Audit Partner Tenure and Audit Quality: An Empirical Analysis

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Abstract
The objective of this study was to provide an evidence on the existence or otherwise of a relationship between the tenure of auditor and audit quality in Nigeria. The Binary Logit Model estimation technique was use to analyze the relationship between the tenure of an auditor and audit quality. Findings reveal that there is a negative relationship between auditor tenure and audit quality though the variable was not significant. The other explanatory variables (ROA, Board Independence, and Director Ownership and Board size) considered alongside auditor tenure were found to be inversely related to audit quality aside from Returns on Assets which exhibited a positive effect. The recommendation is that there is the need for the financial reporting council and other regulatory bodies in line with best practices to look critically into the issue of auditor tenure and the impact on audit quality in Nigeria.

Keywords: Audit quality, Audit tenure, Auditing and financial reporting

1. Introduction
Audit involves performing procedures to obtain evidence about amounts and disclosures in the financial statements so as to evaluate the appropriateness of accounting estimates made by management (KPMG, 2008). The Audit quality therefore, is a basic ingredient in enhancing the credibility of financial statements to users of accounting information. Consequently, studies (Fairchild, 2008; Coate, Florence and Kral 2002) note that audits add credibility to the financial information by providing an independent verification of management–provided financial reports, thus reducing investors information risk. Financial reporting credibility is partly reflected in the confidence of users in audited financial reports (Watkins, Hillison, and Morecroft. 2004). As noted by Levitt (2000), the perception of audit quality plays a critical role in maintaining systematic confidence in the integrity of financial reporting. The higher the perceived audit quality, the more credible the financial statements. This will consequently improve user’s confidence in those financial statements. Concerns about audit quality have gained increased ascendancy especially as a result of the spectacular financial reporting scandals in major corporations, such as Enron, WorldCom and other companies. The aftermath of these scandals has led to the identification of a perceived “expectation gap” in the audit quality as many users of audited financial statements have different expectations of the audit function from what it actually delivers (Beattie, Brandt and Fearnley, 1999). Therefore, there has been a call for sweeping changes in the auditing profession to ensure improved audit quality (Auditing Profession 2002).

However, the non quantitative nature of “audit quality” as a variable has necessitated the existence of a plethora of proxies and indicators for its measurement (Cameran, Prencipe and Trombette 2007). De Angelo (1991) defined audit quality as the probability that an auditor will both discover and truthfully report material errors, misrepresentation and omissions detected in a clients accounting system. This probability depends upon the broad concept of an auditor’s professional conduct, which includes factors as objectivity, due professionalism and conflict of interest. Some studies (Francis 2004, and Geiger & Raghunandan, 2002) measure audit quality in terms of audit or reporting failure, based on the idea that audit quality is inversely related to audit or reporting failures. Other studies (Nagy, 2005; Myers, Omer & Myers, 2003) use earnings as a surrogate for audit quality. The implicit assumption is that high audit quality implies high earnings quality (Johnson, Khurana and Reynolds. 2002). Wallace (1980) notes that a measure of audit quality is the audit’s ability to reduce noise, bias and improve the fineness in accounting information. Researchers have also used estimated discretionary accruals as a surrogate for audit quality (Dechow & Dicheve, 2002; and Krushman, 2003) assuming that higher estimated discretionary accruals reflect lower earnings quality and thus lower audit quality. Knechel and Vanstraelen (2007) note that audit quality is measured by the propensity of the auditor to issue a going concern opinion (GCO) after controlling for other factors that might affect this decision. Finally, Modrich, Jackson and Roebuck (2007) note that true audit quality is when the audit does not result in a type 1 error: a failing company being given an unqualified report or a type 11 error: a non-failing company being given a qualified report.
All of the divergences with regards to the appropriate measure of audit quality may be seen to reflect the need by researches to monitor and provide indices amenable to control so as to make inferences on the audit quality, as the need to monitor necessarily should be preceded by the ability to define. Consequently, studies (Arrunada and Paz-Ares, 1997; Healey and Kim, 2003; Brody and Moscove, 1998) have attempted to identify possible control variables for the state of audit quality. In the light of these studies, auditor tenure has become the focus of much debate. The resulting dilemma is that the firm is faced with the decision of whether to replace its auditors after a period of time or to build and maintain a long-term relationship with the audit firm. The outcome is at polarity with conflicting findings. While some researchers have identified the need and have provided justification for auditor rotation (Healy and Kim, 2003; Ebimobowei and Oyadonghan 2011; Geiger and Raghunandan 2002) others argue on positive effects of tenure on audit quality (Ghosh and Moon, 2005; Adeyemi and Okpala 2011; Defond and Francis, 2005). This study aims to provide empirical evidence from Nigeria as the challenge of auditor tenure and client relationship though still budding has not attracted much analytical attention in the Nigerian audit setting.

2. Statement of the Problem
Several studies (Arrunada and Paz-Ares, 1997; Healey and Kim, 2003; Brody and Moscove, 1998; Dopuch, King and Schwartziz, 2001; Myers et al 2003) have attempted to evaluate possible explanatory variables for the state of audit quality. In the light of these studies, auditor tenure has become the focus of much debate. Should a firm replace its auditors on a regular basis, or should the auditor be allowed to build a long-term relationship with the client? Studies on the impact of auditor tenure on audit quality are at polarity. A considerable number of these studies (Healy and Kim, 2003; AICPA, 1992; Carcello and Nagy, 2004) consider rotation of audit firms as a way of improving audit quality. This is because familiarity with the client has the effect of reducing the fresh point of view auditors have in the early years of engagement. The Sarbanes-Oxley Act of 2002 consolidates this view as it requires rotation of the lead audit partner every five years so that the engagement can be viewed “with fresh and skeptical eyes.” The argument basically is that longer auditor tenure tends to result in an opportunity cost of auditor independence. Conversely, other studies (Ghosh and Moon, 2005; Defond and Francis, 2005; Jenkins and Velury, 2008) also argue that longer auditor tenure improves audit quality as auditors may need time to gain expertise in the business they audit and acquire client-specific knowledge over time. This implies that audit quality is lower during the early years of the Auditor-Client relationship, and audit quality increases with length of auditor-tenure due to the reduction in information asymmetry between auditor and client (Azizkhani, Monroe and Shailer 2006). However, in the Nigerian audit setting, the challenge of auditor tenure and client relationship though still budding has not attracted much analytical attention and empirical studies beyond mere anecdotal opinions. Consequently, there has been a dearth of research in this area and inadequate empirical evidence from Nigeria. Thus, the study will provide empirical evidence from Nigeria on the existence or otherwise of a relationship between tenure of auditor and audit quality.

3. Objective of the Study
The objective of the study is specified thus;
1. To examine the relationship between audit tenure and audit quality in Nigeria.

4. LITERATURE REVIEW
Barbadillo and Aguilar (2008) in a study to of the relationship between the duration of audit engagement and audit quality specified a model to show the functional relationship between the dependent variable (value of audit quality) and the main explanatory factor (tenure). Using a sample of non-financial Spanish companies quoted on Madrid Stock Exchange, the study reveals an inverse relationship between auditor tenure and audit quality and suggest that auditors tend to be more dependent in the first years of the auditing engagement. The study concludes that the shorter the auditor’s tenure, the more they behave in a dependent fashion. According to Ebimobowei and Oyadonghan (2011), auditors may be engaged in a long term audit–client relationship and there may be different incentives for this. Such long term professional affiliation may signal skepticism with regards to the perception of the auditor’s objectivity, independence and audit quality. The findings of the study show that there is a statistical significant relationship between mandatory rotation of auditors and the quality of audit reports. The study concludes that a policy favoring mandatory rotation of auditors could have positive effects on the quality of audit reports as it would allow for fresh approach and restore public confidence in the audit function.
Adeyemi and Okpala (2011) notes that an audit firm’s tenure can result in a loss of auditor’s independence. A long audit-client relationship could lead to an alignment of the auditors interest and that of its client which makes truly independent behaviour of the auditor a probability. The study concluded that audit firm rotation does not necessarily enhance audit independence in Nigeria. This could be due to the unity of professional attitude among auditors and similarity in cultural bias and orientation.

According to Johnson et al (2002), as the auditor-client relationship lengthens, there is the tendency that auditors may develop a “learned confidence” in the client which may result in the auditor not performing religiously, the required testing of financial reports. This learned confidence results in the auditor making assumptions about outcomes and using less rigorous audit procedures or static audit programmes. Potentially, a loop hole for a decline in audit quality has been created.

Arrunada and Paz-Ares (1998) argue that a long auditor–client relationship may result to the development of personal relationship that may lead to the bonds of loyalty, trust or emotive relationships been developed between the client and the auditor. The implication is that truly independent auditor behaviour becomes difficult and there is the increased likelihood of the auditor acceding to client’s pressure in relation to their choice and application of accounting policies. This adversely affects the auditor’s independence and ability to offer a true and fair audit report.

Summer (1998) analyses the hypothesis that audit tenure can enhance audit quality. This test was carried out within the framework of a stylized game model between borrowers, auditors and capital. When audit engagement lasts for two periods, the equilibrium entails that auditors report risky projects as risky, with a positive probability, in the first period. On the other hand, when the auditor engagement lasts only for one period, the equilibrium shows that auditors will report risky projects as safe in the first period. The study concludes that auditors are more unlikely to produce reporting quality in short term than in long term engagements and tenure rotation might have adverse effects on audit quality because it undermines the incentives for building up a reputation for honesty.

Dopuch, King and Schwartz (2001) also examine the impact of auditor tenure on audit quality. The result is consistent with the hypothesis that the auditor compromises his independence most often in a long term auditor contract and suggests that afterall auditor tenure may have significant effect on the audit quality.

Hussey and Lan (2001) undertook a survey of U.K. financial directors on the impact of the duration of the auditor-client relationship on the audit quality. The findings revealed that majority of the respondents disagreed on the option of compulsory rotation of audit firms after a fixed number of years. A multiple regression analysis was further used in order to test the relationship between rotation and the other variables identified. These were the Finance Directors’ perception of audit quality, the costs of the audit. The results show that the perception of audit quality would be enhanced if rotation of audit tenure was most unlikely.

Pierre and Anderson (1984) in their study consider the main factors that can lead clients and third parties to have conflicts with auditors which could result to lawsuits. Examining 129 legal cases tried between 1960 and 1973, the results show that thirty of the 129 cases analyzed involved auditors with less than three years of experience with the client. In terms of errors committed, they represent approximately 40% of the total errors committed, relating to accounting principle interpretation, audit procedural errors and fraud cases. The study therefore concludes that risks increases with shorter auditor tenure.

Copley and Doucet, (1993) in an investigation of the relationship between the quality of audit services and auditor tenure in order to evaluate the usefulness of rotation, describe and tested a statistical model that is, a regression between the dependent variable “audit quality” and other independent variables, of which the most important is “tenure.” The results show a positive sign for the estimated parameter of “tenure”. This means that the likelihood of receiving a substandard quality audit increases with the length of the auditor – client relationship. In other words, the longer the period of engagement, the higher the risk of lower audit quality.

Geiger and Raghunandan (2002) investigate the relationship between the length of the auditor-client relationship and audit reporting failures. Consequently, the objective was to test the relationship between auditor tenure and audit reporting failures. A sample of companies in the United States entering into bankruptcy during years 1996 – 1998 were examined. A multivariate logistic regression was used, in which the endogenous variable was the audit report immediately preceding bankruptcy while the exogenous variables included auditor tenure amongst others. The result indicates the existence of a positive and significant relationship between tenure variable and audit reporting failures.

Johnson, Khurana and Reynolds (2002) in a study, sought to examine if the length of the relationship between a company and audit firm is associated with financial reporting quality. The analysis was conducted using two
empirical proxies of quality (the absolute value of unexpected accruals and the relationship between current period accruals and future income). Three groups were then formed on the basis of the audit tenure (short – until 3 years, medium – between 4 and eight years, long-over 9 years). The model’s outcomes indicated that the level of unexpected accruals observed in the short tenure group of companies was higher than that reported by the medium tenure group. Furthermore, in the long tenure group, no significant increases in unexpected accruals were observed. In other words, short relationships are associated with higher unexpected accruals that are also less persistent in future earnings. These findings were also tested using multivariate and sensitivity analyses. As the financial reporting quality declines with short audit firm tenure, the study concludes that rotation may not be effective in enhancing audit quality.

Myers, Myers and Omer (2003) using proxy variables such as discretionary accruals and current accruals, investigate the relationship between audit tenure and audit quality. The univariate results show that when auditor tenure is longer, the negative value of accrual measures was observed to be minimal. Furthermore, the study also employed multivariate analysis in order to examine if the discovered relationship between tenure and accrual is also influenced by other factors. The relationship between auditor tenure and accrual measures was also observed to be consistent in multivariate analysis as in the univariate analysis. On the other hand, the study found that extended auditor tenure had a beneficial effect on the dispersion of accruals. The implication is that there is the tendency for auditors to place greater constraints on both income increasing and income decreasing accruals as the audit client relation lengths. These results suggest that audit quality does not appear to deteriorate with tenure.

Vanstraelen (2000) examines the effect of long-term audit client relationship on audit quality. The external user’s perception of the audit report was used as the indicator for quality. Utilizing the logistic regression model, the study findings shows that long-term auditor client relationships is positively related with the increased likelihood of the auditor issuing an unqualified opinion. A significant difference was also found between the auditor’s reporting behaviour in the first two years versus the last year of the audit mandate. This implies that auditors are more willing to issue an unqualified audit report in the first two years of their official mandate than in the last year of their mandate. The policy implications of Vanstraelen (2000) support mandatory auditor rotation to maintain the value of an audit for the external users.

Walker, Lewis and Casterella, (2001) provide empirical evidence relating to the link between the length of the audit engagement and audit failures. A logit model was used to predict failures. The results suggest that risk increases early on in audit client relationship and then declines over long term periods. As the failure rate in long term engagements is low, the authors conclude that auditor rotation may not necessarily improve audit quality.

Knechel and Vanstraelen (2007) using a sample of stressed bankrupt companies, and stressed non-bankrupt companies in Belgium, provides evidence on the effect of auditor tenure on audit quality. The study measured audit quality as the likelihood of an auditor issuing a going concern opinion. The study findings reveal that auditors do not necessarily become less independent as the audit duration increases neither is their ability to predict bankruptcy is improved with longer duration. The study concludes that the evidence for tenure either in signaling increasing or decreasing effect on audit quality is substantiated.

Carcello and Nagy, (2004) also considered the relationship between audit quality and mandatory rotation of auditor’s tenure which is investigated from the point of view of fraudulent financial reporting. A logistic regression model was used and the results reveal a significant positive relationship between short auditor tenure and audit quality.

Nashwa (2004) using a sample of U.S companies, carried out a study to examine the relationship between long term auditor-client relationship and the probability of audit failure. A logit regression model was used to predict failure using tenure as the independent variable. The results indicate that risk increases early in the auditor client relation and then declines over time suggesting that longer audit tenure overtime will smoothen out any initial challenges that may impair the quality of the auditor’s performance. The results of the study do not support the hypothesis that short auditor tenure improves audit quality.

In the light of the positions of various studies as reviewed above, we can argue that the effects of auditor tenure on audit quality are controversial. Moreover, few empirical studies use publicly available secondary data in order to determine whether perceived threats to auditor independence actually compromise auditor independence. Again, we could not access any documentary evidence from Nigeria in this subject area. Therefore, this study which was motivated by the lack of consensus in the literature on the impact of audit tenure on audit quality will contribute to the debate by examining the relationship between auditor tenure and audit quality in Nigeria. Consequently, we propose the following hypothesis stated in the null:

null hypothesis: The audit client relationship has no effect on audit quality.
H0: There is a positive relationship between auditor tenure and audit quality.

5. Methodology
Cross sectional data gathered from annual reports of selected quoted companies in Nigeria was used for this study. The data were from audits completed in 2010. A sample size of fifty (50) companies of the 199 listed equities was selected using the simple random sampling technique. Krejcie & Morgan (1970) in Amadi (2005) agrees with the sample as they proposed the population proportion of 0.05 as adequate to provide the maximum sample size required for generalization. The relationship between auditor tenure and audit quality was analyzed utilizing the binary logit model estimation technique. The choice of Maximum Likelihood (ML) binary logit regression model is based on the inability of the OLS multiple regression model to yield reliable coefficients and inference statistics in situation where the dependent variable is binary (0 and 1). Thus the binary logit regression model unlike others is based on the use of dichotomous dependent variable. The model developed basically relates auditor tenure with audit quality measured by the likelihood that a sampled company employs the services of the big audit firms in Nigeria. Namely; Ernst & Young, Price Water House Coopers, Akintola Williams Delliote and KPMG. Several Studies (Skinner and Srinivasan, 2010; Krishnamurthy, Zhon and Zhon 2002; De Angelo, 1981 and Davidson, 1993) have provided both empirical and theoretical justification for use of big audit firms as a proxy for audit quality. Consequently, a dummy value of 1 is used if a firm uses any of the big 5 auditors (Ernst & Young, Price Water House Coopers, Akintola Williams Delliote and KPMG) and 0 if otherwise. In line with the empirical studies by Manry, Mock and Turner (2005), a number of control variables was included: Size, Roa, Board independence, Director Ownership and Board size. The econometric procedure was conducted using Eviews 5.0 software.

6. Measurement of Variables and Model Specification
The following variables are considered relevant in the specification of the model examining the relationship between auditor tenure and audit quality.

AUDIT QUALITY = measured by the likelihood that a sampled company employs the services one of the big audit firms. A dummy value of 1 is used if a firm uses any of the big 5 auditors and 0 if otherwise.
TENURE = Measured in terms of number of years spent as auditor for Sample company. If greater than 3, we assign 1, else 0.
SIZE = Natural logarithm of total assets.
ROA = Return on Assets Calculated by dividing a company's annual earnings by its total assets.
BOARDI = Board Independence measured as the proportion of external directors on the board.
BOS = Board Size measured as the number of directors on the board.
DOWN = Directors' ownership measured as the percentage of ownership by directors.

Consequently, the econometric model is specified below;

\[ AQ = \beta_0 + \beta_1 \text{BOARDI} + \beta_2 \text{BOS} + \beta_3 \text{TENURE} + \beta_4 \text{DOWN} + \beta_5 \text{ROA} + \beta_6 \text{SIZE} + U_i \]

The Maximum Likelihood (ML) binary logistic regression Technique will be used in the estimation of the various parameters selected in the model.

7. Analysis of Result
The Result shows a multivariate binary logit regression convergence achieved after three iterations. The overall fitness of the model as revealed in the LR statistic of 11.43829 with Probability (LR STAT) of 0.057791 which is less than the standard critical p-value of 0.05. This implies that the estimated model is statistically significant at 5% level and thus the linearized functional specification of the model is not inappropriate. The overall explanatory power of the model is revealed in McFadden R- squared, shows that about 18% of the systematic variations of the dependent variable is explained by the independent variables which is quite low. Furthermore, the z-ratio and respective p-value analysis indicative of the individual statistical significance of the explanatory variables shows that an inverse relationship exists between Auditor tenure and Audit quality. The result could stimulate discourse on the sensibleness of changing auditors after a period of time as longer tenure periods may signal increasing threats and declining possibility for quality audits. Thus, as Barbadillo and Aguilar (2000) have also observed, the shorter the auditor’s
tenure, the more they behave in a dependent fashion. Other variables examined alongside auditor tenure such as board independence was found to be negatively related with the likelihood of quality audits. A Similar finding was also observed for board size which is seen to be inversely related with the probability of having quality audits as shown in its slope coefficient. Director ownership and firm size were also observed to relate inversely with the likelihood of having quality audits. Return on assets was observed to exhibit a positive relationship with audit quality. However, except for board independence, all other variables were found to be statistically insignificant at the 5% level suggesting practically, the need for considerable caution in implying strict causality. Based on the result, we fail to accept the hypothesis (H0) that there is a positive relationship between auditor tenure and audit quality. This implies that longer audit tenure may not signal audit quality. The Sarbanes-Oxley Act of 2002 consolidates this view as it requires rotation of the lead audit partner every five years. However, the non-statistical significance of the variable suggests caution in implying strict causality.

8. Discussion of Findings
The relationship between tenure and audit quality was observed to be inverse and as noted earlier, this could stimulate the discourse on the sensibleness of changing auditors after a period of time as it may be effective at increasing the level of audit quality. The study finding is in line with Barbadillo and Aguilar (2000) which found the relationship between the auditor tenure and audit quality to be negative and concluded that the shorter the auditor’s tenure, the more they behave in a dependent fashion. Findings by Mautz and Sharaf (2002) Healy and Kim, (2003) AICPA, (1992) Carcello and Nagy (2004) have also argued that rotation of audit firms is a way of improving audit quality. This is because familiarity with the client has the effect of reducing the fresh point of view auditors have in the early years of engagement. The Sarbanes-Oxley Act of 2002 prescribes a change of auditors every five years. The argument basically is that longer auditor- tenure tends to result in an opportunity cost of auditor independence. However in the Nigerian audit setting, the challenge of auditor tenure though still budding has not attracted significant regulatory pronouncements. Consequently, the length of auditor and client relationship is still at a much more discretionary level. Though other findings such as Walker, Lewis and Casterella, (2001), Knechel and Vanstraelen (2007) have also argued that auditor rotation may not necessarily improve audit quality and the effect of tenure does not have either an increasing or decreasing effect on audit quality and at best the effect is weak. The study finding is nevertheless at variance with conclusions made by Geiger and Raghunandan (2002); Johnson, Khurana and Reynolds (2002) and Myers, Myers and Omer (2003) that short auditor tenure is associated with lower quality audits. For the other variables examined alongside tenure such as board size, board independence and director ownership which are all indicative of the corporate governance were found to be inversely related with audit quality. The finding is at variance with those of Klein (2002) Beasley (1996) Chen and Jaggi (2000) which argues that the presence of corporate governance enhances the tendency for better audits. However, Larcker, Richardson and Tuna, (2005) provides mixed evidence with regards to the effects of corporate governance on audit quality. The findings for return on assets have also be observed to be in tandem with Jaggi and Freedman (1992) while that of company size is in contrast with O’Donovan, (1997).

9. CONCLUSION AND RECOMMENDATION
The objective of this work was to examine the relationship between audit partner tenure on the audit quality, measured by the likelihood that a sampled company employs the services of one of the big audit firms. The study attempts to provide empirical evidence in the Nigerian context. Findings from the study reveal that there is a negative relationship between auditor tenure and audit quality though the variable was not significant. The other explanatory variables (Returns on Assets, Board independence, and Director Ownership and Board size) were found to be inversely related to audit quality aside from Returns on Assets which exhibited a positive effect. Thus the debate about auditor tenure may be seen as still ongoing as reflected in the plethora of divergent research findings in this regards. A limitation of the findings may stem from the possible detection of an appropriate time period to indicate long or short tenure. Thus studies have utilized different time frames ranging from 3 years, 4 years or like the Sarbanes Oxley act which stipulates five years as an average long tenure period and these may have effects on empirical findings. However, the desire for quality audits that minimizes the expectation gap between suppliers of audit and users of audit services is globally recognized and as such x-ray the impact of auditor tenure on audit quality will require more ex-post evidence across different contexts. The recommendation is that there is the need for the Nigerian financial reporting council and other regulatory bodies in line with best practices to look critically into
the issue of auditor tenure and the impact on audit quality in Nigeria.

REFERENCES


Table 1: Presentation of Results

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<tr>
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<tr>
<td>Sample: 1 50</td>
</tr>
<tr>
<td>Included observations: 50</td>
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<tr>
<td>Convergence achieved after 3 iterations</td>
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<tr>
<td>Covariance matrix computed using second derivatives</td>
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<table>
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<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
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McFadden R-squared 0.175053 | Mean dependent var 0.64
S.D. dependent var 0.484873 | S.E. of regression 0.467789
Akaiake info criterion 1.358071 | Sum squared resid 9.409543
Schwarz criterion 1.625754 | Log likelihood -26.95176
Hannan-Quinn criter. 1.460006 | Deviance 53.90353
Restr. deviance 65.34182 | Restr. log likelihood -32.67091
LR statistic 11.43829 | Avg. log likelihood -0.539035
Prob(LR statistic) 0.057739
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