
THE RELATIONSHIP BETWEEN THE FUNCTIONS OF INTERNAL AUDITOR AND EXTERNAL AUDITOR AND ITS IMPACT ON THE FINANCIAL PERFORMANCE OF BANKS

Mohammed Salman Abbood

University of Sfax College of Economics and Management

mohamed_alkasi@yahoo.com

Nesrin Halouani

University of Sfax College of Economics and Management

halouani.nesrin@gmail.com

Abstract

The importance of the relationship between the function of the internal auditor and that of the external auditor has increased recently given the fact that their role has become more integrated in the modern work environment, which necessitated the need to deepen the relationship between them.

The internal auditor is able to detect manipulation in the financial statements, and then the external auditor can consult with him/her regarding estimating and evaluating the risks of manipulation. Therefore, the American Institute of Certified Public Accountants issued Bulletin No. (65), which encourages the external auditor to use the activities of the internal auditor when planning and implementing the audit engagement . It also issued Bulletin No. (55), which obligates the external auditor to understand internal control, and the internal auditor is considered a part of internal control, therefore, the external auditor must understand the work of the internal auditor.

There is no doubt that the work of the internal auditor's function may affect the timing, nature and extent of the external auditor's work, and it may also affect the procedures implemented by the external auditor for the purpose of his/her understanding of the internal control system and the procedures for collecting the evidence necessary for detailed tests .Risk assessment procedures, and the quality of financial reports issued by management is considered one of the most important objectives of bank governance, which is reflected in their financial performance. When performing his/ her duties , the external auditor may rely on work previously performed by the internal auditor, or on work requested directly from him/her , for example ,“the external auditor may ask the internal auditor to complete some tasks that fall within the scope of his work, such as requesting an evaluation of the internal control system. Auditing Standard No. (2) gives the external auditor the right to rely on internal control procedures prepared with cooperation of the internal auditor.

Keyword: Internal Auditor, External Auditor, Financial Performance, Banks.

Introduction

In recent decades, pressure has intensified on the auditing profession to achieve better quality in order to reduce the risks to which the financial community is exposed due to making decisions based on misleading financial statements, and those affected by that misleading statements are holding auditors accountable for the harm that befall them as a result of those decisions. The auditor's fear of the risk of legal accountability and the subsequent risks of litigation made the profession tend to adopt a risk approach in practicing professional audit work. Although the profession has paid great attention to the quality process and addressed quality by applying the extent of professional standards for auditing, it has sometimes focused on the availability of the elements of good auditing through the office, the extent of reliance on culture and professional experience, and the availability of a special quality department that enables the observer to judge the level of auditing and its quality if it is carried out within elements that represent minimum limits that cannot be retracted.

The standards also aim at measuring the audit outputs, which are represented by the auditor's report and his/her opinion on the financial statements and working papers that he/she relies on to verify the audit objectives to be achieved.

The audit risks facing the auditor in the practice of his work require more comprehensive procedures to achieve higher quality that preserves the auditor's reputation and protects him/her from other legal risks, which prioritize testing the impact of auditors' assessment of audit risks on audit quality, and this is what the current study aims at.

Accordingly, the problem of the research lies in the weakness of the internal audit profession and the lack of interest in it and its outputs on the one hand, and in the difficulty of integration and coordination between the internal audit and external audit professions. To solve the research problem, the researcher mentioned several questions, the most important of which is (1) Is there a mutual influence between internal auditing and external auditing? (2) Do internal audit outputs affect financial performance? (3) Do the external audit outputs affect financial performance? (4) Is there an overlap between the functions of internal and external audit? (5) Does the relationship between external audit and internal audit affect financial performance? To reach the research objectives, which are (1) proving whether there is integration and coordination between internal and external audit or not (2) proving whether there is an effect of the integration of internal and external audit on the financial performance of banks or not (3) measuring the relationship of internal audit outputs to external audit outputs. (4) measuring the relationship between internal and external audit integration and the financial performance of banks. To achieve the research results, the researcher assumed the following hypotheses: (1) There is a direct relationship between the effectiveness of internal audit outputs and the effectiveness of external audit outputs. (2) There is integration between internal and external audit in banks. (3) The extent of integration of internal and external audit with the financial performance of banks is directly related. Accordingly, the importance of the research lies in the importance of both internal and external audit on the one hand and the importance of the financial performance of banks on the other hand. Add to that, the importance of coordination between internal and external audit and its impact on financial performance for banks.

Part 1 : What is external audit and internal audit in terms of concept, objectives and importance.

The concept of internal audit: The American Institute of Internal Auditors defined internal audit as “an independent evaluation function that is created within economic organizations to examine and evaluate their economic, financial and administrative activities and submit a report on the examination and evaluation to the organization’s senior management in order to take the decisions it deems appropriate if there is a need for that.” (Brink & Witt, 2002 p.3). Anderson defines internal audit as “an independent, objective, internal consulting activity aimed at adding value and improving the organization’s operations”.(Anderson, 2003. P:106).

Characteristics of Internal Audit

They are summarized as follows:(Endaya, Khaled)(IPPF-IIA, 2013, p:4-8) Hanefah, Mustafa, 2016, p:165)

Independence and objectivity: This characteristic, according to the International Standards for the Professional Practice of Internal Auditing (IPPF), indicates that independence is freedom from conditions and circumstances that threaten the ability of the internal audit activity or the Chief Internal Audit Executive to carry out internal audit responsibilities in an unbiased manner. As for objectivity, according to the IPPF, it is an unbiased mental attitude that enables internal auditors to perform internal audit tasks in a way that guarantees the soundness of the results of their work and with no quality compromises are made to their work .

Proficiency and Due professional Care :Profeiciency refers to the knowledge, skills, and other competencies necessary to carry out the individual responsibilities assigned to each of them, while due professional care refers to exerting the level of care and skill expected of any internal auditor who has a reasonable level of insight and ability, and does not mean infallibility.

Quality Assurance and Improvement Program: It refers to the chief audit executive developing and maintaining a quality assurance and improvement program that covers all aspects of internal audit activity.

Management Support for Internal Audit : It refers to the actions of senior management towards the internal auditor’s scope of work, and not being involved within the scope of internal audit work, as well as open and frank communication between senior management and the chief audit executive, as well as senior management approving and allocating the necessary resources to carry out internal audit ,training and development programs.

Objectives of Internal Auditing

The objective of internal auditing in the early stages was limited to discovering errors, fraud, and manipulation. As a result of the development that has taken place over time, the objectives of internal auditing have evolved, as Al-Sabbagh et al believe that there is a set of main objectives for internal auditing, which are as follows: Al-Sabbagh and Ashmawi, 2008: p. 139)

Determine the accuracy and credibility of financial and operational information and study the methods used to measure and present it.

Study and present methods for protecting assets and verifying the existence of those assets. Verify that internal procedures, policies, regulations and external laws that have a clear impact on operations and reporting are followed.

Evaluate the economy, efficiency and effectiveness when using resources.

Examine processes to verify that results meet specified objectives.

Importance of Internal Auditing

The internal audit function plays an important role in the governance process, as it enhances this process by increasing the ability of citizens to hold the bank accountable. Internal auditors, through the activities they implement, increase credibility and justice, improve the behavior of employees working in banks, and reduce the risks of administrative and financial corruption.

(Archambeault, 2002, p: 8)

Professional and regulatory bodies have recognized the importance of the internal audit function in the governance process, as the Cadbury Committee emphasized the importance of the internal auditor's responsibility in preventing and detecting fraud and forgery. In order to have this function achieve its goals, it should be independent and based on its own legislation. Therefore, the independence of this function is strengthened when its reports submitted directly to the audit committee not to the management. (Cohen, et al, 2004, p:33)

The importance of internal audit function has increased as a tool that allows banks to reform and develop themselves independently, through evaluation, analysis, advice, studies and suggestions. This function was considered as a safety valve of the management, and it was described as the eyes and ears of management. (Guy, et at, 1999: 802).

The concept of External Audit

Peter defines the external audit as "an accurate and intelligent study for a set of financial and other facts in order to give certificate, report, expert opinion or advice." (Peter, et.al.2012,p:150) As for Nasta & Ladar, they define external audit as "the professional examination of information with the intention of expressing a responsible and independent opinion in light of a set of standards and conditions about the suitability of financial reports and transactions of an entity." (Nasta & Ladar, 2016, p:46).

External Audit Goals: There are many goals for external audit:

1. Expressing an impartial technical opinion on the fair presentation of financial statements of the business results and the financial position, in accordance with Generally Accepted Accounting Principles.
2. Providing the company's management with the internal control system's information, and highlighting its shortcomings, through the recommendations provided by the auditor in his/her report on the performance of this system.
3. Providing users of financial statements, including investors, creditors, banks, relevant government departments, and others, with reliable financial statements, to help them make appropriate decisions.

Importance of External Audit: The importance of external audit is represented by a number of points, including the following:(Abu suraa,2010,P:25)

1. Government agencies: Some state agencies rely on institutions' financial statements approved by an independent auditor for purposes of: monitoring economic activity, drawing up the state's economic policies or imposing taxes.
2. Consultants, such as financial analysts and investment houses: This category needs information to evaluate the bank's financial position with the aim of providing advice and guidance to investors.
3. Creditors and Banks: The information approved by the independent external auditor helps this category determine the extent to which loans can be granted to companies and institutions, as well as determining loan amount and terms.
4. Prospective Investors: They need information to help them make decisions about the possibility of investing in the bank, and determine the appropriate price for investment to achieve the greatest return.

The Integration Relationship Between Internal Audit, External Audit and Financial Performance

Integration means that the external auditor relies on the work of the internal auditor. This integration between internal audit and external audit is based on a set of principles and standards that auditors comply with during performing their work. Integration between internal and external audit leads to performing the audit to the fullest extent, evaluating the bank's internal control system to determine the scope of the examination carried out by the external auditor to facilitate the auditing and carry it out efficiently . Thus , reducing the audit time and costs. Ultimately, the integration between internal and external audit reflects positively on the financial performance of banks through increasing the accuracy of the audit process, saving time and reducing audit costs.(adad, 2017, P:25)

The Integration Relationship Among Internal Audit and External Audit and Activating the Principles of Bank Governance

Audit is considered one of the pillars and components of banks governance to create added value to the information contained in the company's financial statements given the fact that such information has an effective role in bank stakeholders oversight. As a result ,developing and raising the level of efficiency of the professional performance of audit become a major support for the efficient application of the governance framework. Audit is closely linked to Governance at the organizational or professional level, as audit is considered one of the most influential scientific and professional fields.The principles and procedures of governance cannot be effectively applied and yield results without the support of the audit profession.(Burahla and Qreema, 2013, P:98)

Auditing , unlike other mechanisms that were unable to solve this problem ,can scrutinize information quality produced by the management, and determine problem effects of mismatched information provided by the management. Therefore, banks resort to auditing and governance .The main reason for appointing an external auditor ,by banks, may be to

control interest issues existing between management and shareholders and to produce information to monitor managers.(Fidaq, 2009, P:43)

The Relationship between Activating Bank Governance Principles and Financial Performance

Many previous studies focused on the relationship between governance and bank performance. The role of bank governance in improving financial performance through good governance policies such as protecting capital and the competitive environment, composition of banks' ownership, composition of their board of directors, and financial policy was investigated. Previous studies also showed that applying bank governance and adhering to its principles approved by many organizations and bodies differs from one bank to another. These differences and diversity in governance policies have an impact on the performance of banks.(Anca, 2012 P:155-158)

Stemming from this point, many studies have addressed the issue of bank governance and its relationship with financial performance. The bank's good governance is necessary to add value to the various interest groups in the bank. It also enhances bank performance by creating an environment that motivates managers to achieve maximum returns on investment, enhances the operational efficiency and ensures productivity growth in the long term. As a result, these banks have the opportunity to attract competencies at the global level. It also ensures compatibility between the interests of investors and society by creating transparency, integrity and accountability in the process of managing banking activities in general and between employees and the Board of Directors in particular .(Azim, M,2012:P 481-505)

Part 2 : Applied Study by Using the Statistical Method SPSS

After tackling the theoretical concept, this part is devoted to analyze the answers of the sample subjects constituting 106 who are specialized in finance, tax, and auditing and of both genders with various academic degrees, age groups, and duration of service. Below is an explanation of the method of statistical analysis, the tools used, and the analysis of the answers of the sample subjects. SPSS 27 program is used to analyze the data contained in the respondents' answers.

Statistical Measures Used

The methods and tools used in measurement and analysis are as follows:

1. Standard deviation (S), which is the square root of the variance to measure dispersion of respondents' answers.
2. Five-point Likert scale, which is a method for measuring behaviors and preferences. It is used in psychological tests and questionnaires, especially in statistics field. The scale is based on responses that indicate the degree of agreement or objection to a statement .
3. Cronbach's Alpha test, to measure the consistency and reliability of the questionnaire and the accuracy of readings taken from the respondents' answers.
4. The (t) test is used to test the hypothesis that there is no statistically significant relationship at the level (0.05).

5. Normal distribution test, to identify the nature of data, and helps in making decision to determine the appropriate type of statistical analysis.
6. Correlation and linear regression, is used to measure the strength of the relation among the topics, to know the equation of the regression line and model parameters, variance analysis table and coefficient of determination.

1. Demographic information: Through table No. (1) below , the data related to gender indicates that the percentage of males exceeds the percentage of females, as the number of males is (80) , with a percentage of (75.5), and the number of females is (26), with a percentage of (24.5). As for Age, the study showed that the most frequent category among the respondents was (41-50) with a percentage of (33), and the least frequent category was (<30) with a percentage of (4.7). Therefore, the dominant category is (41-50) which is distinguished by its scientific and practical experience, and this is consistent with most studies related to the profession that requires people with experience in the field of accounting and auditing. The study showed that the number of bachelor’s degree holders was (23), with a percentage of (21.7).As for the second level i.e. the number of master’s degree holders ,it was (48) with a percentage of (54.3). The third level comprises holders of a doctorate degree the number of which was (34) with a percentage of (32.1).The number of “other academic qualifications” was (1), with a percentage of (0.9).Therefore, holders of higher degrees, such as master's and doctorate constitute more than half of the sample. Accounting comes first in terms of degrees with a number of (73) and a percentage of (68.9)while finance and banking comes second with a number of (20)and a percentage of (18.9).Thus, the percentage of financial specialty was (87.8), constituting more than three-quarters of the study sample. Other specialties number was (7) with a percentage of (6.6).Administration specialty comes last with a number of (6) and a percentage of (5.6).The study showed that the largest percentage of the study sample with more than 20 years of experience was about (41)i.e. (38.7%), and the smallest percentage of individual with less than 5 years of experience was (4)i.e. (3.7%).The most dominant professions covered by the study sample were external auditors (35) ,internal auditors(31) ,financial managers (14) ,accounting managers (12)and others (4)and their percentages were (33,29.4 ,13.2,11.3,and 3.7 respectively).

Table (1): Description of the demographic variables of sample subjects

No.	variables	Group	Frequency	percentage
1	Gender	Male	80	75.5%
		Female	26	24.5%
2	Age	<30	5	4.7%
		30 – 40	23	21.7%
		41 – 50	35	33%
		51 – 60	29	27.4%
		>60	14	13.2%
	Academic qualification	Bachelor's degree	23	21.7%
		Master's degree or equivalent	48	45.3%

3		Doctorate or equivalent	34	32.1%
		Other	1	0.9%
4	Specialty	Accounting	73	68.9%
		Business Administration	6	5.6%
		Banking and Financial Sciences	20	18.9%
		Other	7	6.6%
5	Experience	< 5	4	3.7%
		5 – 10	14	13.2%
		11 – 15	22	20.8%
		16 – 20	25	23.6%
		>20	41	38.7%
6	current occupation	Internal Auditor	31	29.4%
		External auditor	35	33%
		accountant	10	9.4%
		Accounting Manager	12	11.3%
		Financial Manager	14	13.2%
		Other	4	3.7%

Source: developed by the researcher based on the outputs of SPSS 27.

2. Reliability Analysis by using Cronbach’s Alpha Coefficient:

This method is used to measure the survey reliability in order to ensure reliability and consistency of the study variables for the following stages of analysis.

2.1 Survey Data Analysis

As mentioned above, the study population consists of (106) participants who are specialized in accounting and auditing, with different age groups, academic qualification, and years of experience.

2.1.1 Respondents’ answers Analysis

First . Cronbach's Alpha Test

The results of the Cronbach's alphatest for the validity and reliability of the questionnaire showed that the value of the questionnaire reliability of the first topic (the extent to which the effectiveness of external audit depends on that of internal auditing) was (0.884) where Reliability is the positive square root of the Cronbach’s alpha coefficient which is (0.781). It was higher than (0.7), the minimum limit for accepting the test. As for the second topic (the extent of integration of external and internal audit in terms of procedures and reporting), the result showed that reliability value of the questionnaire was (0.887). Where reliability is the positive square root of the Cronbach’s alpha coefficient which is (0.787). It was higher than (0.7), the minimum limit for accepting the test. Concerning the third topic (the extent of external and internal auditing integration impact on the financial performance of banks), the result showed that the questionnaire reliability value was (0.911) where validity is the positive square root of the Cronbach’s alpha coefficient which is (0.830). It was

higher than (0.7), the minimum limit for accepting the test as depicted in the table No. (2) below.

Table No. (2):Reliability and Consistency Cronbach's alphaCoefficient of

No.	Topic	Number of items	Cronbach's coefficient	Reliability coefficient
01	The extent to which the effectiveness of external auditing depends on that of internal auditing	15	0.781	0.884
02	The extent of integration of external and internal audit in terms of procedures and reporting	15	0.787	0.887
03	The extent of external and internal auditing integration impacton the financial performance of banks	15	0.830	0.911

Source: developed by the researcher based on the outputs of the SPSS 27

Second. Mean & Standard Deviation

According to the outputs of the statistical program (SPSS), the following table represents the statistical standards extracted from the respondents' answers to the fifteen questionnaire questions for the first topic(the extent to which the effectiveness of external auditing depends on the effectiveness of internal auditing).

Table (3): The weighted mean, standard deviation, relative weight, t-statistic, normal test values for the skewness and kurtosis factors, and agreement's degree for first topic of the questionnaire (the extent to which the effectiveness of external auditing depends on the effectiveness of internal auditing) according to the fifteen questions.

	Variable	Mean	S.D	Relative weight	t	Skewness factors	Kurtosis factors	Agreement degree
Q₁	The external auditor examines the bank's organizational structure to ensure the independence of internal audit.	4.04	1.16	0.80	35.78	-1.095	.051	Agree
Q₂	The external auditor sometimes ensures that the bank's management responds to the internal auditor's recommendations.	4.12	1.09	0.82	38.83	-1.363	1.165	Agree
Q₃	The external auditor does not take into account the objectivity of the internal auditor to determine the degree of reliance on his/her work.	3.57	1.21	0.71	30.21	-0.388	-1.056	Agree
Q₄	The external auditor depends on the reports and working papers of the internal auditors to obtain a comprehensive understanding of the bank's internal control system.	3.96	1.01	0.79	40.25	-0.819	-.126	Agree
Q₅	The external auditor does not depend on the reports of the internal auditor to identify the bank's problems.	4.15	0.91	0.83	46.79	-1.376	1.466	Agree

Q ₆	The external auditor verifies that the internal auditor's report includes important results and implementable recommendations.	4.21	0.92	0.84	46.89	-1.402	1.029	Totally agree
Q ₇	The external auditor does not follow up the reservations included in the internal auditor's report nor coordinate with the administrations concerned to make sure they are settled .	4.09	0.97	0.81	43.40	-1.082	0.869	agree
Q ₈	The external auditor evaluates the internal auditor's independence in his/her position in the bank's organizational structure before relying on his/her work.	3.87	1.26	0.77	31.44	-0.789	-0.661	agree
Q ₉	The external auditor checks the internal audit programs while planning his/ her audit .	4.07	1.15	0.81	36.20	-1.278	0.717	Agree
Q ₁₀	The internal auditor does not assist in saving time, effort, and cost in planning the external audit.	4.01	1.06	0.80	38.77	-0.985	0.332	Agree
Q ₁₁	The external auditor verifies that the plans and programs of internal audit are written and prepared according to the professional standards.	4.17	1.05	0.83	40.68 0	-1.289	0.828	Agree
Q ₁₂	The external audit verifies that the plans and programs cover all banking aspects.	4.10	1.18	0.82	35.84	-1.165	0.127	Agree
Q ₁₃	The external auditor does not depend on the internal auditor in formulating recommendations to improve the internal audit system.	4.13	1.01	0.82	41.91	-0.883	-0.190	Agree
Q ₁₄	The internal auditor provides evidence to facilitate the external auditor's work.	4.37	0.72	0.87	62.33	-0.998	0.764	Totally agree
Q ₁₅	The external auditor performs control tests and substantive procedures previously performed by the internal auditor.	4.16	1.01	0.83	42.44	-1.126	0.512	Agree
	average	4.07	1.05	0.81	40.79			agree

Source: developed by the researcher depending on outputs of (SPSS 27)

Analysis results depicted in table (3) indicate that all the respondents' answers were positive (>3). This is the basic scale for the weighted mean. The Highest weighted arithmetic mean was for question 14 and question 16 comes second . The respondents totally agreed on the contents of these two questions. The remaining 13 answers were (agree) only.

This indicates that the answers were consistent with the first topic's fifteen questions by a percentage of (81). All standard deviations were very acceptable and within the range. This means reducing data dispersion. These results indicate that the respondents agreed on the questions in the first topic (the extent to which the effectiveness of the external audit depends on the effectiveness of the internal audit).

The table below illustrates the statistical standards derived from the respondents' answers on the questionnaire's fifteen questions of the second topic (the extent of internal and external audit integration in term of procedures and reporting) according to (SPSS) results.

Table (4): weighted arithmetic mean, standard deviation, relative weight, statistic (t) normal test values of skewness and kurtosis factors, and the degree of agreement for the questionnaire's second topic (the extent of external and internal audit integration in term of procedures and reporting)

	Variable	Mean	S.D	Relative weight	t	Skewness factors	Kurtosis factors	Agreement degree
Q ₁₆	The external auditor verifies the neutrality and independence of the internal auditor before starting audit.	4.53	0.53	0.90	86.89	-0.527	-0.958	Totally agree
Q ₁₇	The external audit does not depend on the internal auditor competence in identifying the degree of reliance on his/her work.	3.99	1.04	0.79	39.26	-1.150	0.762	Agree
Q ₁₈	The internal auditor's experience affects the extent to which it adopts the internal audit's work and outputs.	4.31	0.90	0.86	48.84	-1.516	1.404	Totally agree
Q ₁₉	While planning for the audit, the internal auditor has to review the external auditor's plans and working papers to determine the degree of reliance on them.	4.48	0.93	0.89	49.16	-1.024	1.654	Totally agree
Q ₂₀	The external auditor asks the internal auditor to perform certain tasks within his/herscope of work , such as evaluating the internal control and cash count.	4.49	0.79	0.89	58.09	-1.818	1.728	Totally agree
Q ₂₁	Auditing the bank's branches and sections by the external auditor depends on the internal auditor's procedures and report.	4.58	0.72	0.91	64.79	-1.184	1.908	Totally agree
Q ₂₂	The external auditor does not participate in internal control tests of the internal auditor.	3.74	1.20	0.74	32.03	-0.930	-0.027	Agree
Q ₂₃	The internal auditor assists the external auditor in obtaining the required evidence.	4.45	0.86	0.89	53.10	-1.843	1.311	Totally agree
Q ₂₄	The external auditor does not take in consideration the work performed by the internal auditor .This contributes to increasing audit quality.	3.88	1.15	0.77	34.57	-1.128	0.429	Agree
Q ₂₅	The external auditor follows up the bank's administration response to the internal auditor's recommendations.	4.40	1.03	0.88	44.00	-1.630	1.435	Totally agree
Q ₂₆	There are potential risks that may hinder cooperation between external and internal audit.	4.55	0.84	0.91	55.82	-1.046	1.897	Totally agree
Q ₂₇	There is no direct contact between the external and internal auditors concerning Common concerns at all times.	3.83	1.34	0.76	29.36	-0.609	-1.265	Agree
Q ₂₈	There is a conflict between the work of the internal and external auditor,	4.44	0.79	0.88	57.63	-1.208	0.449	Totally agree

	therefore joint coordination between them is necessary to facilitate the external auditing in the bank .							
Q ₂₉	Cooperation and coordination between the internal and external auditor in evaluating the internal control system does not affect the protection of bank's assets	4.39	0.92	0.87	49.06	-1.543	1.772	Totally agree
Q ₃₀	Integration between external and internal audit achieves a higher level of external audit quality	4.97	0.97	0.99	40.29	1.865	1.187	Totally agree

Source: developed by the researcher based on the outputs of the SPSS 27.

The results of the analysis in Table (4) indicate that all of the respondents' answers were positive (> 3), which is the basic measure of the weighted arithmetic mean. The highest weighted arithmetic mean is for the question 30, followed by ten questions for which opinions of the respondents were in total agreement. The remaining four questions (seventeen, twenty-four, twenty-seven, and twenty-two) of topic 2 gained the agreement of the respondents. The above analysis indicates that the answers were consistent with what was stated in the topic questions at a rate of (87%). All standard deviations were very acceptable and within the range, which indicates a decline in data dispersion. These results indicate total agreement among the respondents in their opinions on what was stated in the second topic (the extent of external and internal audit integration in terms of procedures and reporting).

The table below represents the statistical standards extracted from the respondents' answers to the fifteen questionnaire questions for the third topic (the extent of external and internal audit integration in terms of procedures and reporting) according to the outputs of (SPSS).

Table (5): Weighted arithmetic mean, standard deviation, relative weight, the statistic (t), normal test values for the skewness and kurtosis factors, and the degree of agreement for the questionnaire of the third topic (the extent of external and internal audit integration impact on financial performance of banks.

Code	Variable	Mean	S.D	Relative weight	t	Skewness factors	Kurtosis factors	Agreement degree
Q ₃₁	Cooperation and integration between internal and external audit contribute to raising the professional level of the internal audit function, which reflects positively on the financial performance of the bank.	4.41	1.01	0.88	44.95	-1.673	1.640	Totally agree
Q ₃₂	Integration between internal and external audit helps diagnose and reduce the banking risks to which the bank may be exposed, which may constitute an obstacle to financial performance.	4.51	0.80	0.90	57.61	-1.898	1.305	Totally agree
Q ₃₃	The external auditor provides recommendations to improve the quality of internal audit, which reflects positively on the financial performance of banks	4.61	0.65	0.92	72.43	-1.876	1.776	Totally agree
Q ₃₄	The bank's senior management pays attention to the external and internal audit reports because it is convinced of their impact and	4.57	0.76	0.91	61.35	-1.189	1.424	Totally agree

	importance on bank's financial performance.							
Q ₃₅	Users of financial statements do not rely on external and internal audit reports to make various decisions	4.06	0.91	0.81	45.58	-1.562	1.863	Totally agree
Q ₃₆	Joint cooperation between external and internal audit in providing recommendations and technical advice contributes to increasing the effectiveness of the financial performance of banks.	4.62	0.65	0.92	72.77	-1.342	1.250	Totally agree
Q ₃₇	Applying auditing programs and analytical procedures by the external and internal auditors help to discover deviations, manipulations and fraud in documents, which is reflected positively in the financial performance of banks.	4.58	0.68	0.91	68.58	-1.920	1.030	Totally agree
Q ₃₈	The integration of external and internal audit helps in building sound administrative decisions	4.44	0.92	0.88	49.42	-1.659	1.022	Totally agree
Q ₃₉	The integration of external and internal audit does not help improve the outputs of the banking sector	3.92	1.17	0.78	34.34	-1.047	0.110	agree
Q ₄₀	The information obtained by the external and internal auditor is treated with strict confidentiality in order to maintain the bank's performance	4.38	0.84	0.87	53.38	-1.609	1.748	Totally agree
Q ₄₁	Integration between external and internal audit helps the bank prevent economic crises and improve bank's reputation.	4.50	0.81	0.90	56.66	-1.043	1.451	Totally agree
Q ₄₂	The integration of external and internal audit is one of the pillars of financial performance criteria.	4.50	0.95	0.90	48.43	-1.978	1.887	Totally agree
Q ₄₃	The conflict in the work and procedures of the external and the internal auditor does not reflect negatively on the financial performance of banks.	3.70	1.22	0.74	31.18	-.472	-1.066	Totally agree
Q ₄₄	The conflict of tasks and duties of external and external audit affects the credibility and suitability of accounting information, which is negatively reflected in the decisions of the beneficiaries.	4.27	0.92	0.85	47.77	-1.320	1.351	Totally agree
Q ₄₅	Integration of tasks and procedures between external and internal audit may reflect on the efficiency and effectiveness of the financial performance of banks.	4.42	0.85	0.88	53.58	-1.608	1.515	Totally agree
	Average	4.37	0.88	0.87	53.21			Totally agree

Source: developed by the researcher based on the outputs of the SPSS 27 .

The results of the analysis in Table (6) indicate that all of the respondents' answers were positive (> 3), which is the basic measure of the weighted arithmetic mean. The highest weighted arithmetic mean is for the question thirty-six, then comes the eleven questions namely thirty-three, thirty-seven, thirty-four, thirty-two, forty-one, forty-two, thirty-eight, forty-fifth, thirty-one, forty, forty-four, with which respondents were in total agreement .

The remaining second topic three questions namely thirty-fifth, thirty-ninth, and forty-third ,gained agreement among respondents .

The above analysis indicates that the answers were consistent with the questions of the topic by (87 %) . All standard deviations were very acceptable and within the range. This indicates a decrease in the dispersion of the data. These results indicate complete agreement of the respondents on what was mentioned in the third topic (the extent of external and internal audit integration in terms of the financial performance of banks).

2.2. Hypothesis Testing and Discussion of Results

Through a questionnaire consisting of three topics, we will analyze the correlation between the questionnaire results for the three topics and regression analysis to measure the impact of (the extent to which the effectiveness of external auditing depends on the effectiveness of internal auditing), and (the extent of external and internal auditing integration in terms of procedures and reporting), as independent variables, on the dependent variable (the extent of external and internal auditing integration impact on the financial performance of banks), according to the following hypotheses:

➤ Hypothesis 1: There is no statistically significant effect between the effectiveness of internal audit outputs and the effectiveness of external audit outputs and their impact on the financial performance of banks at a significance level of (0.05)

➤ Hypothesis 2: There is no statistically significant effect of the integration between internal and external auditing and their impact on the financial performance of banks at a significance level of (0.05).

the independent variables and the dependent variable are denoted by the following symbols for ease of use in SPSS:

Y: The extent of external and internal auditing integration impact on the financial performance of banks as a dependent variable

X₁:The extent to which the effectiveness of external auditing depends on the effectiveness of internal auditing as the first independent variable.

X₂:The extent external and internal auditing integration in terms of procedures and reporting as the second independent variable.

The hypotheses are tested by using the following multiple linear regression model:

$$\hat{Y} = \beta_0 + \beta_1 X_1 + \beta_2 X_2$$

Table (6): Correlation matrix

Correlations		X ₁	X ₂	Y
X ₁	Pearson Correlation	1	.863	.875**
	Sig. (2-tailed)		.001	.000
	N	105	105	105
X ₂	Pearson Correlation	.863	1	.891
	Sig. (2-tailed)	.001		.005
	N	105	105	105
Y	Pearson Correlation	.875**	.891	1
	Sig. (2-tailed)	.000	.003	
	N	105	105	105

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Prepared by the researcher based on the outputs of SPSS 27 .

From Table (17), which represents the correlation matrix between the three topics,, it is indicated that the correlation was high. The highest correlation was between the dependent variable and the second independent variable. Table (18) indicates that the model's correlation coefficient (0.896) was high and the coefficient of determination was (0.802) which means that approximately (80%) of the explanatory variables explain the dependent variable and the remaining percentage (20%) is due to external factors.

Table (7): Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.896 ^a	.802	.799	3.62305
a. Predictors: (Constant), X				

Source: developed by the researcher based on the outputs of SPSS 27.

The following analysis of variance table indicates that the model is significant, with an F-value of 107.631 and a significance level of 0.000, which is much less than 0.05. This means that the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that there is a statistically significant correlation between the independent variables and the dependent variable.

Table (8): ANOVA table

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1066.201	2	533.1005	107.631	.000 ^b
	Residual	510.245	103	4.953		
	Total	1576.646	105			
a. Dependent Variable: Y						
b. Predictors: (Constant), X ₁ , X ₂						

Source: developed by the researcher based on the outputs of SPSS 27.

Table (20) represents the regression equation for the following multiple model. The table shows that the regression coefficients were positive (0.997 & 0.246), which means that an increase of one unit in the independent variables leads to an increase of (0.246) and (0.997) in the dependent variable. This supports the previous analysis i.e. there is a statistically significant correlation between the independent variables and the dependent variable. It also indicates an impact of the independent variable (extent of external and internal auditing integration in terms of procedures and reporting) on the dependent variable (extent of external and internal auditing integration impact on the financial performance of banks) that is higher than that of the first independent variable (extent to which the effectiveness of external auditing depends on that of internal auditing) on the dependent variable. The table

also shows that the t-statistics values were significant for the regression coefficients according to the values (12.243 & 16.776).

$$\hat{Y} = 1.332 + 0.246 X_1 + 0.997 X_2$$

Table (9): Regression coefficients of the multiple model

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.332	0.12459		10.668	.001
	X ₁	.246	.021	.025	12.243	.001
	X ₂	.997	.059	.635	16.776	.000

a. Dependent Variable: Y

Source: developed by the researcher based on the outputs of SPSS 27.

PLS-SEM analysis

Due to its multiple features, this study used also Smart PLS to analyze the quantitative data of the survey questionnaire as follows.

1. Data investigation

Data investigation table 10:

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Q45	,355	106	,000	,724	106	,000
Q44	,334	106	,000	,799	106	,000
Q43	,303	106	,000	,849	106	,000
Q42	,315	106	,000	,807	106	,000
Q41	,290	106	,000	,861	106	,000
Q40	,353	106	,000	,769	106	,000
Q39	,306	106	,000	,849	106	,000
Q38	,347	106	,000	,806	106	,000
Q37	,385	106	,000	,719	106	,000
Q36	,307	106	,000	,850	106	,000
Q35	,354	106	,000	,757	106	,000
Q34	,310	106	,000	,786	106	,000
Q33	,279	106	,000	,872	106	,000
Q32	,294	106	,000	,842	106	,000
Q31	,342	106	,000	,819	106	,000
Q30	,365	106	,000	,752	106	,000
Q29	,311	106	,000	,843	106	,000
Q28	,361	106	,000	,770	106	,000
Q27	,372	106	,000	,775	106	,000
Q26	,291	106	,000	,861	106	,000
Q25	,293	106	,000	,863	106	,000
Q24	,216	106	,000	,900	106	,000
Q23	,339	106	,000	,821	106	,000
Q22	,246	106	,000	,887	106	,000
Q21	,385	106	,000	,719	106	,000
Q20	,262	106	,000	,870	106	,000

Q19	,268	106	,000	,873	106	,000
Q18	,287	106	,000	,865	106	,000
Q17	,296	106	,000	,856	106	,000
Q16	,258	106	,000	,741	106	,000
Q15	,327	106	,000	,680	106	,000
Q14	,355	106	,000	,701	106	,000
Q13	,350	106	,000	,723	106	,000
Q12	,288	106	,000	,766	106	,000
Q11	,327	106	,000	,802	106	,000
Q10	,308	106	,000	,735	106	,000
Q9	,322	106	,000	,672	106	,000
Q8	,288	106	,000	,725	106	,000
Q7	,326	106	,000	,808	106	,000
Q6	,305	106	,000	,753	106	,000
Q5	,350	106	,000	,670	106	,000
Q4	,327	106	,000	,748	106	,000
Q3	,308	106	,000	,849	106	,000
Q2	,335	106	,000	,800	106	,000
Q1	,321	106	,000	,751	106	,000

a. Lilliefors Significance Correction

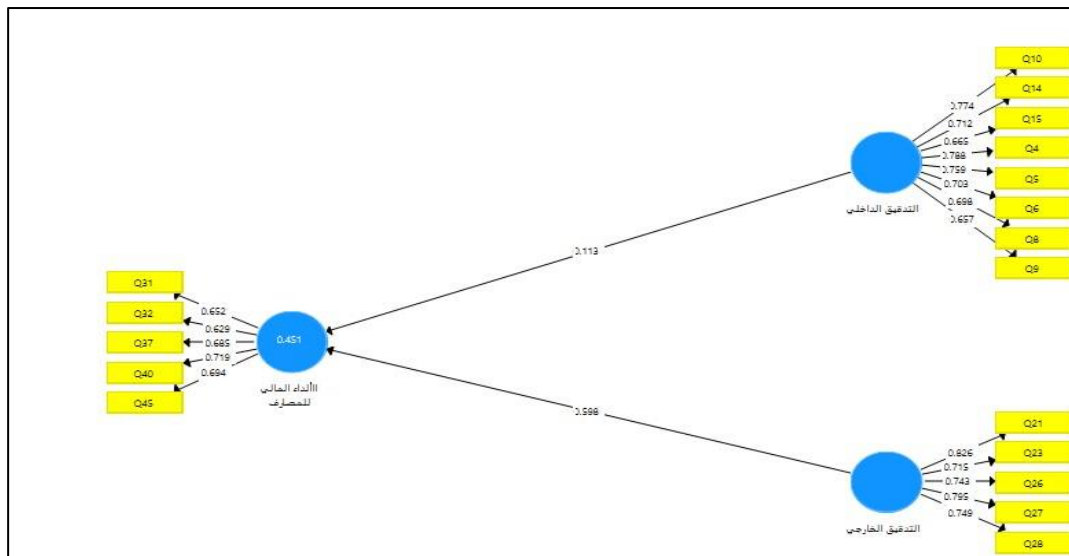


Figure 1: PLS-Path analysis

2. Reliability and validity test

Table 11: Reliability and validity

	Saturation	ρ (AVE(
Bank financial performance	0.652 0.629 0.685 0.719 0.694	0,703	0,458
External audit	0.826 0.715 0.743 0.795	0,837	0,588

	0.749		
Internal audit	0.774 0.712 0.665 0.788 0.759 0.703 0.698 0.657	0,876	0,520

3. HTMT test

Table 12: HTMT test

	Bank financial performance	External audit	Internal audit
Bank financial performance			
External audit	0,860≈0,85		
Internal audit	0,606	0,701	

4. Hypothesis Test

Table 13: Hypothesis Test

Path	hypothesis	Beta value	STDEV	test T (O/STDEV)	value P	VIF	result
internal audit-- Bank financial performance	H1	0,113	0,102	1,111	0,267	1,568	non-significant
external audit-- Bank financial performance	H2	0,598	0,093	6,452	0,000	1,568	significant

The above table shows a significant relationship between external audit and bank financial performance, while the relationship between internal audit and bank financial performance were non-significant.

3. Conclusions and Recommendations for the Practical Aspect

The summary of the questionnaire results' analysis was as follows:

1. The Cronbach Alpha test confirmed the consistency and reliability of the questionnaire, with a score of more than (0.7), and the items of the questionnaire are very good at achieving consistency and reliability for the three topics, and preference is for the third topic.
2. The respondents' answers were distributed normally according to the values of the coefficients of Skewness and Kurtosis and for the three topics.
3. Respondents agreed with the first topic, and totally agreed with the second and third topics", according to the total average of each topic. Thus, we can conclude that :

- The results of the statistical analysis indicate a consensus of the respondents' opinions with respect to the questions of the first topic (the extent to which the effectiveness of external audit depends on the effectiveness of internal audit).
- The results of the statistical analysis indicate a consensus of the respondents' opinions with respect to the questions of the second topic (the extent of external and internal audit integration in terms of procedures and reporting).
- The results of the statistical analysis indicate a consensus of the respondents' opinions with respect to the questions of the third topic (the impact of the integration of external and internal audit on the financial performance of banks).

4. The standard deviations were weak and this is considered in favor of the respondents' answers that the dispersion of the answers was weak for all topics.

5. The (t) test values were very high and significantly less than (0.001). This indicates a statistical significance at a level less than (0.05), for all topics.

6. The factor analysis of the values of (KMO) was high for all topics, as the minimum for that value is (0.50), and this means that the measurement is good and reaches the degree of significance of the measurement, and the best topic for this scale is the second one.

7. Regression analysis proved that the two independent variables (the extent to which the effectiveness of external audit depends on the effectiveness of internal audit), and (the extent of external and internal audit integration in terms of procedures and reporting), have statistical significance with their impact on the dependent variable (the impact of the integration of external and internal audit on the financial performance of banks). Thus, the results of the hypothesis test were as follows:

➤ **The first hypothesis:** there is a statistically significant effect between the effectiveness of internal audit outputs and the effectiveness of external audit outputs with the financial performance of the banks at the level of significance of (0.05)

➤ **The second sub-hypothesis:** there is a statistically significant effect on the integration between internal audit and external audit with the financial performance of the banks at the level of significance of (0.05).

The researcher recommends that the researchers increase the number of independent variables to measure their impact on the dependent variable, as well as increasing the questionnaire questions and expanding the study sample to include more specialists in the fields of auditing and banking.

References:

1. Abou Sarra, Abdessalam Abdallah, Integration of Internal Audit and External Audit, Master's Thesis, University of Algiers, Algeria, 2010.
2. Bourhala, Jamila and Grima, Belhou, The Role of External Auditing in Activating Corporate Governance in Algeria, Thesis presented as Part of the Master's Degree Requirements, Accounting and Auditing Management Sciences, Akli Mohand Oulhadj Bouira University, 2013, Algeria.

3. Sabbagh, Ahmed Abdel Mawla and Ashmawy, Kamel El-Sayed Ahmed and Ahmed, Adel Abdel Rahman, Fundamentals and Standards of Auditing, Open Education center of Cairo University, Cairo, 2008, Egypt.
4. Addad, Nariman, The Role of Management Audit in Activating Corporate Governance: A Field Study of Sidi Argues Mills Establishment, Oum El Bouaghi Branch, and a Sample of Auditors, Unpublished Master Thesis, Faculty of Economics, Commercial and Management Sciences, Oum El Bouaghi University, 2017, Algeria.
5. Faddaq, Amina, The Impact of Algerian Economic Institutions Governance Mechanisms on the Quality of External Auditing, Master's Thesis, Accounting and Auditing, Management Sciences, Higher School of Commerce, 2009, Algeria.
6. Anderson, U. (2003). Assurance and consulting services. Research Opportunities in Internal Auditing. Institute of Internal Auditors Research Foundation. Altamonte Springs, FL
7. Endaya, Khaled ,Hanefah, Mustafa, (2016) "Internal auditor characteristics , internal audit effectiveness, and moderating effect of senior management "Journal of Economic and Administrative Sciences ,Vol.32 No.2 ,2016.
8. Azim, M., Corporate governance mechanisms and their impact on company performance: A structural equation model analysis, Australian Journal of management, vol.73 no. 3,2012, pp 481-505
9. Archambeault, Deborah S., (2002):" The relation between corporate Governance Strength and Fraudulent Financial Reporting: Evidence from SEC Enforcement Cases", USA: Prentice-Hall International, Inc.
10. Anca, p "corporate governance: principles and regulations" Journal of electrical & electronics engineering, 5(1)2012.
11. IPPF-IIA,2013, P:4-8
12. Peter, Z., Jerry, M., & Danjuma, I. (2012). Assessment of the Adequacy of External Auditing in Disclosing Fraud in Nigerian Commercial Banks. Assessment, 3
13. Nasta, L. N., & Ladar, C. T. (2016). CONVERGENCES AND DIVERGENCES BETWEEN INTERNAL AND EXTERNAL AUDIT ON INTERNATIONAL CONTEXT. Agora International Journal of Administration Sciences, 1.
14. Cohen, J, et al., (2004). The Corporate Governance Mosaic and Financial Reporting Quality", Journal of Accounting Literature, Vol.43, Issue 1.
15. Guy, Dan M., Alderman, Wayne C., and Winters, Alan J. (1999), "Institute Of Internal Auditors (IIA)". Exposes New Internal.