associated with earnings management via abnormal LLP and is a potential threat to auditor independence for small banks.

III. Data and method

The data is drawn from pre-IFRS (International Financial Reporting Standard) adoption financial reports of all the 18 banks quoted on the Nigerian Stock Exchange as at 31 December, 2010. The data was sourced manually from publicly available annual reports for period 2005 to 2010. We use pre-IFRS period to exclude the impact of adoption of IFRS on the quality of financial.

The study uses a multiple regression model. Regression analyses were done year by year for the six year period, 2005-2010. Our result is based on the frequency of the relationship between the dependent and independent variables as revealed by the year by year regression analyses.

IV. Model specification

Our model relates audit quality to earnings management. Audit quality is the independent variable. Audit fees and auditor change is used as measures of audit quality (See Gerayli et al., 2011, and CBN Prudential Guideline, 2010). Following Kanagaretnam et al. (2010), we define proxy earnings management using abnormal loan loss provision and define abnormal loan loss provision as follows:

Model 1 Abnormal loan loss provision

$$LLP = \propto_0 + \alpha_1 LLAB + \alpha_2 NPLAB + \alpha_3 \Delta NPL + \alpha_4 NBLW + \alpha_5 \Delta TOTL + \alpha_6 TOTL + \epsilon_t \dots (1)$$

```
Where LLAB = Loan Loss Provision at Beginning
```

NPLAB = Non - performing Loans at the Beginning

 $\Delta NPL = Change in Non - performing Loan$

 $NBLW = Net\ bad\ loans\ written - off$

 $\Delta TOTL = Change in total loans$

 $TOTL = total\ loans$

 $\varepsilon_t = error term$

 α_2 , α_3 , α_4 and α_6 are parameter > 0

We specify our model as follows:

Model 2: Earnings management and audit quality

The model for relating earnings management to audit quality is given below:

Where: ABLL = Abnormal Loan loss Provision

AUDFEE = Total Audit Fees

AUDCH = Auditor Change

 $\epsilon = error term$

 \emptyset_1 , and \emptyset_2 are parameters

 $\epsilon = error term$

Measurement of Variables

Table 1 defines the variables for the study and their measurements.

Table 1 Measurement of Variables

| ABLL | Abnormal Loan | Difference between total loan loss | Kanagaretnam et al. |
|--------|------------------|--------------------------------------|----------------------|
| | Loss Provision | and normal loan loss | (2010) |
| | | | |
| | | | |
| | | | |
| AUDFEE | Total Audit Fees | Natural log total audit fees paid by | Gerayli et al., 2011 |
| | | bank as disclosed in annual report | |
| AUDCH | Auditor change | Dichotomous variable, 1 if Auditor | CBN Prudential |
| | | was change in the year and 0 | Guideline, 2010 |
| | | otherwise | |

Source: Authors' Compilation

V. Results and discussion

Earnings management and auditor change

The results of the regression are shown in table 1 and 2. The relationship between auditor change and abnormal loan loss provision is positive except for 2005 and 2010, where it is negative. Our result is mixed, though the frequency of positive relationships between abnormal loan loss provision and audit change is more. A positive relationship between abnormal loan loss provision and auditor change, as the frequency of the results show, implies that a change in auditor increases tendency for earnings management. A positive

relationship between auditor change and earning management is supported by Gul, Chen, Tsui, and Judy (2003) and Abbott, Paker and Peters (2000). Johnson, Daily and Ellstrand (1996) suggest that auditor change lowers audit quality. They find that short audit tenure lowers audit quality; implying that a change in auditor is not desirable.

The results, although mixed, is not significant. This study therefore supports the first hypothesis that:

Auditor tenure has no significant effect on earnings management

Table 1 Regression results for 2005-2007

| | 2005 | | 2006 | | 2007 | |
|-------------------------|----------|---------|----------|---------|----------|---------|
| VARIABLES: | Coef | p-value | Coef | p-value | Coef | P-value |
| AUDCH | - | 0.27 | 5.44E+08 | 0.25 | 6.81E+08 | 0.38 |
| | 8.65E+08 | | | | | |
| AUDFEE | 22883153 | 0.44 | 1210292 | 0.01 | -38709 | 0.87 |
| R^2 | | 0.17 | | 0.40 | | 0.17 |
| Adjusted R ² | | -0.02 | | 0.26 | | -0.02 |
| F-statistic | | 0.88 | | 2.83 | | 0.91 |
| P-value | | (0.47) | | (0.07) | | (0.46) |
| DW-stat | | 1.89 | | 2.16 | | 2.03 |

Source: Author's Computation using E-views 7.0

Earnings management and audit fee

Audit fee is positively related to abnormal loan loss provision for the period studied except for 2007 and 2009. A positive relationship between audit fee and earning management implies that higher audit fees tend to aggravate earnings management. This is explainable by the concept of economic bonding. When the auditor receives enormous fees from the client, there is a tendency for the auditor to acquiesce when the client adopts unacceptable accounting rules to prepare financial statements. Srinidhi and Gul (2007) find that there is a positive relationship between audit fees and accrual quality. Moreover, Gosh and Moon (2005) posits that audit fee has a negative impact on audit quality.

The study provides mixed results of the relationship between earnings management and audit fee. However, the result is not significant. The study there supports the second hypothesis that:

the effects of audit fees on audit tenure is not significant.

Table 2 Regression results for 2008-2010

| | 2008 | | 2009 | | 2010 | |
|-------------------------|----------|---------|----------|---------|-----------|---------|
| VARIABLES: | Coef | p-value | Coef. | p-value | Coef | p-value |
| AUDCH | 2.71E+09 | 0.42 | 1.70E+10 | 0.32 | -7.53E+09 | 0.31 |
| AUDFEE | 6982058 | 0.89 | - | 0.61 | 9.31E+07 | 0.33 |
| | | | 61964660 | | | |
| R ² | | 0.04 | | 0.12 | | 0.16 |
| Adjusted R ² | | -0.08 | | -0.09 | | 0.00 |
| F-statistic | | 0.34 | | 0.57 | | 0.81 |
| P-value | | (0.71) | | (0.64) | | (0.50) |
| DW-stat | | 1.69 | | 1.86 | | 1.90 |

Source: Author's Computation using E-views 7.0

Conclusion and recommendations

The study shows the inconclusiveness of the relationship between audit quality and earnings management. This inconclusiveness suggests the need for improving method of analysis and developing new proxies for audit quality and earnings management. Using audit fee and auditor change as proxy for audit quality has provided researchers with mixed results. Probably a better measure of audit quality would be from the viewpoint of the audit firm. A measure of audit quality that combines auditor competence and auditor independence is recommended. Moreover, abnormal loss provision may not capture earnings management properly. Doing the same study using post IFRS data, may improve the consistency of results as IFRS is meant to narrow the latitude in accounting rules.

We recommend that based on our findings that audit fees should be monitored to ensure that no audit firm has a client whose audit fee exceeds more than five per cent of total audit fee as suggested by the Institute of Chartered Accountants of Nigerian code of conduct for professional accountants. Significantly high audit fees from an audit client will result in economic bonding which will jeopardize auditor independence and audit quality.

References

- Abbott, L. J., Paker S., & Peters, G. F. (2000). The effectiveness of Blue Ribbon Committee recommendations in mitigating financial misstatement: A empirical study. *Working Paper*. Retrieved from: http://ssrn.com/abstract=84100
- Adewakun A (2010). Poor Corporate governance, bane of Nigerian banks. *Nigeria Tribune*, September 29, p.15.
- Becker, CL, M.L. DeFond, J. Jiambalvo and K.R. Subramanyam (1998), The effect of audit quality on earnings management, *Contemporary Accounting Research*, 15(1), 1-24.
- Carcello, J.V., & Nagy, A.L. (2004): Audit firm tenure and fraudulent financial reporting. *Auditing: A Journal of Practice & Theory*, 23, 55-69.
- Chen, K.Y. Lin, K., & Zhou, J.(2005). Audit quality and earnings management for Taiwan IPO firms, *Managerial Auditing Journal*, 20 (1), 86-104.
- DeAngelo, L. 1981. Auditor size and audit quality. Journal of Accounting & Economics 3 (August): 183–199.
- Diamond, D.W. & Dybvig, P.H.(1983). Bank runs, deposit insurance, and liquidity. *Journal of Political Economy*, 91, (June), 401–419.
- Ebrahim, A. 2001. Auditing quality, auditor tenure, client importance, and earnings management: An additional evidence, *Working paper*, Available online at: ssrn.com.
- Fonseca, A.R., & Gonzalez, F. (2008). Cross-country determinants of bank income smoothing by managing loan-loss provisions, *Journal of Banking and Finance*, 32, 217-228.
- Francis, J.R., Maydew, E.L., & Sparks, H.C. (1999). The role of big 6 auditors in the credible reporting of accruals. *Auditing: a Journal of Practice & Theory*, 18(2), 17-34.
- Geiger, M.A. & Raghunandan, K. (2002). Audit tenure and audit reporting failures. *Auditing: A Journal of Practice & Theory*, 21, 67-78
- Gerayli, S. M., Yanesari, A. B., & Ma'atoofi, A. R. (2011). Impact of audit quality on earnings management: evidence from Iran. *International Research Journal of Finance and Economics*. Issue 66, 77-84. Retrieved from: http://www.eurojournals.com/finance.html
- Gosh, A., & Moon, D. (2005): Auditor Tenure and Perceptions of Audit Quality. *Accounting Review*, 80, 585-612.
- Gul, F.A., Chen, C.J., Tsui, P., & Judy, S. L. (2003). Discretionary accounting accruals,

- managers' incentives, and audit fees. *Contemporary Accounting Research*, 20 (3): 441-464.
- Kanagaretnam, K., Krishnan, G. V., & Lobo, G. J. (2010). An empirical analysis of auditor independence in the banking industry. *The Accounting Review*, 85(6), 2011-2046.
- Johnson, J.L., Daily, C.M., & Ellstrand, A.E. (1996). Boards of directors: A review and research agenda. *Journal of Management*, 22 (3), 409–438.
- Klein, B. & Lerner, K. (1981). The role of market forces in assuring contractual performance, *Journal of Political Economy*, Aug., 615--641.
- Knapp, M. C. (1991) Factors that audit committee members use as surrogates for audit quality. *Auditing: A Journal of Practice and Theory*, 10(1), 35-52.
- Li, J., & Lin, J. (2005). The relationship between earnings management and audit quality. *Journal of Accounting and Finance Research*, 12(1), 1–11.
- Morgan, D.P., (2002). Rating banks: Risk and uncertainty in an opaque industry. *American Economic Review*, 92(4), 874–888.
- Myers, J.N., Myers, L.A., & Omer, T.C. (2003). Exploring the term of the auditor-client relationship and the quality of earnings: A case for mandatory auditor rotation? *Accounting Review*, 78 (3), 779-799
- Oosterbosch, V. R. (2009). Earnings management in the banking industry. Master's thesis in Accounting, Auditing & Control at Erasmus University Rotterdam. Retrieved from: http://hdl.handle.net/2105/5611.
- Piot, C. & Janin, R. (2005). Audit quality and earnings management in France. Retrieved from: http://ssrn.com/abstract=830484 or http://dx.doi.org/10.2139/ssrn.830484
- Rusmin, R. (2010). Auditor quality and earnings management: Singaporean evidence, *Managerial Auditing Journal*, 25(7), 618-638.
- Srinidhi, B.N., and Gul, F.A. (2007). The differential effects of auditors' non audit and audit fees on accrual quality. *Contemporary Accounting Research*, 24(2), 595-629.
- Tendeloo, B. V. & Vanstraelen, A. (2005). Earnings management and audit quality in Europe: Evidence from the private client segment market. *Working Paper*. Available online at www.ssrn.com
- Teoh, S.H., Welch, I. & Wong, T.J. (1998). Earnings management and the long run market performance of initial public offerings. *The Journal of Finance*, 53(6), 1935-1974.

APPENDIX 1 REGRESSION RESULTS

REGRESSION RESULT Earnings management and Audit Quality (Abnormal loan loss provision as dependent variable) 2005

Dependent Variable: ABLL

Method: Least Squares

Date: 09/07/14 Time: 16:15

Sample (adjusted): 2 18

Included observations: 17 after adjustments

Convergence achieved after 2 iterations

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|--------------------|-----------------------|----------|
| AUDCH | -8.65E+08 | 7.46E+08 | -1.158917 | 0.2673 |
| AUDFEE | 22883153 | 28761306 | 0.795623 | 0.4405 |
| С | 2.02E+08 | 1.13E+09 | 0.17811 | 0.8614 |
| AR(1) | -0.219795 | 0.310683 | -0.707458 | 0.4918 |
| | | | | |
| R-squared | 0.169562 | Mean dependent var | | 27788498 |
| Adjusted R-squared | -0.022078 | S.D. dependent var | | 1.01E+09 |
| S.E. of regression | 1.02E+09 | Akaike in | Akaike info criterion | |
| Sum squared resid | 1.37E+19 | Schwarz criterion | | 44.73174 |
| Log likelihood | -374.5534 | Hannan-0 | Quinn criter. | 44.55518 |
| F-statistic | 0.884794 | Durbin-W | /atson stat | 1.888908 |
| Prob(F-statistic) | 0.474565 | | | |
| | | | | |
| Inverted AR Roots | -0.22 | | | |

REGRESSION RESULT Earnings management and Audit Quality (Abnormal loan loss provision as dependent variable) 2006

Dependent Variable: ABLL

Method: Least Squares

Date: 09/07/14 Time: 17:32

Sample (adjusted): 2 18

Included observations: 17 after adjustments

Convergence achieved after 21 iterations

White heteroskedasticity-consistent standard errors & covariance

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|---------------|-----------|
| С | -8.71E+08 | 3.87E+08 | -2.249074 | 0.0425 |
| AUDCH | 5.44E+08 | 4.53E+08 | 1.201248 | 0.2511 |
| AUDFEE | 1210292 | 359377.8 | 3.367744 | 0.005 |
| AR(1) | -0.425735 | 0.181602 | -2.344323 | 0.0356 |
| | | | | |
| R-squared | 0.39518 | Mean dependent var | | -3.96E+08 |
| Adjusted R-squared | 0.255606 | S.D. dependent var | | 7.75E+08 |
| S.E. of regression | 6.68E+08 | Akaike info criterion | | 43.68119 |
| Sum squared resid | 5.81E+18 | Schwarz criterion | | 43.87724 |
| Log likelihood | -367.2901 | Hannan-(| Quinn criter. | 43.70067 |
| F-statistic | 2.83133 | Durbin-W | /atson stat | 2.156609 |
| Prob(F-statistic) | 0.079605 | | | |
| | | | | |
| Inverted AR Roots | -0.43 | | | |

REGRESSION RESULT Earnings management and Audit Quality (Abnormal loan loss provision as dependent variable) 2007

Dependent Variable: ABLL

Method: Least Squares

Date: 09/07/14 Time: 18:59

Sample (adjusted): 2 18

Included observations: 17 after adjustments

Convergence achieved after 17 iterations

White heteroskedasticity-consistent standard errors & covariance

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| С | -4.74E+08 | 6.67E+08 | -0.71037 | 0.49 |
| AUDCH | 6.81E+08 | 7.55E+08 | 0.902446 | 0.3832 |
| AUDFEE | -38709 | 243043 | -0.15927 | 0.8759 |
| AR(1) | -0.280727 | 0.253904 | -1.10564 | 0.2889 |
| | | | | |
| R-squared | 0.173359 | Mean dependent var | | 99198670 |
| Adjusted R-squared | -0.017405 | S.D. dependent var | | 1.05E+09 |
| S.E. of regression | 1.05E+09 | Akaike info criterion | | 44.59341 |
| Sum squared resid | 1.45E+19 | Schwarz criter | rion | 44.78946 |
| Log likelihood | -375.044 | Hannan-Quini | n criter. | 44.61289 |
| F-statistic | 0.908762 | Durbin-Watso | n stat | 2.030198 |
| Prob(F-statistic) | 0.463526 | | | |
| | | | | |
| Inverted AR Roots | -0.28 | | | |

REGRESSION RESULT Earnings management and Audit Quality (Abnormal loan loss provision as dependent variable) 2008

Dependent Variable: ABBL

Method: Least Squares

Date: 09/07/14 Time: 20:11

Sample: 1 18

Included observations: 18

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|--------------------|----------|
| С | -3.15E+09 | 5.85E+09 | -0.537991 | 0.5985 |
| AUDCH | 2.71E+09 | 3.27E+09 | 0.828903 | 0.4202 |
| AUDFEE | 6982058 | 53382096 | 0.130794 | 0.8977 |
| | | | | |
| R-squared | 0.04391 | Mean dep | Mean dependent var | |
| Adjusted R-squared | -0.083569 | S.D. dependent var | | 4.95E+09 |
| S.E. of regression | 5.15E+09 | Akaike info criterion | | 47.7127 |
| Sum squared resid | 3.98E+20 | Schwarz o | criterion | 47.86109 |
| Log likelihood | -426.4143 | F-statistic | : | 0.344449 |
| Durbin-Watson stat | 1.690528 | Prob(F-st | atistic) | 0.714071 |

REGRESSION RESULT Earnings management and Audit Quality (Abnormal loss provision as dependent variable) 2009

Dependent Variable: ABLL

Method: Least Squares

Date: 09/07/14 Time: 21:43

Sample(adjusted): 2 18

Included observations: 17 after adjusting endpoints

Convergence achieved after 8 iterations

White Heteroskedasticity-Consistent Standard Errors & Covariance

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--|--|--|--|--|
| С | -9.40E+09 | 1.13E+10 | -0.82846 | 0.4224 |
| | - | | | |
| AUDFEE | 61964660 | 1.19E+08 | -0.52106 | 0.6111 |
| AUDCH | 1.70E+10 | 1.65E+10 | 1.033195 | 0.3204 |
| AR(1) | 0.349967 | 0.449102 | 0.779259 | 0.4498 |
| | | | | |
| | | | | |
| R-squared | 0.116779 | Mean dep | endent var | -3.05E+08 |
| R-squared Adjusted R-squared | 0.116779 -0.087042 | • | endent var ndent var | -3.05E+08 1.30E+10 |
| • | | S.D. depe | | |
| Adjusted R-squared | -0.087042 | S.D. depe | ndent var fo criterion | 1.30E+10 |
| Adjusted R-squared S.E. of regression | -0.087042 1.35E+10 | S.D. depe | ndent var fo criterion criterion | 1.30E+10 49.69534 |
| Adjusted R-squared S.E. of regression Sum squared resid | -0.087042 1.35E+10 2.38E+21 | S.D. depe Akaike in Schwarz | ndent var fo criterion criterion | 1.30E+10 49.69534 49.89139 |
| Adjusted R-squared S.E. of regression Sum squared resid Log likelihood | -0.087042 1.35E+10 2.38E+21 -418.4104 | S.D. depe Akaike in Schwarz o F-statistio | ndent var fo criterion criterion | 1.30E+10 49.69534 49.89139 0.572949 |

REGRESSION RESULT Earnings management and Audit Quality (Abnormal loss provision as dependent variable) 2010

Dependent Variable: ABLL

Method: Least Squares

Date: 09/07/14 Time: 19:54

Sample(adjusted): 2 18

Included observations: 17 after adjusting endpoints

Convergence achieved after 6 iterations

White Heteroskedasticity-Consistent Standard Errors & Covariance

| | | | t- | |
|--------------------|-------------|-------------|-------------|-----------|
| Variable | Coefficient | Std. Error | Statistic | Prob. |
| | | | | |
| С | 3.30E+10 | 3.90E+10 | 0.8475 | 0.4121 |
| AUDFEE | 9.31E+07 | 9.25E+07 | 1.006 | 0.3328 |
| AUDCOM | -7.53E+09 | 7.12E+09 | -1.058 | 0.3094 |
| AR(1) | 0.238377 | 0.294821 | 0.8085 | 4.33E-01 |
| | | | | |
| R-squared | 1.59E-01 | Mean dep | endent var | -1.11E+09 |
| Adjusted R-squared | -3.52E-02 | S.D. depen | ident var | 1.62E+10 |
| S.E. of regression | 1.65E+10 | Akaike inf | o criterion | 50.09396 |
| Sum squared resid | 3.54E+21 | Schwarz c | riterion | 50.29001 |
| Log likelihood | -421.7987 | F-statistic | | 0.818791 |
| Durbin-Watson stat | 1.859095 | Prob(F-sta | atistic) | 0.506312 |