Effect of Internal Audit Quality on the Financial Performance of Insurance Companies: Evidence from Kosovo

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Abstract

The study aims to investigate the effect of internal audit quality on the financial performance of insurance companies operating in Kosovo. To measure financial performance, the ratio between net profit and total assets (ROA) is used. The data are taken from the 6-month financial statements of these companies for the period 2013-2021. The independent variables were internal audit standards, professional competence, independence of the auditor, and efficiency of the internal audit. In addition, three control variables were included (company growth, company size, and company age). The results of the study show that professional competence has a significant positive impact on financial performance, while the effectiveness of internal audits negatively impacts the financial performance of insurance companies. Regarding the control variables, the size of the insurance company has a strong positive correlation, in contrast to the age of the company, which has a negative and significant impact on the financial performance of insurance companies in Kosovo. The study recommends that insurance companies pay special attention to the effectiveness but also the independence of the internal auditor due to the negative impact they can have on financial performance. The findings of the study may be of interest to many different stakeholders, both inside and outside insurance companies, to improve the effectiveness and increase the independence of internal audits.

1. Introduction

The insurance market in Kosovo arose later than that of other countries. In its current form, the Kosovo insurance market began to develop immediately after the end of the war in Kosovo. In 2011 the number of insurance companies reached a high of thirteen, three of which also offered life insurance. Today, the number of insurance companies is twelve, due to one of these companies losing its license. All these companies have installed an internal audit procedure, a requirement of the Central Bank of Kosovo as documented in applicable laws. In the 2016 Regulation on Internal Audit for Insurance Companies Operating in Kosovo, the Central Bank of Kosovo provided the same definition of the internal audit function as the Institute of Internal Auditors, which defined the internal audit as an independent, objective, and advisory activity, created to add value and improve an organization's operations (IIA, 2017). The internal audit process is part of the ongoing monitoring and internal controls of insurance companies’ activities and ensures an independent assessment of compliance with the insurance company’s established policies and procedures. As such, the internal audit process assists senior managers and the board of directors in carrying out their responsibilities effectively and efficiently. Every insurer must have an internal audit process in place to fulfill its duties and responsibilities. The internal audit function should, moreover, be independent of the audited activities and day-to-day internal control processes (http://bqk-kos.org).

2. Literature Review

Audit quality is an active, dynamic concept, with factors that change over time and from country to country. DeAngelo (1981) defined audit quality as the “market-assessed joint probability that a given auditor will both
Audit quality is vital for companies to achieve efficient and effective resource management because it can lead to rapid improvements in the company’s financial performance. Audit quality is an essential element in maintaining the financial performance of companies in general. This is the main purpose of establishing and strengthening the internal audit function of insurance companies. Based on the definition of internal audit put forward by the Institute of Internal Auditors, audit quality focuses first on providing independent assurance that an organization’s risk management, governance, and internal control processes are operating effectively.

Conceptually, various determinants and factors affect audit quality. These factors are classified into factors that directly affect the quality of the audit (financial reporting according to IAS, auditor quality review, company performance, profit quality, etc.) and factors that indirectly affect the quality of the audit (audit firm size and characteristics of the audit company, audit mandate, audit fees, auditor independence, auditor competencies, etc.). Because many of these characteristics are unclear, various researchers have used various measures of audit quality. Some studies have used the size of the audit firm, auditor experience, audit fees, auditor rotation, and auditor independence as indicators of audit quality (Matoké & Omwenga, 2016; Yi-Fang, Yang, & Lee, 2015).

Several studies have emphasized the impact of audit quality on the quality of corporate governance (Moses, Ofurum, & Egbe, 2016; Zalata, Tauringana, & Tingbani, 2018), while others have presented empirical results on the effect of audit quality on financial performance (Amin, Lukviarman, Suhardjanto, & Setiandy, 2018; Bilal, Chen, & Komal, 2018; Surbakti, Shaari, & Bamahros, 2017). Several other studies have been conducted on the role, function, and characteristics of the internal auditor, as well as his role in the financial structure of various companies (Cohen & Sayag, 2010; Hutchinson & Zain, 2009; Lin, Pizzini, Vargus, & Bardhan, 2011; Prawitt, Smith, & Wood, 2009). Other researchers have identified different metrics as representative of audit quality, indicating that higher audit quality affects financial performance (Bouaziz & Triki, 2012; Farouk & Hassan, 2014; Heil, 2012; Zureiqat, 2011).

Another study analyzed the impact of audit quality on financial performance based on secondary data, mostly from financial statements. In general, return on assets is taken as a dependent variable for measuring financial performance, while the independent variables are the size of the audit committee, audit independence, audit activity, quality of the external audit (Afza & Nazir, 2014), number of shares owned by different shareholders, age of the company, independent board members and institutional investors, audit fees and rotation of audit firms (Sayar, 2018), audit size, audit fee, and growth rate (Adams & Zhou, 2018).

Most research on the impact of internal audit quality on financial performance has been based on individual surveys of respondents (Dahir & Omar, 2016; Dellai & Omri, 2016; Matoké & Omwenga, 2016). All these studies researched the impact of internal audit quality on the financial performance of the organization by distributing surveys to a significant number of respondents.

Barzan (2018) investigated the factors that affect internal audits and their relationship with organizational performance. Multiple regression was used to assess the degree of impact of the independent variables identified in the conceptual framework on organizational performance. Ahmad (2018), using a sample of 364 employees, examined the effect of internal audits on the organizational performance of leading Jordanian banks. Various researchers have investigated the impact of internal audit quality on the financial performance of commercial banks in different countries.

El-Gharboui and Chraibi (2021), measuring the impact of internal audits on the financial performance of manufacturing companies in Nigeria, took as their independent variables the independence of the internal auditor and the internal audit committee and concluded that the quality of the audit positively and significantly affects financial performance. They also cite (Hazaca, Tabash, Khattib, Zhu, & Al-Kuhal, 2020), who conducted a study on the impact of internal audit quality on the financial performance of Yemeni commercial banks, with the independent variables of internal auditor independence, compliance with internal audit standards, application of the principles of governance, size of department internal audit, and frequency of audit committee meetings, concluding that the quality of internal audits has a positive and significant effect on financial performance (El-Gharboui & Chraibi, 2021). Phan, Lai, Le, and Tran (2020) conducted a comprehensive analysis of the effects of audit quality on the financial performance of companies in Vietnam, sampling 228 different companies. Their results show that audit quality positively affects the financial performance of companies, especially the loyalty and satisfaction of those companies’ customers and employees.

3. Research Methodology

The current study is based on a survey research model and involves using a questionnaire to obtain the opinion of respondents. This research design involves analyzing information collected from the study population, which consists of the eleven (11) insurance companies operating in Kosovo: Elsig, Dukagjini, Prisig, Scardian, Security, Sigma, Ilyria, Ilyria Life, Sigkos, Sigal, and Kosova e Re. The population comprises these companies’ board members, audit committee members, department managers, internal audit officers, legal officers, and finance officers. Also, data on the dependent variable are obtained from secondary data sources, namely from the 6-month financial statements of the insurance companies. A survey method was used to collect additional data, and the questionnaire was distributed using the Customized Design Method.

The questionnaire contains items derived from the objectives, research questions, and hypotheses of this study. A 5-point Likert scale was used for respondents to express their opinion on each statement. To test the
hypotheses relating to the quality of internal audits and the impact on the financial performance of insurance companies in Kosovo, the modified general linear regression model was used, as proposed by Ondieki (2013); Matoke and Omwenga (2016) and Ado, Rashid, Mustapha, and Ademola (2020). This model brings together several potential determinants that affect the performance enhancement of the companies analyzed in the case study. The model in linear form is as follows:

\[
FP = \beta_0 + \beta_1 \text{AUDST} + \beta_2 \text{AUDCOM} + \beta_3 \text{AUDIND} + \beta_4 \text{AUDEF} + \beta_5 \text{Age} + \beta_6 \text{Sz} + \beta_7 \text{Fgrowth} + \epsilon
\]

FP - Financial performance of insurance companies measured through ROA.
\(\beta_0\) - Regression constant.
\(\beta_1, 2, 3, 4, 5\) - Coefficients of independent variables.
AUDST - Effect of internal audit standards on FP.
AUDCOM - Effect of professional internal audit competence on FP.
AUDIND - Effect of internal audit independence on FP.
AUDEF - Effect of internal audit efficiency on FP.
Age - Age as the ratio of total liabilities to total assets (control variable).
Sz - Firm size as a natural logarithm (ln) of total assets (control variable).
Fgrowth - Firm growth as \((\text{PG}(t) - \text{PG}(t-1)) / \text{PG}(t-1)\) (control variable).

To create the conditions for a fair evaluation of the independent variables and non-distortion of findings, control variables such as size, age, and growth of the insurance company were included. The independent variables express respondents’ views; their responses are given using Likert scales (1 to 5). Based on the literature review and the applied model, the following hypotheses have been developed:

- \(H_1\): Implementation of internal audit standards has no significant effect on the performance of insurance companies in Kosovo.
- \(H_2\): The independence of internal audits has no significant effect on the financial performance of insurance companies in Kosovo.
- \(H_3\): The professional competence of internal audits has a significant effect on the financial performance of insurance companies in Kosovo.
- \(H_4\): The effectiveness of internal audits has a significant effect on the financial performance of insurance companies in Kosovo.

4. Data Analysis and Presentation

To measure the consistency of the questions in the questionnaire as well as the accuracy and reliability of the data from the questionnaire when using the Likert scale, we applied the Cronbach’s Alpha test. Cronbach’s alpha is a measure of internal consistency that shows how closely a set of items is grouped. Our calculations, which are presented in Table 1, revealed a value of 0.76309, which is an acceptable percentage. Since the percentage achieved while using the questionnaires is over 60%, the obtained results can be considered reliable.

<table>
<thead>
<tr>
<th>No. of questions</th>
<th>No. of items</th>
<th>Standardized Cronbach’s Alpha</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>154</td>
<td>0.789</td>
<td>0.763</td>
</tr>
</tbody>
</table>

4.1. Correlation Results

To establish the relationship between the variables in the study, a correlation analysis was performed. As above, FP is used to express financial performance. Pearson correlation coefficients were obtained for all variables; the findings are shown in Table 2. The results show that there is a constructive reciprocity between auditor competence \((r = 0.247; p < 0.05)\), audit efficiency \((r = 0.270; p < 0.05)\), company size \((r = 0.316; p < 0.05)\) and company age \((r = 0.298; p < 0.05)\) on the one hand, and financial performance on the other. These findings reveal that the auditor’s competence, audit efficiency, and the size and age of the insurance company are positively correlated with FP, meaning that an improvement in one or all of these variables would result in an improvement in financial performance. However, the relationship between auditing standards \((r = -0.015; p > 0.05)\) and internal auditor independence \((r = 0.196; p > 0.05)\) and financial performance was negligible and insignificant.

5. Regression Results

The summary table of the model reports the strength of the relationship between the model and the dependent variable. R, the multiple correlation coefficient, is the linear correlation between the observed values and is predicted by the dependent variable model. The dependent variable, in this case, was the financial performance measured using the return on assets (ROA).
sitive and significant effect on the βs – indicator of insurance indicating that increasing the competence of internal audit as a predictor
results are presented in the performance of insurance companies. Therefore, the model explains 12.6% of the difference in the financial performance of insurance companies in Kosovo. The significance of the overall summary model in providing prognostic value was assessed by the authors; licensee Online Academic Press, USA

The test of statistical significance of the independent variables in the model was done using T-tests. The results are presented in Table 5. They show that internal audit competence has a positive coefficient when used as a predictor of insurance companies' performance in the regression model (β = 0.0307; t = 2.034; p < 0.05), indicating that increasing the competence of internal audits has a positive and significant effect on the
performance of insurance companies measured through ROA. The T-test also found that the competence of internal audits is an important predictor of the financial performance of insurance companies. This finding confirms the third hypothesis. These findings are consistent with those of Ondieki (2013) and Alflahat (2017). Internal auditing standards were not a significant predictor of insurance companies’ financial performance ($\beta = -0.0011; t = -0.103; p> 0.05$). These findings indicate that the application of internal auditing standards does not have a significant effect on the financial performance of insurance companies. The same statement applies to the independence of internal audits ($\beta = -0.00174; t = -0.116; p> 0.05$). These two findings mean that the first and second hypotheses are not proven.

Further findings show that the efficiency of internal audits has a negative and significant impact on the financial performance of insurance companies ($\beta = -7.4488; t = -2.144; p <0.05$). This finding confirms the fourth hypothesis. Firm size was also found to be positively and significantly related to financial performance, while firm age was negatively and statistically significantly related to financial performance at a 5% significance level.

Previous empirical studies have shown that company size positively affects company performance (Grediani, 2019; Hajj, 2014; Legoria, Reichelt, & Soileau, 2018; Pervan & Višić, 2012). The third control variable, FGrowth, does not have a significant effect on the financial performance of insurance companies in Kosovo.

### Table 5. Significance test of independent variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>t-Statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>const</td>
<td>-4.02198</td>
<td>2.16528</td>
<td>-2.125</td>
<td>0.0386**</td>
</tr>
<tr>
<td>AUDST</td>
<td>-0.00110</td>
<td>0.01071</td>
<td>-0.103</td>
<td>0.9180</td>
</tr>
<tr>
<td>AUDIND</td>
<td>-0.00174</td>
<td>0.01489</td>
<td>-0.116</td>
<td>0.9075</td>
</tr>
<tr>
<td>AUDCOM</td>
<td>0.03070</td>
<td>0.01509</td>
<td>2.034</td>
<td>0.0474**</td>
</tr>
<tr>
<td>AUFDE</td>
<td>-0.74488</td>
<td>0.34748</td>
<td>-2.144</td>
<td>0.0370**</td>
</tr>
<tr>
<td>FGrowth</td>
<td>-0.0028</td>
<td>0.00282</td>
<td>-0.991</td>
<td>0.326$</td>
</tr>
<tr>
<td>FSz</td>
<td>10.6316</td>
<td>4.97306</td>
<td>2.138</td>
<td>0.0375**</td>
</tr>
<tr>
<td>Fage</td>
<td>-2.1888</td>
<td>1.07006</td>
<td>-2.045</td>
<td>0.0386**</td>
</tr>
</tbody>
</table>

Note: Durbin-Watson stat. 1.777697; F-statistic 2.657496, Prob. 0.063969.

** Statistically significant at the 0.05 level.

### 6. Conclusions

This research has explored the effect of internal audit quality on the financial performance of insurance companies in Kosovo. In the study, Return on Assets (ROA) was used to measure the financial performance variable, while the independent variables were IA standards, IA independence, IA competence, and IA efficiency. To create conditions for a fair evaluation of independent variables and non-distortion of findings, control variables such as size, age, and growth of the insurance company were used. Based on the results of the OLS analysis, IA competence was found to be positively and significantly related to financial performance. This result is in line with Ondieki (2013), Enekwe, Nwoha, and Udeh (2020), and El-Gharboui and Chraibi (2021). In contrast, IA efficiency was found to be significantly negatively related to financial performance. The other independent variables, AUDIND, were found to have a negative but insignificant effect on FP. Similar results were reported by Akande (2019) and Farouk and Hassan (2014) while contrasting results were encountered in Ado et al. (2020). AUDST also has a non-significant effect on ROA, although opposite results were reported by Ondieki (2013). Such negative and insignificant connections are the result of the mandatory application of internal audit standards, as well as the de facto dependence (not independence) of the internal auditor on management, although legally this issue is regulated. Given these findings, this study provides insights useful to regulators and policymakers about the importance of audit quality in enhancing financial performance.

### References


