Acta Universitatis Danubius
ŒCONOMICA

Study on the Relationship between Audit Quality Perception and Corporate Governance

Aura Oana Mustățea[1], Carmen Mihaela Bulău[2], Lucian - Cosmin Bădălau[3]

Abstract: The purpose of this study is to assess how the different elements of the audit process contribute to corporate governance. The sample comprises 124 firms, chosen using convenience sampling. The respondents are risk management specialists and internal auditors. To analyze the data, a structural equation model is employed. The results demonstrate a direct and positive correlation between the components of the audit process and the perception of corporate governance quality. These findings underscore the importance for organizations to adopt diverse practices that effectively allocate resources to enhance the quality of the audit process.

Keywords: internal audit; corporate governance; structural equation model

JEL Classification: M42

1. Introduction

Audit and corporate governance are two interconnected and complementary domains within an organization. Malaescu and Sutton (2015) assert that audit verifies compliance with applicable standards, regulations, and corporate governance principles. Zhang et al. (2007) specify that audit contributes to detecting and

[1] PhD in progress, "Valahia" University of Târgoviște, Romania, Address: Str, Aleea Sinaia 13, Târgoviște 130004**,** Romania, Corresponding author: auramustatea@yahoo.com.
[2] PhD in progress, "Valahia" University of Târgoviște, România, Adress: Str. Aleea Sinaia 13, Târgoviște 130004, Romania, E-mail: carmenmihaelabulau@gmail.com.
[3] PhD in progress, "Valahia" University of Târgoviște, România, Adress: Str. Aleea Sinaia 13, Târgoviște 130004, Romania, E-mail: lucian.badalau@gmail.com.

correcting deficiencies in the corporate governance system by providing recommendations for improvement.

Audit represents the process of evaluating and verifying the financial, operational, and internal information of an organization with the aim of providing independent and objective assurance. Through audit, transparency, reliability, and integrity of financial and operational information are ensured, which contributes to the trust and protection of the interests of stakeholders such as shareholders, investors, and creditors.

On the other hand, corporate governance refers to the structures, processes, and practices through which an organization is directed and controlled. It involves establishing frameworks and policies that promote effective, responsible, and transparent leadership by balancing the interests of various stakeholders. Corporate governance plays a role in protecting and promoting organizational values, improving performance, and minimizing risks.

Audit and corporate governance are closely linked in a way that audit contributes to good corporate governance, and corporate governance provides a favourable environment for effective auditing. Through audit, "compliance with applicable standards and regulations, as well as conformity with corporate governance principles and practices" is verified (Smith, 2012). Audit helps identify and remedy deficiencies in the corporate governance system and provides recommendations for improvement. On the other hand, corporate governance creates a framework of leadership and control that facilitates independent and objective auditing. By establishing appropriate corporate governance structures and processes, transparency, accountability, and integrity of information and processes are ensured, facilitating their evaluation and verification within the audit. Thus, audit and corporate governance complement each other in ensuring effective management and control of the organization, promoting trust, and protecting the interests of stakeholders. Close collaboration between the audit department and corporate governance structures is essential for ensuring a coherent and efficient approach to evaluating, controlling, and reporting organizational information and processes.

In the audit process, planning, collection, and reporting are interconnected and essential elements for ensuring an effective and rigorous audit approach.

Planning represents the initial stage of the audit process, where objectives are set, risks are identified, and a detailed plan is developed for conducting the audit. This involves assessing the organization's business environment, identifying key audit areas, and developing an appropriate strategy to gain confidence in the processes and financial information of the audited entity.

Information collection is a key component of the audit process, where auditors obtain and evaluate relevant evidence to verify and validate the financial and operational

information of the organization. This involves analysing documents, conducting interviews with key personnel, inspecting assets, and testing procedures and internal controls. Information collection is essential to gain a clear understanding of the organization's activities and processes and to assess risks and potential errors or fraud (Trotman & Duncan, 2018).

Reporting represents the final stage of the audit process, where auditors present their findings and conclusions in an official report. This report contains a detailed description of the audit activities, the auditors' findings and recommendations, and conclusions regarding the adequacy of the organization's financial information and internal processes. Reporting is essential to communicate the results of the audit to stakeholders, including the organization's management, shareholders, regulatory authorities, and other interested entities. Therefore, planning, collection, and reporting are interdependent and complementary processes within the audit, ensuring a systematic and rigorous approach to evaluating and verifying an organization's information and processes.

The purpose of this study was to develop assessment tools for evaluating the perception of audit process quality and corporate governance and to establish the existing relationship between them.

2. Literature Review

Today, there is an increasing need for tools to measure the perception of audit quality and corporate governance. It is essential that the evaluation be as objective as possible, as this significantly contributes to building trust in auditing and governance processes among stakeholders. Measuring the perception of internal audit quality and corporate governance allows us to understand how these aspects are perceived by different stakeholders. High-quality auditing and effective corporate governance are essential for ensuring transparency, accountability, and ethics within an organization. To strengthen trust in auditing and governance processes, we need tools that can objectively measure and evaluate their quality. These tools must be developed based on clear criteria and applied consistently and impartially. By using such perception measurement tools, we can obtain valuable feedback from shareholders, employees, customers, and other external entities. These tools can include surveys, assessments, and benchmarking, providing us with an overview of how internal audit quality and corporate governance are perceived.

It is extremely important that the results obtained through these tools are considered in the continuous improvement process of auditing and corporate governance. The feedback received should be used to identify strengths and weaknesses and to implement corrective measures and enhancements.

The audit planning process is a critical aspect of ensuring the quality and effectiveness of an audit. It involves defining the objectives and scope of the audit, assessing risks, and identifying the necessary resources to conduct the audit in an appropriate manner (ACCA, 2015). First and foremost, "it is important to establish the objectives and scope of the audit; these should be clear and well-defined, enabling the evaluation of results in an objective manner; it is also necessary to clarify which specific aspects of the organization's activities will be examined within the audit" (Gartland, 2017).

The next step in the audit planning process is risk assessment. This involves identifying potential deficiencies and vulnerabilities in the organization's internal control system and assessing their impact on the audit objectives. Based on this assessment, priorities can be established, and appropriate testing and verification methods can be developed (IA CoP, 2014).

Furthermore, it is important to identify the resources needed to conduct the audit properly. This includes both human resources, such as qualified and specialized audit personnel, and technological and material resources required to collect and analyse relevant information (Trotman & Duncan, 2018).

In conclusion, the internal audit planning process involves developing a detailed plan that includes objectives, methods, and resources necessary to conduct an audit efficiently and effectively. This plan should be flexible and allow for adjustments based on changes in the business environment or the audited organization (Zakari, 2013).

The second component of the internal audit process is information gathering, where auditors must obtain and evaluate relevant evidence to verify and validate the financial and operational information of the organization.

Reporting is the final but crucial stage of the audit process. Through reporting, auditors communicate their findings, conclusions, and recommendations to relevant stakeholders. The audit report should present information in an objective, clear, and concise manner. Typically, the report will include key elements such as the purpose and objectives of the audit, the period and scope of the audit, methodologies and procedures applied, detailed findings resulting from the audit procedures, identification of the causes of deficiencies or errors found, overall evaluation of the compliance and effectiveness of internal controls, specific recommendations for process improvement and deficiency remediation, the auditor's opinion on the credibility of the financial statements (in the case of a financial audit), any limitations or obstacles encountered during the audit.

The report should be written in a language appropriate to the technical understanding level of the recipients. It should also maintain a constructive tone and avoid unsubstantiated accusations. Distributing the report to the responsible parties is

essential for the audit results to be utilized through the implementation of recommendations. Comprehensive, accurate, and timely reporting is crucial for an effective audit, as the perceived quality of the audit often depends on it (Knechel & Vanstraelen, 2007). Smith (2012) found that a perceived reduction in audit quality leads management to invest fewer resources in internal controls. Therefore, we assert that the perception of a quality audit process is interconnected with corporate governance, just as effective and robust corporate governance is crucial for ensuring audit quality. This entails establishing a framework of oversight and internal control that promotes ethics, integrity, and accountability within the organization. Principles such as information transparency, board responsibility, auditor independence, and active stakeholder involvement are key elements of good corporate governance (Carcello et. al., 2011). On the other hand, high audit quality contributes to strengthening corporate governance by providing accurate, relevant, and reliable information about the organization's performance. Professional and competent auditors can identify risks and deficiencies in processes and internal controls, thereby providing independent assurance over financial and operational information. This enhances stakeholders' trust, including shareholders, investors, and creditors, in the organization and its ability to manage and report appropriately.

In essence, audit quality and corporate governance complement each other in ensuring transparency, accountability, and informed decision-making within an organization. By implementing a robust corporate governance system and committing to high audit quality, organizations can improve performance, trust, and long-term value for all stakeholders. In conclusion, audit quality is an essential component of good corporate governance. High-quality audits contribute to ensuring the integrity and transparency of financial reporting (Carcello, et al., 2011). The board of directors plays a key role in overseeing audit quality through reviewing financial statements, evaluating auditor independence, and maintaining open communication with auditors. Competent audit committees are associated with higher audit quality as they enhance auditor independence and professional sceptical judgment. Developing constructive relationships between auditors and audit committees leads to more rigorous risk assessments, detailed audit tests, and impartial audit conclusions (Kaplan and Mauldin, 2008). Overall, high audit quality strengthens corporate governance by providing objective assurance of the quality of financial reporting (Aldamen et al., 2012). In conclusion, audit and corporate governance reinforce each other in ensuring solid oversight and control of the organization, fostering stakeholder trust (Arena & Azzone, 2009). Measuring the perception of audit quality and corporate governance is essential to enhance stakeholder confidence in these processes. By developing and utilizing appropriate measurement tools, we can objectively evaluate and continuously improve these aspects, leading to greater trust and transparency within organizations.

3. Research Methodology

This research aims to provide guidelines for organizations to follow during the internal audit process. To achieve this goal, this research provides adequate evidence for the adoption of internal audit quality perception assessment tools as a solution to improve the quality of corporate governance by promoting internal audit performance. Thus, stakeholders will be more motivated to invest in developing procedures and increasing quality. Therefore, the objectives of the study include the following:

• development of tools to assess the perception of internal audit quality;

• identifying the relationship between internal audit quality and corporate governance.

4. Participants and Procedure

In this study, 124 individuals participated to validate a short scale for measuring audit quality. Descriptive statistical data of the participants are presented in Table 1. The items were developed based on the author's professional experience and the literature on internal auditing. The evaluation of the items was conducted on a five-point Likert scale, where 1 represents "not at all" and 5 represents "always." The scale provides a score for the quality of the audit process, and all items are straightforward. After six weeks, the same scale was administered to a subgroup of participants (N=44) to assess the test-retest reliability and determine if the scores were consistent over time (ρ=0,75).

Table 1. Descriptive statistics for respondents

		Frequency	Percent
Years of Experience	0-3 years	12	10
	4-7 years	33	27
	8-12 years	42	34
	over 12 years	37	30
Position level	Employee	16	13
	First level manager	29	23
	Mid-level manager	39	31
	Senior level manager	36	29
	Board member	4	3
Internal audit department	Da	113	91
	Nu	11	9
Number of internal auditors	0-3 internal auditors	27	22
	4-7 internal auditors	18	15
	8-12 internal auditors	32	26

	more than 12 internal auditors	47	38
International certificate	No	51	41
	Yes	73	59
Contract with external audit firms	No	26	21
	Yes	98	79
Total companies		124	

5. Results

No missing data was recorded. Most participants (91%) had over 4 years of experience and held a managerial position (86%). The item scores dataset was suitable for factorial analyses (Kaiser-Meyer-Olkin = 0,944, chi-square = 12184,743, df = 52).

Table 2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.944
Bartlett's Test of Sphericity	Approx. Chi-Square	12184.743
	df	52
	Sig.	.000

Exploratory factor analysis (EFA) explained the three-dimensional structure with 10 items, with approximately 72% of the variance equally explained by these three constructs (sum of rotations: 24.3% = Factor 1, 23.6% = Factor 2, and 23.8% = Factor 3). The extraction method was Principal Component Analysis, and the rotation method in EFA was Oblimin with Kaiser Normalization (Table 3).

Table 3. Component Score Coefficients After Rotation in Exploratory Factor Analysis

Item	Mean	SD	PL	CO	RA
1	3.55	0.92	0.77	0.06	0.21
2	3.33	1.22	0.19	0.7	0.02
3	3.83	0.82	0.21	0.31	0.81
4	3.09	1.06	0.72	0.21	0.09
5	3.16	1.15	0.14	0.83	0.15
6	3.52	0.92	0.25	0.07	0.86
7	2.89	0.91	0.76	0.32	0.05
8	3.19	1.22	0.15	0.84	0.22
9	3.67	0.85	0.07	0.07	0.89
10	3.01	0.88	0.08	0.02	0.17

Figure 1 presents the distribution of item components in the EFA rotated space. The factors were labeled Planning (PL) (Factor 1), Collecting (CO) (Factor 2), and Reporting (RA) (Factor 3). The labels were made according to content similarities between items in each factor, related to the process phase they refer to.

In the CFA, item factor loadings ranged from 0.61 to 0.87. Model fit was adequate, according to the fit indices [comparative fit index (CFI) = 0.93, Tucker-Lewis index (TLI) = 0.92, root mean square error of approximation (RMSEA) = 0.06, standardized root mean square residual (SRMR) = 0.04, and chi-square/df = 1.55], all being at acceptable levels (CFI>0.90, TLI>0.90, RMSEA<0.10, SRMR<0.10, chi-square/df<2) as recommended by Kline (2016). No modifications were made to the measurement model as each error term covariance was negligibly small. Table 4 shows the item intercorrelations were significant at the 0.001 level, except for two correlations between items 2 and 6 (r = 0.09, p<.01) and items 2 and 9 (r = 0.08, p<.01).

Table 4. Intercorrelation Matrix of Internal Audit Quality Assessment Scale Items According to Confirmatory Factor Analysis

Item	1	2	3	4	5	6	7	8	9	10
1	-	.23	.31	.47	.17	.29	.44	.18	.22	.47
2		-	.25	.25	.59	.09	.31	.53	.08	.15
3			-	.21	.35	.58	.28	.42	.65	.31
4				-	.25	.24	.44	.23	.19	.36
5					-	.16	.37	.71	.21	.15
6						-	.19	.19	.68	.27
7							-	.33	.15	.56
8								-	.24	.15
9									-	.17
10										-

The correlations between the factorial structures ranged from 0.68-0.77 and were all significant at the 0.01 level of significance (Table 5), indicating moderately strong positive inter-factor correlations according to Cohen's (1988) guidelines.

By retaining three factors, we ensure that the factor model achieves parsimony, reducing complexity, and explanatory power, accounting for a substantial portion of the variance in the data. This balance between simplicity and explanatory ability is vital for the practical and theoretical utility of the factorial solution (Fabrigar & Wegener, 2012). The Cronbach's alpha coefficients of internal consistency for the items were 0.78 for the Planning Factor, 0.81 for the Collection Factor, and 0.73 for the Reporting Factor, exceeding the 0.7 threshold for adequate reliability in psychometric scale research (Nunnally & Bernstein, 1994). Over a six-week interval, the test-retest reliability (r) was above 0.71 (p <.001), with values of 0.74 (PL), 0.75 (CO) and 0.71 (RA), indicating good stability given that test-retest correlations above 0.7 are considered acceptable (DeVellis, 2016). All reliability calculations support that the IAQAS and three subscales can provide consistent results.

Table 5. Descriptive Data and Kendall Correlations between Factors for the Internal Audit Quality Assessment Scale (IAQAS).

Scale	Mean	Standard deviation	Planning	Collecting	Reporting
The quality of corporate governance	3.13	1.03	0.78	0.77	0.68
Audit planning	3.4	1.1	-	0.68	0.75
Data collection	2.9	1.3		-	0.72
Report	3.1	0.7			-

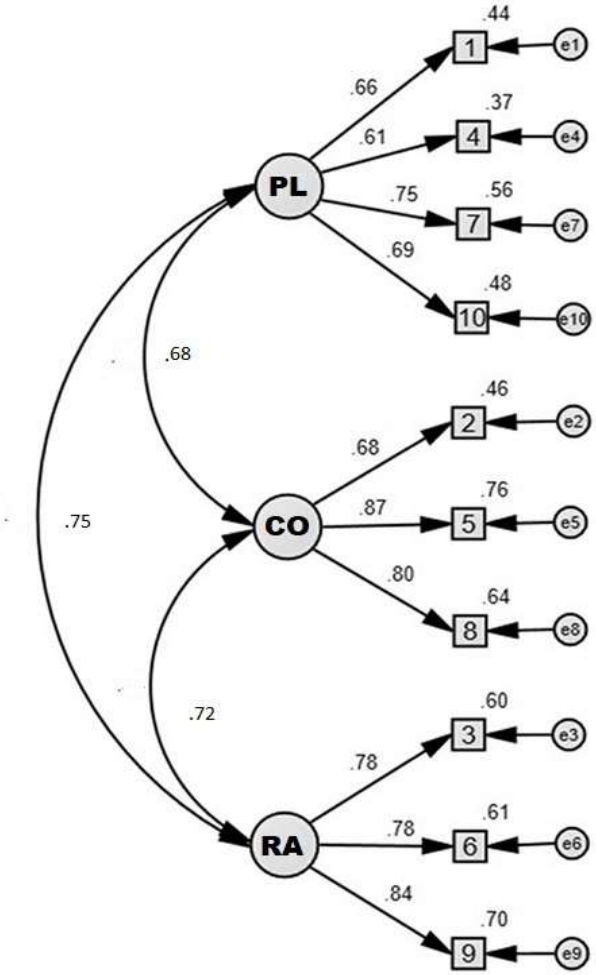

Figure 1. Standardized factor loadings in the measurement model of the Internal Audit Quality Assessment Scale (IAQAS) according to confirmatory factor analysis. PL - Planning, CO - Collection, RA – Reporting

In conclusion, the results of the exploratory and confirmatory factor analyses provide empirical support for a three-factor structure of the Internal Audit Quality Assessment Scale (IAQAS), with the factors of Planning, Collecting, and Reporting accounting for approximately 72% of the total variance. This exceeds the 60% minimum threshold for social science research recommended by Hair et al. (2010). The adequacy of the three-factor model was further evidenced by the good model fit indices in the CFA (CFI=0.93, TLI=0.92, RMSEA=0.06, SRMR=0.04), which met cut-off criteria established in the literature (Kline, 2016). Reliability analyses also demonstrated acceptable internal consistency and test-retest reliability for the overall scale and three subscales. These findings indicate that the three factors efficiently represent the latent constructs measured by the scale. Further research is needed to determine if the factor structure remains invariant across different demographic groups and assess the factors' conceptual significance. Replication of the factorial validity evidence in new samples would also help confirm the robustness of the three-factor model. Overall, this study provides preliminary empirical support for the factorial validity of the Internal Audit Quality Assessment Scale (IAQAS) and its three-dimensional structure. Additional research is warranted to build on these initial results.

The perception of the quality of corporate governance was assessed using a questionnaire consisting of three items rated on a five-point Likert scale. The average obtained was 3,2 (AS=1.1) corresponding to a level perceived as moderate, but which can be improved. The internal consistency of the items of the Corporate Governance Quality Assessment Questionnaire is α=0,86.

Table 6. Descriptive data and Kendall's correlations between the factors of the Corporate Governance Quality Assessment Scale (CGQAS)

Variable	Mean	SD	Decisional responsibility	Ethical values
Transparency	2.9	0.7	0.71	0.54
Decisional responsibility	3.1	1.1	-	0.63
Ethical values	2.8	1.2		-

We identified significant positive relationships of moderate intensity between the internal audit quality perception factors and the corporate governance quality perception factors. The results are presented in Table 7.

Table 7. Kendall correlations between IAQAS and CGQAS factors (p<.001)

Variable	Planning	Collecting	Reporting	IAQAS
Transparency	0.63	0.66	0.54	0.61
Decisional responsibility	0.74	0.72	0.68	0.55
Ethical values	0.33	0.34	0.38	0.36
CGQAS	0.53	0.46	0.65	0.66

6. Conclusions

Internal audit plays a crucial role in ensuring effective corporate governance within an organization. In this study, we investigated the relationship between corporate governance standards and the perception of internal audit quality. Academic literature has demonstrated a positive correlation between a robust governance system and long-term organizational performance. Additionally, governance standards influence how external stakeholders perceive the credibility and transparency of the company. Regarding internal audit, its role is to monitor compliance with governance principles and provide recommendations to management for performance improvement. Therefore, it is crucial that internal audit activities adhere to the highest standards of quality and independence, as outlined in the Institute of Internal Auditors' Guidance (IIA, 2015).

References

Aldamen, H., Duncan, K., Kelly, S., McNamara, R. & Nagel, S. (2012). Audit committee characteristics and firm performance during the global financial crisis. *Accounting and Finance*, vol. 52(4), pp. 971-1000.

Arena, M. & Azzone, G. (2009). Identifying organizational drivers of internal audit effectiveness. *International Journal of Auditing*, vol. 13(1), pp. 43-60.

Association of Certified Chartered Accountants (ACCA, UK) (2015). *Audit and Assurance: Specific considerations.* https://www.accaglobal.com/africa/en/member/discover/cpd-articles/audit-assurance/specific-considerations.html.

Carcello, J.V.; Hermanson, D.R. & Ye, Z. (2011). Corporate Governance Research in Accounting and Auditing: Insights, Practice Implications, and Future Research Directions. *Auditing: A Journal of Practice and Theory*, vol. 30(3), pp. 1-31. https://doi.org/10.2308/ajpt-10112

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). L. Erlbaum Associates.

DeVellis, R. F. (2016). *Scale development: Theory and applications* (4th ed.). SAGE Publications.

Fabrigar, L. R. & Wegener, D. T. (2012). *Exploratory factor analysis*. Oxford University Press

Gartland, D. J. (2017). The importance of Audit Planning. *Journal of Accountancy*. September Issue. https://www.journalofaccountancy.com/issues/2017/sep/importance-of-audit-planning.html.

Hair, J. F.; Black, W.C.; Babin, B.J. & Anderson, R.E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Pearson.

IA CoP (2014*). Risk Assessment in Audit Planning. A Guide for Auditors on How Best To assess risks when planning audit work.* https://www.pempal.org/sites/pempal/files/event/attachments/cross_day-2_4_pempal-iacop-risk-assessment-in-audit-planning_eng.pdf.

Institute of Internal Auditors (IIA) (2015). *International Professional Practices Framework.*

Kaplan, S. & Mauldin, E. (2008). Auditor-audit committee interactions prior to the filing of audited financial statements. *Accounting Horizons*, vol. 22(2), pp. 241-264.

Kline, R. B. (2016). *Principles and practice of structural equation modelling* (4th ed.). The Guilford Press.

Knechel, W.R. & Vanstraelen, A. (2007). The relationship between auditor tenure and audit quality implied by going concern opinions. *Auditing: A Journal of Practice & Theory*, vol. 26(1), pp. 113-131.

Malaescu, I. & Sutton, SG. (2015). The reliance of external auditors on internal audit's use of continuous audit. *Journal of information systems*, vol. 29 (1), pp. 95-114. American Accounting Association.

Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill

Smith, J. L. (2011). Investors' Perceptions of Audit Quality: Effects of Regulatory Change. *Auditing: A Journal of Practice & Theory*, vol. 31 (1), pp. 17-38. Available at SSRN: https://ssrn.com/abstract=1931699.

Trotman, A. J. & Duncan, K. R. (2018). Internal audit quality: Insights from audit committee members, senior management, and internal auditors. *Auditing: A Journal of Practice & Theory*, vol. 37(4), pp. 235-259.

Zakari, M. A. (2013). Does audit evidence type effects on quality of auditor's opinion? *Corporate Ownership and Control*, vol. 11(1-2), pp. 96-106.

Zhang, Y.; Zhou, J. & Zhou, N. (2007). Audit committee quality, auditor independence, and internal control weaknesses. *Journal of Accounting and Public Policy*, vol. 26(3), pp. 300-327.