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A Proposed Framework for an Internal Forensic Auditing to Manage the Risk of Fraud in Financial Statements to Support the Decision of the External Auditor to Rely on the Work of Internal Auditing: A Field Study in Egypt.

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Abstract:

This Research aims to develop a proposed framework for an internal forensic auditing to manage the risks of fraud in the financial statements to support the external auditor's decision to rely on the work of the internal auditor in Egyptian companies.

The proposed framework is derived from a number of steps: first, forensic auditing techniques that are used to detecting and prevent balance sheet fraud are analyzed, for example: Data Mining Technique, Computer Auditing, Laboratory Analysis of Physical and Electronic Evidence, Critical Point Auditing Technique, Continuous Monitoring, Data Analysis, Source and Use Analysis of Funds, Benford Law, Proactive audit, Brain storming, then analyze the role of internal auditing in the management of fraud risks in the financial statements, finally, a combination of forensic auditing techniques and the internal audit fraud risk management program is intended to increase the efficiency of the internal audit work and thus influence of the external auditor's decision to rely on internal auditing work to detect and prevent fraudulent financial statements.

Three hypotheses related to the opinions of external auditors, internal auditors and academics on the proposed framework were tested by statistical methods appropriate to the type of data, and finally, research hypotheses were accepted.

The overall results indicate that from the point of view of the internal auditors and the external auditors, the proposed framework for merging the methods of forensic audit with the internal audit risk management program increases the efficiency of the internal audit work and makes the external auditor more dependent on its work.

The future research should focus on challenges facing the integration of forensic auditing and internal audit methods in the Egyptian business environment, whether in companies or banks and developing solutions for them.

<u>Keywords</u>: Forensic Auditing, External Auditors, Internal Auditors' work, Internal Forensic Audit, The external auditor's decision to rely on internal auditing work.

1-Introduction:

Accounting research has long been concerned with corporate governance as the way to reduce corporate breakdowns, investment losses, and loss of equity. Internal audit has had its share of this interest, and coordination, cooperation, and integration of internal audit with other governance mechanisms, especially external auditors, underpin the credibility and transparency of financial reporting, especially external auditors, which supports the credibility and transparency of financial reports, The scope of reliance on the internal auditor's work may be broadened or narrowed, but it will not disappear. Areas where the external auditor can rely on the internal auditor's work include many tasks such as assessing the internal control system, determining the volume of evidence, and the relative importance of the various items.

Various professional organizations have issued several standards in attempts to assist external auditors in evaluating the internal audit work to decide how much they rely on it by identifying areas of concern to the external auditor such as the organizational location of the internal audit, the efficiency of internal audit and objectivity. Cooperation and coordination between external auditors and internal auditors will benefit both work as well as the management of the company. Researchers expect that anything that adds and improves the efficiency of the internal auditor's work will support the external auditor's decision to rely on the internal audit work, and thus the motivation for a field study that tests the possibility of increasing the scope of the external auditor's reliance on the internal audit work when integrating criminal audit techniques into the internal audit program for the management of fraud risks in the financial statements.

2-Research problem:

The process of detecting fraud and manipulation of financial statements remains one of the most controversial issues facing the auditing community. In the face of frequent financial crises and corporate malaise, the financial community is divided into two groups. The first considers it unfair to accuse external auditors of negligence, the role of the external auditor is limited to providing reasonable assurance and not absolute assurance about the lack of fundamental distortions in the financial lists, and the second group places external auditors in a position of negligence, if not complicity with the administration in the fraud. (Khalil, 2019)

It can be said that the difference in what the external auditor realizes about his responsibilities to disclose the fraud of financial statements and between what stakeholders expect from his professional work is one of the main reasons for the occurrence of the so-called "expectation gap" where stakeholders expect audit reports to reveal fraud, manipulation and errors, while the audit criteria accepted by auditors are met only with the responsibility of detecting substantial investigations as both the U.S. audit standard No. 99 (SAS No.99) and The International Audit Standard (IAS.240) guidelines and procedures through which the auditor can meet his responsibility to study and discover the fundamental distortion in the financial statements resulting from fraud, and report on it, in addition to that the auditors' view of the objective of the audit process is not to detect fraud and errors, but to express a professional opinion on the sincerity and fairness of financial statements.

Several studies have indicated that external auditors continue to fail to assess and detect management fraud cases, as studies conducted by the KPMG audit office have shown, In 2006, only 4% of management fraud cases studied in 1998 and 2002 were detected by independent auditors, rising to 12% in 2003 and then falling back to a very low level of only 1% in 2006. (Washley, 2010).

It became clear that there is a diversity ofroles played by the internal audit function to suit the changes in business environments due to the sudden financial collapses of large companies resulting from the passage of the Sarbanes & Oxley Act (2002), which put the detection and prevention of fraud at the centre of attention, and the Institute of Internal Auditors in 2010 and 2013 initiated the development of an international reference framework for the practice of internal auditing, by which the internal auditing position on the issue of fraud was determined. Clearly in The 1200 Standard of Competence and Professional Care and Standard 2120 entitled Risk Management, internal auditors must have sufficient knowledge to assess the risk of fraud and evaluate the way the company manages these risks despite the fact that they are not primarily responsible for detecting or preventing fraud, contrary to previous frameworks dating back to 2000 and 2004 that did not well clarify the internal audit responsibilities on this issue. (Al-Ayyeb, 2017).

The Audit Standards Bulletin (SAS, 128) has called on internal auditors to play their active role in the review process and the use of early warning signals (triangle fraud) to detect fraud such as external auditors due to their proximity to the work environment and its details. (Metwali, 2018) . In the 21st century, internal examiners are required to be willing to scrutinize almost anything, including operational processes, control systems, financial information systems, fraud, manipulation, environmental reports, performance reports and quality. (Ramamoorti, 2003)

previously, the researchers concluded that the internal auditor is required to raise and develop his efficiency not only to detect fraud but also to reduce the possibility of it occurring cooperating with many governance parties stakeholders in internal audit reports, including the management of the company that develops the strategy of risk management related to fraud.

Many studies have shown that forensic auditing is a central and effective mechanism in preventing and detecting fraud and financial and administrative corruption, and has a role in confronting the earning management, and it is not only in resolving financial disputes in courts, but it is also used by different stakeholders to protect their interests and not be lost or exploited (Ibrahim, Aaron 2016), (Khalil, 2019). The 2004 study by the American Institute of Chartered Accountants (AICPA) was one of the most important studies highlighting forensic auditing as a professional service that combines forensic skill, research, verification and investigation skills to access a guide used to resolve legal disputes, and is primarily concerned with detecting financial fraud and financial corruption in business organizations.

From the above, based on informing the internal auditor of the details of the work in the establishment, developing his tools in evaluating the risks of fraud and evaluating the control to prevent it or detect it and refining it with the tools of forensic auditing increases the efficiency of the internal auditor in managing the risks of fraud, and this may be expected to be in the interest of supporting the decision of the external auditor to rely on the work of the internal auditor in detecting fraud in the financial lists.

Based on the above, the Research problem can be formulated in a number of research questions:

- 1- What factors influence the extent to which external auditors rely on the work of internal auditors?
- 2- What is the role of internal audit and forensic auditing in the management of fraud risks in financial statements?
- 3- Will the internal forensic audit program for fraud risk management make the external auditor expand its reliance on internal audit work?

3-Research objective:

The main objective of the research is to develop a proposed framework for an internal forensic auditing to manage the risk of fraud in financial statements to support the decision of the external auditor in the based on the work of the internal auditor.

A number of sub-objectives emerge from this objective:

- 1. Analysis of the factors affecting the decision of external auditors to rely on the work of internal auditors.
- 2. Discuss the role of both internal auditing and forensic auditing in detecting and reducing fraud.
- 3. Present a proposed framework for integrating forensic auditing procedures into the internal audit plan to manage the risk of fraud in financial statements.

4- The importance of research:

<u>First: Scientific importance:</u> This research deals with one of the important and relatively recent topics that were and still are of interest to researchers where the study deals with forensic auditing and how it can be relied upon in strengthening the role of internal audit in managing the risk of fraud in financial statements and thus to benefit from this in increasing the extent of cooperation between internal auditors and external auditors, in addition to clarifying factors affecting the decision of the external auditor based on the work of the internal auditor.

Second: Practical importance: The role of internal audit evolved not so long ago from asset protection, compliance verification, enforcement of regulations, oversight, transparency of balance sheet information to risk assessment, management, value addition to facility operations, governance support, and finally, fraud was incorporated into risk management standards. Internal audit now had to assess the likelihood of fraud and evaluate the company's fraud risk management strategy.

The two researchers believe that strengthening the role of internal auditing with forensic auditing procedures is both a goal and a necessity.

5- Research methodology:

The research used the positive model in describing, interpreting and predicting the relationship between the role of internal audit in managing the risks of fraud through the use of forensic auditing tools and the decision of the external auditor to rely on the work of internal auditor, in the same the theoretical study depends on previous studies related to the problem of research in Arab and foreign books and periodicals, and then developed a proposed framework for internal forensic auditing, deriving assumptions related to the impact of this framework on the decision of the external auditor to rely on the work of internal auditors and test them, and discussing the results.

The methodology of the field study is the following steps:

- The applied study data are compiled through a survey form, including the following categories:
- Internal auditors in Egyptian companies restricted by the financial market to take their opinions on what forensic auditing techniques add to the efficiency of their work in managing the risk of fraud.
- External auditors of Egyptian companies restricted by the financial market to take their opinions on the factors affecting their decision to rely on the work of internal audit and whether the existence of an internal forensic auditing program to manage the risk of fraud represents an influential factor in the decision to approve when evaluating the performance of internal audit.
- A group of accounting and auditing professors at Egyptian universities, to take academic opinion on the benefit of the internal forensic auditing program in supporting the decision of the external auditor based on the work of the internal auditor in the field of managing the risk of fraud in financial statements.

Appropriate statistical methods are used to test data which were collected about the following search variables:

- The dependent variable is the external auditor's decision on the extent to which the work of the internal audit is relied upon.
- Independent Variable is a proposed internal forensic auditing to manage the risk of fraud in financial statements.

6- Research limits:

The research is limited to discussing what the forensic auditing tools add to the internal auditing plan in the management of fraud risks specifically and without addressing other areas to which the internal audit aims, and whether this desired addition affects the decision of the external auditor to rely on the work of internal auditors in relation to the issue of fraud detection only and other issues have not been addressed.

7- Literature Review and hypotheses development:-

Section 1: The decision of the external auditor to rely on the work of the internal auditors in preventing and detecting fraud on financial statements: presentation and analysis.

This section deals with a number of basic elements: the importance of the external auditor's decision to rely on the work of the internal auditor, the factors affecting the decision of the external auditor based on the work of the internal auditor, the areas and works in which the external auditor can rely on the work of internal auditor.

1- The importance of the decision of the external auditor based on the work of the internal auditor:

Internal and external auditing are two complementary mechanisms, the higher the quality of the relationship between the two, the greater the satisfaction of the shareholders and the greater the areas of cooperation between them. The function of the external auditor is related to the quality of the internal control system of the company, and the efficiency of the internal auditors in ensuring the application and improvement of this system. Therefore, many aspects of the internal audit work are useful in determining the nature, timing and extent of the external audit procedures. The reports of the internal auditors are

valuable sources of information for the external auditor, because they are more knowledgeable about the company. (Azzam, et al, 2020)

From this reasoning, international standards have emerged that help the external auditor evaluate the internal auditing process to determine the reliability of its work. Academic studies have encouraged this in support of corporate governance. Surveying the external auditors' perspective on the expected benefits of cooperating with the internal auditors, their opinion is as follows:

- The external auditor can better understand the working conditions of the client company through his or her experience and knowledge of the internal auditor.
- By collaborating and coordinating efforts with their internal auditors, relationships with the reviewing agent company can be improved.
- The external auditor can focus on the most important areas and continually adjust to these important areas.
- The external auditor has better training and experience than the coordination and management of an internal audit team.

 In addition, the internal auditors pointed out several benefits of their cooperation with the external auditors, including:
- Training of internal auditors through the performance of work using different and new methods, procedures and information.
- Internal auditors obtain a better understanding of the external audit standards and objectives and increase their professional expertise.
- Internal auditors should continuously develop and improve their work by evaluating the external auditor of the effectiveness and efficiency of the company's internal audit function.

(Ward and Robertson, 1980) (Metwali, 1993) (Metwali, 1999).

To determine the relationship between internal and external audits on the quality of corporate reports, one study in Jordan surveyed 312 external auditors. The results showed a significant impact of the objectivity of internal audit in improving the level of cooperation

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between internal and external auditors, as reflected in the increased quality of the financial report. The impact of the internal auditor's technical competence, professional care and, finally, the scope of the internal audit work on cooperation between the two audit teams, which in turn increases the quality of financial reports and the satisfaction of stakeholders. Based on these results, the study recommended that the external auditors rely on the internal audit work. (Azzam, et al, 2020)

It can be said to summarize the above that there are mutual benefits between the external and internal auditors, while the internal auditor benefits from the experience of the external auditor in various fields, it provides the external auditor with a broader and more comprehensive understanding of the internal control system of the company under review, which depends on his evaluation planning the auditor process. As for the perspective of the company under audit study, Felix, et al., 2001 considered the extent to which the internal auditor contributed to the work of the external auditor, a fundamental variable that affects the costs of the audit process, and therefore the fees of the external auditor and generates the financial motivation of the company's management to encourage the external auditor in his decision to rely on the work of the internal auditor.

In its study Ward and Robertson, 1980, both the external and internal auditors predicted that the reliance on internal audit work would increase in the future due to companies and audit clients pressuring external auditors for more efficient review while reducing or fixing audit fees. This leads external auditors to benefit from the internal audit work. The increasing demand for ongoing audit also makes external auditors highly dependent on internal auditors to make their audit cost effective. In addition, in the past, external auditors have difficulty training and qualifying accountants at the appropriate level, so that relying on internal auditing becomes necessary to achieve efficient audit. (Hammad, 1988).

It is therefore clear that previous predictions from the year 80 may have become a reality now that reliance on internal audit work is binding on external auditors by the Sarbanes & Oxley Act of 2002 after the massive financial manipulation that led to the sudden collaps e of Enron and WorldCom.

In 2007, the Public Company Accounting Oversight Board (PCAOB) recommended that the external auditor rely more on the work of others, including the internal auditor, to reduce the excess costs that companies incur in the audit process in accordance with the obligations of Section 404 of the Sarbanes& Oxley Act, which required the company's management to document, evaluate the effectiveness of internal auditing as part of the internal control system in published financial reports, in order to support confidence in the internal audit activity. On the other hand, the results of some studies showed that the external auditor's work had not been fully relied upon in the amount of work performed by the external auditor The external auditors' point of view was that the external auditor's reliance on their work reduces the amount of work planned in the external audit (Saidin, 2014) and some studies such as (Suwaidan and Qasim, 2010), the results confirmed that there is no relationship between the external auditor's reliance on the work of the internal auditor and the costs of the audit process and that the size of the company under audit is the most important influence in changing the cost of the audit.

Consequently, the importance of the External Auditor's decision to rely on the internal auditor's work under corporate governance appears to be understated. The discussion of the importance in terms of reducing the workload of the External Auditor and in terms of reducing the costs of the external audit process is even more important than that, in terms of supporting the governance within the company arising from the cooperation between two mechanisms that are the basis of oversight and protection of the rights of stakeholders.

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2- Factors affecting the decision of the external auditor to rely on the work of the internal auditor:

AICPA's SAS.9 Review Standards Bulletin, 1975, cited a set of factors - which were general and unspecified - that the external reviewer takes into account when evaluating the work of internal auditors, which is the competence of internal auditors in terms of their qualifications, experience and level of training, the objectivity of internal auditors and the extent of their independence and impartiality in the performance of their work in terms of their organizational position and the administrative level to which their reports are submitted and finally, the nature of the work of the internal auditors in terms of its suitability for the field of work and the conformity of the reports with the findings. In 1991, the AICPA Audit Standards Committee issued the US Audit Standards Bulletin SAS.65 to provide more specific and clear guidance to external auditors to assess objectivity, efficiency, scope and nature of work for internal auditors. This bulletin has required external auditors to take into account the follow-up:

- Appropriate field of internal audit work to achieve its objectives.
- Enough internal audit programs.
- Sufficient paperwork in documenting the work performed, including the audit evidence collected, sufficient supervision of the execution, and quality inspection of the work.
- Performed appropriate and safe results from the evidence collected.
- The internal audit reports are consistent with the findings. If the external auditor decides that the internal audit is inappropriate and that its impact on his work plan is not sufficient, he does not need to study the efficiency and objectivity of the internal auditors, but if the auditor decides that the work of internal auditors can be relied upon, in this case he must evaluate its competence and objectivity (Colbert,1992), the requirements of the Egyptian Audit Standard (ISA) No. 610 of 2008 conform to the requirements of the International Standard (IAS)

No. 610 on how to study the work of internal audit and benefit from it in the external audit process. Article 2 requires external auditors to study internal audit activities and determine their impact on external audits, and in order to obtain an understanding of the internal audit function and complete the initial evaluation thereof, the factors that influence are:

- Location in the organizational structure:, The ideal situation is that internal auditor is linked to the highest administrative level, and free from any operational responsibility and it is necessary for internal auditors to have full access to external auditors.
- Job Scope:
 - The external auditor also needs to examine the extent to which manag ement relies on internal audit recommendations
- Technical competence: related to technical training and appropriate vocational qualification to work as internal auditors. For example, external auditors may examine the recruitment and training policies of internal audit staff, their expertise and professional qualifications.
- Necessary professional care: completion of the internal auditor in accordance with a specific and clear plan and supervised implementation, taking into account the existence of evidence, a program of audit and appropriate working papers.

Schneider's study,1985, which was one of the first to discuss the factors on which the external auditor's decision to rely on the work of internal auditor, also concluded with results similar to what we referred to, but was characterized by the determination of the relative importance of the factors affecting it, giving the factors of the competence of the internal auditors and the performance of them to his work greater relative importance than the factor of objectivity of the internal auditors (Lotfi, 1996).

While one study (Haron, et al,2004) tried to identify any of the factors mentioned in the international standard AI610 used by external

auditors to evaluate the work of internal auditors, the study showed that technical competence and the scope of the position are the two most important factors that the external auditor relies on in deciding to rely on the work of the internal auditor. As the accreditation decision is a complex professional one, it is influenced by many external (environmental) factors and internal factors (the quality of the auditor's work and previous experience with the impediments of cooperation with the internal auditor).

The study (Suwaidan and Qasim,2010) tested the perception of Jordanian external auditors of the most influential factors in the decision to rely on the work of internal auditor, the results were that objectivity is the most important factor followed by technical competence and finally the performance of work performance.

The study (Desai, et al,2010), used an analytical model to reflect the external auditor view of the interaction between three key factors: efficiency, work performance and objectivity when evaluating the internal audit workforce so that the evaluation remains high even if evidence appears to reflect the weakness of one of the previous factors alone, and the external auditor will give a negative evaluation of the internal audit if the audit committee is weak and does not perform its role, even if there is evidence of the quality of the three factors of efficiency, scope and objectivity. These results need to be further verified as they are specific to the model used.

The study (Mihret and Admassu,2011) concluded that the reliance of external auditors on the work of internal auditors is not linked to the competitiveness of external auditors and that the performance of internal audit work is the most important factor that determines the extent to which external auditors rely on internal audit work and that companies can enhance the effectiveness of corporate governance by strengthening the role of internal audit and increasing the area of

coordination between internal and external auditors, including by surveying opinions119 external auditors in Ethiopia.

The study (Brody, 2012) was subject to the quality of the work of the internal auditor, which may have a substantial impact on the planning of the audit tests and the decision to rely on the work of the internal auditor. The decision is also influenced by the extent to which the external auditor realized the competence and objectivity of the internal auditors that were formed through their interaction.

The study (Alderd et al., 2012) surveyed the factors that influence the quality of the internal audit work that the external auditor pays attention to when relying on the internal audit work. The study found that we still know very little about how and to what extent the external auditor evaluates the internal audit work and that there are many complex factors that influence his decision to accredit, such as inherent risks and the source of the internal audit, external or shared.

The study (Al-Ibari, 2013) revealed a positive impact of the internal auditor's objective determinants on the external auditor's decision to rely on the internal audit work. This approval also has the effect of reducing the costs of external auditing by applying to 58 external auditors registered with the Egyptian Financial Supervisory Authority. In another study conducted on a sample of 60 external auditors working in the Gaza Strip, with the aim of exploring the relationship between the internal and external auditor from the perspective of the external auditor in the Palestinian business environment, in order to determine the factors affecting the decision to accredit the external auditor to the work of the internal auditor. The study found that the availability of standards of independence, efficiency, work performance and the field of work of the internal auditor positively influenced the decision to accredit, with different relative importance of the impact of these standards. (Moshtahi, 2013)

The study (Abdul Khaliq, 2015) analyzed the impact of internal auditor compliance with internal auditing standards and international standard 610 requirements on external auditor's reliance on internal auditor work. The field study had a significant impact on internal auditors' compliance with professional standards on the external auditors' decision to rely on their work when planning the audit and on the importance of external auditors' application of IAS 610 requirements when evaluating the internal auditors' work.

To determine the extent to which the external auditor relies on the internal audit work in the business environment in Nigeria, the study (Dang and Lawrence, 2016) concluded that the local auditing standard 26 and the international auditing standard 610 are the basis for determining the factors that help the external auditor to evaluate the internal audit work for reliance on, namely objectivity, efficiency, professional work and due diligence.

While the study (Eid, 2017) presented 14 indicators for each of the three dimensions (objectivity, efficiency and scope of work), and a survey of 33 external auditors in the Arab Republic of Egypt confirmed the importance of all indicators for the decision of the external auditors to rely on the work of the internal auditor.

The study (Metwally, 2018) concluded that the factors that influence the external auditor's reliance on internal audit work can be arranged according to the level of importance of each factor as follows: The independence of the internal auditor, followed by the objectivity of the internal auditor, followed by the regulations and rules governing his work, and then the professional competence of the internal auditor, respectively.

In a study conducted on the factors affecting the accreditation decision as defined by International Standard 610 (objectivity, independence, scope of work, technical competence and professional care) in Iraq, the results showed that the scope of the internal audit work

and the professional care of the internal auditor are the two biggest factors affecting the quality of the internal audit and the latter affecting the nature, timing and procedures of the external audit (Al-Kanani, 2020).

Finally, Shakeel et al. 2020 discussed the extent to which external aud itors in Pakistan understand the role of internal audit, and the character istics that achieve efficiency in its work. The study concluded that the independence of the internal audit function, and then the appropriate q ualifications and technical competence of internal auditors, are charact eristics that must be available to play their role in monitoring control a ssessment, risk management, and fraud risk management.

From the above, the researchers can draw the following points:

- The factors that influence the evaluation of the external auditor of the internal audit work are numerous and many, making the evaluation process complicated; differ according to environmental fact ors, as well as depending on the source of the internal audit, the internal audit relationship of the audit committee and the inherent risks.
 - Many studies reviewed have found that the factors influencing the external auditor's judgment on the quality of internal auditing are expressed with some precision by international standards and are a helpful framework for the external auditor to avoid, to some extent, personal discretion in this matter.
 - Academic studies have differed in the position of factors influencing

the evaluation of the external auditor's work in a precise order of relative importance.

3- Areas and work in which the external auditors can depend on the work of internal audit:

If the research take into account that the areas of concentration of internal audit from the examination and evaluation of the internal control system, the protection of the company's assets from being subject to theft and manipulation, the verification of the integrity of the information produced by the accounting system, the assessment and management of risks of fraud and manipulation, and the monitoring and improvement of the operational processes to add value to the company are also areas of interest to the external auditor and that the methods of the external and internal auditors are very similar in achieving their goals, the ideal situation to avoid unnecessary duplication of work is the reliance of the external auditor on the work of the internal auditor after its have evaluated it, where the external auditor can use the work of the internal audit function to obtain evidence of incorrect data on the balances, direct assistance and inspection of the internal auditors.(ISA 610). It is important that the external reviewer discuss with the internal reviewers their plan of action, the nature and timing of their tests, and how this is documented, how the sample was selected because this affects the work plan of the external auditors, and that he coordinate with them the reports and working papers needed to help him accomplish his task. (Metawali, 1993)

One of the areas in which the external auditor can rely on the work of internal audit is to examine and evaluate the internal control system and to develop proposals to address the gaps in it, as the internal control system forms the first wall of mistakes and fraud, and it can also rely on internal auditing in performing some of the essential review procedures under the supervision and control of the external auditor. (Lutfi, 1996), (Al-Saqqa, 1997)

An external auditor's reliance on the internal auditor's work varies as an assistant on the audit team, having an internal auditor as an assistant on

the external auditor's team entails that his or her work is the external auditor's responsibility. The time and cost associated with his or her performance are part of the time and cost of the external audit. If the external auditor relies on the results of the internal audit work without the internal auditor as his or her assistant, this affects the scope of the audit. (Al- Ibyari, 2013)

Schneider's study (2009) indicated that the external auditors' reliance on internal auditing is primarily due to the fact that internal auditing is part of the internal control system of the company as a whole, and therefore they rely on the work already accomplished in testing internal controls, testing accounts or transactions, or using internal auditors to assist them directly in the audit procedures. (Metwalli, 2018)

Internal audit activities can be related to the risk assessment adopted by the external auditor and thereby modify the nature, timing, and extent of the additional audit procedures (Eid, 2017). The more the internal audit work is relied on, the lower the scope of the audit for the external audit. And vice versa (Ibrahim, 2013)

From the above, the researchers conclude that: the external auditor either depends on the work of internal auditor directly so that the internal auditors act as his assistants or depends on the result of internal auditor work in areas such as internal control evaluation, risk assessment, detection of symptoms of fraud and some types of audit of certain items. By the internal auditor on which you relied to reach these results, and to compare the results reached with the predetermined objectives of the internal audit work program, it should also assess the compliance of internal auditors with internal audit standards, and holding regular meetings with internal auditors seems useful to see any important matters contained in their reports and affect its work.

Section 2: The role of internal forensic auditing in managing the risk of fraud in financial statements:

Part 1: The role of internal audit in preventing and detecting fraud in financial statements.

Discussing the role of internal auditing in detecting or preventing fraud in financial lists requires, at the beginning, giving a preliminary indication of what cheating is. Cheating is one of the biggest risks faced by enterprises of different size, activity, location, and not to detect or confront it leads to distortion of financial lists and loss of rights, and therefore a loss of confidence in the auditing profession.

Interest in it has increased with the increasing global financial crises. In a 2007 report, the Public Company Accounting Oversight Board (PCAOB) considered the responsibility of the auditor in detecting fraud to be one of the council's top priorities (PCAOB, 2007). In a 2005 US study, the cost of cheating the management of stakeholders in the financial market was about \$500 billion (Chile, 2010). In 2008, the American Association of Fraud Examiners (ACV) submitted a report on the loss of US\$29,94 billion (US 011) and ACFE, 2014 also submitted fraud reports. Ordinary organizations estimate that they lose about 5% of their revenues each year due to fraud. In a study by the Office (Pricewaterhouse, 2014), it was found that 55% of French companies were subject to fraud in 2013 (Metwalli, 2018).

The Institute of Internal Auditors defined fraud as any illegal or illegal acts or acts characterized by deception or concealment, not based on the use of the threat of violence or physical force committed by different parties or institutions with the aim of accessing money, property or services, avoiding payment, avoiding the loss of services or for obtaining personal or commercial benefits. (IIA, 2013)

Define American SAS: 99 In 2002, fraud was as follows: "Intentional act leading to material distortions in financial reports (AICPA, SAS: 99), is defined by the American Association of Fraud Examiners (ACFE) as

the deception or misinformation practiced by an individual or management to gain benefits for that individual, department, or any other party.

In academic research, cheating has been used as synonymous with manipulation, fraud and corruption. The minimum cheating requirement is that employees intentionally not produce, that employees engage in petty theft, and the maximum limit is to distort and falsify financial reports to make them misleading. The motives for the cheating lie in the administration either to cover embezzlement or lack of cash for personal gain, or the presence of pressures from inside and outside the establishment that lead the administration to beautify the image of the establishment by maximizing the profit or the tendency of the administration to reduce the tax burden. (Abd Al-Hassani, 2016)

Audit Standard 53 differentiates between errors and manipulation, with "referring the unintentional error misrepresentation or exclusion of certain amounts or disclosures in financial statements", "which are often committed as a result of the ignorance of common accounting principles by accounting employees, as well as Egyptian Auditing Standard 240, "The Liability of Observers for Fraud and Fraud in the Audit of Financial Statements", and International Auditing Standard 240, 2003, making a difference between fraud and error, where the separating element between fraud and error is: Whether the underlying act that caused the distortion of the financial statements was intentional or not, where the term "fraud" refers to the intentional act of one or more individuals within the administration, those responsible for governance, or employees or others, which relates to the use of deception to obtain an illegal or undue advantage, the error is the unintended deviation from the financial statements resulting from an error in data collection or analysis, incorrect accounting estimate or error in the application of accounting principles.

But why does fraud happen? Sociologist Cressey, 1973, photographed three factors called the Cheating Triangle: one side explained opportunities for cheating; for example, the lack of oversight over the actions of individuals that facilitates access to the assets to be misappropriated; the other side explained the existence of motives stemming from material need, a desire to take risks, or a habit of cheating; and most of them stemmed from psychological motives. The third side explained to the cheater's justifications for doing ordinary work.

The Egyptian audit standard 240 also pointed out the same logic as the fraud triangle, the link between frauds motivated or pressure leading to committing fraud, with the opportunity to do so and to add logic to the procedure. Fraudulent financial reports can be prepared because of pressures on management from outside or inside the facility to achieve the expected profit goal (which may be unrealistic), especially when the consequences of the management's failure to meet the financial goals are substantial. Even honest individuals can cheat and cheat in an environment that puts enough pressure on them to influence them.

The researchers concluded that fraud is an act intended to achieve the self-interest of the person concerned, which is detrimental to the users of the financial statements, as it is the reason for the wrong information upon which the wrong decisions are based. The fraud effect does not stop at the loss of trust in the establishment whose financial statements were misleading, and the loss of confidence in the supervisors of the auditing process of this establishment due to their negligence in detecting fraud. Rather, it extends to inflicting a heavy cost on the economy as a whole due to the misallocation of economic resources. In the 2016 report of the American Association of Certified Fraud

Examiners (ACFE), it was found that the fraud cases detected by the internal auditors represented 16.5%, as opposed to 3.8% discovered by

the external auditors from the cases discovered in the same year. (Moussa, 2017).

The internal audit function is one of the most important elements of corporate governance and can, on its own, improve corporate governance. The Board of Directors, Management, External Auditor and the Audit Committee are stakeholders in the internal audit and benefit from its work. (Shakeel et al., 2020) According to a four-form model of good corporate governance outlined by the Institute of Internal Auditors (IIA, 2005), internal audit is one of the four pillars for effective governance with the External Audit, Management and Audit Committee. Quality internal audit can provide greater transparency in the organization through oversight, increased the probability to detect bias in governance provisions. 2008), and considering the audit risk model, high quality internal audit can reduce the control risk and its work can be relied upon to reduce detection risk (PCAOB 2007a)

The Institute of Internal Auditors (IIA) has contributed to the evolution of the concept and role of internal audit since its inception in the 1940s as a tool for internal control and the preservation of assets from theft and manipulation to its new concept as an objective and independent advisory activity, providing assurance and recommendations to improve the company's operations, adding value and helping it achieve its objectives, and improving risk management processes (IIA, 2004, 2009). This is reflected in the benefit of the company's stakeholders as well as in the quality of external auditing through increased reliance on the internal audit work. The evolution of the role and responsibilities of internal auditors through their qualification, training, increased use of modern tools and testing as corporate activities increase.

(Amara, 2012).

The Institute of Internal Auditors' standard 2210 (IIA, 2012) states that an internal auditor must take into account the possibility of major errors,

fraud or other issues that must be encountered in establishing the objectives of the audit function. Standard A2.1210 also directed internal auditors to the broad knowledge that enables them to assess fraud risks and the methods used by the facility to reduce those risks, but not expected to have the same responsibility as management to prevent, detect and investigate fraud. Criterion A1.1220 mentioned the importance for internal auditors to exercise the necessary professional care in their work, taking into account the following aspects: The extent of work required to achieve mission objectives, the degree of complexity or importance of the matters to which the confirmation procedures are applied, the adequacy and effectiveness of governance, risk management and control processes, the potential for serious errors, fraud or manipulation, the cost of the confirmation work as compared to potential benefits, and the internal auditor can benefit from the services of parties and parties outside the enterprise that can deal with cases of fraud. Finally, the issue of fraud was included in the standards for risk management, as A2.2120 stated that the internal audit activity must assess the likelihood of fraud and how to manage the risks of fraud. (Al-Ayeb, 2017) Some even considered that competition between internal auditors might occur because of the evolving role of internal audit and its increasing scope, increasing focus on the effectiveness of its function and the efficiency of the management of operational activities, and the risk management and governance. (Cecere, 2008)

A study (Hadbi and Zidan Muhammad, 2018) found that internal auditing in the light of the International Standards of Professional Practice issued by the Institute of Internal Auditors (IIA) effectively contributes to the detection and prevention of fraud, as it provides objective assurance on the evaluation of internal control systems and risk management, and the assessment of the likelihood of fraud and how

to manage its risks, which reflects positively on the corporate governance system.

Several studies also examined the relationship between the efficiency of the internal audit function and the quality of accounting information. The results revealed that there is a moral relationship between the internal audit function and the quality of the accounting information published, especially in the field of detection and prevention of fraud. They even recommended the publication of the internal audit report with financial reports such as the study (Laković et al., 2016) on companies in Montenegro and the study (Ibidunni et al., 2017) on industrial companies in Nigeria.

Based on professional standards analysis and previous academic studies, internal auditing, as it defines all operations in the company, risks to the company, internal control and the people exercising this oversight, has a central role to play in detecting and preventing fraud. This role supports internal auditors' tests to improve the detection and likelihood of fraud. Therefore, an integrated relationship between forensic and internal audit techniques would be beneficial to corporate governance generally, and to enhance the external auditor's reliance on the internal auditor's work, particularly with regard to the fraud issue on the financial statements.

Part 2: The role of forensic auditing in preventing and detecting fraud in financial statements:

1- The concept and importance of forensic auditing (Forensic Auditing : - Conceptual framework

In the past, forensic auditing was seen as a branch of accounting that was used only in the event of serious financial corruption, but in recent years, forensic auditing has become a pre-emptive activity seeking to prevent financial crimes rather than investigating a crime or fraud that has already been committed. (Bansal, Atul, 2017) forensic auditing is a branch of accounting that is interested in detecting and preventing

fraud and profit management practices to help its continuity and stability of companies, especially in light of technological development, inflated size of companies and multiple stakeholders. (Ibrahim and Aaron, 2016) forensic auditors share some objectives with external auditors, including forensic authorities' investigations to identify fraud, which is different from the investigations of external authorities, which consider the detection of fraud to be a secondary objective and is responsible only for fundamental distortions in light of the professional standards and guidelines for doing so. (Gray, 2008)

Forensic accounting has been known for many definitions, including in Bolgna and Linquist, 1995. It's a way to investigate financial and business transactions with a view to getting to the truth or giving an expert opinion on potential fraud and in defining the American Institute of Certified Public Accounting AICPA, 2010) the forensic auditing has emerged as applying specialized knowledge, and investigative skills possessed by chartered accountant CPA. In collecting, analyzing, evaluating and interpreting evidence and communicating the findings of the Court, the Board of Directors, or other judicial administrative bodies, the study (Khalil, 2019) defined forensic auditing as a branch of audit science that relies on integrated knowledge of both accounting, auditing and legal matters along with a set of maha ra Such as creativity, communication, research, investigation, investigation and other diverse skills that help the forensic authorities obtain appropriate evidence and express independent professional opinion through a report, in order to provide a lot of services such as dispute adjudication, litigation support, reduction of fraud, fraud and corruption, and the credibility of accounting information, the Researchers agree with this definition of forensic auditing.

The Digabriali, James, 2008 study in the United States provided a survey of accounting practitioners, academics, and receivers of forensic accounting services to show how different their views were on the skills

required in a forensic Accountant. The results of the survey indicated that practitioners and academics agreed that critical thinking, problem solving, investigative flexibility, analytical competence, and legal knowledge were important skills for Accountants. Users of forensic accounting services rated the critical analysis less important than academics, yet both agreed with practitioners that the critical analysis was important. Study groups did not disagree on the importance of oral and written communication skills.

The researchers believe that the cases of fraud and corruption in the business environment in different countries, and the tumbling and collapse of major companies, have increased the number of financial cases in the courts, and led to the increasing demand for the services of the accountant, which combines accounting and legal knowledge, in addition to the expansion of the use of electronic commerce, which is a fertile ground for manipulation, embezzlement and theft, and is another factor supporting the services of the accountant to prevent and detect fraud in this field. Despite the many definitions of forensic auditing, they all emphasize its importance in terms of its forensic role and advisory role in identifying areas and risks of fraud. The different skills of a forensic auditing from those of a regular auditor can also support the role of external and internal audit in detecting fraud.

2- The role of forensic auditing in detecting and preventing fraud in financial statements:

The failure and collapse of companies is due to many reasons, including, of course, fraud that leads to the distortion of financial statement information, and where forensic auditing is an independent service, there will be no fear of conflict of interest and can be used through the company's internal activities as a regulatory system for the company's day-to-day activities to reduce the likelihood of fraud. (Koh et al, 2009)

There have been several studies discussing the concept of forensic auditing and its role in solving corporate problems such as the study (Owojori, 2009), which concluded that forensic auditing is a fundamental element and complements the efforts of other mechanisms in reducing fraudle and fraud, as well as the study (Ibrahim and Aaron Mustafa, 2016) the role of forensic auditing in the fight against financial and administrative corruption in the form of profit management practices and the study ended in a number of results:

- forensic accounting can use the mechanism of collecting and analyzing financial evidence from executive departments in disclosing profit management practices.
- forensic accounting helps the company improve and support its internal control system.
- forensic auditing, with its fraud detection methods, can adjust financial performance and ethical behavior at executive levels.
- forensic accounting plays an important and real role in detecting any irregularities in accounting standards and even measuring losses resulting from such violations.

The Okoye and Gbegi study , 2013, used 370 survey forms on the role and importance of forensic auditing in detecting fraud in the financial statements of five ministries in The State of Koji, Nigeria, and concluded that there is a fundamental difference between forensic auditors and external auditors, so the use of forensic auditors can better help detect and prevent cases of fraud in public sector institutions, and that the presence of a department of forensic auditors within these Organizations reduce the likelihood of fraud and fraudle. The results of the previous study were consistent with the study (Oyerogba, 2021), which showed the importance of using forensic auditing techniques in detecting fraud and fraudle in public sector companies in Nigeria as well, and several studies such as: - (Madumere and Onumah, 2013) (Eiya, et al, 2013) on the Nigerian economy and its results ended

with the importance of giving employees, whether in the public or private sector skills and training, which qualifies them in a similar way to forensic auditors to reduce and detect fraud and manipulation, and consider the presence of forensic authorities in graft bodies as essential. In a study (Tabichat and Khalil Ibrahim, 2017) on Jordanian joint stock companies, they clearly provided the role of forensic accounting in detecting financial fraud in industrial companies.

In a study (Emmanuel and Olajide, 2018), about 350 professional accountants at the Institute of Chartered Accountants of Nigeria and the Association of National Accountants were surveyed on the importance of forensic accounting techniques in achieving the integrity of financial statements and their fraud, the study concluded the importance of integrating judicial accounting techniques into the financial reporting process, which enhances internal control activities and reveals any distortion in financial statement information.

While the study (Zain, Ali and others, 2018) mainly aimed to study, evaluate and develop the role of forensic auditing in narrowing the expectation gap in the Egyptian auditing environment and then restore the confidence of beneficiaries of financial statements in the audit profession, the study provided a case study for a company on an existing dispute over its tax position using forensic auditing and the study concluded that the use of forensic auditing services will contribute to narrowing the gap of expectations in the Egyptian audit environment, and to reduce the The number of cases brought against external audit offices, as well as there is an complementary relationship between the use of forensic auditing as a new entry and some other entries used to narrow the expectation gap in the Egyptian audit environment, as discussed the study (Al-Ajab and Madin Melhem, 2018) the use of forensic accounting in detecting fraudle and financial fraud and strengthening the internal control system as well as strengthening disclosure and confidence in financial statements.

Bansal 2019 provides evidence of the importance of the role of forensic auditing in the various mechanisms that are most employed in the field of detecting and preventing corporate fraud, represented by internal control, internal audit and external review, and thus limiting its negative effects on the Bahraini economy.

The study (Khalil, 2019) formulated an intellectual framework to develop the role of forensic auditing to prevent or reduce fraud and financial corruption in the Egyptian environment, and then to determine its reflection on the credibility of accounting information by testing a number of assumptions:

- 1- There is relationship between the availability of audit practice requirements and the development of its role to prevent or reduce fraud, fraudulent and financial corruption in business organizations.
- 2- There is relationship between the attainment of the required attributes in the forensic auditing and the development of the role of forensic auditing to prevent or reduce fraud, fraudlent and financial corruption in business organizations.
- 3- The types of fraud and financial corruption that the forensic auditing is facing are not limited to manipulating the financial statements and reports of business organizations.
- 4- Developing the role of forensic auditing to prevent or reduce fraud, fraudlent and financial corruption helps to achieve the credibility of accounting information. The test validated the four previous assumptions.

Madzivire, et al,2020 also analysed the role of forensic auditing as a tool to detect and prevent fraud using Chartered Accounting in Zimbabwe as a case study and the research revealed that there is a positive relationship between training and the level of education of the company's employees and the ability to detect and prevent fraud.

Finally, the study (Nandini and Raju, 2021) addressed the role of forensic auditors in combating fraud and fraudulent and the impact on

corporate governance and the study concluded to confirm the impact on corporate governance where forensic auditors contributed to improving the accountability of management, enhancing the independence of external auditors, and helping members of the audit committee to carry out their oversight function by examining the assurances of the internal audit report.

From the above, it is clear that forensic auditing techniques derive their importance from the multiple areas of services they perform, of which detection and prevention of fraud are an important part, leading to increased confidence in financial statements and helping in corporate governance. Many academic studies recommended that the company's external audit facility provide forensic auditing service or that the company obtains it from specialists and experts from other audit facilities, and recommended teaching forensic auditing tools and skills as a curriculum for students specializing in accounting and auditing at universities to emphasize their importance in their future profession.

Section 3: Part 1: The <u>proposed framework for an internal audit</u> <u>program based on forensic auditing techniques and methods to</u> manage the risk of fraud in financial statements:

In order for the study to clarify the proposed framework for integrating forensic auditing tools and techniques into the internal audit program to strengthen its role in managing fraud risks in the financial statements, which reflects positively on the external auditor's decision to expand its reliance on the internal audit work in this particular case, the study highlights a number of important points that were derived from the previous sections:

• The external auditor can only play an effective role in preventing financial statements fraud by complementing the other internal audit mechanisms, namely the Internal Audit and Audit Committee. Where the planning of the external auditor in terms of broadening or narrowing the scope of its detailed tests is related to the extent of its reliance on the internal audit work, its judgment on internal audit and its efficiency in reducing and detecting fraud is a governing and fundamental factor in its decision to rely on its work, then it is important to think about strengthening the role of internal audit as part of the internal control system whose external auditor planning depends on its strength or weakness. Moreover, the evaluation of the internal audit work is an integral part of the evaluation of the system of internal control as a whole.

- One of the elements through which the efficiency of the internal audit work can be judged is the evaluation of its work program in terms of fraud risk management, including the identification of the potential risk of fraud, the evaluation of the internal control system and its procedures that reduce the occurrence of fraud, the use of analytical and detailed audit procedures and, finally, the reports issued by the internal audit on the fact that the financial statements are free from distortion.
- It is well known that the use of forensic auditing services was in conjunction with the great collapse of companies whose financial statements and audit reports showed the strength of their financial position, which made their bankruptcy shocking and surprising for the business community. Hence the increasing role of forensic auditing services to reach the perpetrators of corruption, fraud and fraudulent with legal financial evidence, which made it a first class fraud and fraud detection audit, especially with its proactive approach to preventing corruption in all its forms.

To build the proposed framework, the following steps are followed: First: Analysis of forensic auditing techniques or methods used to detect and prevent fraud in financial statements, for example but not limited to:

- **1- Data Mining Technique:** This technique contains the extraction of information about anomalies and previously unknown relationships from a large amount of data search that could have remained hidden by the large amount of data. The technique involves three activities:
- Exploration is the disclosure of correlation relationships between data such as the occurrence of one variable based on the occurrence of the other, the disclosure of trends or variations without presupposing the relationship pattern.
- Forecast models rely on detected patterns to define and estimate the new style of values.
- Parsing the variation. The variation is analyzed by specifying the standard and then indicating which elements differ from this standard.
 - **2- Auditing using the computer:** in which the computer is used to perform some audit tasks more quickly, with greater data size and lower cost, and some applications can conduct a detailed audit of account balances.
 - 3- Laboratory Analysis of Physical and Electronic Evidence: Laboratory analysis of physical evidence refers to the use of computer applications in the analysis of financial information, analysis of possible computer misuse such as forged signatures, mock or modified documents, retrieval of deleted files and documents to access evidence, analysis of e-mail to officials.
 - **4- Critical Point Auditing Technique:** Used for the purpose of accessing fraud marks from regular financial operations, which are concealed, where books, records and financial lists are examined and analyzed to detect fundamental deviations.

- 5- Continuous monitoring: Continuous monitoring is concentrated in the audit sections by branches where the revenues are monitored from their sources and expenses and theface of expenditure and the way they are recorded in the books in accordance with the standard accounting standards and through continuous monitoring can detect the mistakes and manipulation and illegaloperations.
- **6- Data analysis**: An important technique that includes ratio analysis, trend analysis or time series, horizontal and vertical analysis, where it analyzes 100% of data sets instead of using statistical samples, helps identify potential weaknesses and can help assess the effectiveness of current anti-fraud and risk management programs and practices.
- 7- Analysis of the sources and uses of Funds: This technique is concerned with transactions with large amounts and relationships between the parties to the deal, which include obtaining documents forthe monitoring of accounts such as fixed assets and debtors to verify their validity as well as financial statement analyses to determine differences in their terms and reasons for these differences.
- **8. Benford Law:** It is an important law in the mathematical sciences and is used in the review process to identify anomalies in accounting data when they show a discrepancy with Benford's distribution. The application of this law requires a large sample to show the rank of the number and that all numbers must be representative of the phenomenon under test.
- **9-Reactive Audit**: It aims to conduct investigations to uncover illegal activities and the resulting misrepresentation of data and those responsible.
- **10- Brain storming:** One discussion method whereby members of a group are encouraged to generate as many ideas and solutions as possible to the problem under discussion. Brainstorming sessions with the participation of a review team are used to identify fraud risk factors, and use this information, to modify the fraud risk assessment.

"(Al-Shurabi,2018), (Bekain, Siam Zakariya, 2015), (Al-Sisi, 2006), (Rashid and Ziad Hashim, 2015)".

Second: Analysis of the role of internal auditing in managing the risk of fraud in financial statements:

- 1-Considering fraud risk assessment as a continuous proactive process and not just an end-to-end activity, the fraud risk assessment begins by identifying the risk factors associated with fraud and prioritizing the risks present in the company. The internal auditor collects information on problems that have already occurred in similar companies that could occur in the company under auditing, as well as on changes in the company's activities and what these changes could lead to potential new risks.
- 2- Based on the previous step, the internal auditor examines possible fraud schemes, using the collection of information from interviews with management and staff, inquiries, questionnaires, and most often in the order of the fraud triangle theory (opportunities, motives, justifications) where it is necessary to think in the same way as the fraudster does.
- 3- The internal auditor shall establish the oversight mechanisms established by the department in the form of maps and test them to the extent of their ability to disprove possible fraud schemes, all to identify possible gaps in the functioning of the oversight mechanisms.
- 4- Documentation and reporting of the risks assessed in the form of a report addressed to company management, including the following elements: fraud cases that have an opportunity to arise and the adequacy of the fraud control and internal control programs in place, the potential gap between the existing control mechanisms, and the potential impact of fraud on the company's operations.
- 5- Providing assistance to the management of the company, after verifying that the management of the company has raised awareness among workers and employees of the existence and importance of control mechanisms, and written rules describing prohibited activities,

penalties or sanctions for breaches of these rules, internal audit can conduct activities directly aimed at preventing fraud. These include: continuous analytical reviews, reviewing contracts in the company, evaluating the electronic data protection system, and conducting spot checks.

6. Using the results of the tests in the previous step, the assessment of the risk of fraud can be reconsidered. This means that the internal auditor of the two steps returns 1.2 times to modify them with the results of the tests. (Ibrahim, 2014), ((Djordjevic and Đukić, 2015).

Third: The combination of forensic auditing techniques and the internal audit program to manage the risk of fraud with the aim of increasing the efficiency of the work of internal audit and thus positively affecting the decision of the external auditor to rely on the work of internal auditor in detecting and preventing fraud in financial statements:

Risk management steps for fraud	Appropriate forensic
By internal review	auditing techniques
1- Assessing the risk of fraud as an ongoing proactive process and not just an end activity, the fraud risk assessment begins by identifying risk factors associated with fraud and prioritizing the risks in the company.	Brainstorming.
2- Examining potential fraud schemes, collecting information from interviews with management, staff, inquiries, questionnaires, and often arranging it according to the theory of fraud triangle (opportunities, motives, justifications)	Brainstorming, interactive review, data exploration.
3- Examining the oversight mechanisms established by the Department and testing its ability to refute potential fraud schemes, all to identify potential gaps in the work of control mechanisms.	Constant surveillance, Analysis of sources and uses of funds. Use laboratory analysis of physical or electronic evidence.

4- Report on fraud cases that have the opportunity	Data mining.
to emerge and the adequacy of existing anti-fraud	Review using critical points.
and internal control programs, the potential gap	Benford Law.
between existing control mechanisms, and the	Use laboratory analysis of
potential impact of fraud on the company's	physical or electronic
operations.	evidence
5- Conduct audit activities directly aimed at	Data analysis.
preventing fraud.	Computer review.
	Analysis of sources and
	uses of funds.

Source: By the researchers.

<u>Note:</u> The use of forensic auditing techniques during fraud risk management is not actually specific and conclusive for each step as shown in the previous table. The steps overlap and the methods overlap and a particular method can be useful for one step or more. This proposed schedule is designed to reflect priorities only in the consistency of the use of specific techniques with specific steps.

Fourth: Determinants of the proposed framework: -

First: Management and audit committee support for the role of internal audit in managing the risks of fraudulent financial statements in this process may require training courses for the internal auditor that provide him with the necessary skills for professional suspicion of detecting fraud indicators, courses for dealing with various technological applications when using the computer in the auditing process, and sometimes partial outsourcing of some internal audit activities in the face of illegal practices.

Second: The decision of the external auditor is influenced by increasing or reducing the reliance on the work of internal audit on many factors that have already been discussed, whether from academic studies or in professional standards, and it appears to be a rather complex process and there is an overlap between the factors of evaluating the work of internal audit by the external auditor and therefore the expectation to

increase the reliance of the external auditor on the work of internal audit when incorporating forensic auditing techniques in the management of the risk of fraud in the financial statements requires the assumption of the stability of any other factors influencing the decision of the external auditor to rely.

Third: Incomplete data for the application of forensic auditing techniques, particularly data analysis technology, where a large amount of detailed data is required for each of the company's activities, thereby reducing the benefits of data analysis technology.

The field study:

The field study aimed to validate the research assignments, to try to provide a working guide in the Egyptian business environment on the agreement of the academy and the auditors on the decision to support the external auditor by relying on the work of the internal auditor to carry out an internal forensic audit of fraud risk management in the financial statements, as well as to devise the factors influencing the decision of the external auditor to rely on the work of the internal auditors and to discuss the role of both internal and forensic audit in detecting and reducing the occurrence of fraud, as well as to determine the extent to which the two categories of the study agree on the role of the framework and proposal for the integration of forensic audit procedures into the internal audit plan for fraud risk management in the financial statements.

Study population and sample:

The study population has three main categories: Academics are represented by university professors at the Faculty of Commerce at Egyptian universities, in addition to external auditors and internal auditors. The size of the sample was determined deliberately to allow it to perform the necessary statistical analyzes to test the assumptions and

to make it possible to disseminate the results obtained subsequently. The members of the study sample were selected on the criterion of accessibility because it was difficult to achieve random selection because of the heterogeneity of the study population.

The two researchers collected the necessary data to test the hypotheses through a questionnaire that was designed and distributed to 150 individuals, with 50 forms for each of the study categories, the survey list was designed to facilitate the testing of study assumptions, the survey list included three groups, as follows:

The first group reflects the extent of the internal auditor's ability to carry out his responsibilities as an internal forensic auditor represented by the X_1 variable. The questions included are the same $(X_1, X_2, ... X_4)$.

Group II: - reflects the impact of the efficiency of internal audit in the detection of fraud in the financial statements when merging forensic audit methods is represented by the X_2 variable $(X_{21}, X_{22}, ..., X_{210})$.

Third group: reflects support for the external auditor's decision to rely on the internal audit work when integrating the forensic audit methods in the internal audit program for fraud risk management in the financial statements, represented by variable X_3 and its sub-questions (X_{31} , X_{32} , X_{310}). A total of 105 lists out of the total number of 50 distributed lists have been compiled by 70% and as a response rate from the different categories. The following table shows the number of forms distributed to the study categories and the response rate for each category.

Table (1) Survey lists distributed, response rate and percentage of correct responses per category:

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Study Category	Number of forms distributed	Number of forms received	Response rate	
Academics	50	35	70%	
Internal auditors	50	37	74%	
External auditors 50		33	66%	
Total	150	105	70%	

No lists were excluded because the list was lifted and sent to all relevant categories. The response rate was 70%. All the questions on the survey form were subjected to the Reliability Analysis test through the calculation of the Cronbach's Alpha coefficient. This test reflects the consistency of the responses of the sample members to the questionnaire, the reliability test in the responses of the sample items to the questions, the validity of the study data for statistical analysis and the extent to which the results obtained from the sample can be disseminated to the study community. The consistency coefficient of the survey form was 959, as shown in table (2):

Reliability Statistics

Cronbach's Alpha	N. of items
959	34

The Cronbach alpha factor rate of 959 shows that if the survey form is distributed to a sample other than the one selected in this study at different times, there is a 95.9% probability for the same results of this study. The Cronbach alpha factor value exceeds the statistically accepted 60%, which reflects a high degree of consistency and credibility in the data. This may indicate that the data collected can be

relied upon to complete the following stages of the statistical analysis and the tests. The study tested a set of assumptions as follows:

- 1-There is relationship between the proposed framework for merging internal audit and forensic audit techniques to manage fraud risks and the upgrading of internal audit competencies to perform this role from the point of view of internal auditors.
- 2-There is relationship between the proposed framework for merging internal audit and forensic audit techniques in fraud risk management and the upgrading of the internal audit work to fulfill this role from the point of view of the external auditors.
- 3-The proposed framework for merging internal audit and forensic audit techniques in fraud risk management positively impacts the external auditor's decision to rely on internal audit work.

Research hypothesis test results:

Research hypothesis were tested by analyzing the data using the statistical program for social sciences (SPSS)Statistical Package for Social Sciences to perform the necessary statistical analyzes and tests at a 5% morale level. The researchers used some statistical tests that are appropriate for the nature of the data collected. The results of the test for the research assignments are as follows:

The results of the first hypothesis test:-

The objective of this hypothesis is to test the extent to which the proposed framework for merging forensic and internal audit methods in fraud risk management has a relationship with the more efficient internal audit in performing this role from the point of view of internal auditors

This hypothesis was tested by analyzing the responses of the study sample groups on group I and group II of the survey list. The five Lickert scale was used and the following weights were assigned to the responses of the sample members: (5) I strongly agree, (4) I agree, (3) neutral (I don't know), (2) I don't agree, (1) I don't completely agree, and descriptive statistics of survey sample responses to the first three questions of the survey list were calculated and analyzed using a T-test for one sample T-One sample Test to test the morale of impressions between the arithmetic averages of study sample responses to these three sets of questions.

<u>Table (3) Descriptive statistics and single sample test results:</u>

	t-tests for one sample				variable name	variable
morale level	T value	standard deviation	average		symbol	
•,••1	١,٨٠٩_	.,0079	٤,٥٨٨	The internal auditor has scientific and practical qualifications in accounting and auditing	X1-1	
•	1,4•1=	• , ५ • ۸ ٩	٤,٥٨٨	The internal auditor can evaluate the motives, opportunities, and justifications that constitute a favorable environment for fraud in the financial statements	X ₁₋₂	

.,1	٠,٤٨٩	٠,٦٦٥٥	£, Y ٦£	The internal auditor can evaluate the motives, opportunities, and justifications that constitute a favorable environment for fraud in the financial statements	X1-3
٠,٠١٦	٠,٩٣١_	1,1.£7	₩,•٨٨	The internal auditor can defend his independence against management pressures	X1-4
•, ٧٤	۲,٤٨٦	1,.017	٣٠٤٧٠	The internal auditor can efficiently estimate fraud risks using traditional methods	X ₁₋₅
٠,٣٠١	1,417_	٠,٧٦٩٢	٤,١١٧	The internal auditor has a deep understanding of the company's operations, both financial and administrative	X1-6

٠,١٥٦	٠,١٠٨	1,. ۲۹	٤,٢	The internal auditor can see confidential data.	X1-7
.,٣٧٣	٠,٣٠١_	1,. 444	٤,٦	The internal auditor can effectively communicate with the officials	X ₁₋₈
.,٧٤٦	٠,٣٥٦	V0977	۳,۸	The internal auditor makes effective use of professional skepticism.	X1-9
•	٠,٤٦٦	٠,٥٩٧١	٤,٦	The skills of the internal auditor in dealing with information technology can be developed through continuing education.	X ₁₋₁₀
.,.۲۹	٠,٢١٢_	٠,٤٩٧١	٤,٢	The internal auditor can solve unconventional (non-programmed) problems. Unstructured problem solving.	X1-11

			1		
•	1,147	٠,٩٩٥٥	٤,٤١١٨	The internal auditor is familiar with the legislation and regulations that the company must abide by	X ₁₋₁₂
		1,1.£7	٤,٢٦٤	The internal auditor is committed to international standards for the performance of internal auditing.	X ₁₋₁₃
•	• , ٦ € €	1,.017	£, Y. 09	The internal auditor has knowledge of creative accounting methods that aim to raise profits through the use of permitted alternative accounting treatments	X1-14
٠,٠٢٩	- •,Y,117	1,1A#Y	٤,٣٢٣	The use of Data Mining Technique increases the efficiency of internal auditing in detecting fraud.	X ₂₋₁

•	•,1,187	1,. 484	٤,٣٨٢	The use of computer-based auditing in the internal audit program to manage the risks of fraud in the financial statements has a positive impact on the external auditor's decision to rely on the work of the internal audit	X2-2
	•	.,7 £ £	٤,٢٣٥	Use of laboratory analysis of physical or electronic evidence . Laboratory Analysis of Physical and Electronic Evidence Increases the efficiency of internal auditing in detecting fraud	X2-3
•,•٩٨	٠,٠٨١	£, \ 0 	٤,٣٢٣	Critical Point Auditing Technique Increases the Efficiency of Internal Auditing on Fraud Detection	X2-4

۰,۳۳۸	•, ₹ 0 £_	.,५.०٩	٤,٣٨٣	The use of continuous monitoring on revenue and expense items increases the efficiency of internal auditing in detecting fraud	X ₂₋₅
٠,٧٩٣	٠,١٠٣٨	V,097	٤,٢٩٤	The use of data analysis increases the efficiency of internal auditing in detecting fraud	X2-6
•,1 \ £	•,944	٠,٥٩٧١	٤,٢٠٥	Using the analysis of the sources and uses of funds increases the efficiency of the internal audit in detecting fraud	X2-7
٠,٢٧٢	•, • • •	1,124	٤	Using Benford's law to detect anomalies increases the efficiency of internal auditing in detecting fraud	X2-8

			1	TI . B	
•,• 4	•,1٧٨٤	·, \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	£, Y 9£	Using Reactive Audit to detect illegal activities increases the efficiency of internal auditing in detecting fraud	X2-9
*,***	*,12/	*, * * * *	2,1101		
.,1.1	1,792	٠,٧٠٤١	£ ,£	Using brainstorming as a major component of the proactive approach to detecting fraud indicators increases the efficiency of internal auditing on fraud detection.	X ₂₋₁₀
٠,٠٧١	.,1.01	٠,५٦٥٥	£,11Y1	The use of data mining technology in the internal audit program to manage the risks of fraud in the financial statements has a positive impact on the decision of the external auditor to rely on the work of the internal audit	X3-1
٠,٣١٢	.,1,790.				

		1			
٠,١٦٢	• , ५ ९ १	• , ٦ ٨ ٤	٤,١٧٦٥	The use of computer-based auditing in the internal audit program to manage the risks of fraud in the financial statements has a positive impact on the external auditor's decision to rely on the work of the internal audit	X ₃₋₂
•,• £ £	٠,٨٧٦	•,५९५	£, Y 0	Influences the use of laboratory analysis of physical or electronic evidence Laboratory Analysis of Physical and Electronic Evidence in the internal audit program to manage the risks of fraud in the financial statements has a positive impact on the external auditor's decision to rely on the work of the internal audit.	X3-3

٠,٠٥٧	•,11٧_	٠,٧٥٩٢	£,11V7	The use of the audit using Critical Point Auditing Technique in the internal audit program to manage the risks of fraud in the financial statements has a positive impact on the decision of the external auditor to rely on the work of the internal audit	X ₃₋₄
, £ £	٠,٨٦٧	٠,٦٣٨٢	£,1Y%°	The use of continuous monitoring in the internal audit program to manage the risks of fraud in the financial statements positively affects the decision of the external auditor to rely on the work of the internal audit	X ₃₋₅
•	۰,۰۸۳	.,4791	٤,٢٠٥	The use of data analysis in the internal audit program to manage the risks of fraud in the financial statements has a positive impact on the decision of the external auditor to rely on the work of the internal audit.	X3-6

*, * * £	•,٧١٤٢	۷,۷۹۲	٤,١٧٥	The use of analysis of sources and uses of funds in the internal audit program to manage the risks of fraud in the financial statements positively affects the decision of the external auditor to rely on the work of the internal audit	X3-7
•	۰,٧٩٨	٠,٦٤١٦	٤,١٧٦	The use of Benford's law to detect anomalies in the internal audit program to manage the risks of fraud in the financial statements positively affects the external auditor's decision to rely on the work of the internal audit	X3-8

٠,١٢٣	٠,٨١٥	۰,۹۰۷	ŧ	The use of interactive auditing in the internal audit program to manage the risks of fraud in the financial statements positively affects the decision of the external auditor to rely on the work of the internal audit The use of	X3-9
•	۰,۷۱٦	•,•£¶V	£,£	The use of brainstorming as a major component of the proactive approach to auditing in evaluating the potential for fraud in the internal audit program to manage the risk of fraud in the financial statements has a positive impact on the external auditor's decision to rely on the work of the internal audit	X3-10

The results of the tests revealed that all the variables of the first, second and third set of questions with a mathematical medium differ morally from the hypothetical medium of the Lykert scale, which is equal to (3) Test value=3 at a level of confidence of 95%, indicating the approval of the three academic study categories, external auditors, and internal auditors, on the importance of supporting the decision of the external auditor to rely on internal references in the process of conducting internal forensic audit to manage the risks of fraud in financial statements, in addition to the results showed the extent to which the efficiency of internal audit affects the detection of fraud in financial statements when introducing forensic audit tools and methods into the internal audit program and to test the validity of the first hypothesis, the T test was used to compare the average of two independent sample T.Test samples, to determine the morality of the differences between the average answers of the academic group and the review group for the first question variables at the confidence level of 95% With the results verified using a self-fulfilling master's test, the Man-Whitney test, Table 4shows the results reached.

Table 4 (A) T-test:

Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
X_{1_1}	academics	34	4.5882	.55692	.09551
X 1_1	Auditors	35	4.8000	.40584	.06860
V	academics	34	4.5882	.60891	.10443
X _{1_2}	Auditors	35	5.0000	.00000	.00000
Y. a	academics	34	4.2647	.66555	.11414
X_{1_3}	Auditors	35	4.2000	.40584	.06860
X _{1 4}	academics	34	3.5882	1.10420	.18937
A 1_4	Auditors	35	3.8000	.75926	.12834
X _{1 5}	academics	34	3.4706	1.05127	.18029
A 1_5	Auditors	35	2.8000	1.18322	.20000
$X_{1_{-6}}$	academics	34	4.1176	.76929	.13193
A1_6	Auditors	35	4.4000	.49705	.08402
X _{1 7}	academics	34	3.8235	1.02899	.17647
A 1_/	Auditors	35	3.8000	.75926	.12834
X _{1_8}	academics	34	4.1471	.70205	.12040

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	Auditors	35	4.2000	.75926	.12834
v	academics	34	4.2353	.60597	.10392
X _{1_9}	Auditors	35	4.2000	.75926	.12834
X_{1-}	academics	34	4.6471	.59708	.10240
_10	Auditors	35	4.6000	.49705	.08402
X_{1-}	academics	34	3.9118	.75348	.12922
_11	Auditors	35	3.8000	1.18322	.20000
X_{1-}	academics	34	4.2647	.79043	.13556
_12	Auditors	35	4.6000	.49705	.08402
X ₁₋	academics	34	4.4412	.74635	.12800
_13	Auditors	35	4.2000	.99410	.16803
$X_{1_{-}}$	academics	34	4.0588	.81431	.13965
14	Auditors	35	4.2000	.99410	.16803

Taple 4(B)Man-Whitney:

Ranks

	group	N	Mean Rank	Sum of Ranks
	academics	34	31.71	1078.00
$X_{1_{-}}$	Auditors	35	38.20	1337.00
	Total	69		
	academics	34	28.82	980.00
$X_{1_{\underline{}}}$	Auditors	35	41.00	1435.00
	Total	69		
	academics	34	36.54	1242.50
$\begin{bmatrix} X_{1} \\ 3 \end{bmatrix}$	Auditors	35	33.50	1172.50
	Total	69		
	academics	34	33.56	1141.00
$X_{1_{-}}$	Auditors	35	36.40	1274.00
	Total	69		
	academics	34	40.25	1368.50
$X_{1_{-}}$	Auditors	35	29.90	1046.50
	Total	69		
	academics	34	31.81	1081.50

مجلة البحوث المحاسبية

1	Auditors	35	38.10	1333.50
$X_{1_{-}}$	Auditors	33	38.10	1333.30
6	Total	69		
	academics	34	36.03	1225.00
X ₁ _	Auditors	35	34.00	1190.00
	Total	69		
	academics	34	34.18	1162.00
X ₁ 8	Auditors	35	35.80	1253.00
	Total	69		
	academics	34	35.10	1193.50
X ₁ _	Auditors	35	34.90	1221.50
	Total	69		
	academics	34	36.44	1239.00
X ₁ -	Auditors	35	33.60	1176.00
	Total	69		
	academics	34	35.00	1190.00
X ₁₋	Auditors	35	35.00	1225.00
	Total	69		
X ₁₋	academics	34	31.19	1060.50
_12	Auditors	35	38.70	1354.50

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Total	69		
academics	34	36.54	1242.50
Auditors	35	33.50	1172.50
Total	69		
academics	34	32.94	1120.00
Auditors	35	37.00	1295.00
Total	69		
	academics Auditors Total academics Auditors	academics 34 Auditors 35 Total 69 academics 34 Auditors 35	academics 34 36.54 Auditors 35 33.50 Total 69 academics 34 32.94 Auditors 35 37.00

The results showed that the value of P-Value for the two tests is greater than 5% for all variables, which means that there are no substantial statistically significant differences between the average answers of the academic group and the group of auditors, which indicates a relationship and agreement (there are no differences between the opinions of the academic group and the group of auditors, which is likely to reject nihilistic imposition and accept alternative hypothesis, Based on previous results, nihilistic hypothesis was rejected and the alternative hypothesis was accepted, which stipulates that there is no relationship between the fragmented framework for combining forensic and internal audit methods in fraud risk management with increased efficiency of internal audit in playing this role from the point of view of auditors.

Results of the second hypotheses test:

This hypothesis has led to the test of the extent to which there is an agreement between the opinions of academics and external auditors the relationship of the proposed framework for combining the methods of forensic audit and internal audit in the management of the risk of fraud and raising the efficiency of internal audit in carrying out this role in their view.

This hypothesis was formulated for statistical testing in the form of nihilistic hypothesis and alternative hypothesis as follows:

- Nihilistic hypothesis (Ho): - There is no agreement between the opinions of the two study groups on a relationship between the proposed framework for combining forensic audit methods with internal audit in the management of fraud risks and raising the efficiency of internal audit in playing this role from the point of view of external auditors.

Alternative hypothesis (H): There is agreement between the opinions of the two study groups that there is a relationship between the proposed framework for combining forensic and internal audit methods in fraud risk management with raising the efficiency of internal audit in playing this role from the point of view of external auditors.

It is worth mentioning that the two sets of study in this hypothesis are the group of opinions of academics and the group of opinions of external auditors, and to test the validity of the second hypothesis, the T test was used to comparing the average of two independent sample test-T samples to determine the morality of the differences between the average answers of academics and the averages of the answers of the group of external auditors For the second set of questions, which includes 10 questions named x_{2-10} ... 21) At a 95% confidence level

V.	academics	34	4.4118	.70141	.12029
X _{2_1}	auditors	35	4.4000	.49705	.08402
V	academics	34	4.2647	.75111	.12881
X _{2_2}	auditors	35	4.6000	.49705	.08402
V	academics	34	4.2647	.66555	.11414
X _{2_3}	auditors	35	4.6000	.49705	.08402
v	academics	34	4.2059	.68664	.11776
X _{2_4}	auditors	35	4.2000	.75926	.12834
V	academics	34	4.3235	.68404	.11731
X _{2_5}	auditors	35	3.8000	.99410	.16803
V	academics	34	4.3824	.69695	.11953
X _{2_6}	auditors	35	4.2000	.75926	.12834
V	academics	34	4.3529	.59708	.10240
X _{2_7}	auditors	35	4.2000	.75926	.12834
V	academics	34	4.2353	.65407	.11217
X _{2_8}	auditors	35	4.2000	.75926	.12834
V.	academics	34	4.3529	.64584	.11076
X _{2_9}	auditors	35	4.6000	.49705	.08402
X ₂₋	academics	34	4.3235	.63821	.10945
_10	auditors	35	4.6000	.49705	.08402
I		I	l	l	l

with results verified using a self-fulfilling teacher, the Man-Whitney test, table 6.5 shows the results reached - table 5, the results of the T test for two independent samples Independent Sample Test-T and the Man and Whitney Man-Whitney test.

Table 5(A) T-test:

Table 5(B) Man Whitney:

	academics	34	36.13	1228.50
X_{2}	auditors	35	33.90	1186.50
	Total	69		
	academics	34	30.88	1050.00
X_{2}	auditors	35	39.00	1365.00
	Total	69		
	academics	34	30.37	1032.50
X_{2}	auditors	35	39.50	1382.50
	Total	69		
	academics	34	34.90	1186.50
$X_{2_{-}}$	auditors	35	35.10	1228.50
·	Total	69		
	academics	34	39.94	1358.00
X ₂ _	auditors	35	30.20	1057.00
	Total	69		
			l	

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	academics	34	37.26	1267.00
X ₂ _	auditors	35	32.80	1148.00
	Total	69		
	academics	34	36.65	1246.00
X ₂ _	auditors	35	33.40	1169.00
,	Total	69		
	academics	34	35.21	1197.00
X ₂	auditors	35	34.80	1218.00
Ů	Total	69		
	academics	34	31.60	1074.50
$X_{2_{-}}$	auditors	35	38.30	1340.50
	Total	69		
	academics	34	31.09	1057.00
X ₂ -	auditors	35	38.80	1358.00
=="	Total	69		
I				

The results showed that the value of P-Value for the two tests is greater than 5% for the majority of variables, which means that there are no statistically significant moral differences between the average answers of the academic group and the group of external auditors for these variables, this indicates that there is an agreement (no substantial differences) between the opinions of the two study groups regarding a relationship between the proposed framework combining between forensic audit methods and internal audit in the management of fraud risks and raising the efficiency of internal audit in playing this role from the point of view of external auditors, which is likely to reject nihilistic hypothesis and accept alternative hypothesis.

Results of the third hypothesis test:

This hypothesis was aimed at testing the extent to which there is an agreement between academics and external auditors on the impact of the proposed framework for combining forensic audit methods with internal audit in the management of the risks of fraud in financial statements and on the decision of the extent to which the external auditor is based on the work of the internal auditor, and this imposition was formulated to test it statistically in the form of nihilistic hypothesis and alternative hypothesis as follows:-

Nihilistic hypothesis (Ho): - There is no agreement between the opinions of the two study groups on the impact of the proposed framework between forensic audit methods and internal audit in the management of fraud risks in the event of a decision of the external auditor based on the work of the internal auditor. Alternative hypothesis (H): - There is an agreement between the opinions of the two study groups on the impact of the proposed framework for combining forensic audit methods with internal audit in the management of fraud risks in the event of the decision of the external auditor to rely on the work of the internal

auditor.

It is worth mentioning that the two groups of study of interest in the third hypothesis are the group of academics and the group of external auditors and the hypothesis specializes in the set of questions from $x_{3-1} - \dots x_{3-10}$

The validity of the third hypothesis was tested by using an average of two independent samples to determine the morality of the differences between the average answers of the academic group and the group of internal auditors, while verifying the results using a self-fulfilling teacher's test, the Man-Whitney test.

Table 6(A)T-test:

V	Academics	34	4.3824	.69695	.11953
$X_{3_{_1}}$	Auditors	35	4.4000	.49705	.08402
v	Academics	34	4.2941	.62906	.10788
X_{3_2}	auditors	35	4.2000	.75926	.12834
V	academics	34	4.2059	.59183	.10150
X_{3_3}	auditors	35	4.2000	.40584	.06860
v	academics	34	4.0000	.73855	.12666
X_{3_4}	auditors	35	4.0000	.64169	.10847

X _{3_5}	academics	34	4.2941	.71898	.12330
	auditors	35	4.0000	.64169	.10847
X _{3_6}	academics	34	4.2647	.75111	.12881
	auditors	35	4.0000	.64169	.10847
X _{3_7}	academics	34	4.2059	.72944	.12510
	auditors	35	4.4000	.49705	.08402
X _{3_8}	academics	34	4.1176	.76929	.13193
	auditors	35	4.0000	.64169	.10847
X _{3_9}	academics	34	4.1765	.75761	.12993
	auditors	35	4.0000	.90749	.15339
X ₃₁₀	academics	34	4.2059	.84493	.14490
	auditors	35	4.4000	.49705	.08402

Table 6(B) Man Whitney:

X ₃ _	academics	34	35.51	1207.50
	auditors	35	34.50	1207.50
	Total	69		
X ₃ _	academics	34	35.93	1221.50
	auditors	35	34.10	1193.50
	Total	69		
X ₃ _	academics	34	35.41	1204.00
	auditors	35	34.60	1211.00
	Total	69		
X ₃ _	academics	34	35.31	1200.50
	auditors	35	34.70	1214.50
	Total	69		
X3_ 5	academics	34	39.43	1340.50
	auditors	35	30.70	1074.50
	Total	69		
X ₃	academics	34	39.01	1326.50
	auditors	35	31.10	1088.50
	Total	69		
•		•		

	academics	34	32.94	1120.00
X ₃ _	auditors	35	37.00	1295.00
X ₃ _	Total	69		
	academics	34	36.96	1256.50
	auditors	35	33.10	1158.50
X ₃ _	Total	69		
	academics	34	36.96	1256.50
	auditors	35	33.10	1158.50
	Total	69		
X ₃ .	academics	34	33.66	1144.50
	auditors	35	36.30	1270.50
	Total	69		

The results showed that the P-Value value of the two tests is greater than 5% for the third set of variables $(x_{3-1} - ... x_{3-10})$, This means that there are statistically significant moral differences in the average answers of the academic group and the group of internal auditors of these variables, which indicates that there is an agreement between the two sets of study on the impact of the proposed framework between the methods of forensic audit and internal audit in the event of the decision of the external auditor based on internal auditors, On the other hand, the results showed that the value of P-Value for the test is less than 5% for all study variables, which means that there are statistically significant moral differences between the average answers of the group of academics and the group of internal auditors for all variables, which indicates that there is no agreement between the opinions of the study groups until the effect of the proposed framework to integrate forensic auditing methods with internal audit methods in the management of fraud in financial statements, which is likely to reject the nihilistic imposition and accept the alternative hypothesis.

Recommendations:

In light of the theoretical and results, the research recommends a number of recommendations, the most important of which are:

- 1- Applying the proposed framework in integrating between forensic audit methods and the internal audit program for risk management in Egyptian companies to support the relationship between the external auditor and the internal auditor.
- 2-The necessity of adopting internal forensic audit as a basic subject at the bachelor's stage in the accounting and auditing departments in the faculties of commerce at the level of Egyptian universities in order to increase awareness of the importance of forensic audit to reduce corruption and financial fraud in the Egyptian environment.

- 3- Working on the issuance of professional legislation that organizes the work of forensic audit, and clarifies the skills and requirements that forensic auditors must have in terms of practical and scientific qualification.
- 4- Establishing an official independent professional association under the name of the forensic Auditors Association to be responsible for fulfilling all the requirements of the profession.
- 5- Benefiting from forensic auditors in the public sector and government control units, and in implementing the Egyptian state's strategies to reduce financial corruption and fraud.
- 6- Recommending to professional and scientific organizations in the field of auditing the need to seek to issue a local and international standard on the relationship between forensic audit methods and the stages of internal auditing and its impact on the efficiency of the internal auditor and the quality of financial reports.

future research:

In light of the research findings reached, the researchers suggest that the research be continued in the following areas:

- The impact of the merger between forensic audit methods and internal audit in supporting risk management in Egyptian banks.
- Challenges facing the integration of forensic audit and internal audit methods in the Egyptian business environment.
- Supporting the credibility of financial statements by applying forensic audit mechanisms from an external source.

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