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## The Importance of the COSO oversight framework in improving the internal control structure

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### Abstract

This study aimed to identify the importance of the COSO Oversight framework in improving the internal control structure and in order to achieve the objectives of this study and to reach the results and recommendations of the research. The researcher designed an electronic questionnaire that included the three axes and paragraphs of the study. The questionnaire was answered by (62) questionnaires specialized in the profession of accounting, auditing, economics and statistics, which are closely related to the science of accounting and auditing. After obtaining the answers to the three axes of the study, the researcher analyzed the answers based on the SPSS statistical analysis program. One of the most important results of the study was the weakness of most of the internal control systems in public sector companies in Iraq, which indicates the great importance of the COSO Oversight framework in improving the internal control structure. One of the most important recommendations recommended by the researcher is directing the attention of the professional bodies and organizations in Iraq that are responsible for the process of regulating the accounting and auditing profession towards applying the latest versions of the global internal control frameworks, because these frameworks are of great importance in improving internal control structures and keeping pace with the latest control versions and their importance in applying them in the environment of Iraqi companies.

**Keywords:** Internal control, COSO framework and components of internal control

### Introduction

As a result of the increase in financial collapses and crises in companies at the international level, there has become a necessary and urgent need to develop internal control structures and support them with efficient and scientifically qualified human resources and provide them with the necessary financial support, which would lead to achieving the objectives set for companies, through the application of the COSO Oversight framework in improving The internal control structure because it contains a set of internal control standards. Accordingly, the researcher sought to shed light on the study of the literature and scientific ideas that indicate the importance of the COSO framework in improving the internal control structure. The internal control structure" and the fourth topic "the scientific aspect of the research", while the fifth and final topic included "conclusions and recommendations" in order to achieve the goals and hypothesis of the research and access to the results and recommendations of the research.

### The first topic is: Research Methodology

#### Research Problem

Public sector companies in Iraq suffer from the lack of appropriately designed oversight structures, which makes these companies unable to achieve their goals related to the effectiveness and efficiency of operational processes, the reliability of their reports, and their compliance with applicable laws and regulations, as these goals become difficult to achieve in light of the weak structures of internal control systems. And the methods of its design, as well as the absence of a specific supervisory standard for the design of internal control structures, and therefore the research problem can be formulated by asking the following:

Is there any importance to the COSO Oversight framework in improving internal control structures in Iraqi public sector companies?

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**Research Hypothesis**

The main hypothesis of the research includes the following: There is no statistically significant effect of the importance of the COSO Oversight framework in improving the internal control structure applied in the company.

**Research Importance**

The research takes its importance by educating and guiding companies towards applying the latest versions of the internal control frameworks recommended by the COSO Organizational Stewardship Committee in order to improve the design of the internal oversight structure.

**Research objective****The research aims to achieve a set of the following goals**

1. Directing the attention of local professional bodies in Iraq to the need to implement the COSO framework, due to its importance in improving the internal control structure.
2. Examining the literature on the frameworks recommended by the COSO Committee.
3. Recognize the importance of designing suitable structures for internal oversight in public sector companies in Iraq.
4. Designing a well-articulated scientific questionnaire designed for this purpose to measure the importance of the COSO oversight framework in improving the internal control structure, based on the responses of respondents with expertise in this field, in order to reach the required results.

**Research Limits**

An appropriate scientific questionnaire was designed and distributed to a sample of employees of government and public sector departments, companies and faculty members specialized in this field. The number of respondents reached (62 respondents) for the purpose of surveying their opinions in the field of research.

**The second topic: the cognitive foundations of the COSO Oversight framework**

**Internal control frameworks:** A number of important control frameworks have been put in place to help companies develop appropriate internal control structures that address various issues, and among the most important of these control frameworks are the following (Romney, *et al.*, 2021: 326-329) <sup>[12]</sup>:

**First. COBIT Framework for Information Systems Oversight:**

ISACA has developed a framework for COBIT oversight objectives for information and related technology. The COBIT framework is defined as a set of standards or applications for control and protection for information systems prevailing for IT control and from many different sources in one framework. It is a control framework that allows:

1. For management to compare security and control practices in information technology environments.
2. Ensure that there are adequate security and controls for information technology.
3. Supporting the auditors' opinions to establish evidence about control regarding their opinions related to internal

control and providing advice on information technology security and control issues.

**Second. COSO Framework for Internal control:** The Committee for Sponsorship of Organizations, otherwise known as the COSO Committee, is made up of the American Accounting Association, the American Society of Certified Public Accountants, the Institute of Internal Auditors, the Institute of Financial Accountants, and the Institute of Financial Executives, in 1992, the five-year COSO Committee issued the Internal control Framework - Integrated Framework IC, which was widely accepted as the important reference for internal controls and was incorporated into the policies, rules and regulations used to control business activities. In 2013, the international cooperation framework was updated to better deal with current business processes and technological progress. For example, in 1992, very few companies used the Internet, sent e-mail, or stored their data in the cloud. The revised IC framework provides users with more precise guidance on how to implement and document the framework Several new examples have been added to clarify framework concepts and make the framework easier to understand and use The new IC framework maintains the five components of the original framework and adds 17 principles that build on the concepts It is supported by each of the five component elements containing at least two and up to five principles.

**Third. ERM Framework for Project Risk Management**

In order to improve the risk management process, the COSO Committee developed in 2004 a second oversight framework called Project Risk Management - Integrated Framework ERM. Project risk management is the process used by the board of directors and management to develop strategy and identify events that may affect the company. Evaluate and manage risks, and provide reasonable assurance that the company achieves its objectives. After the issuance of project risk management, new risks have emerged and the complexity of existing risks has changed. To address this matter, the project risk management framework was updated in 2017 and renamed Project Risk Management - Integration with Strategy and Performance Recognizing The new title highlights the importance of considering risks to determine the level of the company and in helping companies improve their performance.

**The concept of internal control structure according to the updated COSO Oversight framework:**

The updated COSO internal control framework of 2013 defines the internal oversight structure as a process influenced by the company's board of directors, management and other employees designed to provide reasonable assurance regarding the achievement of objectives related to the effectiveness and efficiency of operations, reliability of reports and compliance with laws and regulations Accordingly, the framework indicates (Richardson, *et al.*, 2021: 367-368) <sup>[11]</sup>:

1. The internal control is a process consisting of continuous tasks and activities. It is a means to an end and not an end in-itself.
2. The internal control structure is influenced by people.

It's not just about policies, systems, and models. Instead, it's about the people at every level of the company who influence internal control and its structure.

3. Internal control can provide reasonable assurance, but not absolute assurance, to the company's management and board of directors.
4. The internal control structure is oriented towards achieving objectives in one or more separate categories, but in an overlapping manner.
5. The internal control structure is a structure that can be adapted to the organizational structure of the company.

**Objectives of the internal control structure according to the updated COSO Oversight framework:** The objectives of the internal oversight structure according to the updated COSO control framework for the year 2013 are represented by interrelated objectives (Whittington & Pany, 2016: 250)<sup>[14]</sup> as follows:

1. **Operational objectives:** objectives that deal with the effectiveness and efficiency of the company's operations, such as profit, performance, and the protection of the company's assets.
2. **Reporting objectives:** objectives that help ensure the accuracy, completeness, and reliability of the company's internal and external reports, both financial and non-financial. Usually, these objectives are based on improving decision-making, monitoring the company's activities, and monitoring performance effectively.
3. **Compliance Objectives:** Important objectives that help the company comply with all applicable laws and regulations. Parties outside the company often set rules and laws, and industry companies have similar interests to such rules.

**Components of the internal control structure according to the updated COSO control framework:** Internal oversight as defined in the COSO framework consists of five components. In the revised COSO framework, which was updated and revised in 2013, it includes each of these five components of the set of principles, which represent the main concepts on which the effectiveness of each component is based. Any company can achieve effective internal control by applying all seventeen principles. These five components can be explained as follows (Messier, *et al.*, 2017: 182)<sup>[10]</sup>:

**1. Control environment:** The control environment is a set of standards, processes and structures that provide the basis for the implementation of internal control across the company, as the board of directors and senior management determine the style or style of leadership in relation to the importance of the internal control structure and expected standards of behavior.

**2. Risk Assessment:** Risk assessment requires a dynamic and iterative process to identify and analyze risks to achieve the company's objectives. As a result, it forms the basis for determining how to manage risks. Management considers potential changes in the external environment and within its own business environment, which may hinder its ability to achieve its set goals.

**3. Control activities:** oversight activities are a set of procedures that have been developed according to policies and procedures to help ensure the implementation of the company's management directives in order to mitigate risks that hinder the achievement of objectives. Control activities are implemented at all levels of the company and at different stages during business operations, and through technology environment.

**4. Information and communication:** Information is necessary for the company to carry out its responsibilities both internally and externally to support the internal control structure in order to achieve its objectives. Communication occurs and provides the company with the information necessary to carry out daily internal control activities, while communication enables employees to understand the responsibilities of internal control and its importance in achieving goals.

**5. Monitoring:** The company uses continuous assessments, discrete assessments, or a combination of both assessments to ascertain whether each of the five components of the internal control structure, including controls over the impact of principles within each component, is in place and operating effectively. The results are usually evaluated. Report shortcomings and weaknesses in a timely manner while reporting sensitive issues and risks to senior management and the Board of Directors.

The following figure shows the objectives of the three internal control structure at the top of the COSO cube and their relationship to the five main components represented by the rows of the COSO cube.



**Fig 1:** The three objectives of internal control and their relationship to the five components

Source: Messier, Jr., William F., Glover, Steven M., & Prawitt, Douglas F., Auditing and Assurance Services- A Systematic approach, Tenth Edition, McGraw-Hill Education, 2017, page (182)<sup>[10]</sup>.

**Principles of the updated COSO Oversight framework:**

The five components of the updated COSO framework consist of seventeen principles, and these principles are as follows:

**First. Principles of the internal control component:** The first component of internal control components, which is the internal environment component, consists of the following principles (Romney, *et al.*, 2021: 330)<sup>[12]</sup>:

1. Commitment to integrity and ethics.
2. Overseeing the internal control by the Board of Directors, independently of the management.
3. Structures, administrative lines and appropriate responsibilities to achieve the objectives set by the administration and supervised by the Board of Directors.
4. Commitment to attracting, developing and retaining qualified individuals in line with achieving objectives.
5. Accountability of individuals for their responsibilities towards their internal control in pursuit of achieving the set goals.

**Second. Principles of the risk assessment component**

The second component of the internal control components, the risk assessment component, includes the following principles (Whittington & Pany, 2016: 255)<sup>[14]</sup>:

1. Defining objectives clearly enough to identify and assess risks.
2. Identifying and analyzing risks to determine how to manage them.
3. Consider the possibility of fraud.
4. Identify and evaluate changes that could significantly affect the internal control system.

**Third. Principles of the control activities component**

The third component of the internal control components, which is the control activities component, is formed from the following principles (Johnstone, *et al.*, 2014: 78)<sup>[7]</sup>:

1. Selecting and developing controls that may help mitigate risks to an acceptable level.
2. Selection and development of general technology control activities.
3. Develop monitoring activities as specified in relevant policies and procedures.

**Fourthly. Principles of the information and communication component:**

The principles of the fourth component of the internal control components, which is the information and communication component, are the following (Messier, *et al.*, 2017: 183)<sup>[17]</sup>:

1. Obtaining or generating relevant, high-quality information to support internal control.
2. Communicate information internally, including the objectives and responsibilities necessary to support the other components of internal control.
3. Informing external parties of relevant internal control matters.

**Fifth. Principles of the oversight component:** The fifth component of the internal control components, which is the control component, consists of the following principles (Louwers, *et al.*, 2018: 190)<sup>[8]</sup>:

1. Selecting, developing and conducting continuous or separate assessments of internal control components.
2. Evaluate deficiencies and inform those responsible for corrective actions, including senior management and the Board of Directors when urgently needed.

**The third topic: the philosophical framework for the structure of internal control**

**The concept of the internal control structure:** The concept of the internal control structure has undergone many developments. The definition of internal control according to COSO is the procedures and processes implemented by the company's board of directors, management and other employees, which are designed to give reasonable assurance about the achievement of the company's objectives in the following three categories:

Efficiency and effectiveness of operations, reliability of financial reports, compliance with laws and regulations, and preservation of company assets from theft, fraud, or unauthorized distribution (Hayes, *et al.*, 2005:230)<sup>[6]</sup>. Internal control is a process issued by the company's management and the board of directors as an integral part of the company's governance and risk management. Internal control systems contribute to work at different levels of effectiveness, and the company's management implements the internal control system in order to pursue the company's goals, which requires extensive communication with other employees (Soltani, 2007: 303)<sup>[13]</sup>. Internal control is one of the processes and means used by the company's management to achieve its goals and objectives. It is an effective, dynamic and continuous activity within the scope of the company's structure. Internal control develops with the company's environment changing continuously (Louwers, *et al.*, 2015:174)<sup>[9]</sup>. The term internal control structure was used instead of the internal control system because the term structure is more consistent and compatible with the terms of the updated framework of 2013, which was issued by the Committee for the Sponsorship of Organizations COSO, in addition to the fact that the term structure is more comprehensive than the term system.

**Internal control Objectives:** An effective internal control structure consists of a set of policies and procedures designed to give management reasonable assurance of achieving its goals and objectives. The effective internal control structure consists of three main objectives: (Arens, *et al.*, 2017: 336)<sup>[5]</sup>:

**1. Effectiveness and efficiency of operations or operational objectives:**

Effective internal control structures within the company encourage the effective and efficient use of resources in order to achieve the company's objectives. This is done by obtaining financial and non-financial information related to management and making appropriate decisions.

**2. Reliability of reports:** This objective is concerned with preparing financial and non-financial reports and presenting them to its users. The administration is specialized in providing reports in accordance with the requirements of reporting and accounting frameworks such as international

financial reporting standards and generally accepted accounting principles. The administration bears legal and professional responsibility for preparing reports.

**3. Compliance with laws and regulations:** All companies are obligated to apply the laws and regulations issued by the relevant authorities, such as tax laws, fraud prevention and environmental protection.

**Types of Internal control:** In order to achieve the objectives of the internal control structure, this structure must be divided into the following three main types:

**1. Accounting control:** Accounting control aims to ensure the correctness of the information recorded in the accounting records and that it has been recorded in accordance with generally accepted accounting principles so that this information can be relied upon as well as to protect the company's assets (Nasr *et al.*, 2019: 18) <sup>[3]</sup>.

**2. Administrative control:** Administrative control aims to verify the extent to which employees adhere to the laws and policies set by the administration and to verify the optimal use of resources in operational processes (Nour El-Din, 2015: 50) <sup>[4]</sup>.

**3. Internal control:** The internal control includes the means of coordination and the organizational plan aimed at protecting the company's assets from unauthorized acquisition and use, encouraging employees to comply with administrative policies, dividing work and tasks according to specializations, so that the work of each employee is subject to scrutiny by the other employee, in order to discover error, fraud and fraud. (Al-Khatib, 2010: 18) <sup>[1]</sup>.

**Arms of Internal control:** Many feel that there is a major clash between creativity and control. Robert Simons, a business professor at Harvard University, explained that there are four control arms that help companies settle this clash (Steinbart and Romney, 2018: 280-281) <sup>[2]</sup> and these four arms (control systems) are the following:

**1. Belief System:** A summary that spreads the company's core values among employees and urges them to adhere to them. This system attracts attention to how the company establishes ethical values and helps employees understand the direction desired by management.

**2. Boundary System:** It helps employees determine the way to act ethically by setting limits that the employee cannot cross, and according to this system, employees are not informed of what they should do in the form of standard operating rules and procedures because this hinders initiative and renewal and does not lead to This leads to the emergence of authorized and responsible employees, but employees are encouraged to think and act creatively in the process of solving problems and meeting customer requirements as long as they work within certain limits.

**3. Diagnostic Control System:** The system ensures effective and efficient achievement of important goals as it measures the company's progress by comparing the actual performance with the planned performance. The planned

performance is often in the form of budgets or performance goals such as sales, profit, or the amount of revenue for each employee, and helps The diagnostic control system enables managers to track the essential performance outcomes, monitor the progress of individuals, departments, and sites within the attempts aimed at achieving important strategic goals.

**Interactive Control System:** The interactive control system helps higher-level managers who think about improving higher-level activities that require them to focus regularly, such as setting the company's strategy, setting company goals, understanding and estimating threats and risks, monitoring the most important changes in competition conditions and new technology, Determining the most important responses and action plans to deal in advance with this type of issues and sensitive activities. This system also contributes to helping managers to follow up on strategic issues accurately and to participate more in making crucial decisions. The information issued by the interactive system is better interpreted and discussed in direct meetings that include Senior managers, assistants, and colleagues.

#### The fourth topic, "The Practical Side"

##### Study population and sample:

The study population consists of a group of employees of government departments working in the public sector, where the researcher designed an electronic questionnaire that included paragraphs of the study axes to be answered by specialists in the field of research study. The electronic questionnaire was sent to a group of university professors, academic accountants and internal auditors, by sending it to them through social networking programs, and the answers to the axes paragraphs were obtained, which will be analyzed by the SPSS statistical analysis program to reach the research results. The number of respondents to the questionnaire was (62).

##### The demographic information of the study sample

The number of respondents to the electronic questionnaire consisted of (62) respondents, as the number of respondents from the General Directorate of Education in Najaf Governorate reached (31) respondents, who represent (50%) of the total number of respondents to the questionnaire, while the number of respondents from the General Directorate of Education in Babil Governorate (7) respondents, who represent (11.3%), and (1) a respondent from the General Directorate of Education in Al-Muthanna Governorate, which represents a rate of (1.6%), and (1) a respondent from the General Directorate of Education in Kerbala Governorate, which represents a rate of (1.6%), and (4) a respondent from the College of Administration and Economics, University of Kufa, who represent (6.5%), and (4) respondents from the College of Administration and Economics, University of Karbala, who represent (6.5%), and (2) a respondent from the College of Administration and Economics, University of Al-Qadisiyah, who represents a percentage of (3.2%), and (1) a respondent from the Technical Administrative College of Kufa, Al-Furat Al-Awsat University, which represents a percentage of (1.6%), and (1) a respondent from the Secretariat of the Kufa Mosque and Shrines attached to it, which represents (1.6%),

and (1) from the Technical Institute of Samawah, which represents a rate of (1.6%), and (2) respondents from the Technical Institute of Kut, which represent a rate of (3.2%), and (2) from Imam Al-Sadiq University, Najaf branch, which represent a rate of (3.2%).), and (1) a respondent from the Prime Ministry, who represents (1.6%), and (2) a respondent from the College of Engineering, University of Kufa, who represents a percentage of (3.2%), and (1) a respondent from Al-Safwa University College, which represents a percentage of (1.6%), and (1) a respondent from the Ministry of Construction, Housing and Public Municipalities, which represents a percentage of (1.6%). Table No. (1) shows other demographic information for the study sample, which was collected from the answers of the sample and analyzed by the SPSS statistical analysis program. The results of the frequencies and percentages of the study sample were obtained as shown below.

**Table 1:** Demographic information for the study sample:

	Details	Repetition	Percentage
Gender	Male	50	80.6%
	Female	12	19.4%
Qualification	Bachelor's	14	22.6%
	Master's	40	64.5%
	Ph.D	8	12.9%
Scientific specialization	Accounting	55	88.7%
	Business Administration	5	8.1%
	Statistics	1	1.6%
	Economics	1	1.6%
Number of years of service	Less than 5 years old	9	14.5%
	From 5-10 years	7	11.3%
	From 11-15 years	27	43.5%
	From 16-20 years old	11	17.7%
	From 21-25 years old	4	6.5%
	More than 25 years	4	6.5%
The total members of the study sample		62	100%

*Source:* Prepared by the researcher based on SPSS data.

**Data collection tool and statistical methods for analysis**

The researcher designed an electronic questionnaire that included paragraphs of the axes of the research study, based on scientific sources and literature related to the subject of the research, and to obtain the responses of the respondents to the paragraphs of the axes of the study. The research where the data was collected and analyzed by the SPSS statistical analysis program in order to reach the results of the research. Among the statistical methods that were used in the research study:

1. Mean.
2. Standard deviation.
3. Cronbach's alpha Laboratories.

**Method of data analysis**

The five-point Likert scale was used, which is one of the types of statistical measures, in order to test the research hypothesis, stand on the results of the research, and obtain the respondents' answers. The weights of the questionnaire paragraphs were adopted as follows: As the number (5)

indicates completely agree, number (4) agree, number (3) is neutral, number (2) does not agree, and number (1) does not agree completely.

**The reliability and validity of the study tool**

The researcher analyzed the reliability coefficient of the study tool, which means that the study scale gives the same results if it was re-applied to the same study sample. As the reliability coefficient takes values ranging between (0-1), if the value of the reliability coefficient is equal to zero, this means that there is no reliability and unreliability of the research resolution scale, and on the contrary, if the value of the reliability coefficient is equal to one, this means that there is complete reliability of the study tool. Table No. (2) shows us the values of the reliability coefficient of the study tool for the three axes, which were extracted using the Cronbach's alpha coefficient and based on the SPSS statistical analysis program.

**Table 2:** Reliability coefficient to measure the study tool:

Axis	Number of phrases	Reliability coefficient	Validity coefficient
First axis	7	0.733	0.857
Second axis	7	0.724	0.843
Third axis	7	0.765	0.874
Total	21	0.880	0.940

*Source:* Prepared by the researcher based on SPSS data.

After conducting the process of statistical analysis of the reliability coefficient for all the items of the study axes, the results of which were included in Table No. (2) above, we find that the general reliability coefficient for the study axes was (high), reaching (0.880) for the total items of the questionnaire, which numbered (21) items, while it ranged The reliability coefficient is between (0.765) as a maximum and (0.724) as a minimum, and this indicates that the paragraphs of the questionnaire have a (good) degree of reliability and can be relied upon in conducting the application to reach the research results.

**Presentation and interpretation of results**

After studying and analyzing the data of the study sample for the three axes using the SPSS statistical analysis program, it was found that the three axes of the study were effective and well, and that the value of the Cronbach's alpha coefficient was high and of great moral value. The researcher will analyze the answers to the paragraphs of each axis of the study separately, and then present and interpret the results of each axis.

**Presentation and interpretation of the results of the first axis (COSO supervisory framework)**

The researcher analyzed the arithmetic mean, standard deviation, and frequencies for each of the paragraphs of the first axis, which were presented in Table No. (3), in order to find the results of the first axis (COSO oversight framework).

**Table 3:** The first pillar (COSO oversight framework)

N	Paragraph	Scale	Completely agree	Agree	Neutral	disagree	Completely disagree	Mean	Std. Deviation	Result
1	The application of the COSO control framework contributes to reducing weaknesses in the company's internal control systems and strengthening the strengths.	Repetition	18	41	3	0.00	0.00	4.24	0.534	Completely agree
		Percentage	29	66.1	4.8	0.00	0.00			
2	The application of the COSO Oversight framework ensures the achievement of the company's objectives related to operational, reporting, and compliance objectives.	Repetition	15	42	5	0.00	0.00	4.16	0.549	Agree
		Percentage	24.2	67.7	8.1	0.00	0.00			
3	The application of the control environment component in accordance with this framework helps to determine the patterns of professional and ethical behavior of employees that are determined by the management and the board of directors.	Repetition	22	29	10	0.00	1	4.15	0.807	Agree
		Percentage	35.5	46.8	16.1	0.00	1.6			
4	The risk assessment component contributes to discovering the risks facing the company's activities and works to direct the attention of officials towards these risks, assessing them and managing them appropriately.	Repetition	21	35	5	1	0.00	4.23	0.663	Completely agree
		Percentage	33.9	56.5	8.1	1.6	0.00			
5	The control activities component enhances the control procedures to reduce the risks facing the company at various administrative levels.	Repetition	18	36	6	1	1	4.11	0.77	Agree
		Percentage	29	58.1	9.7	1.6	1.6			
6	The information and communication component provides employees with the information and communications necessary to carry out the tasks and responsibilities assigned to them and to understand their oversight responsibilities to ensure the achievement of the company's objectives.	Repetition	22	33	7	0.00	0.00	4.24	0.645	Completely agree
		Percentage	35.5	53.2	11.3	0.00	0.00			
7	The control component is the control lens to ensure that the components of the framework operate properly and to identify deficiencies in each of these components.	Repetition	20	34	6	1	1	4.15	0.786	Agree
		Percentage	32.3	54.8	9.7	1.6	1.6			
First axis result		Repetition	136	250	42	3	3	4.19	0.546	Agree
		Percentage	31.37	57.6	9.6	0.68	0.68			

Source: prepared by the researcher based on SPSS data.

Table No. (3) shows us the results of studying the responses of the respondents to the paragraphs of the first axis (COSO Oversight framework) after analyzing them using the SPSS statistical analysis program and obtaining the arithmetic mean and standard deviation for each of the paragraphs of the first axis (COSO supervisory framework). Where it was found that the sixth paragraph, which states On (the information and communication component provides employees with information and communications necessary to carry out the tasks and responsibilities entrusted to them and understand their oversight responsibilities to ensure the achievement of the company's goals), it ranked first among all paragraphs of the first axis, with an arithmetic mean of (4.24) and a standard deviation of (0.645). The degree of response indicates (completely agree), which is highly significant according to the five-point Likert scale, which means that the study sample emphasize the importance of the information and communication component in providing the necessary and necessary information to the company's employees, which helps them to identify their tasks and responsibilities that fall on them, which in turn Contribute to

the achievement of the company's goals, while the fifth paragraph got the last rank among all the paragraphs of the first axis, which states (that the control activities component enhances the control procedures to reduce the risks facing the company and at various administrative levels) with an arithmetic mean of (4.11) and a standard deviation of (0.77). In other words, the degree of response was (agree) with a high degree of respondents' responses according to the five-point Likert scale, which means that the study sample support, with a high degree, the role played by control activities in reducing the risks that impede the achievement of the company's goals.

**Presentation and interpretation of the results of the second axis (internal control structure)**

Table No. (4) refers to the results of the study of respondents' responses to the paragraphs of the second axis (internal control structure), as it shows us the arithmetic mean, standard deviation, frequencies, and repetition percentages for each of the paragraphs of the second axis, as shown below in Table No. (4).

**Table 4:** The second axis (internal control structure)

N	Paragraph	Scale	Completely agree	Agree	Neutral	disagree	Completely disagree	Mean	Std. Deviation	Result
1	Designing an efficient organizational structure in which the powers and responsibilities are defined for each employee contributes to consolidating an effective internal control structure.	Repetition	34	25	1	2	0.00	4.47	0.695	Completely agree
		Percentage	54.8	40.3	1.6	3.2	0.00			
2	The existence of a flexible organizational structure that takes into account the application of the principle of separation of duties and functions enhances the elements of internal control.	Repetition	26	32	3	1	0.00	4.34	0.651	Completely agree
		Percentage	41.9	51.6	4.8	1.6	0.00			
3	The need for a sound and easy-to-understand accounting system by the company's employees reduces the commission of errors and irregularities among these	Repetition	24	31	5	2	0.00	4.24	0.74	Completely agree
		Percentage	38.7	50	8.1	3.2	0.00			

	employees, which supports the pillars of internal control.									
4	A sound internal control system is characterized by the employment of qualified and specialized employees, which in turn leads to a reduction in the commission of violations and cases of fraud and enhances the robustness of the internal control structure.	Repetition	32	25	5	0.00	0.00	4.44	0.643	Completely agree
		Percentage	51.6	40.3	8.1	0.00	0.00			
5	It is the responsibility of the company's management to design an effective internal control structure that ensures the achievement of its set goals.	Repetition	24	29	8	1	0.00	4.23	0.734	Completely agree
		Percentage	38.7	46.8	12.9	1.6	0.00			
6	The company's management should develop effective control plans, policies and procedures to ensure the protection of its assets from embezzlement and illegal acquisition, which indicates the existence of a solid internal control system.	Repetition	23	33	6	0.00	0.00	4.27	0.632	Completely agree
		Percentage	37.1	53.2	9.7	0.00	0.00			
7	The company's management should conduct a continuous and periodic evaluation of its employees, identify deviations and their causes among their employees, and find solutions to address them, which supports the internal control system and its components.	Repetition	26	32	3	1	0.00	4.34	0.651	Completely agree
		Percentage	41.9	51.6	4.8	1.6	0.00			
Second axis result		Repetition	189	207	31	7	0.00	4.40	0.534	Completely agree
		Percentage	43.5	47.6	7.14	1.42	0.00			

Source: prepared by the researcher based on SPSS data.

Table No. (4) related to the results of the second axis (internal control structure) shows us that the first paragraph, which states (that the design of an efficient organizational structure in which the powers and responsibilities of each employee are defined contributes to consolidating the existence of an effective internal control structure) has got the first place among All paragraphs of the second axis, with an arithmetic mean of (4.47) and a standard deviation of (0.695). As the degree of response indicates (completely agree), which is of great moral significance according to the five-point Likert scale, which means that the study sample stress the importance of designing an effective and efficient organizational structure for the company in which the powers and responsibilities of all the company's employees are determined, which helps in establishing a solid internal control structure. Paragraph No. (5) ranked last among all the paragraphs of the second axis, which states (it is the responsibility of the company's management to design an

effective internal control structure that ensures the achievement of its set objectives), with an arithmetic mean of (4.23) and a standard deviation of (0.734), and that the degree of The response was (completely agree) according to the five-point Likert scale, which indicates that all the paragraphs of the second axis have received significant support from the study sample.

**Presentation and interpretation of the results of the third axis (COSO framework and its importance in improving the internal control structure)**

Table No. (5) refers to the results of the study of respondents' responses to the paragraphs of the third axis (COSO framework and its importance in improving the structure of internal oversight), as it shows us the arithmetic mean, standard deviation, frequencies, and repetition rates for each of the paragraphs of the second axis, as shown below in Table No. (5).

**Table 5:** The third axis (COSO framework and its importance in improving the internal control structure)

N	Paragraph	Scale	Completely agree	Agree	Neutral	disagree	Completely disagree	Mean	Std. Deviation	Result
1	The adoption of the COSO framework in the company helps to design efficient organizational structures with clear powers and responsibilities.	Repetition	20	32	10	0.00	0.00	4.16	0.682	Agree
		Percentage	32.3	51.6	16.1	0.00	0.00			
2	Achieving the operational goals, reporting, and compliance goals according to the COSO framework, it is necessary to take into account the application of the principle of separation of duties and functions.	Repetition	22	31	9	0.00	0.00	4.21	0.681	Completely agree
		Percentage	35.5	50	14.5	0.00	0.00			
3	The adoption of the control environment component according to the COSO framework by the company's employees makes each employee able to understand his roles and responsibilities in applying the accounting system.	Repetition	19	40	3	0.00	0.00	4.26	0.541	Completely agree
		Percentage	30.6	64.5	4.8	0.00	0.00			
4	The use of an effective risk assessment component in accordance with the COSO framework and the presence of competent and experienced employees, which helps in achieving the company's planned objectives.	Repetition	21	35	6	0.00	0.00	4.24	0.619	Completely agree
		Percentage	33.9	56.5	9.7	0.00	0.00			
5	The presence of the control activities component in accordance with the COSO framework, working in conjunction with an effective internal oversight structure that ensures efficient risk management and the achievement of the company's objectives.	Repetition	21	33	6	1	1	4.16	0.793	Agree
		Percentage	33.9	53.2	9.7	1.6	1.6			
6	The information and communication component works according to the COSO framework to provide the necessary information and provide means of communication that guarantee the protection of the company's assets from manipulation, embezzlement and illegal acquisition.	Repetition	14	36	9	2	1	3.97	0.809	Agree
		Percentage	22.6	58.1	14.5	3.2	1.6			
7	The oversight component is used in accordance with the COSO framework to determine the means of reporting on the evaluation	Repetition	19	34	8	1	0.00	4.15	0.698	Agree
		Percentage	30.6	54.8	12.9	1.6	0.00			



of internal control components and to identify deficiencies and material weaknesses in the internal control structure, which helps to correct deviations and develop appropriate treatments.									
Third axis result	Repetition	136	241	51	4	2	4.15	0.540	Agree
	Percentage	31.3	55.5	11.7	0.91	0.45			

Source: prepared by the researcher based on SPSS data.

Table No. (5) shows us the results of the study of the responses of the respondents to the paragraphs of the third axis (COSO framework and its importance in improving the internal oversight structure). The COSO framework by the company's employees makes each employee able to understand his roles and responsibilities in applying the accounting system) with an arithmetic mean of (4.26) and a standard deviation of (0.541). This indicates that the degree of response among the study sample was (totally agree), which is highly significant according to the five-point Likert scale, which means that the application of the control environment component according to the COSO framework contributes to improving the professional and ethical behavior of the company's employees, which in turn raises the level of interest in responsibility. The company's employees have the direction of achieving its set goals, while the sixth paragraph ranked last among all the paragraphs of the third axis, which states (the information

and communication component works according to the COSO framework to provide the necessary information and provide means of communication that guarantee the protection of the company's assets from manipulation, embezzlement and illegal acquisition) with an arithmetic average of (3.97) and a deviation A standard value of (0.809), which indicates that the degree of response was (OK), which is of good moral significance according to the five-point Likert scale.

**Analysis of correlation coefficients for the axes of the study**

In order to know the value of the correlation coefficients for the study axes and the type of relationship between them, the researcher analyzed the data of the study sample and using the Pearson correlation coefficient analysis. The results of the study axes were reached. Table (6) shows the results.

**Table 6:** Correlation coefficients for the axes of the study

		First axis	Second axis	Third axis
First axis	Correlation coefficient	1	0.220	0.565**
	Significance value		0.086	0.000
	Number of the sample	62	62	62
Second axis	Correlation coefficient	0.220	1	0.450**
	Significance value	0.086		0.000
	Number of the sample	62	62	62
Third axis	Correlation coefficient	0.565**	0.450**	1
	Significance value	0.000	0.000	
	Number of the sample	62	62	62

\*\* Correlation coefficient at the level of statistical significance 0.01

Source: prepared by the researcher based on the statistical program (SPSS).

After studying the results of the correlation coefficients, we notice that the relationship is direct and has a weak statistical significance according to the five-pointed Likert scale of the Pearson correlation coefficient between the first axis (COSO oversight framework) and the second axis (internal control structure), with a correlation coefficient of (0.220) at a significant level (0.086). They are the least correlated among all the axes of the study, while the type of relationship between the first axis (COSO supervisory framework) and the third axis (COSO framework and its importance in improving the internal oversight structure) was a direct relationship with medium statistical significance, and those who obtained a correlation coefficient of (0.565\*\*) according to the scale The Pentacle.

**Testing the study's main hypothesis**

The researcher used linear regression analysis to verify the validity of the main hypothesis of the study.

H0: There is no statistically significant effect at the 95% confidence level of the COSO Oversight framework on improving the internal control structure applied in the company.

Ha: There is a statistically significant effect at 95%

confidence level of the COSO oversight framework on improving the internal oversight structure applied in the company.

**Table 7:** The results of testing the main hypothesis of the research

Axis	Mean	Std. Deviation	Correlation coefficient	Regression coefficient
First axis	4.19	0.546	0.565	0.001
Third axis	4.15	0.540		

Source: Prepared by the researcher based on the statistical program (SPSS).

After studying the results of the linear regression test shown in Table No. (7) for testing the main hypothesis of the research, it was found that the type of correlation is a direct and medium correlation between the first variable (COSO oversight framework) and the third variable (COSO framework and its importance in improving the internal control structure), where the value of the coefficient Correlation (0.565) it is a statistically significant value at the confidence level (0.05), which means that the application of the COSO framework has a significant impact on improving the internal control structure, which in turn contributes to

achieving the company's goals. Table No. (7) also showed the regression value (0.001) according to ANOVA analysis, which is less than the value (0.05) set by the researcher. Thus, the null hypothesis was rejected, which states (there is no statistically significant effect at a 95% confidence level of the COSO oversight framework on improving the internal control structure applied in the company) and the alternative hypothesis was accepted, which states (there is a statistically significant effect at a 95% confidence level of the framework COSO on improving the internal oversight structure applied in the company).

#### **Fifth topic: "Conclusions and Recommendations"**

##### **Conclusions:**

1. The weakness of most of the internal control systems in the public sector companies in Iraq, which indicates the great importance of the COSO framework in improving the internal oversight structure.
2. The implementation of the COSO framework contributes to reducing weaknesses and increasing strengths in the internal control structure.
3. There is a statistically significant effect of the importance of applying the COSO oversight framework and its components and its effective role in improving the internal oversight structure in companies.
4. The five components of the COSO framework have an effective impact in contributing to achieving the company's objectives related to the effectiveness and efficiency of operations, reliability of financial reports, and raising supervisory awareness in compliance with applicable laws and regulations.

##### **Recommendations**

1. Urging public sector companies in Iraq to adopt the application of a reference framework represented by the COSO Oversight framework and its five components (control environment, risk assessment, control activities, information and communication, and monitoring) due to its utmost importance in assisting companies in providing reasonable assurance of achieving their set objectives and facing Risks that hinder the achievement of these goals.
2. Directing the attention of the professional bodies and organizations in Iraq that are responsible for the process of regulating the accounting and auditing profession towards applying the latest versions of the global internal control frameworks because of these frameworks of great importance in improving the internal control structures and keeping pace with the latest control versions and their importance in applying them in the environment of Iraqi companies.

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