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Factors Affecting Internal and External Audits Based on Experimental Analysis

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ABSTRACT
The purpose of this study is to investigate which factors affect the effectiveness of internal audits and the independence of external audits. In order to achieve this goal, this research followed the analytical procedures of previous studies, found that some factors have an impact on the effectiveness of internal audits and the independence of external audits, and analysed the differences between internal audits and external audits.

Keywords: *internal audit effectiveness, external audit independence, the difference between internal and external audit.*

1. INTRODUCTION

In the context of market globalization, more and more companies have become global, and the people they face are also international. There may be substantial financial scandals, embezzlement, fraud, and losses in the organization, but no regulatory agency can monitor and regulate their development. Therefore, the audit requirements of people that global companies need to face have become urgent. [1] Besides, today's investors and the public need more reliable financial and non-financial information to make decisions. Audit, an important term in accounting, refers to financial statements or the objective inspection and evaluation of the company's financial statements, which describes the review and verification of a company's financial records to ensure that financial information is fairly and accurately presented. [2] The audited and edited financial statements comply with relevant accounting standards. There are three primary financial statements: income statement, balance sheet, and cash flow statement. Financial statements are prepared by management internally using relevant accounting standards, such as International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (GAAP). Their purpose is to provide helpful information to the following users: shareholders, creditors, government entities, customers, suppliers, and partners.

2. THE IMPORTANCE OF AUDIT

Auditing must perform its responsibilities following an auditing policy that describes the standards and guidelines that a company uses when conducting internal or external audits through public accounting firms. This policy helps ensure that every accountant in the company understands his role in the audit process and can also develop audit policies to meet the guidelines of government agencies. Audit policies can promptly remedy mistakes and avoid financial fraud or scandals. In addition to the importance of the legal requirements of audit, the audit itself also provides important and valuable insights. Auditing determines whether an organization provides true and fair financial performance and is also the goal that any organization hopes to achieve. The year-end audit enables the organization's management accounts to be accurate and reveals system errors throughout the year. It would provide reassuring advice for the decisions of those who rely on organizational management information. The process of conducting an audit challenge and provides valuable feedback on the soundness of the organization's existing internal controls and processes. Since the financial statements are prepared internally, they record its transactions, operations, investments, and financing activities. In this case, fraud is easy to occur. Without proper regulations and standards, it is easy for compilers to misrepresent their financial position to make the company appear more profitable or successful. Therefore, auditing is essential to ensure that the company fairly and

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accurately reflects its financial position and complies with accounting standards.

3. TYPES OF AUDITS

This article mainly discusses internal audits and external audits.

3.1 Internal audit

The internal audit evaluates a company's internal control, including the company's governance in compliance with laws and regulations and the company's internal finance accounting process. Internal audit is a necessary management tool that helps companies maintain accurate and timely financial reports while improving business efficiency.

3.2 External audit

An external audit is an examination conducted by independent accountants to certify an organization's financial statements. The external audit ensures that the organization responds fairly to its financial performance and is free from fraud.

3.3 The relationship between internal and external audit

Internal audit and external audit complement each other. [3] In a company, an internal audit is responsible for the execution, while an external audit can give true, accurate, and impartial opinions on the financial reports provided. Moreover, because internal auditors can benefit from external audit activities, it is easier for them to express their opinions and suggestions. [3]

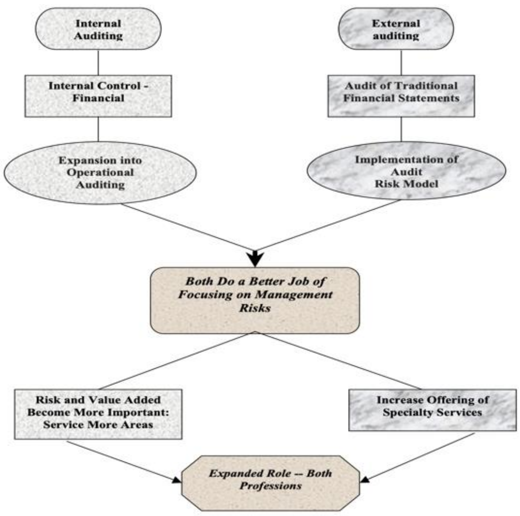

Figure 1 Convergence of Internal Audit and External Audit Functions [4]

3.4 The difference between internal and external audit

- The internal audit, which records and manages internal finance, is determined by the organization's internal management. Its objective differs from those of an independent external auditor. The objectives of the internal audit function vary according to the requirements of the management. In contrast, the external audit mainly focuses on whether a material misstatement in the financial statements. [3]
- The external auditor should have a thorough understanding of the activities involved in the organization's internal audit and identify, and assess the risk of material misstatements in financial statements to make the right decision. [3]
- The audit is concerned with the risk assessment of the external auditor, who should evaluate the internal audit function when conducting an internal audit. [3]

4. THE FACTORS AFFECT THE AUDIT

4.1 Internal audit

The purpose of an internal audit is to provide risk management and assessment for the organization's internal governance so that its internal control system can operate effectively. The internal audit function helps align internal regulations with the organization's vision and mission. Compared with external audit consulting, the internal audit department conducts a deeper analysis of the company's experience and provides objective insights into the company's performance. [5] Internal audit builds a bridge between the organization and each stakeholder.

4.1.1 Conceptual model

Due to the current organizational scandal and global financial crisis, internal audit occupies a unique position in the public and regulatory agencies [6] Since the financial market crisis in 2007, issues related to auditing and predictive financial reporting have gradually surfaced. Therefore, for an organization, , it is necessary to evaluate the honesty and efficiency of employees to reduce the possibility of problems. Assessing employee productivity was mandated by internal audit, [7] using data from Alzeban and Gwilliam's study [8], which was collected by sending questionnaires to 619 respondents (223 managers and 396 internal auditors) at the Public Authority for Social Insurance (PASI). According to the questionnaire, regression analysis is used to analyse the relationship between independent variables and internal audit effectiveness (IAE).

4.1.2 Independent variable

According to the research of Alzeban and Gwilliam [8] , this paper uses the following characteristics as measurement variables to study the effectiveness of the internal audit.

4.1.2.1 Competence of internal audit

It is measured by four indicators: education, professional qualifications, experience in the internal audit field, and continuous development (average number of training hours per year) [8]

4.1.2.2 Size of internal audit

It is measured by the number of internal auditors.

4.1.2.3 Relationship between internal audit and external audit

A series of indicators measure it: the attitude of internal audit towards external auditors, the effectiveness of discussion of mutual interests, discussion of audit plans, and the dependence of external auditors on internal audit work and management's utilization of these two groups.

4.1.2.4 Management support for internal audit

Management supports internal audits so that internal audits can perform their duties, and management needs to respond and use them when internal audit submits work to management.

4.1.2.5 Impendence of internal audit

he independence of internal audit needs to be measured by nine items: the level of independence, reporting level, direct contact with the board of directors and senior management, conflicts of interest, interference, unrestricted access to all departments and employees, appointment and removal of the head of internal audit and the implementation of non-audit activities. [8]

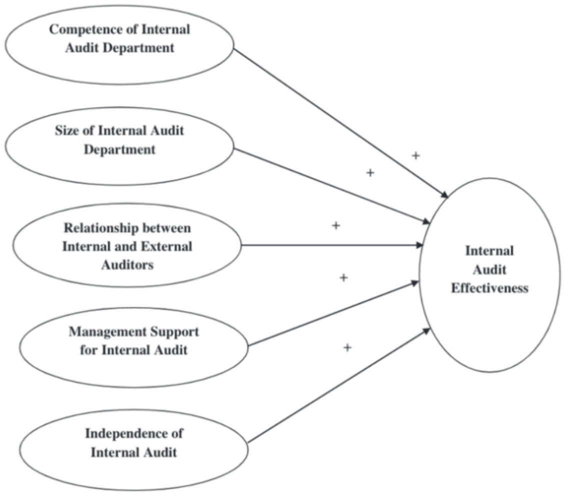

Figure 2 Conceptual Model [8]

4.1.3 Hypotheses

H1: A significant perception of internal audit effectiveness is positively related to the greater competency of the internal audit staff.

H2: A significant perception of internal audit effectiveness is positively related to a larger internal audit department.

H3: A significant impact of internal audit effectiveness is positively related to a closer relationship between internal and external auditors.

H4: A significant perception of internal audit effectiveness is positively related to greater management support for internal auditing.

H5: A significant perception of internal audit effectiveness is positively related to greater independence of the internal audit.

4.1.4 Results and discussion

4.1.4.1 Model

Ordinary Least Squares (OLS)

Is a common technique for estimating the coefficients of linear regression equations that describe the relationship between one or more independent quantitative variables and a dependent variable. [9]

Based on OLS multiple regression, the degree of influence of the above five factors (independent variables) on IAE (dependent variables) is estimated, combining the responses received in the questionnaire to provide a result. [8]

OLS regression model:

IAE = b0+ b1COMP + b2SIZE + b3RELEX + b4MSUP + b5IND + ei
(IAE = perceived internal audit effectiveness.

COMP = competence of the IAD (training and experience). SIZE = size of the IAD.
RELEX = relationship between internal and external auditors.
MSUP = management support for internal auditing.
IND = independence of the IAD.)

4.1.4.2 Results and discussion

- correlation coefficients for the variables in the model

	1	2	3	4	5	6
1 IAE	1.00					
2 COMP	.59**	1.00				
3 SIZE	.59**	.45**	1.00			
4 RELEX	.47**	.42**	.19	1.00		
5 MSUP	.66**	.44**	.46**	.40**	1.00	
6 IND	.43*	.21	.24*	.21	.38**	1.00

* Correlation is significant at the .05 level.
** Correlation is significant at the .01 level.

Figure 3 correlation coefficients analysis [8]

According to figure 3, IAE is significantly positively correlated with five independent variables (p < 0.01).

- regression result

Variable	*B*	Standard	*β*	*t*	*p*-Value	Tolerance VIF	Error of *B*
Constant	.551	.265		2.082	.041		
COMP	.201	.074	.230	2.702	.009	.656	1.524
SIZE	.213	.064	.277	3.352	.001	.699	1.430
RELEX	.116	.057	.161	2.021	.047	.751	1.332
MSUP	.262	.075	.308	3.507	.001	.616	1.624
IND	.162	.074	.165	2.197	.031	.845	1.183

Predictors: (constant), competence of the IAD, size of the IAD, relationship between internal and external auditors, management support for internal audit, independence of the IAD.
R^2 = .65.
Adjusted R^2 = .63.
F = 27.378.
p < .01.

Figure 4 regression analysis [8]

According to figure 4, all four hypotheses are true. IAE is significantly positively correlated with COMP SIZE and MSUP (P<0.01, H1, H2, and H4 are supported). At the same time, the coefficients of RELEX and IND are also statistically significant (p <.05), supporting H3 and H5, but their levels are different from other variables. The positive correlation between COMP and IAE shows that IAE has a significant relationship with the working ability of internal employees, the higher the capacity of internal employees, the better the IAE. As the number of internal audits increases, IAE increases. And if you want to have a higher IAE, the management needs more support.

4.2 External audit

For a long time, shareholders and supervision mechanisms have focused on the independence of external audits. Moreover, controls on external audit independence are becoming more and more stringent because of the collapse of Enron, a large international accounting firm. [10] Therefore, the Independent Standards Board defines significant independence as not being affected by those pressures and other factors or auditors' ability to reasonably be expected to achieve fair audit decisions. Judging the independence of external auditing, the objective state between intermediary agencies and clients, or the subjective understanding between clients and other parties, can be divided into two criteria: facts or appearance. The independence of external auditing can be divided into two criteria: fact or appearance [11]. At the same time, Arens et al [11]. defined audit independence as maintaining true, objective, and fair quality without prejudice to the implementation and evaluation of audit reports.

4.2.1 Conceptual model

If external auditors lack independence, the value of their audit services will be damaged, [12] and if external auditors lack independence, they are unlikely to find irregularities in financial reports. The compromise of independence is also a manifestation of the lack of independence of external audits, which will reduce the audit quality of financial reports. [13] In other words, if the external auditor lacks independence, audit quality deteriorates, and errors are less likely to be found. [14] Therefore, the independence of external audit will adopt a conceptual framework with independent variables as a factor influencing the independence of external audit. Data is obtained from the study of Muthui et al. (2014). An audit company in Nairobi selected the questionnaire. Use stratified sampling to select samples. A total of 217 interviews and questionnaires were selected.

4.2.2 Independence variable

4.2.2.1 Provision of non-audit service

Non-audit services refer to any services other than statutory audit services, usually including tax services, information technology services, corporate financing-related services, and other audit-related services. When external audits have professional auditing skills and experience, they can provide non-audit services. [15] Non-audit services are provided based on the audit knowledge and experience of external auditors, with the subjective consciousness of the auditors, which will affect the independence of external audits.

4.2.2.2 Audit firm tenure

The tenure of an external audit firm in an organization can affect the accuracy of its audit because Flint believes that when auditors work in an organization for a long time, auditors may establish a personal relationship with people in the organization and lose their independence [16] The independence of external auditors is threatened by long-term tenure, which leads auditors to form overly comfortable relationships and reduces the quality of their audit work.

4.2.2.3 *Completion of auditing*

Audit completion refers to all the necessary work that must be done prior to submitting an audit opinion and completion of the audit process. The work needs to continue from the planning stage to the signing of the audit report, which needs to take into account the opening balance follow-up events going concerned and written statements. [17]

4.2.2.4 *Audit fee*

Normally, the audit market is considered to be monopolistic competition. A large audit firm will feel higher quality than a small one. Therefore, the entire audit market is deemed to be competitive. [18] Thus, in a competitive audit market, audit fees that reflect the external auditor's need to reduce audit risk to an acceptable level will reflect the expected cost of the audit work and the auditor's business risk. At the same time, the audit industry also has expensive switching costs. When switching audit firms, the organization has to re-establish the relationship with external auditors. Therefore, the independence of external auditors will be affected.

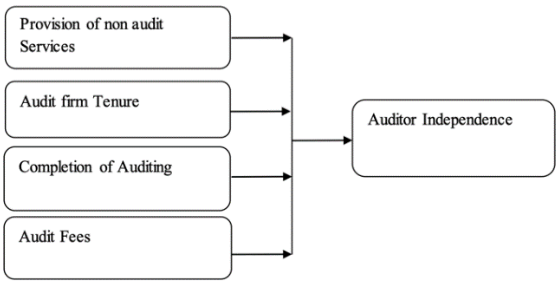

Figure 5 Conceptual model [19]

4.2.3 *Hypotheses*

H1: A significant perception of internal audit effectiveness is positively related to the greater competency of the internal audit staff.

H2: A significant perception of internal audit effectiveness is positively related to a larger internal audit department.

H3: A significant impact of internal audit effectiveness is positively related to a closer relationship between internal and external auditors.

H4: A significant perception of internal audit effectiveness is positively related to greater management support for internal auditing.

H5: A significant perception of internal audit effectiveness is positively related to greater independence of the internal audit.

4.2.4 *Results and discussion*

4.2.4.1 *The average number of audit clients*

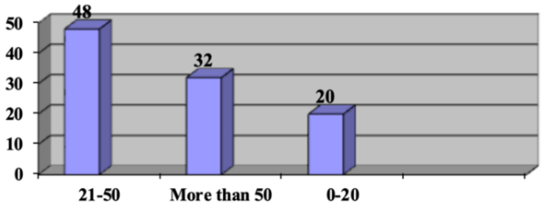

Figure 6 Average number of audit clients [19]

According to the survey stationery, 8% of respondents indicated that their firm has 21-50 audit clients, 32% have 0-20, and 20% have more than 50 audit clients.

4.2.4.2 *Provision of non-audit service*

	Frequency	Percentages
Management services	25	44
Secretarial services	17	29
Tax consulting services	16	27
Total	58	100

Figure 7 non-service to clients [19]

Figure 7 shows that the non-audit service provided to clients by the firm. 44% of respondents indicated that the organization offers management services to clients, 29% provides secretarial services to customers, and the remaining 27% provides tax consulting services to clients.

4.2.4.3 *Audit firm tenure*

Factors	Disagree	Neutral	Agree	Strongly agree	Mean	Std deviation
The proportion of non-audit fees paid to you has increased economic bonding with your clients	0	15	29	14	4.87	0.86
Provision of these services has improved on your relationship with your client	6	8	26	18	4.48	0.58
The client's business operations and reporting issues influence audit independence	0	12	22	24	4.44	0.43

Figure 8 audit firm tenure [19]

Figure 8 shows the impact of tenure satisfaction on the independence of external auditing. As can be seen from the survey results, the average value and standard deviation of non-audit fees agreed to be paid to enterprises are 4.87 and 0.86, indicating that the economic proportion of non-audit fees that enterprises are willing to pay to customers has increased. Moreover, non-audit services also improve the relationship between the organization and its customers, which will affect the independence of external auditing because the standard deviation varies from 4.48 to 4.44. It means that establishing a personal relationship between the external audit and the client will affect its independence and reduce audit quality.

4.2.4.4 Completion of auditing

	Frequency	Percentages
Very great Extent	37	64
Great Extent	12	21
Moderately Extent	9	15
Total	58	100

Figure 9 completion of auditing [19]

Figure 9 shows the impact of competition in the audit market on audit independence. According to the survey results, 64% believe that competition has a significant effect on audit firms' independence, 21% believe that competition in the audit service market has a considerable impact. The remaining 15% believe that competition moderately impacts audit independence.

4.2.4.5 Audit fees affect audit independence

The audit fee will affect audit independence. Respondents indicated that unexpected and high audit fees would make it impossible for external auditors to express opinions on ongoing operations because audit work is not independent, affecting audit quality.

4.2.4.6 Discussion

According to the above research results, first, audit firms provide non-audit services for customers. The clients owned by the organization need foreign financial derivatives, and audit firms need to provide management, secretarial, tax, and other services. Second, the increased economic relationship between firms and clients improves the relationship between the client and the external audit. Third, tenure also leads to fraud in external auditing. Fourth, if auditors are replaced, it also increases the audit cost. Therefore, the above four will affect the independence of external audit, thereby reducing the audit's quality and expanding the audit's cost. The four hypotheses are supported according to the above discussion. Non-audit service, firm tenure, audit competition, and audit fees significantly influence the independence of external auditing.

5. CONCLUSION

Auditing plays an essential role today, and both internal and external audits will provide users with helpful and reliable information. It needs to maintain effectiveness for internal audits. An internal audit is an important tool for the management in an organization, assisting management in providing influential opinions on future management policies and sustainable operation. We conclude regression analysis and hypothesis testing. The capacity and scale of internal audit, the relationship with external audit, the support of management to an internal audit, and the independence of internal audit all positively affect IAE. If an internal audit has professional and complete capabilities and the auditors are sufficient, the effectiveness of the audit will be improved. The excellent cooperation between internal and external audits will make audit reports more accurate and helpful. At the same time, the organization's management should support internal audits and provide adequate information to help them improve financial reporting and improve the effectiveness of the internal audit. External auditors play an important role in improving people's trust in financial reports, so the independence of external auditors is crucial. Therefore, it is necessary to supervise the completion of the tenure of non-audit service firms and audit fees well so as not to affect the independence of external audits. According to research data, it is recommended that external audits need to maintain independence to increase the audit quality and provide financial statements with added value for users to apply this information.

REFERENCES

[1] M. Annisette and v. u. Trivedi, “Globalization, paradox and the (un) making of identities: Immigrant chartered accountants of India in Canada,” Accounting, Organizations and Society, vol. 38(1), pp. 1-29, 2013.

[2] C. F. Institue, “What is Auditing?,” n.d. [Online]. Available: https://corporatefinanceinstitute.com/resources/knowledge/accounting/what-is-an-audit/.

[3] P. Atanasiu , B. A. Cristina and B. A. Florin, “The relationship between internal and external aduit,” 2008.

[4] L. E. Rittenberg, “The outsourcing dilemma: What's best for internal auditing,” Institute of Internal Auditors Research Foundation., 1997.

[5] S. Shahimi, N. D. Mahzan and N. Zulkifli, “Consulting role of internal auditors: Exploratory evidence from Malaysia,” Journal of Business and Management,, vol. 5(2), pp. 22-40, 2016.

[6] D. S. Soh and N. Martinov - Bennie, “he internal audit function: Perceptions of internal audit roles, effectiveness and evaluation,” Managerial auditing journal, vol. 26(7), pp. 605-622, 2011.

[7] S. Ramamoorti, “Internal auditing: history, evolution, and prospects,” pp. 2-23.

[8] A. Alzeban and D. Gwilliam, “Factors affecting the internal audit effectiveness: A survey of the Saudi public sector,” Journal of International Accounting, Auditing and Taxation, vol. 23(2), pp. 74-86, 2014.

[9] Addinsoft, “XLSTAT,” [Online]. Available: https://www.xlstat.com/en/solutions/features/ordinary-least-squares-regression-ols.

[10] G. Vinten, "Enronitis–dispelling the disease," Managerial Auditing Journal, vol. 18, pp. 448-455, 2003.

[11] A. A. Arens, R. J. Elder, M. S. Beasley and C. E. Hogan, "Auditing and assurance services," Auditing and Assurance Services, 2016.

[12] D. Lindsay, "Auditor-client conflict resolution: an investigation of the perceptions of the financial community in Australia and Canada," nternational Journal of Accounting, vol. 27.4 (1992), pp. 342-365, 1992.

[13] A. T. Craswel, J. R. Francis and S. L. Taylor, "Auditor brand name reputations and industry specializations," Journal of accounting and economics, vol. 20(3), pp. 297-322., 1995.

[14] H. Ashbaugh, R. LaFond and B. W. Mayhew, " Do nonaudit services compromise auditor independence? Further evidence," The accounting review, vol. 78(3), pp. 611-639., 2003.

[15] R. Quick and B. Warming - Rasmussen, "Auditor independence and the provision of non - audit services: Perceptions by German investors," International journal of auditing, vol. 13(2), pp. 141-162, 2009.

[16] D. Flint, " Philosophy and principles of auditing: an introduction," Macmillan Education.

[17] Kaplan, "Kaplan financial knowledge bank," [Online]. Available: https://kfknowledgebank.kaplan.co.uk/audit-and-assurance/audit-completion.

[18] F. A. Gul, "Audit prices, product differentiation and economic equilibrium," Auditing: A Journal of Practice & Theory, vol. 18(1), pp. 90-100, 1999.

[19] T. Muthui, W. Muthui and J. Kabiru, "Factors affecting external auditors' independence in discharging their responsibilities: a survey of medium level auditing firms in Nairobi," nternational Journal of Business and Law Research, vol. 2(4), pp. 22-35, 2014.