

# CONTROL ENVIRONMENT EFFECTIVENESS: THE INFLUENCE OF CONTROL SYSTEMS ON THE EXTERNAL AUDIT PROCEDURES QUALITY

Rana M. Airout, Philadelphia University

## ABSTRACT

*This research intended to identify the influence of internal control systems on the external audit procedures in the Jordanian business environment. Specifically, to investigate the impact of control systems (accounting, managerial and internal control) on the effectiveness of external audit procedures, representing by four main audit aspects (including the planning for the audit process, developing audit testing procedures, risk assessments, and implementation of the audit plan). This study uses the questionnaire to gather data to test the relationship between internal control systems and external audit procedures. This research focuses mainly on the Jordanian external auditors' point of view regarding these control systems' influence on the external audit procedures. Data were analyzed employing inferential and descriptive statistics. The research hypotheses were tested using one-sample t-test. Based on 64 valid questionnaires, the findings of the study results show that internal control systems do contribute significantly toward improving the effectiveness of various external audit procedures. The main findings illustrate that the internal control system is the most vital monitoring factors; it has a significant influence on external audit procedures. Moreover, the participants perceived that internal control; accounting and managerial systems play an essential role in enhancing the quality of audit procedures especially their role in conducting a risk assessment. Moreover, the descriptive and inferential findings demonstrate that the influence of the internal control systems over the planning for the audit process was the most important monitoring system. The internal control systems have impact on developing the audit plan, the audit plan tests and risk identification. The findings also suggest that accounting control systems influence the external audit procedures in Jordanian companies that can assist in improving different procedures of external audit. This indicates that the auditors should be aware of the dynamic role of particular internal control systems to enhance the procedures of external audit. The research findings consistent with the Jordanian set of laws, such as JCGC which highlights the significance role of these systems on the control environments and audit processes. The research findings have practical implications for the policymakers, including (board of directors and external auditors). This research recommends that control systems should exert more assurance in monitoring the control environment and external audit process.*

**Keywords:** Control systems, External Audit Procedures, Internal Control System, Accounting, Managerial and Internal Control.

## INTRODUCTION

Due to several audit failures and business scandals worldwide in the last few years, interest in the correlation between internal control systems and the value of the quality of external audit procedures has been reignited. The internal control system's weakness and the failure of auditing have called for improving the internal governance mechanisms in general and External Audit Procedures in particular (Carcello et al., 2011; Karaibrahimoglu, 2013; Nigel & Fedapo, 2018). At its early stages, internal control has been associated with

protecting cash as it is the most vulnerable asset to fraud and embezzlement. Such protection can be achieved by safeguarding money from theft and embezzlement, such as defining the treasurer's duties and responsibilities and separating the conflicting powers such as collections and registrations (Jokipii, 2010). After that, the scope of the internal control extended to include stock control and other access means. Internal control was known as internal control, and then the internal control expanded to include the measures taken to guarantee the validity and accuracy of the accounting data (Khamis, 2013). Internal control is scientifically known as the means of ensuring the performance of tasks according to the set plans and programs and assessing the level of performance within the various units. Such control is exercised inside the company by the top management as an internal control of all activities (Lai et al., 2017). There is another category of control exercised outside the unit by the shareholders and other authorities as an external control on top management's actions. It is the organization's management's responsibility to establish a sound internal control system and maintain it and ensure the integrity of applying such a system. The administration also has the legal obligation of keeping accounts regular, particularly in joint-stock companies. However, no standard accounts can exist without a sound internal control system (Kewo & Afiah, 2017; Ibrahim et al., 2017).

Effective control systems play a vital role in ensuring objective organizations accomplishment (Xie & Ranjan, 2002; Wijethilake, 2017; Abdulnafa et al., 2011). Internal control is considered a starting point for the external auditor when preparing the audit program and specifying the tests that they will perform and the examinations that will be implemented for applying the procedures of weakness or strength of the internal control system (Abdullah & Al-Araj, 2011). Other than auditors, the management is also concerned with the adequacy of internal accounting controls. Administrative controls consist of a plan of the company and all procedures and measures that are related primarily with operational effectiveness and observance to managerial policies and which usually are just indirectly connected to the financial reports (Jokipii, 2010). They typically comprise such controls as performance reports, statistical analyses, quality controls and employee training programs. The external auditor determines the nature of obtaining the audit evidence and determines the depth required for examining such evidence throughout the process of external auditing and collecting evidence. The auditors shall continue the examination and assessment of the internal control system until they become familiar with the methods to the extent that removes any doubt or question in their mind about the organization's procedures and the effectiveness and efficiency of the system (Khamis, 2013). Thus, accountants, auditors and the organization's management had a great interest in internal control systems during the last years, mainly because auditing transformed from a full detailed process to a testing process based on the statistical sample method. Such method depends – for determining its volume and the number of its tests – on the degree of robustness of the internal control system used in the concerned project (Leng & Li, 2011; Saha & Arifuzzaman, 2011).

The assessment of the internal control system approved in the organization is one of the essential steps of auditing (Rahaleh, 2011). It aids to discover the weaknesses of the auditing processes and then focusing on such flaws in the review process, and discovering strengths (Gillan, 2006). Such a system reflects the organizational plan and all procedures and measures adopted by the organization to ensure the proper functioning of all jobs and ensure the correctness and reliability of information resulting from the organization's information systems (Voeller & Zein, 2013). The development in the business of the latter requires adapting the internal control system with the new form of the organization; as such system is related to the procedural control of the business inside the organization. Thus, the organization can continue its activity through developing procedural control on all operations on the one hand, and through reviewing the statements of the nature of organization's activity

and reflecting the true financial position of the organization. The main research question for this study are the following:

1. What is the influence of the managerial control system, accounting control system and internal control system on External Audit Procedures (the planning for the audit process, audit testing procedures, risk assessments, implementation of the audit plan)?

Accordingly, the current study aims to answer the following research question: Do the different components of the internal control systems contribute significantly to the audit program's effectiveness in Jordan?

In order to answer the research question, a quantitative research (questionnaire) was incorporated in this study. Based on external Jordanian auditors' responses.

### **Research Problem and Aim**

The auditors generally assess and the quality evaluation of the intended company's system of internal monitoring in order to assess and planning the reach and auditing process (Calotă & Iana, 2009). There are several interrelated internal control components, including the environment for control, risk perception, operations for control, communication and monitoring (Alawaqleh et al., 2021). The study conducted by Abdullah & Al-Araj (2011) in Jordan, two auditing approaches, i.e., traditional audit approaches and business risk audit approaches, were primarily focused. The key drawbacks of conventional methods were explored in the analysis and the problems posed by following the method of auditing business risk (Wang, 2010). The findings revealed the auditors of Jordan prefer to use conventional auditing methods and, for several reasons, neglect the business risk audit approach (Abdullah & Al-Araj, 2011). However, previous research, especially in developing countries, the relationship between internal control quality and the performance of the audit programme has been overlooked (Cristina et al., 2010). Relatively few studies have been conducted on the criteria used by a company to select an audit firm. This study is important due to its role in clarifying the impact of internal control systems (administrative control, accounting control and internal control) from the point of view of the external auditor in the industrial companies on the audit procedures (planning, risk identification, implementation of audit test) to avoid the weaknesses, and to ascertain the existence of a strong internal control that can ensure the accuracy of the financial statements within the laws applied in the financial systems. In the light of its importance, as facilitating the work of the auditor is beneficial to such organizations if such organizations system as control system aid to improve the control system. The auditor's report relies mainly and sufficiently on the internal control system (Khamis, 2013). There are unlimited risks that may affect the national economy and affect such organizations and financial companies. The external auditor's report does include an examination or opinion of the organization's internal control auditor relies on the internal control procedures. The study aims at identifying the impact of applying the internal control systems on the external audit procedures. It also aims at identifying the extent to which the external auditor's report relies on the quality and the efficiency of the internal control. From such main objectives, the following sub-objectives can be derived as following:

1. To examine the impact of applying the internal control systems (managerial, accounting and internal control) on the external audit procedures.
2. To determine the extent to which the companies and economic organizations adhere to internal control standards, particularly the financial and accounting control.
3. To investigate the extent to which the external audit uses the internal control systems in conducting their work.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

This section aims to define the control's theoretical concepts to reach a comprehensive conceptual framework that will be the basis of the field study (Jokipii, 2010). This section highlights control definitions in general and defines the managerial, accounting and internal control systems and their components and importance. Furthermore, it highlights the purpose of an external audit and its objectives and significance. It also reviews the essential literature covered by previous studies on the subject of the current study. The JCGC (2006) highlighted that the role of the internal control mechanisms in conducting the monitoring tasks over the auditing activities. The audit service development in practice requires a good understanding of its operation system (Abbott & Parker, 2000; Carcello & Neal, 2000). Kamel & Elkhatib (2013) focus on developing markets in their study, in their empirical study in Egypt. This study employed a survey to examine the financial managers, external auditors and senior accountants' perceptions; these participants express their point view concerning to the influence of the audit committees on the financial reporting quality and control systems. The findings recommend that “*revising vital changes in accounting policies*” is the most important function for an efficient audit committee, follow by internal control assessment.

### External Audit Procedures

Auditing means checking internal control systems, data, documents, accounts, and project registers under auditing (Halbouni, 2015). This means reaching a neutral technical opinion about the importance of the financial statements about that project's financial position at the end of a known period and the extent to which it depicts its business results from profit or loss from that period. The auditor works with the company to check what the accountant reports regarding its accounts (Soliman & Elsalam, 2013). The audit was defined as a systematic process of obtaining the evidence related to the elements indicating economic events and objectively evaluating them to ascertain the degree of conformity of these elements with the objective criteria, then communicating the results of this to the concerned parties (Yuniarti & Ariandi, 2017).

The audit process includes examination, investigation, and report. The analysis means the verification of the validity of the operations that have been recorded, analyzed and classified, i.e., an examination of the mathematical measurement of financial operations for the specific activity of the project (Knechel et al., 2012). Out of the previous definition, we find that auditing includes the following points:

1. Auditing is a normal process that depends on prior planning for what the auditor will be doing during the process.
2. The importance of the auditor obtaining the appropriate evidence and evaluating them objectively.
3. Commitment to the elements under examination to the criteria established as a basis for evaluation and opinion.
4. The audit process ends with communicating the auditor's examination results to the concerned parties, which means that the audit is a communication method.

As observed by the researcher, the professional meaning of auditing means the process of reviewing the organization's documents, registers and records validate operations and expressing the opinion on the fairness of the organization's financial reports relying on the strength and durability of the internal control system. They refer to the auditor's steps and techniques from the beginning of the audit process until the audit report's issuance. Such strategies include planning, development, risk identification and implementation (Almasria, 2022).

**Planning and documenting the audit process:** Planning for the audit process includes developing the overall audit strategy of the process developing an audit plan (Glover et al., 2003). Adequate planning benefits the process of auditing the financial statements in several ways such as assisting the auditor to pay attention to the important aspects of the audit process. It also assists the auditor to identify the potential problems (Glover et al., 2000). Obtaining sufficient evidence is vital for an accounting organization to avoid liability exposure and maintain a good reputation in the business community. It is mentioned in Standard No. (ISA 300); Paragraphs 2 and 3.

*“The auditor should plan and implement the audit work to reduce the audit risk to an acceptable low level, which is consistent with the achievement of the audit goal so that the audit can be carried out effectively”.*

**Audit Testing Procedures:** After developing the general audit strategy that relates to the nature, scope and timing of the audit process, the auditor shall prepare the audit plan that is more detailed than the general strategy and identifies the nature, timing and extent of the audit procedures that the auditor will conduct to obtain adequate and appropriate audit evidence that help to reduce the audit risk to an acceptable level (Glover et al., 2000; Montgomery, 2010). It is also stated in Standard No. 300, paragraphs 11 and 14, *“a detailed audit plan is established that includes the nature, timing and extent of the audit procedures that the audit team will undertake to obtain sufficient and appropriate evidence to reduce the audit risk to an acceptable low level. According to the audit strategy to meet the need to achieve audit objectives through the efficient use of the auditor's resources.”*

**Risk assessment procedures:** Audit procedures performed to understand the organization and its environment risk (Calotă & Iana, 2009), including internal control and identification and assessment of the risks of material misstatement, whether they are caused by fraud or error on the level of financial statement and the level of issuance of the international standards for quality control, auditing, revision, and other assurance process and related services (Abdullah & Al-Araj, 2011, Magu & Kibati, 2016). Define the characteristics of the audit task, which include defining the scope of this process, such as the financial reporting framework used, the industry's financial reporting requirements in which the client organization operates, and its components (Glover et al. 2003, Al-Harshani, 2012; (Ji & Qu, 2018).

**Implementation of the audit plan:** After the auditors plan for the audit process, develop the audit plan and identify the risks, they should study and understand the internal control system for planning purposes (Magu & Kibati, 2016). They should start this stage by implementing the specified tests in the audit program (Montgomery, 2010). Such tests aim to determine the extent to which internal control is appropriate and the operating system is efficient. As for the necessary operations tests, they aim to verify distortions in these operations' monetary values (Asare & Wright, 2004).

The auditor then performs the detailed tests for the final account balances in the ledger related to the income and budget statement, taking note of the exact difficulties of the income and feature balances that the focus is on budget accounts (Ramos, 2003; Glover et al., 2003). The auditor performs detailed examinations of the ratios to verify the rights, obligations, evaluation and distribution. The auditor also performs the analytical procedures (analytical review), which is the process of examining the financial information. At this stage, the auditor performs tests of presentation and disclosure to verify the occurrence and completeness, classification, understandability, accuracy, and evaluation.

## The Role of Internal Control in the External Audit Process

Internal control refers to a managerial plan, and all coordination means and measures to protect the project's assets from embezzlement, manipulation or misuse. Internal control involves the organizational plan and all means of coordination to protect the project assets from embezzlement, loss or misuse. To achieve its goals, internal control relies on sharing the work with self-monitoring so that each employee's work is reviewed by another employee involved in implementing the process. It also depends upon the determination of authorities, powers and responsibilities (Jokipii, 2010).

Similar definitions have internal control. That is, it's hard for internal control to just provide one perfect definition this is because, from multiple viewpoints, it can be explained (Li & Wei, 2008). Internal control, however, the process is established to provide equal assurance in the attainment of the aims, plans, and strategies of the organization, in compliance with applicable legislation, laws, policies, and regulations, and to the acts of the Board of Directors and other corporate organization. Major organizations have recently started to generate detailed management reports on the efficiency and success of internal control systems as a measure of good corporate governance practice in their yearly corporate reports (Leng & Li, 2011). The assessment of the system of internal monitoring is based, however, primarily on an assessment of internal quality management at three main levels of the planned organization, which involves adequate control of internal, inadequate control of internal and insufficient control of internal. The efficiency of an organization's system of internal monitoring is generally agreed for the audit process since the primary determinant, schedule and degree of execution or restriction of audit procedures is considered (Saha & Arifuzzaman, 2011).

Internal control is such a system that aims to audit accounting and financial operations to serve the management. Internal control is sufficient if there is an effective internal control system. The internal control system requires special arrangements for the duties to prevent and discover errors and fraud, in addition to the following:

1. Defining (separating) the *managerial* prerogatives in a way that makes efforts unified – not contradicted and defining priorities at the level of individuals within subsidiary sections and departments, so one person does not carry out that process from its beginning to the end. Instead, the process must be divided into stages. Each employee shall perform the first stage, which means monitoring the employee after the employee's work in the preceding step; this identifies the responsibility once an error or fraud is detected.
2. Defining the detailed procedures for the steps of the processes undertaken by the organization, so that the person responsible for performing a process could have full information about the procedures to be applied for such process.

Internal control's main objectives include establishing an organizational structure to clarify the authorities, powers, and responsibilities within the organization. The existence of an organizational structure in the organization is a critical factor in achieving both accounting and internal administrative control, which is done through an integrated organizational chart in the organization and the provision of crisis protection to the organization's assets from embezzlement and manipulation while preserving the rights of others in the organization (Jokipii, 2010). The organization's assets protection takes various methods and forms, but it is often focused on providing full protection to its assets and preventing them from being lost, wasted and stolen (Khamis, 2013). To achieve such goals, companies need several internal control types, each of which shall have its competence and powers (Almasria, 2021).

Internal control is a procedure performed by the organization's management to ensure the progress of work and achieve the established plans and objectives to reach the best results (Muhunyo & Jagongo, 2018). The effective implementation of the organization's internal

control protects the company from the risks it may face and protects the assets and funds of the company from loss and theft. Thus, the company's internal control system is the cornerstone from which the controller starts his work; whenever the internal control system is robust, the results of the external audit will be accurate and better (Magu & Kibati, 2016; Chalmers & Khelif, 2019).

The emergence of large projects nowadays has increased internal control as a system that helps the management achieve its objectives (Oussii & Taktak, 2018). At its early stages, internal control has been associated with protecting cash as it is the most vulnerable asset to fraud and embezzlement. Internal control refers to groups of procedures and means adopted by the management to protect the organization's assets and to ensure the accuracy and integrity of the financial statements including increase the reliability thereof. Internal control is considered one of the basics of administrative jobs such as planning, organization, guidance and decision making (Khamis, 2013). The internal control system in a project is considered the starting point from which the external auditor starts his work. Whenever the internal control system is robust, the auditor can rely on the sampling method to obtain evidence and clues of consistency, and whenever the internal control system is weak, the auditor will resort to increasing the size of the selected sample (Lai et al., 2017; Oussii & Taktak, 2018).

Internal control was defined as the measurement of the control system that concerns the achievement of the organization's accounting objectives, and it is an essential and continuous process performed by the management at all levels to assess the employees (Goloshchapova et al., 2017). Performance and their achievements, and to determine the extent to which the organization achieves its objectives and plans, and to ensure the implementation's progress according to the established policies and within the time, capabilities and costs specified in the plan (Masadeh et al., 2021).

The internal control function is considered one of the behavioral operations due to its connection to human behavior because its parties are humans (the controller and the person subject to control), and it is behavioral because it aims at affecting such behavior by exposing the persons and their actions to examination and evaluation. Internal control can be defined as the organizational plan and the procedures and means adopted by the management of the organization to protect the assets of the organization and to ensure the accuracy of the accounting data, and to increase the production efficiency and to increase compliance with the accounting policies (Almasria, 2021). Moreover, internal control is interested in pursuing the plans step by step when implemented, to identify the errors, deviations and pitfalls associated with implementation, and overcome them on time and take corrective actions before its risk becomes more serious, which guarantee the integrity of the financial position of the public organizations and leads to achieving balance and maintaining the financial position (Rahim, et al., 2017).

It is clear from this definition that the internal control system extended to include the following: accounting and financial departments functions in addition to other scopes such as planning budgets, standard costs and periodic reports on statistical operations and analyzes. It also includes training programs and all means of evaluating productive efficiency and achieving administrative policies. The importance of the internal control system for the management derives from the fact that such system enables it to ensure proper implementation of the established financial policies, and thus achieving the objectives related to the credibility and fairness of the financial statements, to protect the company's assets from manipulation and misuse (Jokipii, 2010; Xiao, 2011; Ibrahim et al., 2017).

Internal control systems are considered alarms of errors and deviation in companies' performance. Such control seeks to prevent mistakes or misuse of funds and resources and protect them from loss or embezzlement (Khamis, 2013). The internal control system is a

function performed by the specialized authority to ensure that the work is going according to the established objectives and on time. It is the first line of defense that protects the shareholders' interests (Lai et al., 2017; Rubino et al., 2017; Rae et al., 2017). The internal control includes all the techniques and methods set by the company to protect the assets and ensure the accuracy of the accounting data, which raises the production efficiency and encourages compliance with the administrative policies set by the administration (Voeller & Zein, 2013; Lawson et al., 2017). Therefore, there must be substantial internal control within the organization that works effectively according to the system. Having accurate accounting information facilitates the work of the external auditor. This information helps the auditor to produce precise accounting reports. In this case, the auditor's task is to determine the degree of strength or weakness of the control system (Magu & Kibati, 2016). Strong internal control makes the audit sample size less, and this facilitates the work of the auditor in the audit procedures, thus saving the effort and time that benefits the organization with interest and profit. The researcher also believes that the administration is responsible for designing the internal control system in a way that enables it to achieve the set goals and obtain reasonable assurance that the desired objectives of the audit process have been achieved and that the audit procedures established by the administration help to prevent errors and detect fraud. According to the previous discussion, there are different ways that the external auditor cooperates and works together with internal governance bodies to enhance control procedures and quality of financial reporting (Adeyemi et al., 2012; Karaibrahimoglu, 2013). Therefore, this research argues that adequate internal control systems are vital for an effective audit procedure, as outlined in the previous studies (Voeller & Zein, 2013). Thus, the following research hypotheses have been developed:

*H1: There is a significant effect of "Internal Control System" on the planning for the audit process, implementation of the audit plan, audit testing procedures and risk assessments.*

### **The Role of Managerial Control in the External Audit Process**

Managerial control refers to the organizational plan, means of coordination and the measures that aim at achieving the most significant possible degree of productive efficiency while encouraging compliance with policies and administrative decisions.

It involves the managerial plan, coordination, and procedures to achieve the highest potential degree of productive efficiency while encouraging compliance with policies and administrative decisions. It depends for the sake of achieving its goals on multiple means, such as statistical statements.

The quality control reports, budgets, standard costs, and the use of graphs are indirectly related to accounting and financial records (Abdusalomova, 2020). The American Institute of Certified Accountants defines administrative control as follows: "*It includes the organizational plan, procedures, documents, and records relating to decision-making processes that lead to administrative licensing of operation. Such license has an administrative function that is directly related to responsibility when achieving the organization's goals, and it is the starting point for creating or establishing accounting control of operations.*" Among the essential methods used by the organization to achieve the objectives of administrative control are the following: planning budgets - movement and time studies - responsibility accounting system - graphs and statistical statements - standard costs - quality control - performance evaluation system - periodic efficiency reports - training programs.

Administrative control usually involves methods, procedures, and organizational plans to achieve the highest possible operational efficiency, ensuring compliance with established policies and procedures (Asiligwa & Rennox, 2017). Administrative control can

be achieved through means and techniques related to planning and continuous monitoring of plans' implementation.

The audit's aim requires the (administrative and accounting) system to identify the work steps and procedures necessary to perform the work efficiently. There should also be a sound reporting system prepared based on responsibilities (vertical and horizontal) to detect strengths and weaknesses in responsibility centers' progress and performance. Accordingly, the study's hypothesis is as follows:

*H2: There is a significant effect of "Managerial Control System" on the planning for the audit process, implementation of the audit plan, audit testing procedures and risk assessments.*

### **The Role of Accounting Control in the External Audit Process**

Accounting control involves the managerial plan and all procedures of coordination and procedures that aim at testing the accuracy of the accounting data in books and accounts (Jokipii, 2010, Phomlaphatrachakom, 2020). This type includes multiple techniques, such as following the double-entry system, using the control accounts (total). It also focuses on following the periodic review balances, following the system of certifications, approving adjusting entries by a responsible officer, providing the sound documentary system and the internal audit system, and separating the duties of the account officer from duties related to production and storage (Asiligwa & Rennox, 2017; Fitriyani, 2019).

Accounting and Financial Control refers to verifying the truthfulness of the accounting information recorded in books and accounts and determining how we can rely on such data and track the accuracy, recording, classification, analysis and presentation of accounting data (Phomlaphatrachakom, 2020). Accounting control means all the methods, means, procedures, and systems established by the management to protect its different resources and ensure the validity of reports and financial statements made during (the audit trail) (Khamis, 2013; Roque et al., 2019). Such control is achieved through a man's presence and a subsidiary plan that defines the activity elements and how to do it for all levels of management and responsibility centers related to it. It also requires determining the policies and regulations on which financial operations and actions are implemented and clearly defining the framework of authority and responsibility that eliminates any interference or conflicts of competence and ensures cooperation of all internal activities levels to achieve the desired planned goals (Phomlaphatrachakom, 2020). Such control methods prevent the issuance of any promissory note or any action in the elements of the activity, without the instructions from the person in charge, and only within the limits of the powers conferred upon him, so that each official bears his responsibilities for what falls within the scope of his responsibilities, and is held accountable for the consequences of his actions. By applying such control methods on all elements of the activity, accounting control can be achieved efficiently and effectively (Abdulnafa et al., 2021; Kizirian et al., 2005).

The accounting control system aims to test the accuracy and reliability of the accounting data recorded in books and accounts and track the veracity of the recording, classification, analysis and presentation of accounting data. Therefore, the AICPA defines accounting as a sufficient and efficient system of controls designed to provide reasonable and appropriate assurance, taking the following into account:

1. Executing operations according to a general and specific license from the management. Procedures shall be appropriately registered as follows:
2. Preparation of financial reports by GAAP that are generally recognized or according to any other criteria applicable to such reports
3. Determination of accounting responsibility for the assets (assets).

4. Asset acquisition is only permitted with authorization from management, and the accounting accountability of assets recorded in the books can be carried out by comparing them to the existing assets at reasonable periods, and whenever any differences occur between them, appropriate action must be taken. Consequently, the following hypothesis was formulated:

**H3:** *There is a significant effect of "Accounting Control System on the planning for the audit process, implementation of the audit plan, audit testing procedures and risk assessments.*

### Research Methodology and Testing Hypothesis: Analysis and Discussion of Results

The research aims to examine the impact of the control systems; the questionnaire consists of a set of data collection techniques where all the sample members asked to answer the same questions. The questionnaire will use a five-point Likert scale is a scale that has several specific answers that provide several neutral options to know more about the study sample opinions and to assist measure their responses and analyze the results, ranging from 1, strongly agree, to 5, strongly disagree. This research targeted the external auditors as they are responsible for conducting the audit procedures. They are the leading player in providing audit service, and they have experience in the audit service. Therefore, this study focused on their perceptions of the influence of the internal control systems on external audit procedures. This study collects data from a random sample of the audit offices in Jordan. This research employed statistical analysis to explain the demographic factors of the study sample.

Variable	Item	Repetition	Percentage
Years of experience in auditing practice	Less than 5 years	23	36
	From 5 to 10 years	15	23
	10 years or more	26	40
Job position in the audit team	Staff assistance audit	15	23
	Senior	37	57
	Manger	12	18
Total summation		64	64

Participants to the sample study questionnaire were 15% staff assistance and senior audit staff by 37%, and managers by 18%. In comparison, the majority of the participants have experience of more than ten years Table 1.

Table 2 Presents that all research variables are above 70%, these findings measured good stability of the tool, and it can be subjected to statistical analysis (Hair et al., 2019).

Studies' Constructs	Number of indicators	Cronbach's Alpha Based on the pilot study results.
1. Managerial Control Systems	14	86%
2. Accounting Control Systems	23	89.8%
3. Internal Control Systems	19	91.7%

Source: Reliability Check, "Fieldwork results".

### Discuss the Results Related to the Study Questions

The mean and standard deviations were extracted to highlight the answers of the study sample on the impact of internal control systems on the procedures of external audit. The following are answered the research questions. The results showed that the impact of the application of internal control on the external audit procedures was high, through applying

administrative control to planning and developing the audit plan, identifying planning risks, implementing the audit plan, through applying accounting control to the planning process, developing the audit plan, identifying planning risks, and implementing the audit plan. This is an indication that the application of internal controls at a high level affects external audit procedures at a high level (Johnstone et al., 2011).

<b>Table 3</b>		
<b>STATISTICAL DESCRIPTIVE ANALYSIS OF THE QUESTIONNAIRE ITEMS</b>		
The questionnaire items	Mean	Std. Deviation
<b>1. Administrative control over planning</b>		
Having management control that guides audit steps and procedures facilitates the audit process.	4.33	.87
It also provides administrative control to plan the audit process that varies with the size and complexity of the audit, the previous auditor's experience, and his knowledge of administrative oversight work.	3.94	.55
Providing a business plan for the organization's auditor helps him identify the business and events that may have a material impact on the financial statements. Also, a general audit plan describes the scope of doing work as an administrative control duty to improve the level of work.	4.01	.64
<b>2. Administrative control over audit testing procedures</b>		
Management control is the improvement of the audit steps and procedures, one of the critical effects in the audit procedure that lead in permanent accomplishment for the business.	4.21	.52
The audit plan's development restrictions the likelihood of a disagreement between the auditor and the customer by explicatory the essential matters and roles before the audit.	4.33	.63
The auditor has made a general audit plan that describes the scope of doing the work, and it is considered one of the administrative control to develop the audit plan.	4.21	.55
<b>3- Administrative control over the implementation of the audit plan</b>		
Successful management control oversees the performance of the audit plan ensure that all audit steps is conducted in alignment to IAS or according to relevant local standards.	4.01	.52
Administrative control oversees persons' appointment with the degree of professional care and competence required to implement audit plans through adequate guidance, supervision, and business review at all levels.	4.12	.55
Management controls implement procedures to provide evidence about the amounts and disclosures in the financial statements.	3.93	.838
<b>4- Administrative control and risk assessment</b>		
The administrative control in the organization by the decision-makers to determine the organization's risks affecting the organization's financial and administrative position.	4.43	.48
A material misrepresentation of the entity's financial statements, which affects the organization's financial position and increases the losses.	4.22	.87
The higher the auditor's confidence in the management control systems, the lower the risk incidence	4.48	.52
<b>1- Accounting control over planning</b>		
The presence of accounting control from the people of experience and competence in the organization makes planning and accounting data correct and sound, including the positive impact on the organization.	4.21	.48
The organization's accounting control facilitates the planning and management process so that the financial reality is sound, and the organization's income increases.	4.32	.87
Accounting control over planning leads to the discovery of all kinds of misrepresentations in the financial statements and a neutral technical opinion about the data's validity.	3.95	.52
Accounting control over planning increases the number of new customers entering the organization, thus increasing the investment size and	4.55	.78

improving the organization's financial position.		
One of the duties of accounting control over planning is to obtain a reasonable degree of understanding of the nature of the project, the industry to which it belongs and the customer's legal processes.	3.99	.66
<b>2- Accounting control over audit testing procedures</b>		
- Accounting control is the development of an audit plan based on a focus on various activities.	4.25	.56
- Accounting control supervises the progress of the audit steps, leading to enhanced firm's production.	3.93	.54
- Accounting control is the development of the audit plan is one of the crucial things in the audit process that accustomed to the organization with great success.	4.56	.87
Accounting control must determine the objective of the audit of the financial statements to develop the audit plan.	3.99	.52
Coordination between the accounting control and the administrative control to develop the organization's financial position avoids the organization's losses.	4.22	.55
Accounting control should identify the causes that lead the customer to ask for an audit to support the audit plan's development.	4.22	.87
<b>3 - Accounting control over the implementation of the audit plan</b>		
Accounting control offers the auditor with objectivity and privacy until the audit steps is applied as proposed to generate a unbiased methodological report.	3.98	.65
Successful accounting control oversees the audit plan and make sure that all auditor work is conducted based IAS or JCGM	4.34	.54
<b>4- Accounting control over risks assessment</b>		
The lack of accounting control over the organization negatively affects the financial position of the organization.	4.50	.58
The existence of effective accounting control indicates the possibility of a certain material deviation or activity that affects the organization's productivity. This increases its production activity and reduces the likelihood of risks.	4.25	.78
The financial auditor in the organization reduces the occurrence of risks to the success of the organization.	4.34	.86
The higher the auditor's confidence in the accounting control systems, the lower the auditors' risk.	4.42	.87
<b>1- Internal control over planning</b>		
Those in charge of internal control at the organization must identify potential weaknesses to operations or financial aspects in general.	4.54	.27
The practical and strong internal control in the organization provides insurance for the property of the employees who have the contract and leads to an increase in the efficiency of the employees.	4.31	.75
The internal control in the organization must specify the competencies and responsible authorities to raise the organization's efficiency and production.	3.96	.68
The internal control plan assists the auditor with his work and leads to preparing a high-quality financial accounting report.	4.33	.69
The entity's profound and double control is one of the internal control duties, which facilitates the audit of the accounting data.	3.95	.79
<b>2- Internal control over audit testing procedures</b>		
Internal control maintains the validity of the various financial and administrative operations that are executed in anybody.	4.22	.85
One of the internal control duties to develop the audit plan is to provide independence in the workplace to feel that the auditor is independent.	4.31	.68
Internal control aims to protect assets to raise the level and develop the audit plan.	4.54	.76
One of the organization's internal control duties is to select an integrated team in the audit process to distribute the tasks to the auditors to produce a sound and transparent financial report.	4.65	.65
<b>3- internal control over the implementation of the audit plan</b>		

An internal control task for implementing the audit plan is to use information technology to obtain a clear and sound report.	4.31	.68
Division of work in the organization is necessary to implement the auditor's plan to facilitate the audit.	3.88	.76
The success of the organization's internal control process is to activate self-control so that each employee's work is subject to review by another employee.	4.23	.89
To properly implement the audit plan, the property of the employees in possession of the covenant must be insured to preserve the assets of the organization.	4.35	.65
To implement the audit plan, the entity must provide the auditor with security and stability until the financial report is clearly and correctly issued.	4.12	.85
<b>4- internal control over risks assessment</b>		
One of the tasks of internal control in the organization is to divide the work among the employees to avoid sudden risks that confuse work in the organization.	3.95	.76
To avoid risks in the organization, there must be internal control in the organization from the administrative point of view. Each employee's work is subject to review by another employee.	4.26	.89
The entity's internal control prevents audit risks in terms of giving an inappropriate report, while the financial statements are financially distorted.	4.35	.61
Those in charge of internal control at the organization to avoid risks must give the auditor independence and provide precise accounting data for the work.	4.25	.64

The results of the study's analysis proved that there is an effect of internal control systems on the external audit procedures. Specifically, there is an effect of administrative control, accounting control and internal control on audit procedures (Planning the audit process, developing the audit plan and test, identifying the audit risks, implementing the audit plan). It is noticed through the results that the highest impact of the internal control systems on the audit planning process, it is clear from the table that the highest arithmetic means (4.54) and the standard deviation (0.27).

It is clear from Table 3 that the arithmetic averages for (administrative control of planning) ranged between (3.94 and 4.48). In the last place, paragraph management controls implement procedures to provide evidence about the amounts and disclosures in the financial statements came with an arithmetic average (3.93) and a standard deviation (838). This explains that the impact of administrative control on planning in Jordanian companies was of a low level, as companies emphasized a general audit plan describing the scope of doing work to improve the upgrading of the work level. Also, the administrative control should provide an action plan for the organization's auditor that helps him in identifying works and events that may have a material impact on the financial statements. Administrative control facilitates the audit process and has been recorded at a high level (Ramos, 2003; Glover et al., 2003). SAS number 47, for example, stresses the audit preparation stage in which the auditor can consider materiality in deciding how much information is required during the audit process to review the financial statements (Wang, 2010). However, this allows auditors to efficiently accomplish all the work required to satisfy the needs of consumers of financial statements and to comply with professional audit requirements. As one of the audit management elements, SAS number 82 puts more focus on risk assessment, as it offers basic measures of high fraud risk and provides auditors with guidelines how to evaluate the risk of fraud and adjust its performance audit plans of the risk assessment. Results from Glover et al. (2003) suggested that, since the existence of SAS number 82, the audit preparation stage shows that the possibility of fraud is more sensitive. The results show, in particular, that post-SAS number 82 auditors are more mindful of the need to change and will increase the audit

plans scope and the amount of their audit tests relative to pre-SAS Number 82 (see also Hoffman, 1997). However, SAS No. 99 focused on preparation questions, in particular risk-related, for a variety of audit programs. In order to fully define the material risks due to fraud and examine them and to take them into consideration and to respond to and build upon the conclusions, the auditing program of the company and internal audit, the audit auditor needs to collect and thoroughly review all information needed (Ramos, 2003; Glover et al., 2003). The evaluation of internal control also tends to be necessary for the implementation of an audit program, a prerequisite for the audit itself (Calotă & Iana, 2009). In that context, in order to assess the type and extenuation of information, auditors to collect, update and combine information on an early basis in order to formulate an opinion of the fairness and credibility of the various financial statements using well-prepared auditing systems (Domnişoru & Vînătoru, 2008; Saha & Arifuzzaman, 2011). The process of audit planning therefore includes preparing the audit programs, assessing reliability and risk after the internal control system (Almasria, 2022).

### Testing the Hypothesis

This study used One Sample T-test to test the internal managerial system's influence on the procedures of external audit (the planning for the audit process, Audit testing procedures, risk assessments, implementation of the audit plan). In order to test the first hypothesis, this study used One Sample T-test to identify the effect of internal managerial system on the procedures of external audit; table 4 illustrates the results.

<b>Item</b>	<b>T test value</b>	<b>Degrees of freedom</b>	<b>Statistical significance</b>
Managerial control system on the planning for audit process	43.5	301	*00000
Managerial control system Audit testing procedures	46	301	*00000
Managerial control system risk assessments	42.5	301	*00000
Managerial control system implementation of the audit plan	47.5	301	*00000

The findings indicate that there is a statistically significant effect of managerial control system on external audit procedures. This is because the findings of the One Sample T-test have illustrated that the statistical significance was less than 5%, which is (0.000). The values of T are (43.5, 46, 42.5, 47.5), this indicates managerial control system has a role in improving external audit procedures, this result was also confirmed by descriptive statistics. This study used One Sample T-test to test the influence of the internal managerial system on the procedures of external audit. Table 5 illustrates the results of the one sample T-test for the effect of internal managerial system on the procedures on auditing process.

<b>Source</b>	<b>T test Value</b>	<b>Degrees of freedom</b>	<b>Statistical significance</b>
Accounting control system the planning for audit process	29.221	301	*00000
Accounting control system Audit testing procedures	25.539	301	*00000
Accounting control system risk assessments	26.315	301	*00000
Accounting control system implementation	25.042	301	*00000

of the audit plan			
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The findings indicate that there is a statistically significant effect of accounting control system on external audit procedures. This is because the findings of the One Sample T-test have illustrated that the statistical significance was less than 5%, which is (0.000). The values of T are (29.221, 25.539, 26.315, 25.042). This indicates Accounting control system has a role in improving external audit procedures (the audit process planning, risk assessments, Audit testing procedures implementation of the audit plan), this result was also confirmed by descriptive statistics (Takahiro & Jia, 2012).

In order to test the third hypothesis which is there is a significant effect of “*Internal Control System*” on External Audit Procedures. This study used One Sample T-test to identify the effect of internal control system on the procedures of external audit. Table 6 illustrates the results of the one sample T-test for the effect of internal control system on the procedures on auditing process.

<b>Source</b>	<b>T test Value</b>	<b>Degrees of freedom</b>	<b>Statistical significance</b>
Internal control system the planning for audit process	38.167	301	*00000
Internal control system Audit testing procedures	25.171	301	*00000
Internal control system risk assessments	37.137	301	*00000
Internal control system implementation of the audit plan	33.659	301	*00000

The results show that that there is a statistically significant effect of internal control systems on external audit procedures. This is because the One-Sample T-test findings have illustrated that the statistical significance was less than 5%, which is (0.000). The values of T are (38.167, 25.171, 37.137, 33.659) respectively. This indicates the internal control system has a role in improving external audit procedures). This result was also confirmed by descriptive statistics.

## CONCLUSION AND IMPLICATIONS

The study results showed that the level of the impact of administrative control on the implementation of the audit plan for Jordanian companies was high level from the viewpoint of the study sample. This is through the presence of management control that implements the procedures to obtain evidence about the amounts and disclosures in the financial statements. The findings of the research demonstrated that the impact of administrative control on identifying risks for high-level Jordanian companies from the point of view of the participants, where the responses focused on a high level on the administrative control not being able to prevent or discover errors or misrepresentations in the organization, it has a negative impact on the financial or administrative position of the organization. The findings illustrate that the influence of administrative control on planning was of at high level, as companies emphasized the existence of a general audit plan describing the scope of doing work from administrative control duties to improve the upgrading of the work level. The study showed that the impact of administrative control on developing different aspects of audit plan in Jordanian companies is high-level from the perception of the study sample. This is through the work of the auditor, a general audit plan that describes the scope of doing the work and is considered one of the administrative controls over developing the audit plan (Khamis, 2013).

Furthermore, the impact of accounting control on planning was high through the duties. Furthermore, the impact of accounting control on planning was high through the duties of accounting control on planning to obtain a reasonable degree of understanding of the nature of the project and the industry to which it belongs and the legal processes of work (Almasria, 2018). Based on the foregoing, the effect of accounting control on the development of the audit plan for Jordanian companies was high-level from the point of view of the study sample individuals (Almasria et al., 2021). Responses focused on a high level, on the successful accounting control overseeing the audit plan and ensuring that the entire auditor's work is carried out according to the relevant standards (IAS) (Alawaqleh & Almasria, 2021). The research findings highlighted that risk assessment is one of the internal control system elements that contributes considerably on the way to effective audit program. Also, the presence of effective accounting control designates the possibility of a specific substantial deviation. The researcher explained that the effect of internal control on planning in the Jordanian companies was of a high level. This was demonstrated by the continued marginal and dual control of the organization from the internal control duties, thus facilitates the audit process in the accounting data.

It is clear from the results that the level of the impact of internal control on the development of the audit plan in the Jordanian companies was high level; the internal control maintains the correctness of the various financial and administrative operations that are implemented in any company. The effect of internal control on the implementation of the audit plan was high. As the responses focused on separation of tasks in the organization, it is necessary to implement the auditor's plan to facilitate the audit process. The results indicate that the level of the effect of internal control on determining the audit risks in high-level Jordanian companies from the point of view of the individuals in the study sample. As the majority of responses focused on the role of entity's internal control, it prevents the audit risks in terms of giving an unqualified opinion, while the financial statements are materially misstated.

## Acknowledgement

**Funding:** The publication of this research has been supported by the Deanship of scientific research and graduate studies at Philadelphia University.

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