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**Investigating the Role of Internal Control in Fraud Detection:
Evidence from Companies Listed on the Palestine Exchange.**

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**This Thesis Was Submitted in Partial Fulfilment of the
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Auditing.**

Palestine, December /2024

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Declaration

I declare that, except where explicit reference is made to the contribution of others, this thesis is substantially my own work and has not been submitted for any other degree at the Arab American University or any other institution.

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Dedication

I dedicate this graduation and the fruit of my humble effort to those who taught me that giving has no limits and who illuminated my path in life, to those who are my support in this life and the source of security, to those from whom I draw my strength and who supported me throughout my academic career. I dedicate this thesis to my beloved Mother, whose unwavering love and support have been my guiding light, and to my dearest Father, whose wisdom and encouragement have shaped my journey. To my brothers and my sister, your belief in me has been a constant source of strength and inspiration. Your presence in my life has made every challenge surmountable and every success sweeter. This work is a testament to the love, sacrifices, and values instilled in me by my family. Thank you for being my pillars of strength and for always believing in my dreams.

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Abstract

This study aimed to explore the role of internal control in detecting fraud, with evidence drawn from companies listed on the Palestine Exchange. The study adopted a descriptive-analytical approach, utilizing a suitable quantitative research design. The study population included all Palestinian public companies listed on the Palestine Exchange. The sample size was (376) employees selected through a simple random sampling technique, and (369) questionnaires were retrieved, resulting in a response rate of (98.1%)

The study found that gender significantly influences the effectiveness of fraud detection within internal control systems, suggesting that men and women may have different approaches to identifying fraudulent activities. However, other demographic factors such as age, educational qualifications, years of experience, and job title did not show any notable impact on fraud detection capabilities. In addition, the study emphasized the importance of key internal control dimensions, including the control environment, risk assessment, control effectiveness, information and communication, and monitoring. Each of these dimensions plays a vital role in creating a robust internal control framework that not only prevents fraud but also aids in its early detection. For instance, the control environment fosters an ethical culture, while risk assessment identifies potential fraud risks, and monitoring ensures continuous oversight. Companies listed on the Palestine Exchange demonstrated that strengthening these dimensions leads to better fraud detection, enhanced financial stability, and increased trust in governance. The findings suggest that organizations should adopt a comprehensive, integrated approach to internal controls to minimize the risk of fraud and ensure long-term financial health.

Based on these findings, the study recommended the need for comprehensive strategies for fraud detection, which include periodic evaluation and system updates to enhance detection and prevention effectiveness. It also emphasized the importance of strengthening the control environment by organizing workshops and educational seminars to enhance organizational culture and ethical values, thereby contributing to increased adherence to internal policies. Additionally, the study stressed the need to enhance risk assessment mechanisms by leveraging advanced analytical techniques and expanding the scope of assessments to cover all aspects of operations.

Keywords :Internal control, fraud detection, Palestine Exchange, Risk Assessment, Control Environment.

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List of Definitions of Abbreviations

Abbreviations	Title
ACFE	Association of Certified Fraud Examiners.
AICPA	American Institute of Certified Public Accountants.
APAC	Asia-Pacific.
COSO	Committee of Sponsoring Organizations of the Treadway Commission.
GCG	Good Corporate Governance.
IAASB	International Auditing and Assurance Standards Board.
IAM	Internal Audit Management.
ISA	International Standards on Auditing.
ISA 240	The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements.
ISA 315	Identifying and Assessing the Risks of Material Misstatement.
KAM	Key Audit Matters.
MDAs	Medium Development Areas.
MFI	Microfinance Institutions.
MSMEs	Micro, Small, and Medium Enterprises.
PEX	Palestine Exchange.
SKPDs	Satuan Kerja Perangkat Daerah (Regional Work Units).

Chapter One: Introduction

1.1 Introduction

The sustainability within an entity relies on efficient management regarding both monetary and non-monetary resources. To maximize resource efficiency, management implements various controls, with internal control and internal audit playing key roles. Often referred to as an internal oversight system, internal control, it aligns the actions and objectives of organizational personnel to support goal achievement (Obafemi et al, 2024). This system functions as a tool for overseeing organizational processes, and weak implementation can elevate fraud risk. Hence, prioritizing internal control is essential for curbing fraudulent behavior. As highlighted by (Sudirman et al, 2021), a robust internal control framework can greatly decrease fraud occurrence.

Internal control contributes to companies reaching necessary aims and improvements in overall performance. The Internal Control-Integrated Framework by COSO assists companies with building effective systems of internal control that can adjust to changing environments of business, keep potential threats at manageable thresholds, and support well-informed making decisions, and governance. This Framework provides guidance to administration and boards of directors for identifying and assessing risks, enabling them to establish suitable risk mitigation strategies with an emphasis on detecting fraud (COSO, 2013)

Fraud is defined as a deliberate behavior by someone aiming for personal benefit at the expense of an organization's assets, motivated by self-interest, and harmful to the organization. It includes intentional actions by individuals within a corporation—such as management, staff, administrators, or external parties—who seek unlawful gains through deceptive practices. Fraud may significantly affect an organization or institution as a form of economic crime. Detecting fraud is especially challenging, as those involved frequently go to considerable efforts to hide their actions, sometimes involving others in their schemes (Fahmi & Shafira, 2023)

Expertise in handling big data is a key element that enhances internal auditors' efficiency in identifying financial statement fraud. In today's digital era, the strategic use of big data is vital for efficient corporate data management. Proficiency in understanding and applying big data strengthens internal auditors' analytical capabilities, greatly increasing their effectiveness in uncovering fraudulent activities (Rakipi et al, 2021)

As a result, organizations establish specific internal controls aimed at preventing, detecting, or reducing instances of misconduct. However, the effectiveness of these controls in deterring and revealing fraud can differ based on various factors and can evolve over time. Thus, benchmarking anti-fraud policies against those of other organizations can provide valuable insights. It's crucial to acknowledge that fraud may still occur even in companies with robust anti-fraud systems (ACFE, 2022). This research examines how internal control contributes to fraud detection within Palestinian companies to develop a deeper insight into the elements that lead to occupational fraud.

1.2 Research problem:

Fraud and embezzlement often occur in institutions due to weak or absent internal controls, leaving them vulnerable to unethical practices. For instance, a Palestinian construction company lacked an effective system for reviewing invoices and tracking transactions, allowing a senior accountant to embezzle large sums over several years, discovered only during an external audit. In another case, a lawyer committed fraud in 2017, submitting checks worth 28 million shekels for real estate purchases before fleeing the country. The bank involved failed to meet basic internal control requirements, lacking necessary information, communication, and monitoring mechanisms. These examples highlight the importance of strong control procedures to protect assets and prevent fraud.

Research indicates a significant linkage between effective internal control systems and an alleviation of fraud incidents. (Flowerastia et al, 2021) demonstrated the substantial and beneficial impact of internal controls on the prevention and discovery of fraudulent activity, especially within emerging companies. A robust internal control framework can reduce the likelihood of each external and internal fraud, underscoring the crucial necessity of implementing effective mechanisms. In general, these outcomes underline the essential part that effective internal control systems play in risk handling and in safeguarding organizations against losses from fraudulent activities.

To meet the growing demand for enhanced internal control systems, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) introduced the integrated framework of internal control. This framework emphasizes the vital role of internal controls in assisting companies to accomplish their performance and profitability purposes while minimizing resource losses. It also stresses the critical role of internal controls in ensuring the reliability of financial reporting. The lack or disregard of these

controls significantly raises the risk of fraud, particularly in situations where individuals or organizations face pressures that may encourage the rationalization of unethical behavior (Albrecht et al, 2018)

This information underscores the essential significance of internal controls throughout the corporate sector, emphasizing their crucial importance for organizational stability. Accordingly, this research examines the presence of internal control systems in companies and their effectiveness in fraud detection among entities listed on the Palestine Exchange. This leads to the formulation of the main question of study:

What is the role of internal control in detecting fraud from firms listed on the Palestine Exchange?

1.3 Research questions

The primary research question is further separated into several sub-questions:

1. What is the level of internal control in firms listed on the Palestine Stock Exchange?
2. To what extent is fraud detection effective within firms listed in Palestine?
3. How do the dimensions of internal control (such as the control environment, risk assessment, control activities, information and communication, and monitoring) influence fraud detection in Palestine-listed firms? This central question leads to the following sub-questions:
 - What is the influence of the control environment on fraud detection in firms listed on the Palestine Exchange?
 - In what ways does risk assessment facilitate fraud detection in Palestine-listed firms?
 - What effect do control activities have on identifying instances of fraud within Palestine-listed firms?
 - How do information and communication systems enhance the capability of Palestine-listed firms to detect fraud?
 - What is the role of monitoring in identifying fraudulent activities in Palestine-listed firms?

1.4. Research objectives

This study aims to achieve the following objectives:

1. Assessment of the level of internal control in firms listed on the Palestine exchange.
2. Assessment of the level of fraud detection in firms listed on the Palestine Exchange
3. Testing the influence of the control environment on fraud detection from firms listed on the Palestine exchange.
4. Examination of the role of risk assessment in fraud detection from firms listed on the Palestine Exchange.
5. Testing the effect of control activities on fraud detection from firms listed on the Palestine exchange.
6. Testing the significance of information and communication in fraud detection from firms listed on the Palestine Exchange.
7. Examination of the role of monitoring in fraud detection from firms listed on the Palestine exchange.

1.5 Research hypotheses

1. **H1 (a):** The dimensions of internal control (including control environment, risk assessment, control activities, information and communication, and monitoring) have a statistically significant impact on fraud detection in Palestine-listed firms.
 - **H1 (a1):** The control environment has a statistically significant effect on fraud detection in Palestine-listed firms.
 - **H1 (a2):** Risk assessment significantly influences fraud detection in firms listed on the Palestine Exchange.
 - **H1 (a3):** Control activities have a statistically significant impact on detecting fraud in Palestine-listed firms.
 - **H1 (a4):** Information and communication systems significantly affect fraud detection in Palestine-listed firms.
 - **H1 (a5):** Monitoring processes have a statistically significant effect on fraud detection in firms listed on the Palestine Exchange.

1.6 Significance research:

1.6.1 Theoretical Significance

From a theoretical perspective, this study contributes to the existing body of knowledge on internal control systems (ICS) and their role in mitigating fraud risks. By examining the relationship between internal control frameworks and fraud detection in companies listed on the Palestine Exchange (PEX), the research offers insights into the mechanisms through which ICS can enhance organizational governance and financial transparency. It builds upon established frameworks such as the COSO Integrated Framework (2013), extending its application to a Palestinian context. Moreover, this research enriches the literature by exploring the interplay between internal controls, organizational processes, and stakeholder trust, providing a deeper understanding of how ICS serve as a critical component of risk management (Albrecht et al., 2018; Flowerastia et al., 2021). The findings are expected to provide a foundation for future research in similar emerging economies and contexts where regulatory and economic challenges prevail.

1.6.2 Practical significance

From a practical perspective, the study highlights the critical importance of designing and implementing effective internal control systems in organizations. The findings serve as actionable insights for company executives, auditors, and policymakers in developing policies and strategies to strengthen internal control frameworks. The research provides tailored recommendations for companies listed on the Palestine Exchange to enhance fraud detection capabilities, mitigate risks, and improve financial transparency. In addition, the study emphasizes the role of internal controls in enhancing stakeholder confidence, maintaining an organization's reputation, and ensuring operational stability (COSO, 2013; AICPA, 2020). These findings are of particular value to Palestinian companies operating in a challenging economic and regulatory environment

1.7. The Research Models

In order to identify dependent variables and independent variables, the researcher showed it by presenting them in the model below:

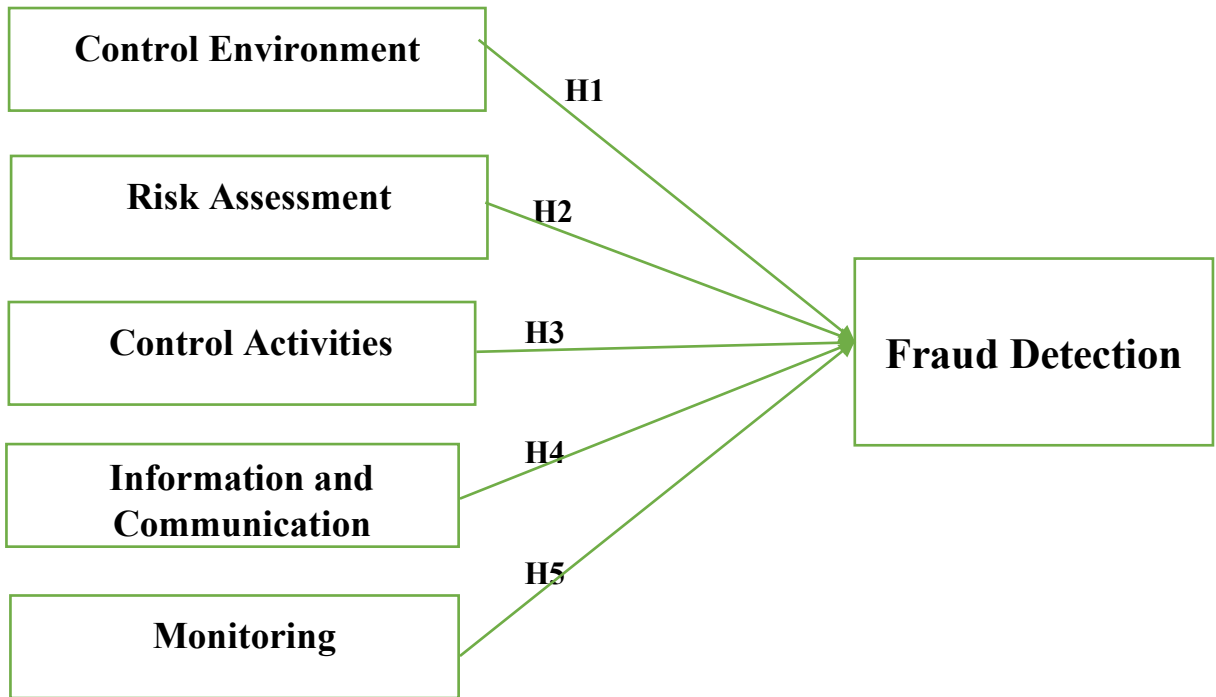


Figure No. (1.1): conceptual framework

1.8 Operational Definitions:

1. **Internal Control:** This term encompasses the various processes, procedures, and systems that organizations establish to guarantee the integrity of financial reporting, adherence to legal and regulatory requirements, efficient operation of activities, and detection of fraudulent activities (Maulani et al., 2024).
2. **Control Environment:** This refers to the collection of standards, processes, and structures that form the basis for executing internal control throughout an organization. It includes the ethical tone set by senior management, the organization's values, and the culture that shapes control awareness (Kumar, 2010).
3. **Risk Assessment:** This is the process of identifying, analyzing, and managing potential risks that may hinder the achievement of an organization's objectives. It entails evaluating both internal and external factors that might impact goal

attainment, including risks related to fraud or operational inefficiencies (Dagane, 2024).

4. **Control Activities:** These are the established policies and procedures designed to ensure that management directives are implemented effectively. Control activities encompass approvals, authorizations, verifications, reconciliations, and segregation of duties, all aimed at minimizing risks and fulfilling organizational objectives (Irwansyah & Zega, 2023).
5. **Information and Communication:** This involves the processes of identifying, capturing, and disseminating pertinent information within an organization in a timely and effective manner. Effective communication ensures a seamless flow of information across various departments and levels, facilitating decision-making and maintaining efficient control (Nwite et al, 2024).
6. **Monitoring:** This process entails the ongoing evaluation of the effectiveness of internal control systems over time. It includes both continuous activities and periodic reviews to confirm that controls are functioning as intended and to implement corrective measures when necessary (Shakeel et al, 2023).
7. **Fraud Prevention and Detection:** This concept involves establishing controls and mechanisms designed to avert fraudulent activities before they occur and to recognize them when they do. This encompasses both preventive controls (e.g., segregation of duties) and detective controls (e.g., audits) aimed at minimizing risk (Nisak & Rochayatun, 2023).
8. **Palestine Exchange (PEX):** This is the official stock exchange in Palestine where shares of publicly traded companies are bought and sold. Its purpose is to facilitate the trading of securities in an efficient, transparent, and regulated manner, thus supporting economic growth in the region (PEX, 2022).

Chapter Two: Literature Review

2.1 Theoretical framework

2.1.1 Internal control

Internal control mechanisms are crucial for protecting the accuracy of financial and accounting information while also acting as a deterrent against fraudulent activities. They serve a critical function in identifying and eliminating fraud, as well as protecting the resources of the company, both ethical and material (COSO, 2013). The internal control system also aids in achieving strategic and operational goals by ensuring compliance with regulations and laws among all personnel (Sarbanes-Oxley Act, 2002). Furthermore, the internal control system enhances the production of reliable financial reports, which enables informed and timely decision-making (IFAC, 2020). Over the years, internal control systems have adapted to fulfill various objectives and align with different standards (KPMG, 2016). This progression has generated growing interest from professional organizations and government entities, acknowledging their significance in reinforcing governance principles within institutions (Albrecht & Albrecht, 2004). The internal control system is also considered vital for the audit process, as various international audit standards and guidelines have been developed by organizations, for example, the International Federation of Accountants (IFAC, 2020), alongside national standards in each nation.

2.1.1.1 Definition of internal control:

Internal control is defined in various ways by different organizations. (Maulani et al, 2024) describe it as a collection of guidelines and protocols adopted by organizations to guarantee the attainment of strategic and functional aims, optimize the safeguarding of resources, and ensure the precision of financial information. This definition highlights the necessity of internal control for better institutional effectiveness and efficiency.

In a similar vein, (Irwansyah & Zega, 2023) characterize internal control as the methods and procedures established by an entity to assure the fulfillment of organizational goals and conformity with regulations, while also promoting transparency and integrity in financial operations. This underscores the crucial role of internal control in reducing financial risks.

(Shakeel, et al, 2023) outlined internal control as the framework that includes processes and practices sought to achieve organizational goals, safeguard resources, and ensure the

financial reports are reliable and accurate. This highlights the importance of coordination among various processes within an organization to improve performance.

The American Institute of Certified Public Accountants (AICPA) characterizes internal control as a system that guarantees the achievement of objectives pertaining to operational competence, accurate financial information, and conformity with policies, laws, and regulations. It functions as a structured framework for controlling risk concerning value enhancement and protection (AICPA, 2018). Furthermore, International Standard on Auditing (ISA) No. 315 defines it as a process created, carried out, and sustained through the management and those responsible for governance, along with employees, to provide sufficient assurance regarding the objectives of an entity concerning the accuracy of financial reporting, operational performance, and competence, in addition to adherence to established rules. (ISA 315, 2013).

Finally, the organizations that support the Treadway Commission Committee (COSO) define internal control as a process utilized by a firm's board of directors, administration, and other staff in the firm that are required to offer a level of assurance that is considered acceptable or satisfactory. Assurance regarding the accomplishment of operational, reporting, and compliance goals. It aims to achieve specific objective categories, such as operations, compliance, and reporting and is described as a continuous process rather than a final goal. While it offers a reasonable guarantee to senior management and the board of directors, it does not guarantee complete certainty. Furthermore, it can be tailored for use across the entire organization or specific subsidiaries, divisions, units, or processes (COSO, 2013).

2.1.1.2 Objectives of the system of internal control:

Internal control serves various purposes, including the protection of assets, improvement of operational effectiveness, preparation of financial statements in accordance with set standards, and the delivery of precise and dependable information (Romney et al, 2021)

1. **Safeguarding Assets:** One of the primary aims of internal controls is to prevent or identify the illegal acquisition, utilization, or disposal of assets, which includes physical assets, cash, and confidential information. Employees can represent substantial security threats, as insiders may take advantage of weaknesses within the system. Thus, a robust internal control framework is important for limiting

unauthorized access, reducing inadvertent risks, and upholding the integrity of data (Romney et al, 2021).

2. **Improving Operational Efficiency:** Effective internal control systems help mitigate errors in operational expenditures, thereby contributing to accurate information on unit cost, informed decisions on pricing, and robust cost control measures. Conversely, droopy internal controls may score in operational inefficiencies by compromising the fineness of internal reporting, which ultimately affects taking decisions processes (Cheng et al, 2018).
3. **Generating Financial Reports in Compliance:** internal controls play a significant part in improving the credibility and quality of financial reporting. By ensuring adherence to established criteria, these controls minimize the need for extensive auditor testing and reduce investor concerns. A strong internal control system serves as a primary defense against financial report fraud, with management responsible for its effective implementation in the preparation of financial statements (Hammood & Dammak, 2023).
4. **Submitting Accurate and Reliable Information:** Internal control is necessary for improving the fineness of financial reporting. It fosters efficiency and effectiveness in the accounting process, ultimately striving for reliable financial statements. A well-constructed internal control system minimizes errors, making audit evidence derived from accounting data more reliable and Maintaining financial reporting integrity (Romney et al., 2021).

2.1.1.3 The COSO Framework

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) introduced the Integrated Framework of Internal Control in 1992. This framework is widely acknowledged as a primary standard for creating, executing, and evaluating systems of internal control, as well as measuring their effectiveness. In recent years, business and operational environments have undergone significant changes, becoming increasingly complex and driven by technological advancements and globalization. Concurrently, stakeholders are demanding greater accountability and transparency regarding the probity of the internal control systems that assist organizational and company governance. Moreover, the COSO Framework assists organizations in Building and keeping up efficient and effective internal control systems, thereby enhancing The

possibility of obtaining their objectives and adapting to shifts in the organization and operational landscape (COSO, 2013).

1. Consequently, the COSO emphasizes that a firm's administration should evaluate the efficacy of the system of internal control it uses; all five specified elements must be both "present" and "operational." These components are crucial to the internal control framework (Abei, 2021). The term "present" refers to the integration of these elements into the firm's internal control design, while "operational" indicates that these elements are actively functioning within the firm and its control system practices. To ensure effective internal control, the five elements— risk assessment, control activities, communication and information, control environment, and monitoring—must collaborate in a cohesive and coordinated manner (Abei, 2021).

1. **Control Environment:** This is composed of a collection of strategies, frameworks, and guidelines that give the foundation for executing internal controls within the business (Malisiovas, 2020). The environment acts as the foundation for each component of internal control (Romney et al, 2021) and encompasses the following elements:

- Ethical principles and honesty
- Dedication to competence
- The Board of Governors role
- Organizational framework
- Personnel policies and procedures.

2. **Risk Assessment:** companies must determine, analyze, and manage the hazards they confront. Risk management is an ongoing process, where management must assess modifications in the outside environment as well as changes within the organization that may hamper the fulfillment of its aims. Important aspects of risk assessment include:

- Defining objectives in a manner that enables the identification and evaluation of risks
- Recognizing and assessing risks to Identify how they could be controlled,

- Considering the possibility of fraud
 - Identifying and analyzing alterations that may material impact the internal control structure (Romney et al, 2021).
3. **Control Activities:** are the proceedings formulated via politics and measures to guarantee compliance with instructions established by management intended to reduce risks related to fulfilling goals. These activities are accomplished across all organizational tiers and business processes, including technological environments. They are able to be categorized as either preventative or detective and may involve a range of automated and manual tasks such as authorizations and approvals, reconciliations and validations, and assessments of performance. Key points include:
1. The company identifies control activities and develops them to reduce hazards to levels that are acceptable to achieve objectives.
 2. The company chooses and creates comprehensive control activities backed by technology.
 3. The company carries out control activities using guidelines that set expectations and procedures that execute these guidelines (COSO, 2013)
4. **Information and Communication:** Information plays a part that is crucial in ensuring effective internal control and achieving objectives, as it must be accessible and pertinent at each level of the company. Communication and information systems are key elements of internal control systems, facilitating the gathering, analysis, and dissemination of relevant data promptly and accurately (Alslihat et al, 2018). A robust communication and information system enables companies to make educated decisions. and allows them to identify and respond to risks and issues swiftly, encompassing both financial and operational data, whether sourced internally or externally (Alzoubi, 2023).
5. **Monitoring:** is an operation that assesses the efficacy of internal control measures along a specified timeframe (Sholihah, 2022). It ensures that each of the four elements of internal control functions effectively (Chan et al., 2021) and acts as a feedback mechanism that may necessitate enhancements in the fineness of control activities. Monitoring assesses and communicates the efficacy of control activities, suggesting necessary modifications and adjustments. Consequently, monitoring is

a crucial approach for determining how effectively the activities of an organization, particularly control activities, have met its objectives. Employees' awareness of the fairness of the organization and the significance of principles of ethics bolsters the culture of accountability, which is reflected in the breadth of monitoring operations. Employee participation and responsibility within their company's control environment are likely to lead to improved monitoring effectiveness (Rae et al, 2017).

- 1) Monitoring measures the effectiveness of internal control systems through continuous surveillance, independent evaluations, or a conjunction of both.
- 2) Internal control deficiencies and significant feebleness have been made known to the board of directors and senior management, allowing them to resolve issues swiftly. (Chan et al, 2021).

2.1.5 Functions of Internal Controls:

Internal controls serve three essential functions (Agyemang, 2016):

1. **Preventive Controls:** These measures are enacted by the administration to prevent and discourage noncompliance with regulations, procedures, and policies. The main purpose of preventative controls is to reduce the risk of inaccuracy, fraud, and infractions in transactions while protecting against potential losses. Examples of these measures encompass the division of roles, sufficient authority, and authorization processes; the establishment of the organizational structure to allocate responsibilities to suitable personnel; proper registration practices; physical dominance of assets; and continuous traineeship for employees.
2. **Detective Controls:** These controls have been established to set and reveal problems such as infractions, fraud, and mistakes after they have happened. While recognition is significant, prevention remains the preferred approach. Detective controls include validation processes, exception reporting, and post-audits. They offer documentation of losses but do not avert future incidents. Common examples comprise reviews, analyses, audits, physical inventories, reconciliations, and variance analyses. Detective controls play a vital function in giving proof that prevention measures are effective and help mitigate potential wastages.

3. **Corrective Controls:** These controls are established to handle any deficiencies or issues that have arisen within the system. Corrective measures may involve redesigning processes, imposing sanctions on individuals for violations, conducting follow-ups, and performing post-audits to ensure compliance and improvement.

2.1.6 Types of Internal Control Systems

Internal control systems encompass a varied range of control types prepared to mitigate risks and protect organizations from adverse outcomes. Preventive controls are instituted to avert or halt undesirable events before they transpire. These measures include password protection, approval processes, and established policies and procedures (IBANGA, 2022). In conjunction with preventive controls, detection controls are strategically designed to identify mistakes or anomalies that may have already taken place. These activities involve reconciliations, monitoring actual expenditures against budgets, and analyzing past periods and forecasts (Irwansyah & Zega, 2023). Furthermore, controls can be categorized into hard controls and soft controls. Hard controls are formal and concrete elements, such as organizational structures, written policies, procedures, and segregation of duties. In contrast, soft controls are informal and non-physical, encompassing factors like leadership tone, ethical climate, integrity, trust, and competence (Nisak & Rochayatun, 2023). Controls can also be classified based on their execution methods, distinguishing between **manual controls**, which rely on human effort, and **IT-supported processes** that utilize system-generated reports, as well as **automated controls**, which are entirely driven by computer systems. Additionally, controls are identified as either **key** or **secondary**. Key controls are essential and perform correctly to reduce hazards at a tolerable level, while secondary controls facilitate the smooth functioning of processes without being critical to risk mitigation (Dagane, 2024). The selection and implementation of these controls depend on a thorough comprehension of existing risks, with the objective of the organization guiding the identification and adoption of appropriate controls. In essence, the sequence for implementing controls follows the framework: Objectives → Risks → Controls (UCSF, 2023).

2.2.1 Fraud detection

2.2.2 Definition of Fraud:

Fraud signifies intentional conduct performed by one or more persons in positions of governance, administration, staff, or external parties, utilizing deceit to secure an undue or unlawful benefit. Situations or incidents that imply an incentive or motivation to engage in fraud or that establish a chance for fraudulent activities are known as fraud risk factors (IAASB, 2020). According to (Osisioma, 2012), fraud is an encompassing term that includes various tactics individuals may devise and utilize to gain an advantage over others. It comprises any form of deception, cunning, trickery, or unethical methods of misleading someone. Fraud covers a wide range of business offenses, including larceny, embezzlement, asset misappropriation, and theft, among others. Fraudulent financial reporting specifically entails intentional misstatements, such as omitting figures or disclosures in financial statements, designed to mislead users of financial statements. Procedures undertaken in response to identified material risks are known as additional procedures (IAASB, 2020).

2.2.3 Two major causes of fraud:

Occupational fraud is one of the costliest and most widespread ways of financial crime around the world. Individuals who commit occupational fraud against their employers are termed vocational fraudsters. Two essential reasons contribute to the prevalence of this kind of crime: (Al-Naghi et al, 2023):

1. The first reason is that any organization employing individuals must inevitably delegate a certain level of authority to its staff. This includes responsibilities such as managing financial records, overseeing bank accounts, and securing inventory. Such reliance on trust creates vulnerabilities, as all instances of fraudulent activity fundamentally arise from breaches of that trust (Antawiryra et al, 2019).
2. Another contributing factor to the prevalence and financial repercussions of occupational fraud is the sheer volume of individuals who have the opportunity to engage in such misconduct. With a global workforce exceeding 3.3 billion people—most of whom are honest and trustworthy—even a small percentage deviating from ethical standards leads to millions of incidents of occupational fraud each year (Norazida et al, 2014). While the exact number of individuals

involved in these fraudulent activities remains unknown, the total damage inflicted by such misconduct is significant (ACFE, 2022).

2.2.4 Elements of fraud:

From a legal perspective, a fraudulent act must encompass the following essential elements:

1. A false disclosure, representation, or statement.
2. A significant truth that prompts an individual to take action.
3. The intent of deception.
4. Justified dependence, meaning the individual depends on the deceit to make decisions.
5. The victim experiences harm or loss (Romney et al, 2021).

According to Agyemang (2016), fraud can include various activities, such as:

1. Tampering with, forging, or altering records and documents.
2. Recording transactions that lack substance.
3. Inappropriately appropriating assets or engaging in theft.
4. Deliberate misapplication of accounting principles.
5. Hiding transactions or intentionally omitting them from documents.
6. Intentionally falsifying an entity's financial condition or transactions.
7. Involves unlawfully taking property without awareness of the owner, consent, or permission, or knowingly misrepresenting a position through intent or negligence.

2.2.5 Pictures and methods of fraud:

Fraud can take three forms as follows (Al-Naghi et al, 2023):

1. Falsification of Financial Reports: This form involves the deliberate alteration of financial reports to misrepresent facts and mislead users of financial statements. Fraudulent financial reports can be produced through various actions, including:
 - Distorting or manipulating evidence of events and transactions that affect financial statements during their preparation.
 - Modifying accounting records or supporting documentation used in the preparation of financial statements.

- Disregarding principles of accounting related to the allocation of amounts, formatting methods, or policies of disclosure. Recording daily and monthly entries, especially near the end of the financial year, to manipulate outcomes or artificially enhance profits.
 - Concealing material truth that should impact the amounts presented in the financial statements.
 - enter complicated transactions to distort an entity's financial performance or position. Manipulating records or conditions related to non-routine and unusual transactions (Mohamed & Handley-Schachler, 2015).
2. Misuse of Assets: This type of fraud involves the manipulation, exploitation, and embezzlement of assets within an organization. It typically occurs among employees rather than management and often starts with relatively small amounts that escalate over time. However, management can also engage in this behavior, making detection challenging due to potential cover-ups. Common forms of embezzlement and asset misuse include:
1. Embezzling tangible assets or misappropriating intellectual property, such as taking (stock for personal use or) selling scrap materials for profit.
 2. Colluding with competitors by disclosing technological information for financial compensation, which may involve loading the entity with expenses for goods and services not received.
 3. Overpaying suppliers and contractors or providing excessive salaries to employees and contractors.
 4. Participating in bribery during purchases or inflating the prices of goods and services.
 5. Using organizational assets for personal purposes, such as leveraging them as collateral for personal loans or for individuals with connections (ISA 240, 2020).
1. Creative Accounting or Profit Management: Also referred to as "creative accounting," this type of (fraud has attracted considerable interest from accountants, auditors, and stakeholders engaged with financial data across numerous organizations. Researchers have identified that creative accounting practices, characterized by the flexibility allowed by accounting principles and standards, facilitate cheating, fraud, and

manipulation in financial statements. These practices can erode confidence in accounting information, distorting business results and the financial position of the entity to achieve managerial objectives at the expense of other stakeholders. Academically, creative accounting can be defined as altering financial accounting values to align with the preferences of accountants, often by exploiting, manipulating, or circumventing current regulations (Al-Tikriti, 2019).

2.2.1.5 Fraud Triangle

Source:(Free, 2015)

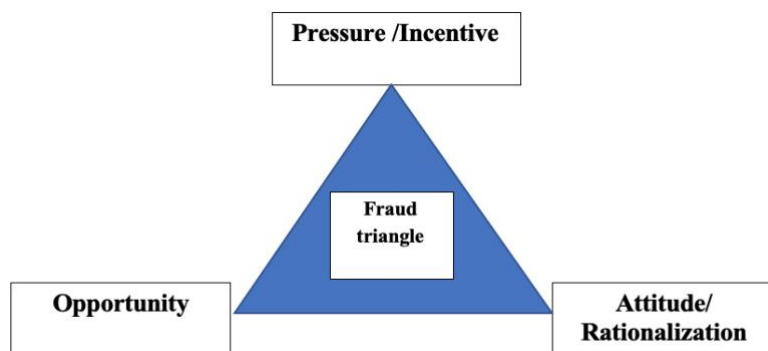


Figure (2.1) : Fraud Triangle (Free, 2015)

The fraud triangle framework suggests that three primary elements compel individuals to perpetrate fraud: pressure, opportunity, and rationalization.

1. **Push Economic pressure** is a primary motivator for individuals engaging in fraudulent activities. This pressure often stems from personal financial difficulties, where individuals feel overwhelmed by life's challenges, pushing them toward fraud for personal gain. Such circumstances may arise from insufficient welfare support or an extravagant lifestyle that seems unattainable through legitimate means. Additionally, external factors like an unfavorable work environment, perceived unfair treatment, and unjust recruitment processes can exacerbate this pressure, compelling individuals to resort to fraudulent behavior.
2. **Opportunity** The opportunity component arises from the organizational context, presenting a potential target for fraudulent activities. Various roles within the organization can create opportunities for fraud, particularly when internal control systems are lacking. Individuals may perceive their positions as avenues for

personal gain, capitalizing on weaknesses in the organization's oversight and control measures.

3. Rationalization The rationalization factor entails the culprit persuading himself that their acts are justified. They may create valid reasons for their behavior and attempt to influence others to accept or approve of their conduct. This self-justification helps them reconcile their fraudulent actions with their moral beliefs (Handoyo & Bayunitri, 2021).

2.2.1.6 Relationship between Internal Control System and Fraud:

To effectively combat fraud, organizations must implement a comprehensive strategic approach that not only tackles the root causes of fraudulent behavior but also cultivates an environment supportive of proactive anti-fraud initiatives. Central to this strategy is the effective execution of internal controls, which act as the backbone of any successful fraud detection effort. Many organizations have embraced strong internal control systems as a foundational method for fraud detection, a practice that has demonstrated high effectiveness. Research highlights that the appropriate application of these controls significantly bolsters anti-fraud efforts by reducing the avenues through which fraud can occur (Wulandari & Nuryatno, 2018).

Moreover, internal controls are not merely a deterrent but a proactive measure that can minimize the endurance of management complicity in fraudulent activities. This is particularly crucial, as fraudulent behavior at the managerial level may bring about irreclaimable harm to an entity's financial standing and reputation. (Natasya et al, 2017) assert that implementing effective internal controls can mitigate the potential for management involvement in fraudulent activities, thereby fostering a culture of accountability and transparency.

To effectively combat accounting fraud, it is essential to implement and uphold updated internal controls that ensure the reliability and integrity of financial information, commitment to relevant laws and regulations, and improved operational efficiency. A properly constructed internal control system could substantially lower the risks associated with personal interests that may deviate from an organization's objectives, thus aligning individual behaviors with the broader goals of the

organization. This alignment not only discourages fraudulent behavior but also promotes ethical conduct within the organization.

In addition to ensuring financial integrity, internal controls have an important part in enhancing operational efficiency through simplifying processes and facilitating better decision-making. When internal controls are effectively designed and executed, they establish a clear framework within which employees can function, minimizing the threat of errors and enhancing the reliability of financial reporting. A robust internal control system also fosters an environment of continuous improvement, where processes are regularly evaluated and modified according to best practices and changes in the regulatory environment (Natasya et al, 2017).

The significance of internal controls in deterring fraudulent financial reporting cannot be overstated. Poorly implemented controls can lead to substantial financial losses, juristic consequences, and harm to reputation, whereas an efficacious system of internal controls allows companies to optimize the utilization of assets and safeguard their financial interests. On the contrary, inadequate internal controls can result in accounting fraud, which not only impacts the organization but also has extensive implications for all stakeholders, including investors, employees, and customers. (Faisal, 2023)

In situations where internal controls are inadequate or poorly executed, organizations become susceptible to different types of fraud, including asset theft, fraud on financial statements, and depravity. These types of fraud may result in huge financial casualties and diminish stakeholder trust, which is often challenging to regain. Thus, an important element of an entity's fraud prevention strategy should incorporate regular audits and evaluations of the internal control system to make sure it stays effective. and adaptable to emerging risks and challenges. Auditing these controls enables early identification of weaknesses or inefficiencies that could potentially be exploited for fraudulent activities (UCSF, 2023).

The obligation to maintain an efficacious internal control system relies on both the administration and the board of directors. The administration is accountable for creating and executing internal controls, while the board of directors monitors their effectiveness and ensures alignment with the entity's strategic objectives. The

function of internal audit is also vital in this context. By providing an independent and unbiased assessment of the control environment, internal auditors play a necessary role in pinpointing scopes where controls may be lacking and suggesting enhancements. (Faisal, 2023).

Moreover, it's crucial to acknowledge that the effectiveness of internal controls depends not only on their design but also on the ethical culture present within the organization. An organization with a robust ethical culture, backed by leadership's commitment to ethical conduct, is more likely to implement effective internal controls. This culture discourages fraudulent activities and reinforces the importance of accountability at all levels. In contrast, a weak ethical culture can undermine even the most well-designed internal controls, as employees may feel less compelled to adhere to established policies and procedures (Nisak & Rochayatun, 2023).

One of the most effective methods for enhancing internal controls is through employee training and education. Employees should receive regular training on the significance of internal controls, how they operate, and their responsibilities in fraud prevention. This not only raises awareness but also empowers employees to realize potential risks and notify activities that are suspicious. Additionally, organizations should implement clear channels for reporting fraud, such as whistleblower programs, which enable employees to express apprehension anonymously without terror of retaliation. By promoting an atmosphere where employees feel secure in reporting fraud, organizations can identify and address issues early, before they develop into more serious problems (Wulandari & Nuryatno, 2018).

Lastly, technology is becoming essential to the effectiveness of internal controls. Utilizing advanced software tools, like artificial intelligence and data analytics, can ameliorate transaction monitoring and detect patterns that may indicate fraudulent behavior. Automated systems minimize the risk of human error and deliver real-time insights into financial activities, aiding deviation detection and allowing quick corrective actions. As fraud schemes grow more complex, it is vital for organizations to leverage technology to stay ahead of emerging risks. (Kesuma & Fachruzzaman, 2024).

In conclusion, implementing robust internal controls is essential to any organization's strategy for detecting fraud. By tackling the underlying causes of fraud, fostering an environment of accountability, and utilizing technology, organizations can greatly lower the risk of fraudulent activities. Regular audits, employee training, and a strong ethical culture further strengthen internal controls, safeguarding the organization's financial integrity and ensuring long-term success. The roles of management, the board, and internal auditors are pivotal in upholding a resilient internal control system that evolves with new risks and challenges. As fraud tactics advance, organizations must remain vigilant and proactive to protect their financial assets, reputation, and stakeholder trust. (Faisal, 2023); (Natasya et al, 2017); (Wulandari & Nuryatno, 2018).

3.1.1 Overview of the Palestine Exchange

The Palestine Exchange (PEX) is the primary securities market in Palestine, enabling the trading of various financial instruments, such as stocks, bonds, and other securities of listed companies. Established to foster economic development and create investment opportunities, the PEX serves a vital role by offering a platform for businesses to access capital while providing investors with the chance to engage in Palestine's financial markets. Founded in 1995, the PEX has grown steadily, establishing itself as a key component of the Palestinian financial landscape and contributing to broader goals of economic stability and growth. As a cornerstone of the nation's financial infrastructure, the exchange functions within the regulatory framework set by the Palestinian Capital Market Authority (PCMA), and ensures that it meets international standards of transparency, fairness, and operational efficiency. (PEX, 2020)

A key function of the PEX is to support Palestinian businesses by giving them access to capital markets, allowing them to secure the funding needed for growth and development. This, in turn, helps drive job creation and boosts economic activity across multiple sectors. The regulatory oversight from the PCMA ensures that firms listed on the exchange adhere to high standards of corporate governance, accountability, and financial transparency, strengthening investor confidence and fostering market participation. Moreover, the PEX's dedication to good governance practices creates an environment favorable to long-term investment, supporting financial system stability and

enhancing Palestine's appeal as a destination for both local and international investors (PEX, 2020).

The PEX lists companies from a wide array of sectors, including banking, insurance, industry, services, and telecommunications, which contribute to a diversified and dynamic market. This diversification not only allows investors to spread their risk across different industries but also strengthens the resilience of the financial market as a whole. In a region characterized by economic and political challenges, the PEX provides a much-needed avenue for investment and financial growth, serving as a beacon of stability and opportunity. Investors, both individual and institutional, engage in trading activities through licensed brokerage firms, ensuring that transactions are conducted in a secure and transparent manner. The exchange has embraced modern technologies to facilitate these transactions, providing a seamless and efficient trading experience. This includes the adoption of electronic trading platforms that improve the speed as well as reliability of market operations, enabling investors to access real-time market data more easily and execute trades efficiently (PEX, 2020).

Furthermore, the PEX is instrumental in advancing financial literacy as well as awareness within the investor community and the public at large. Through educational initiatives and outreach programs, the exchange seeks to provide potential investors with the information and resources necessary to make prudent financial decisions. These efforts are particularly important in Palestine, where financial literacy levels may vary, and where encouraging broader participation in the stock market can have a significant impact on economic empowerment and wealth creation. By fostering a culture of informed investing, the PEX helps to build a more inclusive financial system, where individuals from all walks of life can contribute to and benefit from the growth of the economy (PEX, 2020).

In addition to its primary role as a marketplace for securities, the PEX serves as a catalyst for broader economic development in Palestine. By facilitating the flow of capital from investors to businesses, the exchange helps to fuel innovation, entrepreneurship, and industrial growth. This capital mobilization is crucial for addressing some of the key economic challenges facing Palestine, such as high unemployment rates and the need for greater private sector development. The PEX offers companies, especially small and medium-sized enterprises (SMEs), an avenue to secure the capital required to grow their operations, invest in advanced technologies, and enter new markets. In doing so, the

exchange supports not only the success of individual businesses but also promotes the broader diversification and modernization of the Palestinian economy (PEX, 2020).

The exchange's commitment to fostering a robust financial market is further evidenced by its efforts to attract foreign investment. By adhering to global best practices in corporate governance and market regulation, the PEX has positioned itself as a credible and reliable institution within the international investment community. The presence of foreign investors in the market not only provides additional liquidity but also brings valuable expertise and global perspectives that can help to elevate the performance and competitiveness of Palestinian businesses. This international engagement is essential for integrating Palestine into the global economy and for attracting the capital flows necessary to support long-term economic progress and advancement (PEX, 2020).

The role of the PEX extends beyond the realm of finance and economics; it also has social and political significance. In a region marked by ongoing conflict and uncertainty, the existence of a functioning stock exchange represents a symbol of resilience and hope for a brighter future. By providing a platform for economic opportunity and financial growth, the PEX plays a part in the broader effort to build a sustainable and prosperous Palestinian state. Its success as an institution demonstrates the capacity of Palestine to create and maintain sophisticated financial systems, even in the face of adversity (PEX, 2020).

In conclusion, the Palestine Exchange serves as a vital institution for economic growth, capital mobilization, and investment in Palestine, contributing to developing a robust and dynamic financial market in the region. Through its commitment to transparency, good governance, and financial education, the PEX provides businesses with the capital they need to grow while offering investors a secure and efficient platform to participate in the financial markets. As the exchange progresses and adjusts to meet the evolving demands of the Palestinian economy, it will continue to be a cornerstone of economic development, playing an essential role in shaping the future of Palestine's financial landscape (PEX, 2020).

2.3.2 Sectors of the Listed Firms in Palestine Exchange

The Palestine Exchange (PEX) encompasses a diverse range of sectors, each represented by listed firms that contribute to the overall market dynamics. The sectors of the listed corporations in the PEX include **Palestinian Financial Market Authority, (2023):**

Distribution of Palestinian Publicly traded companies listed on the Exchange of
Palestine.

Sector	Number of listed companies
Industry Sector	13
Banking & Financial Services Sector	8
Insurance Sector	7
Service Sector	11
Investment Sector	10
Total	49

3.1.2.1 Insurance Sector:

The insurance sector in the Palestine Exchange comprises 7 listed companies, and it revolves around the field of insurance as its core activity. This sector includes companies that provide insurance services covering various aspects such as life, property, automobiles, and more. These companies play an important part in offering financial protection to individuals and institutions against possible risks. The presence of this sector reflects the diversity in the Palestinian financial market, enhancing confidence in the financial stability of individuals and the community. This contributes to the promotion of economic stability and achieving balance in the financial system. The following illustrates the insurance companies operating in Palestine. (Palestinian Financial Market Authority, 2023).

3.1.2.2 Investment Sector

Secondly, the investment sector in the Palestine Exchange consists of 10 listed companies, reflecting the companies' interest in investment activities at various levels. Investment in this sector varies between securities, real estate, and other opportunities. These companies play a necessary part in stimulating economic activity and consolidating diversity in the securities market, contributing to the creation of diverse and sustainable investment opportunities (Capital Market Authority, 2023).

3.1.2.3 Industrial Sector

The industrial sector in the Palestine Exchange comprises 13 listed companies, encompassing a wide range of businesses engaged in the production of goods and products. The activities within this sector vary among manufacturing companies operating in different industrial fields. This sector performs an essential part in upholding

the local economy by creating opportunities for employment and promoting industrial development. (Capital Market Authority, 2023)

3.1.2.4 Services Sector

The Services Sector in the Palestine Exchange consists of 11 listed companies and encompasses a variety of companies providing diverse services to consumers or other businesses. This sector includes financial services, technology, retail, and entertainment, where these companies play a significant role in meeting market needs and providing services that enhance the local economy. (Capital Market Authority, 2023)

3.1.2.5 Financial Services and Banking Sector

The Banking and Financial Services Sector in the Palestine Exchange comprises 8 listed companies, including a diverse range of banks and financial institutions. This sector provides a variety of banking and financial services tailored to the needs of customers, contributing to the support of the financial system and the enhancement of economic development in the region. **(Palestinian Monetary Authority, 2023)**

2.2. Previous studies

Understanding the dynamics of internal control measures and their effectiveness in fraud detection is critically important, especially within public sector entities and financial institutions. An increasing body of research has explored different facets of internal controls, emphasizing their contribution to mitigating fraud across various sectors. This synthesis of studies investigates the impact of internal controls on identifying and avoiding fraud and reveals the significance of governance, ethical considerations, and the necessity for comprehensive strategies to bolster organizational integrity. The studies included are as follows:

1. **(Kesuma & Fachruzzaman, 2024)**: This research investigates the impact that internal control practices have on accounting fraud within public sector entities. Through a thorough literature review, the study synthesizes insights from ten prior studies obtained from both national and international sources. The literature search focused on key terms such as public sector accounting fraud, fraud, and internal control. The combined findings indicate that implementing internal control measures serves as an effective strategy for reducing accountancy fraud in the organizations in the public sector.

2. **(Maulani et al, 2024)**: This study investigates the problem of fraud in financial institutions, specifically focusing on Islamic banks that function within distinct regulatory and ethical frameworks. It evaluates the influence of internal controls and auditor integrity on fraud prevention while also considering the moderating effect of sound corporate governance. The findings reveal that internal controls significantly bolster efforts to prevent fraud, whereas auditor integrity demonstrates a positive yet insignificant correlation. Furthermore, sound corporate governance does not significantly moderate the relationship between internal controls or auditor integrity and fraud prevention. This research contributes to agency theory by examining the dynamics of agency relationships within the realm of Islamic banking, highlighting the critical roles of robust internal controls and auditor integrity in fraud prevention, and indicating that reliance solely on sound corporate governance may not be adequate for achieving optimal fraud prevention results.
3. **(Dagane, 2024)**: This paper examines the impact of internal control measures on fraud revelation in manufacturing companies in Kenya. A quantitative cross-sectional approach was employed, with data purposive sampling used to obtain data from 75 Kenya Association of Manufacturers (KAM) member businesses. The study highlights the necessity for clear lines of authority and appropriate division of responsibilities to ensure accountability. Additionally, it recommends implementing robust strategies for fraud identified and avoided, encouraging workers to declare acts of fraud, and clearly defining roles for all employees. It is also suggested to establish effective communication channels, provide regular training on fraud identification, and impose punitive measures on those involved in fraudulent conduct.
4. **(Nwite et al, 2024)**: This research assesses the influence of internal control systems on fraud preservation within the ministries, departments, and agencies of Ebonyi State. The primary objective is to analyze how control activities, monitoring and the control environment processes contribute to fraud prevention in these organizations. A cross-sectional survey methodology was employed, and data were evaluated using the ordinary least squares (OLS) estimation technique with SPSS software. Initial data was gathered using organized questionnaires distributed to respondents. The results reveal that the control environment, control activities, and monitoring processes had an essential influence in the fight against fraud in MDAs in Ebonyi State. The study suggests that these organizations should establish effective and comprehensive

internal control systems that include the control environment, control activities, and monitoring processes, as these elements are essential for mitigating fraud.

5. **(Mansyuri et al, 2024)**: This research stresses the material of integrity and internal controls in combating fraud in Indonesia, and small and medium companies were targeted. Although MSMEs play a vital role in the national economy, they encounter difficulties like inadequate administration and fraudulent activities. The study investigates how fostering a culture of transparency and implementing strong internal control measures can help lower the likelihood of fraud. Analyzing a sample of 150 MSMEs through Smart PLS indicated that both integrity and effective internal control measures contribute to the accuracy of financial reporting, operational effectiveness, and customer confidence. In particular, internal control practices—for example, risk evaluation, control activities, and communication and information—demonstrated efficacy in lowering the risk of fraud. The research advocates for governmental and stakeholder assistance to offer management support, training, and initiatives that encourage transparency and internal controls, empowering MSMEs to better address business difficulty as well as contributing to sustaining growth in the economy at the national level.
6. **(Widiantari & Bella, 2023)**: The research explores the leverage of strong corporate governance, internal control, and individual morals as moderating factors in fraud prevention at the asset management agency and the Badung regency regional financial office. The study targeted a population of 96 employees, using a saturated sampling approach to include all 41 respondents from the agency. Analytical methods such as the determination coefficient, multiple regression analysis (MRA), F-test, and t-test were employed. The findings indicate that both strong corporate governance and internal control systems have a significant part in avoiding fraud, with individual ethics further enhancing this connection.
7. **(Insani et al, 2023)**: This study investigates the safeguarding function of internal control and moral principles consciousness in combating fraud. The research targeted four state-owned banks, administering surveys to 100 employees for data collection. Harnessing multiple linear regression analysis, the findings reveal that both moral principles consciousness and internal control are crucial in fraud prevention.
8. **(Nisak & Rochayatun, 2023)** This research emphasizes the crucial importance of internal audits for discovering and avoiding fraud within some universities based on a thorough assessment of the literature and experimental data. The data gathering

strategies involved searching for pertinent papers in databases such as Springer, Google Scholar, and Emerald by underlining terms relating to the research. The results of the research indicate that a practical internal audit is required to identify and avoid university fraud. Internal audits must help colleges adopt effective controls by evaluating their efficacy and performance and encouraging them to undertake constant enhancements. Internal audits enable universities to meet their objectives by establishing, analyzing, and enhancing risk administration, university governance processes, and the efficacy of university controls. Internal auditing at universities additionally acts as an oversight for avoiding and identifying acts of fraud. The findings of this study are intended to be utilized as assessment materials to improve the function of internal audits in universities in the identification and avoidance of fraud.

9. **(Shakeel et al, 2023)** This paper investigates the influence of internal control systems (ICS) elements on identifying occupational fraud, highlighting the audit committee's moderating effect. Data were gathered from 413 individuals working in the accounting, financial, and auditing departments of publicly traded firms in Pakistan and analyzed using regression techniques. The research introduces a mechanism for identifying fraud that is grounded in control activities, the control environment, risk evaluation, monitoring, and communication and information. It demonstrates that the Committee of Audit Notably enhances the connections between these elements. The results offer important modulation and policy suggestions for administrators, politicians, regulatory agencies, auditing companies, and investors, emphasizing the vital Place of the internal control system and its elements in improving the effectiveness and efficiency of occupational fraud detection.
10. **(Arifia et al, 2023)** This paper examines the function of internal control in thwarting and identifying fraud in online enterprises, especially within the framework of Indonesia's economic growth. A qualitative descriptive approach was adopted, incorporating data analysis and interpretation and bolstered by established theories. Data from secondary sources, including research journals and the Experian Global Fraud and Identity Report APAC (2019-2020), were employed. The report reveals that 50% of Indonesian businesses experienced losses caused by internet fraud in the previous year, with 48% of firms reporting heightened fraud losses in 2020 as a result of challenges in accurately recognizing consumers.

11. **(Ibanga, 2022)** This study evaluates the efficiency of ICS in deterring fraud and misappropriation of funds within the public strip, with a focus on Akwa Ibom State Polytechnic. A survey design was utilized, with 92 participants selected using the Taro Yamane formula. Data were gathered through a self-constructed questionnaire, guided by specific research questions and hypotheses. Analysis was carried out using simple percentages and the Likert scale method. The findings reveal that dimensions such as risk assessments, control activities, control environment, and information and communication are crucial in preventing fraud and fund misappropriation. The study recommends the adoption of internal auditing practices for managing financial resources, maintaining school assets, and effectively managing funds. It also highlights the necessity for management to adhere to a rigorous and objective selection process for accounting standards and personnel.
12. **(Holloway, 2023):** This research examines the challenges and supportive factors faced by the leadership of tiny non-profit entities in the east region of the US regarding the application of effective internal control procedures to prevent fraud. The primary research question focused on how executives perceive these internal controls as a safeguard against workplace fraud. Data were gathered from 10 nonprofit leaders using a qualitative exploratory case study approach, with information collected through telephone, email, and in-person interviews. Findings reveal that nonprofit executives emphasized the need for a strong board of directors, training, reliable accounting systems, regular meetings, qualified volunteers, and established rules and procedures. Ethical behavior is seen as a pathway to enhanced financial integrity and increased donor contributions, suggesting potential for positive social change.
13. **(Irwansyah & Zega, 2023)** This paper evaluates the impact of corporate governance, internal audits, the efficiency of internal controls, and appropriate compensation on the likelihood of fraud. It utilizes quantitative data collected from managers in business, sales, finance, and HR departments. Using purposive sampling, data were gathered from 10 companies with a total of 49 respondents. Analysis was performed through multiple linear regression on SPSS 25. The results reveal that while corporate governance positively correlates with fraud risk, the roles of internal audits, effective internal controls, and adequate compensation negatively influence the likelihood of fraud in state-owned enterprises in Bengkulu City.
14. **(Putra et al., 2022)** This study examines how organizational culture influences internal control behaviors and community involvement in fraud prevention. Data were

collected from 161 participants through questionnaires, and the analysis employed the PLS way. The findings indicate that robust internal controls and active community participation are crucial for preventing fraudulent activities.

15. **(Yahya, 2022)** This study evaluates how components of internal controls alter preventing fraudulent activity, incorporating elements from the fraud pentagon theory, which includes rationalization, pressure, opportunity, capability, and arrogance. The research focused on employees from a construction service company, using a non-probability sampling method to represent the entire populace. Data analysis was performed using the structural equation model (SEM) with a partial least squares (PLS) approach. Findings suggest that monitoring, risk assessment, and control environments significantly influence fraud prevention, while information and communication and control activities, they have no effect.
16. **(Abei, 2021)** This paper explores how the implementation of internal control design affects fraud identification and avoidance in institutions for microfinance. A qualitative approach was used, involving personal interviews with fourteen participants, and the data were analyzed manually. The findings indicate that robust internal controls diminish the motivations, opportunities, justifications, and capabilities to commit fraud, thereby enhancing the ability of microfinance institutions to identify and prevent fraudulent activities. Additionally, the study highlights weak internal control systems, inadequate monitoring, and insufficient compensation as significant factors contributing to fraud in these institutions.
17. **(Handoyo & Bayunitri, 2021)** This study was applied at PT Pos Indonesia and seeks to assess the way internal controls and internal audits prevent fraud. Utilizing a non-probability sampling method combined with a saturated sampling strategy, the research included a score of 91 employees from the organization. Findings reveal that every internal audit and internal controls have a necessary impact on fraud barring, collectively achieving a 68.8% reduction in the company's fraud rate.
18. **(Herawaty & Hernando, 2021)** This study investigates the impact that internal control has on effective corporate governance and fraud forbidding within the Jambi City Regional Government. It also evaluates the impact of effective corporate governance on fraud prevention and whether internal control acts as a mediator in this relationship. Utilizing purposive sampling, 49 government employees were surveyed, resulting in 47 completed questionnaires. Results indicate that internal control has not had a major effect on either fraud forbidding or effective corporate governance.

19. **(Fernandhytia & Muslichah, 2020)** This paper evaluates how internal controls, moral character, and ethical principles affect the probability of accounting fraud in startups. The survey involved 128 respondents. Findings reveal that strong internal controls considerably lower the chance of accounting fraud; as internal controls strengthen, a firm's vulnerability to fraud diminishes. Additionally, personal morals play a substantial impact in the likelihood of occurrence fraud, indicating that promoting personal morality by embedding appropriate values into everyday practices can curb fraudulent behavior. Ethical values are also essential in reducing tendencies toward accounting fraud.
20. **(Alslihat et al., 2018)** This investigation aims to identify ICS components, based on the COSO framework, that impact cloud computing risk perceptions in Jordanian public shareholding companies. A questionnaire targeting 190 public accountants was distributed, achieving an 81.1% response rate with 154 valid responses for analysis using SPSS version 21. The findings indicate that public shareholding companies should adopt cloud accounting practices and improve their knowledge of the required hardware and software for effective information technology support. Furthermore, the COSO framework provides internal control procedures to mitigate risks associated with implementing information systems, particularly accounting information systems.

2.2.1. Comment on previous studies.

The literature review reveals a significant link between internal controls and avoiding fraudulent activity. A central theme is the way successful internal controls were at reducing accounting fraud, particularly within the public sector. It also highlights the importance of auditor-related factors and big data skills. Furthermore, the roles of corporate governance, moral sensitivity, and internal auditing in detecting fraud are emphasized, showcasing their relevance across different organizations. (Kesuma & Fachruzzaman, 2024) provide a thorough analysis of ten studies that collectively affirm the importance of internal control measures in curtailing accounting fraud in the public sector. Their focus on this specific sector adds a valuable dimension to the broader consensus regarding the necessity of robust internal controls across industries. (Maulani et al, 2024) explore the relationship between internal controls and auditor integrity in Islamic banks, revealing that while strong internal controls are crucial for fraud detection, the impact of auditor integrity is less pronounced. This focus on the unique challenges of Islamic banking expands the discourse around fraud detection, particularly in sector-

specific contexts. (Dagane, 2024) and (Nwite et al, 2024) investigate internal control mechanisms in manufacturing companies in Kenya and public sector agencies in Ebonyi State, respectively. Their findings reinforce the significance of various internal control components for fraud detection and prevention while providing valuable geographic perspectives that highlight regional differences in fraud management strategies.

Cultural and ethical dimensions are emphasized in the studies by (Mansyuri et al, 2024) and (Widiantari & Bella, 2023). (Mansyuri et al,2024) discuss how a culture of honesty promotes reliable financial practices, while (Widiantari & Bella,2023) survey the interplay among corporate governance and personal morality in fraud safeguarded. These insights enhance the conversation by integrating psychological factors often overlooked in traditional control-focused analyses. (Insani et al, 2023) contribute a significant perspective by analyzing the roles of moral values alongside internal controls, highlighting the necessity for an ethical foundation in effective fraud protection. This holistic approach underscores the importance of aligning control measures with ethical standards to foster a robust fraud prevention culture. The perspective of the academic sector is notably represented by (Nisak & Rochayatun, 2023), where internal auditing plays a key role in universities. Their findings align with existing literature while offering a unique viewpoint on fraud identification and avoidance within educational establishments. Further contributions come from (Shakeel et al,2023), Who highlights the function of audit committees in enhancing fraud detection, and (Abei,2021), whose focus on microfinance institutions adds depth to the understanding of internal control systems' effectiveness.

In contrast, (Herawaty & Hernando, 2021) challenge the prevailing narrative by suggesting that internal controls may not significantly influence fraud prevention or governance. This divergence calls for further exploration into the conditions that determine the efficacy of internal controls. Additionally, studies such as (Fernandhytia & Muslichah, 2020) and (Alslihat et al, 2018) broaden the scope by examining the impact of personal ethics and the risks associated with cloud computing on fraud prevention, reflecting the evolving challenges organizations face today. In summary, while the reviewed studies collectively affirm the critical role of internal controls to avoid fraud, the diversity of perspectives—from sector-specific challenges to cultural and ethical considerations—illuminates the complexity inherent in fraud avoidance techniques. Studies in the future should continue to explore these multifaceted dimensions to promote the performance of internal control techniques across various organizational contexts.

2.2.2. Similarities and distinctions among the present study and previous studies.

Regarding the role of internal control in fraud detection, several studies with different objectives, methodologies, and findings present an opportunity to compare their similarities and differences.

First, the study by (Kesuma & Fachruzzaman, 2024) highlights how internal control mechanisms affect accounting fraud within government agencies, emphasizing that implementing these measures effectively can greatly reduce fraudulent activities. In contrast, research by (Nwite et al, 2024) and (Ibanga, 2022) underscores the value of the control framework and sound management practices in enhancing the overall effectiveness of internal controls. While all studies agree on the essential function of internal control in preventing fraud, (Kesuma & Fachruzzaman, 2024) focus specifically on the public sector, whereas (Nwite et al, 2024) and (Ibanga, 2022) explore various contexts, including government institutions and the financial sector.

Second, the study by (Maulani et al, 2024) examines how internal controls relate to auditor integrity in Islamic banks, finding that robust internal controls significantly enhance fraud prevention. This aligns with the findings of (Holloway, 2023) and (Shakeel et al, 2023), which stress the critical role of strong governance and internal control practices. However, (Maulani et al, 2024) 's research is distinctive due to its specific focus on the particular challenges Islamic banks face in adopting these controls.

Additionally, the study by (Mansyuri et al, 2024) emphasizes the importance of a culture of truthfulness and robust internal controls in preventing fraud within small and medium-sized businesses. This reflection on cultural aspects adds a vital dimension that may be underexplored in other studies. Meanwhile, research by (Insani et al, 2023) and (Yahya, 2022) identifies moral values as significant components in fraud prevention, thereby introducing an ethical dimension that enriches our understanding of the way internal controls operate inside various organizational contexts.

Conversely, the study by (Herawaty & Hernando, 2021) yields intriguing findings, suggesting a lack of significant impact of internal controls for preventing fraud or good governance. This conclusion contrasts with the prevailing consensus in other research, prompting questions about the specific contexts that might affect the effectiveness of internal controls.

However, all studies acknowledge the critical significance of internal controls in reducing fraud; they vary in their focus on different contexts, cultures, and ethical dimensions, and the ways these factors influence internal control effectiveness. This variation highlights the complexity surrounding internal control systems and their vital role in detecting fraud, underscoring the need for further research to explore these dimensions more comprehensively.

2.2.3 Research Gap:

The research gap in internal control systems and fraud detection, particularly in the Palestinian context, is significant and multi-dimensional. While existing literature emphasizes the importance of internal controls in fraud detection, it often overlooks key factors such as the influence of organizational culture, ethics, and the broader socio-economic and political environment. Most of the studies conducted so far focus on environments outside Palestine, where political and economic stability plays a different role compared to the Palestinian setting. The unique challenges of the Palestinian context, including its unstable political and economic situation, present specific hurdles in the implementation and effectiveness of internal control systems. The lack of political stability and economic turbulence can lead to fluctuating organizational priorities and insufficient resources, which are often overlooked in studies conducted in more stable regions. Furthermore, the research gap exists in understanding how these factors—such as regional conflicts, security concerns, and political unrest—affect internal controls and fraud detection efforts in Palestinian institutions.

Another significant gap is the limited attention paid to the interaction between cultural and ethical norms and the effectiveness of internal controls. In the Palestinian context, social and ethical values play a central role in shaping organizational behavior, but these factors are often neglected in global studies. Additionally, there is a dearth of research on how technology can enhance internal control systems in Palestinian organizations, despite the growing importance of digital tools and data analytics for fraud detection. Moreover, research on the role of training, education, and continuous professional development in improving the effectiveness of internal control systems is scarce. Employees' understanding and commitment to fraud detection are crucial, yet there is a gap in investigating how regular training and capacity-building programs could influence their performance in the context of Palestinian organizations. By addressing these gaps,

research can provide valuable insights into how internal control systems can be adapted to the Palestinian context, considering its unique challenges. This would contribute to the development of more robust and context-specific frameworks, ultimately strengthening financial integrity and institutional trust in an unstable environment.

Chapter Three: Methodology

Introduction

The following chapter explains the thesis methodology used in the thesis. The researcher clarifies in this chapter the way data collection and sample selection work, the thesis design, the thesis approach, the intended audience, the thesis sample, the chosen sample, the thesis instruments, the data collection techniques, and methods for the analysis of data. The questionnaire formulated based on a rehearsal of the relevant previous studies on the topic is also provided.

3.1 Data Collection and Sample Selection

3.1.1 Firstly, secondary data:

The researcher began collecting data from books, research papers, articles, published journals, reports, and previous research on the same subject, as well as websites, to gather data on research questions. The results are presented in the second chapter of this study.

3.1.2 Secondly, primary data:

The researcher employed a meticulously crafted questionnaire to gather primary data, featuring a wide range of structured questions. This questionnaire is designed to investigate various aspects of the research terms, facilitating the collection of essential information to satisfy the research's aims.

3.2 Study Methodology

To achieve the study's aims and respond to the questions of the study, the researcher utilized a descriptive-analytical approach. This integrated method combines the systematic description of the phenomenon with in-depth analysis to identify its characteristics and influencing factors. Initially, the phenomenon was described clearly and accurately, followed by data analysis to uncover key patterns and influences. The researcher designed a questionnaire for data collection, analysis, and comparison of the results to select the most accurate and reliable findings. This process contributed to a thorough and deep understanding of the subject being investigated.

3.3 Study Population

The study sample included employees from 49 Palestinian public shareholding firms stated within the Palestinian exchange, encompassing a variety of sectors, including the services sector, banking and financial services sector, industry sector, investment sector,

and insurance sector. In table 3, a detailed breakdown of these firms by sector is presented.

Table (3.1) Distribution of Palestinian Public Shareholding firms Listed on the Palestine Exchange. (Palestinian Financial Market Authority, 2024).

Sector	Number of listed companies
Industry Sector	13
Banking & Financial Services Sector	8
Insurance Sector	7
Service Sector	11
Investment Sector	10
Total	49

3.4 Study Sample

The sample for the study was picked from the total research community, where the researcher classified the companies in each sector and determined the number of managers and employees in each. This step helped in determining the sample size reliably and accurately. Moreover, each row in the tables (3.2) shows a specific sector, as it includes identifying the nouns of the firms and the number of managers and employees for each company as follows.

Table (3.2) Distribution of sectors of the Palestine Exchange (Palestinian Financial Market Authority, 2023)

Name of Company	Number of Managers	Number of Employee
Industry Sector	159	2754
Banking & Financial Services Sector	144	4327
Insurance Sector	100	1558
Service Sector	167	5073
Investment Sector	37	2228
Total	607	15940

3.5 The Sample

The study sample was selected from the total research community through a systematic classification of companies by sector, and determining the number of managers and employees in each company. The sample size was calculated using the website (calculator.net), which is a reliable and academically recognized tool for calculating research sample sizes. The use of this tool ensured that the sample size was determined

accurately and reliably, in line with the research community. Table (3.2) corresponds to each specific sector, showing the names of the companies and the number of managers and employees in each, showing the exact distribution of the sample across the different sectors as shown in Appendix No. (3), while Table (3.3) shows the number of employees to whom the study was applied, who received the questionnaire and filled it out.

Table (3.3) Distribution of the number of employees studied in the study(Palestinian Financial Market Authority, 2023)

Job Title	Frequency
Manager	56
Administrative Assistant	44
Accountant	99
Auditor	18
Customer Service Officer	77
Credit Officer	11
Cashier	64
Total	369

3.6 Study Instrument

In this research, the investigator employed a questionnaire to gather quantitative data. The questionnaire is designed as the main data-gathering instrument.; it involves 39 statements organized into six sections, utilizing a five-point Likert scale for evaluation. This structure is detailed.

3.7 Correction Key:

Some results obtained from the Likert scale approach were used, and the allocation was as follows applied to evaluate the questionnaire items (Bhandari & Nikolopoulou, 2020):

Very High	High	Moderate	Low	Very low
5	4	3	2	1

Table (3.4): Correction Key

Mean	Degree
4.21-5	Very High
3.41-4.20	High
2.61-3.40	Moderate

1.81-2.60

Low

1-1.80

Very low

The researcher utilizes this scale because it is the most suitable and provides the best response to the questionnaire data.

3.8. Tool validity:

The validity of the questionnaire was evaluated by consulting five academic supervisors and experts in the field. After making some necessary modifications, these specialists confirmed the suitability of the questionnaire to achieve the objectives of the study. This process enhances the reliability of the data collection tool and thus contributes to the accuracy of the thesis results, as shown in Appendix No. 2.

3.9. Study Variables:

1. The independent variable:

is a factor that exerts influence without being affected by other variables. In this study, it pertains to internal control. Internal control is characterized by strategy, practices, and procedures executed by an organization to safeguard its assets, achieve goals efficiently and effectively, conform to required regulations and legislation, and mitigate the risks of fraud and errors. The dimensions of internal control encompass:

1. **Control Environment:** A framework of regulations and procedures that shape the institution's overall culture concerning control and regulatory compliance. (Braim & Bilal, 2023)
2. **Risk Assessment:** The systematic Identifying and assessing possible hazards that could hinder the institution's objectives, along with the development of strategies to mitigate those risks. (Amudo & Inanga, 2009)
3. **Control Activities:** The actions and procedures implemented by the institution to ensure the effective execution of policies and control measures while monitoring compliance. (Ayagre, Appiah-Gyamerah, & Nartey, 2014)
4. **Information and Communication:** Processes designed to ensure that essential information is communicated effectively to all relevant stakeholders, thereby enabling informed decision-making. (Mawanda, 2008)
5. **Monitoring:** A continuous process of assessment the effectiveness of control internal systems, ensuring they are regularly updated to adapt to changing circumstances. (Fadzil, Haron, & Jantan, 2005)

2. The variable that is dependent:

On the flip side, the variable dependent is the one that is influenced but does not influence, and in this study, it refers to Fraud Detection, which comprise a collection of procedures implemented by the firms to avoid or diminish the chances of fraud and to detect it when it occurs.

3.10 Reliability of the Questionnaire:

The questionnaire's reliability was assessed utilizing internal consistency analysis; this was done by determining Cronbach's alpha coefficients for every part and the questionnaire as a whole. The total coefficient of reliability has been determined to be (0.944), indicating a good level of reliability for research purposes. The table following illustrates that reliability coefficients for every section are satisfactory and consistent with the objectives of the study.

Table (3.5): Reliability Coefficients for Questionnaire Sections.

Section's Number	Section's Title	Reliability coefficient	Number of paragraphs
1	Control environment	0.783	6
2	Risk assessment	0.823	6
3	Control activities	0.728	6
4	Information and communication	0.853	6
5	Monitoring	0.842	6
6	Fraud Detection	0.876	9
	Total	0.944	39

3.11 Responses to the Questionnaire:

It is clear to us that after distributing the questionnaire, (369) questionnaires were retrieved from the study sample out of (376), where this number showed a distinguished response that reflects the participants' interest in the research. Despite the researcher's direct visit to many firms stated on the Palestinian exchange, in addition to sending the questionnaire electronically via various means such as email and social media, the response rate reached 98.1%. This rate is considered high and reflects the effectiveness of the methods used in collecting data.

3.12. Statistical Analysis:

The data for this investigation was analyzed using SPSS version 26, employing various statistical tests tailored to specific research objectives:

1. **Descriptive Statistics:** these descriptive statistics were employed for calculating standard deviations and means, and percentages to summarize participants' responses. This initial analysis provided a clear overview of data trends and patterns related to the study variables. (Saeidi, Sofian, Saeidi, Saeidi, & Saaeidi, 2015)
2. **Cronbach's Alpha Test:** To evaluate the reliability of the questionnaire, Cronbach's alpha was calculated. This test assesses the internal consistency of the scale, with higher values indicating that items effectively measure the same construct. Reliability is crucial for ensuring accurate findings. (Hair, Hult, Ringle, & Sarstedt, 2019)
3. **Pearson's Correlation Test:** this test examined the relationships between continuous variables, measuring the strength and direction of linear associations. Understanding these relationships is essential for further analysis. (Al-Tamimi & Al-Mazrooei, 2007)
4. **Independent Samples t-Test:** utilized for comparing responses according to gender, this test assesses whether gender significantly influences perceptions related to the study variables, highlighting potential gender-related variations in attitudes. (Yamamoto, 2008)
5. **Analysis of Variance (ANOVA):** ANOVA analyzed differences among demographic factors such as age, academic qualifications, experience, and job title. This test helps assess whether significant differences exist in means across multiple groups (Malhotra & Birks, 2012).
6. **Multiple Linear Regression Analysis:** this technique measured the statistical effects between study variables, determining relationships between a dependent variable and multiple independent variables. It identifies significant predictors and quantifies their contributions, providing insights for informed recommendations. (Ahmed, Islam, & Alabdullah, 2013)

Chapter Four: Results

4.1 Introduction

The following chapter describes the study population and addresses the description of the study tool, the procedures followed in implementation, and the statistical analyses used in the result analysis.

4.2. Description of Respondents Characteristics:

This section focuses on key demographic variables, for example, age, gender, academic qualifications, years of experience, and job title. These factors have an important part in molding participants' perspectives and responses. Analyzing these characteristics enhances the understanding of the respondents, thereby enriching the study's findings. The findings are presented on Table (4.1) below:

Table (4.1) Sample distribution according to study variables.

Gender	Frequency	Percent
Male	212	57.5%
Female	157	42.5%
Total	369	100%
Age	Frequency	Percent
Less 25 years	57	15.4%
25 - 35 years	192	52%
35 - 45 years	94	25.5%
More than 45 years	26	7%
Total	369	100%
Academic Qualifications	Frequency	Percent
Bachelor	296	80.2%
Master	70	19%
PhD	3	.8%
Total	369	100%
Years of experience	Frequency	Percent
Less 5 years	119	32.2%
5 - 10 years	102	27.6%
10 - 15 years	80	21.7%
15 - 20 years	43	11.7%
More than 20 years	25	6.8%
Total	369	100%
Job Title	Frequency	Percent
Manager	56	15.2%
Administrative Assistant	44	11.9%

Accountant	99	26.8%
Auditor	18	4.9%
Customer Service Officer	77	20.9%
Credit Officer	11	3%
Cashier	64	17.3%
Total	369	100%

4.2.1 Gender

The study sample was distributed according to gender, where the data represents an overall of (369) those who responded. The findings indicate that (212) of the participants, equivalent to (57.5%), were males, while the number of females was (157), equivalent to (42.5%) of the total sample. This percentage reflects an unequal distribution between the genders, which may indicate a disparity in participation between males and females in firms stated in the Palestinian Exchange. This distribution may affect the results related to the part of internal control in detecting fraud, as the views and experiences of the genders may differ in this context, which calls for further analysis to understand the impact of these differences on the effectiveness of internal control in firms.

4.2.2 Age

The research sample was distributed according to age group, where the data represents an overall of (369) those who responded. The findings show that 57 participants, equivalent to (15.4%), are under the age of 25 years. While (192) participants, equivalent to (52%), fall within the age bracket of 25 and under than 35 years. There are also (94) participants, representing (25.5%), in the age bracket of 35 to under 45 years, and finally, (26) participants, equivalent to (7%), belong to the age group above (45) years. These results reflect the age structure of the sample, where the age bracket of 25 and under than 35 years dominates, which may indicate that this category is the most represented in the firms stated on the Palestinian Exchange. This composition may affect the results regarding the part of internal controls in fraud detection, as it may reflect different experiences and opinions based on the age background of the participants.

4.2.3 Academic Qualifications

The study sample was distributed in accordance with academic qualifications, and the data represents a total of (369) respondents. The results indicate that (296) of the participants, equivalent to (80.2%), hold a bachelor's degree. whereas (70) respondents, equivalent to (19.0%), hold a master's degree. Finally, the number of respondents who

obtained a doctorate degree is only (3), representing (0.8%) of the total sample. These results reflect the substantial rate of participants who hold a bachelor's degree, which may indicate that the majority of employees in the firms stated on the Palestinian Exchange have academic qualifications with a bachelor's degree. This distribution in academic qualifications may affect the insights and experiences related to the part of internal control in detecting fraud, as the level of knowledge and skills varies based on the educational qualifications of the participants.

4.2.4. Years of experience

The distribution of the research sample was determined by experience years, where the data represents an overall of (369) respondents. The results indicate that (119) participants, equivalent to (32.2%), have less than (5) years of experience. While (102) participants, equivalent to (27.6%), have experience ranging from (5) to less than (10) years. There are also (80) participants, representing (21.7%), who have experience ranging from (10) to less than (15) years, while (43) participants, equivalent to (11.7%), have experience ranging from (15) to less than (20) years. Finally, (25) participants, equivalent to (6.8%), have experience of more than (20) years. These results reflect the diversity of experience levels among the participants, as the categories with less experience dominate the sample. This distribution may indicate that firms stated on the Palestinian Exchange include a large number of employees with early experience, which may affect their views and experiences regarding the part of internal control in discovering fraud inside of corporations.

4.2.5 Job Title

The research sample was distributed in accordance with job title, where the data represents a overall of (369) respondents. The results indicate that (56) participants, equivalent to (15.2%), hold the position of manager. While (44) participants, equivalent to (11.9%), work as administrative assistants. The number of accountants is (99) participants, representing (26.8%) of the total sample. Also, (18) participants, equivalent to (4.9%), hold the position of auditor, while (77) participants, equivalent to (20.9%), work as customer service employees. The number of credit employees is (11) participants, equivalent to (3.0%), while (64) participants, equivalent to (17.3%), hold the position of treasurer. These results show diversity in job positions among the participants, as work is distributed among different roles within the firms stated on the Palestinian Exchange.

This composition reflects the importance of each function in contributing to understanding the part of internal control in discovering fraud, as experiences and opinions differ according to job titles, which may affect the effectiveness of control and fraud detection tools in firms.

4.3 Analysis of Internal Control Effectiveness in Fraud Detection:

The study addressed the main question: **What is the level of application of the role of internal control in detecting fraud from firms listed on the Palestine Exchange?**

The results of the table (4.2) indicate the variation in the levels of application of the various dimensions of internal controls for discovering, as monitoring came in the highest rank with an average of (4.2819) and a percentage of (85.6%), which reflects the companies' commitment to following up on tasks and implementing proceedings to ensure the leverage of the control system. Followed by the control environment with an average of (4.2633) and a percentage of (85.3%), which indicates the companies' interest in providing a strong environment that supports internal control policies and procedures with a focus on building a strong control culture. In third place came the effectiveness of control with an average of (4.2360) and a percentage of (84.7%), which reflects the use of effective procedures to combat fraud and ensure transparency of operations. Then came information activation with an average of (4.2367) and a percentage of (84.7%), which reflects the use of information to support control efforts and make informed decisions. Finally, the risk assessment came with an average of (4.1370) and a percentage of (82.7%), which indicates the need to enhance this process to ensure that all potential risks are addressed efficiently.

From an investigator's way of looking at it, the result related to the field of internal control, which reached an average of (4.2310) and a percentage of (84.6%), shows that the firms stated on the Palestinian Exchange apply the internal control system at a "very high" level. This level reflects a great commitment from these firms to ensure the adequacy of control systems and their effective application, which contributes to enhancing transparency and accountability and achieving organizational goals. The relatively low standard deviation indicates homogeneity in the level of application among different companies, which enhances confidence that there is a strong common framework for internal control operations within the business environment in Palestine. This effective performance reflects the extent of awareness of the urgency of internal

control as a vital instrument in detecting errors and fraud and achieving sustainability in financial and administrative performance.

In general, all dimensions show high or very high levels of application, which reflects the commitment of firms stated on the Palestinian Exchange to apply internal control to detect fraud and ensure the probity of administrative and financial operations. It is evident in the following table. (4.2).

Table (4.2): Level of application of the role of internal control in detecting fraud: Evidence from companies listed on the Palestine Exchange.

Dimension	Mean	Percentage	Std. Deviation	Level
Control environment	4.2633	85.3%	0.50540	Very high
Risk assessment	4.1370	82.7%	0.52735	High
Control activities	4.2360	84.7%	0.45588	Very high
Information and communication	4.2367	84.7%	0.57656	Very high
Monitoring	4.2819	85.6%	0.52208	Very high
Internal control	4.2310	84.6%	0.43166	Very high

This table (4.2) reveals both agreement and discrepancies among studies regarding the application of various internal control dimensions for fraud detection. Research by (Dagane, 2024), (Nwite et al, 2024), and (Mansyuri et al, 2024) aligns in recognizing the effectiveness of internal control in fraud detection and promoting operational transparency. These studies highlight that elements such as the control environment, risk assessment, and monitoring are crucial in fraud prevention and institutional performance enhancement. In contrast, (Widiantari & Bella, 2023) presented a partial divergence, suggesting that while internal controls as well as corporate governance positively influence fraud prevention, personal ethics may further amplify this effect.

4.4 Analysis of the dimensions of internal control

Analysis of the dimensions of internal control in detecting fraud in firms stated on the Palestinian Exchange by:

4.4.1 Control environment

The results indicated that the influence of the control environment on fraud detection in companies listed on the Palestine Exchange obtained a total average (4.2633) with a response rate (very high) and a percentage (85.3%). The highest arithmetic average in the previous paragraphs was paragraph No. (1) with an arithmetic average (of 4.39) in which the paragraph (Internal control policies are reviewed to ensure they are in line with legal and regulatory developments) was mentioned and a percentage (87.8%) and a response

rate (Very high). On the other hand, the lowest arithmetic average in the previous paragraphs was paragraph No. (5) with an arithmetic average (of 4.18) in which the paragraph (The control environment encourages the promotion of a culture of compliance and integrity within the internal control environment) was mentioned and a percentage (83.6%) and a response rate (high).

Table (4.3): Level of application of the Control environment on detecting fraud in companies listed on the Palestine Exchange.

Paragraph	Mean	Std. Deviation	Percentage	level
Internal control policies are reviewed to ensure they are in line with legal and regulatory developments.	4.39	0.649	87.8%	Very high
Potential risks within the internal control environment are identified	4.28	0.624	85.6%	Very high
The company periodically reviews and evaluates internal control strategies.	4.28	0.670	85.6%	Very high
Continuous training and development are provided to employees to improve their skills in the field of internal control.	4.21	0.787	84.2%	Very high
The control environment encourages the promotion of a culture of compliance and integrity within the internal control environment.	4.18	0.769	83.6%	high
The company provides effective mechanisms for submitting complaints and comments related to the internal control environment.	4.22	0.815	84.4%	Very high
Control environment	4.2633	0.50540	85.3%	Very high

From the researcher's perspective, the results related to the influence of the control environment on fraud detection in companies listed on the Palestine Exchange reflect a high commitment to implementing effective control systems. The high average indicates that these companies recognize the urgency of internal control as a vital instrument to ensure integrity and transparency in financial operations. A robust control environment contributes to the early detection of any illegal practices or deviations, which enhances the confidence of shareholders and investors.

When analyzing the paragraph related to reviewing internal control policies, the researcher shows that companies are making a significant effort to make sure that their policies are consistent with current regulations and legislation. This is an indication of companies' readiness to adapt to legal changes, which enhances their ability to comply

and reduces potential legal risks. Updating policies and procedures also reflects companies' ability to learn and develop, which is an essential element in enhancing the potency of internal control.

As for the paragraph concerning enhancing the culture of compliance and integrity, the researcher indicates that despite the remarkable progress, there is an urgent need to improve efforts in this area. Building a strong cultivation that encourages moral behavior and compliance is central to the success of internal control. The researcher confirms that employees who feel responsible and committed to ethical values are more likely to report any illegal practices. Therefore, focusing on enhancing this culture will minimize the potential for fraud while enhancing probity in financial operations.

Overall, the researcher highlights that firms stated on the Palestinian Exchange have a strong foundation for an effective control environment but stresses the need to improve efforts in enhancing the culture of compliance and integrity. Companies' investment in building this culture will not only enhance the potency of internal control but will also improve their financial performance and overall reputation in the market.

4.4.2 Risk assessment

The results indicated that the impact of Risk assessment on detecting fraud in firms stated on the Palestinian Exchange obtained a total average of approximately (4.14), with a response rate categorized as "Very high" and a percentage of around (82.7%). The highest arithmetic average in the previous paragraphs was paragraph No. (1), which had an arithmetic average of (4.21), where the statement regarding the periodic analysis conducted to identify potential risks within the company's operational environment was mentioned. This paragraph achieved a percentage of (84.2%) and a response rate of "Very high". Conversely, the lowest arithmetic average in the previous paragraphs was paragraph No. (4), with an arithmetic average of (4.06), which discussed the specific strategies adopted to deal with potential risks and reduce their impact. This paragraph attained a percentage of (81.2%) and a response rate categorized as "high."

Table (4.4): Level of application of Risk assessment on detecting fraud in companies listed on the Palestine Exchange.

Paragraph	Mean	Std. Deviation	Percentage	Level
A periodic analysis is conducted to identify potential risks within the environment in which the company operates.	4.21	0.754	84.2%	Very high

The impact of risks and their likelihood of occurrence in the current business context is determined through periodic reviews.	4.14	0.685	82.8%	High
A comprehensive classification of potential risks is prepared and their priorities are determined.	4.17	0.715	83.4%	High
Specific strategies are adopted to deal with potential risks and reduce their impact.	4.06	0.716	81.2%	High
There is an assessment of the impact of changes in the external environment on various risk areas.	4.11	0.718	82.2%	High
The results of the risk assessment and its reports are documented for use in improving operations and decision-making.	4.14	0.754	82.8%	High
Risk assessment	4.1370	0.52735	82.7%	Very high

The results indicate that risk assessment has an essential impact on fraud detection in firms stated on the Palestine Exchange, as it obtained a high overall average, indicating the importance of this process in strengthening internal control systems. This high average reflects the “very high” response of the participants, indicating their good awareness of the importance of risk assessment in protecting companies from fraud.

The highest arithmetic average was in the first paragraph, which emphasized the importance of conducting a periodic analysis to identify potential risks in the work environment. This result indicates that companies realize the need to continuously monitor risks to ensure their effective response to market changes and threats. The significant increase in the percentage also reflects the effectiveness of the mechanisms followed in these companies to assess risks, which supports the hypothesis that effective risk management enhances companies’ ability to confront fraud.

On the other hand, the lowest arithmetic average was in the fourth paragraph, which discussed the specific strategies followed to deal with potential risks. Although this result was still high, it suggests that there is a chance for improvement in how risk management strategies are developed and implemented. This may reflect challenges facing companies in this aspect, such as insufficient resources or a lack of appropriate strategic direction.

Overall, the results indicate that firms stated on the Palestinian Exchange recognize the importance of risk assessment in fraud detection but need to enhance their strategies to handle risks more effectively to make sure that they maintain their integrity and transparency.

4.4.3 Control activities

The results indicated that the impact of Control activities on detecting fraud in companies listed on the Palestine Exchange obtained a total average of approximately (4.24), with a response rate categorized as "Very high" and a percentage of around (84.7%). The highest arithmetic average in the previous paragraphs was paragraph No. (1), which had an arithmetic average of (4.43), in which the statement regarding comprehensive auditing of financial and operational processes was mentioned, achieving a percentage of (88.6%) and a response rate of "Very high". On the other hand, the lowest arithmetic average in the previous paragraphs was paragraph No. (2), which had an arithmetic average of (4.15), in which the statement about conducting reviews to assess the potency of the firm's internal processes and proceedings were mentioned, achieving a percentage of (83.0%) and a response rate categorized as "high."

Table (4.5): Level of application of Control activities on detecting fraud in companies listed on the Palestine Exchange.

Paragraph	Mean	Std. Deviation	Percentage	Level
Internal control activities include comprehensive auditing of financial and operational processes.	4.43	0.587	88.6%	Very high
Periodic reviews are conducted to assess the effectiveness of the company's internal processes and procedures.	4.15	0.650	83.0%	High
A periodic assessment is conducted of compliance with the specified policies and procedures in the work environment.	4.24	0.712	84.8%	Very high
Internal control activities include verifying the implementation of security and information protection procedures.	4.19	0.661	83.8%	High
Internal investigations are conducted to verify employees' compliance with ethical and professional conduct standards.	4.26	0.808	85.2%	Very high
Audits are conducted to assess the effectiveness of the internal control system in dealing with new challenges.	4.15	0.779	83.0%	High
Control activities	4.2360	0.45588	84.7%	Very high

The outcomes imply that control activities have a considerable impact on detecting fraud within firms stated on the Palestinian Exchange, while it obtained a high overall average, indicating a very high response from the survey participants. This indicates that companies realize the importance of the effectiveness of control systems in protecting against fraud and enhancing their financial integrity.

The paragraph also exhibits the greatest arithmetic average in the first paragraph, which discussed conducting a comprehensive audit of financial and operational processes. This paragraph received a high percentage, reflecting the companies' commitment to improving the internal control system through accurate auditing, that promotes transparency and reduces the likelihood of fraud.

In contrast, the lowest arithmetic average was in the second paragraph, which discussed conducting periodic reviews to assess the potency of the firm's internal processes and proceedings. Although this result is still considered high, it suggests that there is area for development in how these reviews are conducted, which may reflect some of the challenges that companies face in ensuring the potency of the control system.

Overall, the outcomes reflect companies' awareness of the necessity of control activities in detecting fraud, highlighting strengths and weaknesses in the implementation of these processes, and indicating a continued need to strengthen internal control systems and enhance transparency in financial operations.

4.4.4 Information and communication

The findings indicated that the impact of information and communication on detecting fraud in firms stated on the Palestinian Exchange obtained a total average of approximately (4.24), with a response rate categorized as "Very high" and a percentage of around (84.7%). The highest arithmetic average in the previous paragraphs was paragraph No. (1), which had an arithmetic average of (4.39), in which the statement regarding the periodic updating of information protection policies within the company was mentioned, achieving a percentage of (87.8%) and a response rate of "Very high". On the other hand, the lowest arithmetic average in the previous paragraphs was paragraph No. (3), which had an arithmetic average of (4.13), in which the statement about conducting periodic reviews to assess the company's readiness to face digital security threats was mentioned, achieving a percentage of (82.6%) and a response rate categorized as "high."

Table (4.6): Level of application of Information and communication on detecting fraud in companies listed on the Palestine Exchange.

Paragraph	Mean	Std. Deviation	Percentage	level
Information protection policies are updated periodically within the company.	4.39	0.733	87.8%	Very high
The effectiveness of security measures to protect sensitive information is periodically evaluated.	4.32	0.737	86.4%	Very high

Periodic reviews are conducted to assess the company's readiness to face digital security threats.	4.13	0.761	82.6%	high
There are periodic reviews to verify the integrity of the digital programs and systems used in the company.	4.19	0.836	83.8%	high
The company's readiness to deal with data loss or leakage is periodically evaluated.	4.23	0.711	84.6%	Very high
The effectiveness of the company's digital emergency response strategies is periodically evaluated.	4.16	0.774	83.2%	high
Information and communication	4.2367	0.57656	84.7%	Very high

The outcomes imply that the role of information and contact in detecting fraud within firms stated on the Palestinian Exchange is significantly positive, with a notably high overall average. This indicates that firms recognize the critical importance of maintaining robust communication and information protection strategies as part of their fraud detection efforts.

The results further reveal that the highest arithmetic average was recorded for the first paragraph, which addressed the periodic updating of information protection policies. This high score demonstrates the companies' proactive approach in ensuring that their information security measures are regularly reviewed and improved, thus reflecting a commitment to safeguarding sensitive data. The corresponding high percentage indicates there was a high unanimity among those who responded about the usefulness of these strategies.

Conversely, the lowest arithmetic average was observed in the third paragraph, which dealt with assessing the company's readiness to confront digital security threats. While this outcome yet falls during the high range, it highlights an area that may require further attention and enhancement. The slightly lower response rate suggests that there may be varying opinions among employees concerning the adequacy of current measures in preparing for potential digital threats.

Overall, the results underscore the essential part of effective information management and communication in relieving fraud risks. They point to the substantial for firms to continually evaluate and adapt their strategies to ensure a high level of preparedness against emerging security challenges.

4.4.5 Monitoring

The outcomes reference that the impact of monitoring on detecting fraud in firms stated on the Palestinian Exchange obtained a total average of approximately (4.28), with a response rate categorized as "very high" and a percentage of around (85.6%). The highest arithmetic average in the previous paragraphs was paragraph No. (1), which had an arithmetic average of (4.36), in which the statement regarding the periodic estimation of the firm's internal control procedures was mentioned, achieving a percentage of (87.2%) and a response rate of "Very high." On the other hand, the lowest arithmetic average in the previous paragraphs was paragraph No. (3), which had an arithmetic average of (4.17), in which the statement about internal control plans including mechanisms to monitor changes in the company's operating environment was mentioned, achieving a percentage of (83.4%) and a response rate categorized as "high."

Table (4.7): Level of application of Monitoring on detecting fraud in companies listed on the Palestine Exchange.

Paragraph	Mean	Std. Deviation	Percentage	level
The internal control procedures of the company are periodically evaluated.	4.36	0.747	87.2%	Very high
Periodical follow-ups can be conducted to ensure that the policies and procedures monitored are properly implemented.	4.30	0.657	86.0%	Very high
Internal control plans include mechanisms to monitor changes in the company's operating environment.	4.17	0.715	83.4%	high
Compliance with the policies and procedures monitored is monitored at all levels of the company.	4.24	0.676	84.8%	Very high
Periodical reviews are conducted to ensure that internal processes are in compliance with the specified standards and requirements.	4.31	0.736	86.2%	Very high
Periodical evaluation of the effectiveness of internal control systems in dealing with new challenges and developments is conducted.	4.31	0.662	86.2%	Very high
Monitoring	4.2819	0.52208	85.6%	Very high

The findings indicate that the influence of monitoring on detecting fraud in firms stated on the Palestine Exchange is notably important, with a very high overall average reflecting an unanimity among those who responded about the usefulness of monitoring practices in identifying fraud.

The highest arithmetic average was found in the statement discussing the periodic evaluation of the firm's internal control procedures. This result emphasizes the importance

that companies place on regularly reviewing their internal controls. Such evaluations are crucial as they help identify weaknesses and areas for improvement, thereby enhancing overall fraud detection capabilities.

Conversely, the lowest arithmetic average was noted in the statement addressing the inclusion of mechanisms in internal control plans to monitor changes in the company's operating environment. While this score is still commendable, it suggests that there may be less emphasis or fewer established practices regarding the adaptation of internal controls to external changes. This indicates a potential area for development, as an organization's ability to respond to changes in its operating environment is essential for effective fraud detection.

Overall, the outcomes emphasize the necessity role that robust monitoring mechanisms play in fraud detection. They underscore the necessity for companies to not only maintain rigorous internal control procedures but also to remain vigilant and adaptable to changes within their operating environments to enhance their fraud detection efforts further.

4.5 Analysis of Fraud Prevention and Detection

The outcomes indicated that the impact of fraud prevention and detection in firms stated on the Palestinian exchange obtained a total average of (4.1940) with a response rate of (high) and a percentage of (83.9%). The highest arithmetic average in the previous paragraphs was paragraph No. (1) with an arithmetic average of (4.33), in which paragraph "The company uses modern technologies to monitor and analyze data to detect potential fraud" was mentioned, with a percentage of (86.6%) and a response rate of (very high). On the other hand, the lowest arithmetic average in the previous paragraphs was paragraph No. (7) with an arithmetic average of (3.97), in which paragraph "The company uses artificial intelligence or big data analysis techniques to enhance fraud detection efforts" was mentioned, with a percentage of (79.4%) and a response rate of (high).

Table (4.8): Level of application of detecting fraud in companies listed on the Palestine Exchange.

Paragraph	Mean	Std. Deviation	Percentage	level
The company uses modern technologies to monitor and analyze data to detect potential fraud.	4.33	0.645	86.6%	Very high

The company adopts strict policies and procedures to verify customer and business partner data in order to prevent fraud.	4.24	0.685	84.8%	Very high
The company's employees receive periodic training on how to recognize fraud methods and methods of combating them.	4.28	0.804	85.6%	Very high
The company provides communication channels for employees to report any activity that raises suspicions of fraud.	4.21	0.705	84.2%	Very high
An external audit of accounts is conducted regularly to verify the accuracy of financial reports and detect any manipulation.	4.22	0.720	84.4%	Very high
The internal control system is reviewed and evaluated periodically to update and improve it.	4.26	0.705	85.2%	Very high
The company uses artificial intelligence or big data analysis techniques to enhance fraud detection efforts.	3.97	0.979	79.4%	high
The company exchanges information about detected fraud cases with the competent regulatory authorities	4.13	0.789	82.6%	high
The company exchanges information about potential and detected fraud cases to enhance transparency and integrity in the market.	4.11	0.921	82.2%	high
Fraud Prevention and Detection	4.1940	0.54061	83.9%	high

From the researcher's perspective, the results indicate that firms stated on the Palestinian exchange demonstrate a high level of commitment to fraud prevention and detection, reflecting a serious interest in implementing effective strategies in this regard. Data shows that the use of modern technologies for monitoring and analyzing data enhances these companies' ability to detect suspicious activities, which is a positive step toward strengthening financial integrity. Additionally, the adoption of strict policies and procedures for verifying customer and business partner data illustrates the companies' dedication to fostering trust in the business environment. Providing regular training for employees on how to recognize fraud methods and developing their skills is essential for improving their awareness and ability to combat illegal practices.

However, the researcher notes that there is a need to enhance the use of technologies such as artificial intelligence and big data analysis to bolster fraud detection efforts. Although these aspects showed lower results compared to other policies, the commitment to sharing information about detected fraud cases with regulatory authorities is an important step toward enhancing market transparency.

Overall, these results reflect a positive trend toward improving fraud prevention procedures, with a necessity to continue developing and utilizing advanced technologies to achieve the best outcomes. The researcher believes that enhancing training and development efforts in this area will significantly contribute to increasing the efficiency of the fraud prevention system in the future.

4.6 Hypothesis Testing

Evaluating the first main hypothesis, which posits that demographic variables (gender, age, education, experience, and job title) significantly impact internal control effectiveness in fraud detection within companies on the Palestine Exchange.

4.6.1 Gender

Assessing the first sub-hypothesis, which asserts that gender influences the level of internal control effectiveness in fraud detection within companies listed on the Palestine Exchange. An independent samples t-test was performed to determine if significant differences exist in internal control levels between male and female respondents.

Table (4.9): Results of independent sample analysis (t-test) on the level of internal control in detecting fraud on companies listed on the Palestine Exchange.

		Independent Samples Test							
		N	Mean	Std. Deviation	F	Sig.	T	df	Sig. (2-tailed)
Internal control	male	212	4.2497	0.45717	0.396	0.529	0.965	2	0.335
	Female	157	4.2058	0.39464					
Fraud Prevention and Detection	male	212	4.2759	0.48260	0.937	0.334	3.431	2	0.001
	female	157	4.0834	0.59412					
Total	male	212	4.2628	0.39964	.752	0.387	2.654	2	0.008
	female	157	4.1446	0.45270					

Table (4.9) displays the outcomes of the independent samples t-test, evaluating the level of internal control for fraud detection in companies listed on the Palestine Exchange. The findings reveal a significant gender difference regarding the effectiveness of internal control in fraud detection. Male respondents had an average score of (4.2497), slightly surpassing the female average of (4.2058), yet this difference was not statistically significant ($p > 0.05$), as the t-value indicated no notable distinction between genders in this aspect. However, upon examining the effectiveness of fraud prevention and detection, the analysis provides further insights, the results show a more pronounced contrast, as

males obtained an average of (4.2759) compared to (4.0834) for females, indicating a significant difference ($p < 0.01$), reflecting that males may have a higher level of effectiveness in these aspects compared to females. The general data also show that the average score of males (4.2628) is also superior to the average score of females (4.1446), with statistical significance ($p < 0.01$).

The independent sample analysis reveals a notable difference in the effectiveness of internal control and fraud detection between males and females in companies listed on the Palestine Exchange. This difference may stem from various factors influencing how internal control effectiveness varies by gender. Notably, the results indicate that the overall level of internal control does not differ significantly between genders, suggesting both contribute equally to implementing internal control systems. This equality may reflect a strong awareness of internal control's role in fraud detection and risk reduction, highlighting the commitment of listed companies to transparency and accountability.

However, the results related to the effectiveness of fraud prevention and detection reveal a different picture, as males showed a clear superior performance over females with statistical significance, and this difference can be attributed to possible differences in organizational culture or opportunities for training and professional development between the genders. Companies may have developed more focused strategies on developing male internal control skills, which contributed to enhancing the effectiveness of control and fraud detection. Also, this disparity indicates the importance of including gender as an influential variable in future studies on internal control and fraud detection. These studies may contribute to identifying factors that may lead to improving the effectiveness of internal control in general, as well as how to enhance female participation in control and fraud investigation processes. These results reflect the commitment of companies listed on the Palestine Exchange to implement effective internal control systems, with a need to focus on enhancing gender practices to ensure equal results in Control activities and fraud detection.

These studies align with findings indicating significant gender differences in the effectiveness of internal control and fraud detection, highlighting the relevance of gender factors in this context. For instance, (Maulani et al, 2024) assessed the impact of internal control and auditor integrity on fraud prevention in Islamic banks, revealing that men outperformed women in terms of internal control effectiveness. Similarly, (Widiantari &

Bella, 2023) explored the roles of good governance, internal control, and personal ethics in fraud prevention, concluding that males demonstrated more favorable outcomes than females in implementing internal controls and preventing fraud.

4.6.2 Age

The second sub-hypothesis posits that “statistically significant differences exist in the level of internal control for detecting fraud among companies listed on the Palestine Exchange based on age.” This was evaluated using one-way analysis of variance (ANOVA) to analyze the differences in internal control effectiveness across different age groups within these companies.

Table (4.10): One Way Anova results in applying the level of application of internal control in detecting fraud among companies listed on the Palestine Exchange according to Age.

		ANOVA				
		Sum of Squares	Df	Mean Square	F	Sig.
Internal control	Between Groups	1.002	3	0.334	1.805	.146
	Within Groups	67.566	365	0.185		
	Total	68.569	368			
Fraud Prevention and Detection	Between Groups	2.286	3	0.762	2.643	.049
	Within Groups	105.263	365	0.288		
	Total	107.550	368			
Total	Between Groups	1.379	3	0.460	2.560	.055
	Within Groups	65.551	365	0.180		
	Total	66.930	368			

The results from the one-way analysis of variance (ANOVA) reveal significant differences in the application of internal control and fraud detection across age groups. The significance value (p-value) for internal control was (0.146), indicating no statistically significant differences among the age groups. However, for the effectiveness of "preventing and detecting fraud," the significance value (0.049) was below the conventional threshold of (0.05), suggesting notable differences in fraud detection effectiveness among the age categories. Additionally, the overall significance value (0.055) was close to the threshold, indicating a potential influence of age groups on the effectiveness of internal control.

The one-way analysis of variance (ANOVA) results indicate that age groups significantly influence the effectiveness of "fraud prevention and detection." This finding suggests that perceptions of internal control practices vary across different age

demographics. While no significant differences were observed in the overall application of internal control, it highlights the need to consider factors explaining this variance. Different age groups may possess varying levels of experience and knowledge that shape their understanding and interaction with internal control mechanisms.

This discrepancy in fraud detection effectiveness implies that older individuals may be more adept at recognizing fraud indicators, whereas younger individuals may have less exposure. The findings also underscore the importance of developing targeted training programs for different age groups to enhance internal control and fraud detection effectiveness. Improving the quality of internal control within companies listed on the Palestine Exchange can better equip them to tackle fraud challenges and maintain sustainable financial performance.

Supporting this conclusion, previous studies such as (Nwite et al, 2024) found significant differences in internal control effectiveness based on age among ministries in Ebonyi State, emphasizing the impact of age groups on control performance. Similarly, (Mansyuri et al, 2024) highlighted age differences in the effectiveness of internal control in preventing fraud within small and medium-sized enterprises.

4.6.3 Academic Qualifications

The Third sub-hypothesis, which states that “there are statistically significant differences in the level of internal control in detecting fraud among companies listed on the Palestine Exchange according to Academic Qualifications,” was tested using one-way analysis of variance (ANOVA) to examine the differences in the level of internal control in detecting fraud among companies listed on the Palestine Exchange according to Academic Qualifications.

Table (4.11): One Way Anova results in applying the level of application of internal control in detecting fraud among companies listed on the Palestine Exchange according to Academic Qualifications.

		ANOVA				
		Sum of Squares	Df	Mean Square	F	Sig.
Internal control	Between Groups	0.231	2	0.115	0.618	0.540
	Within Groups	68.338	366	0.187		
	Total	68.569	368			
Fraud Prevention and Detection	Between Groups	0.607	2	0.304	1.039	0.355
	Within Groups	106.943	366	0.292		
	Total	107.550	368			

Total	Between Groups	0.226	2	0.113	0.620	0.539
	Within Groups	66.704	366	0.182		
	Total	66.930	368			

The results of the one-way analysis of variance (ANOVA) indicate no significant differences in internal control levels and fraud detection across different academic qualification groups. The significance value (p-value) for "internal control" was 0.540, exceeding the traditional significance threshold of 0.05, which suggests that the observed differences are not statistically meaningful. Similarly, the effectiveness of "preventing and detecting fraud" also yielded a significance value of 0.355, reinforcing the conclusion that academic qualifications do not significantly impact fraud detection capabilities. The total significance value was 0.539, further confirming the absence of significant differences.

These findings suggest that academic qualifications alone do not enhance the effectiveness of internal control implementation within companies. Moreover, they indicate that varying academic backgrounds do not lead to substantial differences in fraud detection performance.

From the researcher's perspective, this emphasizes the need to explore other factors that might improve internal control and fraud detection effectiveness, such as practical training, prior experience, and the regulatory environment. Developing training programs focused on practical skills, irrespective of academic qualifications, could elevate internal control and fraud detection efficiency in companies listed on the Palestine Exchange.

This aligns with prior research, including the findings of (Kesuma & Fachruzzaman, 2024), which confirmed that while implementing internal control measures is effective in reducing accounting fraud, academic qualifications did not show a significant effect. Additionally, (Maulani et al, 2024) demonstrated that internal control significantly aids fraud prevention, yet without clear effects linked to academic qualifications. (Dagane, 2024) also reported that all internal control elements positively influence fraud detection, without addressing academic qualifications.

4.6.4 Years of experience

The Fourth sub-hypothesis, which states that “there are statistically significant differences in the level of internal control in detecting fraud among companies listed on the Palestine Exchange according to Years of experience,” was tested using one-way analysis of variance (ANOVA) to examine the differences in the level of internal control in detecting fraud among companies listed on the Palestine Exchange according to Years of experience.

Table (4.12): One Way Anova results in applying the level of application of internal control in detecting fraud among companies listed on the Palestine Exchange according to Years of experience.

		ANOVA				
		Sum of Squares	Df	Mean Square	F	Sig.
Internal control	Between Groups	2.407	4	0.602	3.311	0.011
	Within Groups	66.162	364	0.182		
	Total	68.569	368			
Fraud Prevention and Detection	Between Groups	2.421	4	0.605	2.095	0.081
	Within Groups	105.129	364	0.289		
	Total	107.550	368			
Total	Between Groups	1.570	4	0.392	2.186	0.070
	Within Groups	65.360	364	0.180		
	Total	66.930	368			

The one-way analysis of variance (ANOVA) results indicate a significant difference in the application of internal control across groups based on years of experience, with a significance value (p-value) of 0.011, which is below the conventional threshold of 0.05. This implies that the differences in the application of internal control related to employee experience are statistically significant. However, the effectiveness of "preventing and detecting fraud" yielded a significance value of 0.081, indicating no significant differences among the groups regarding this aspect.

The findings suggest that experience positively influences the application of internal control systems, as individuals with more years of experience likely possess greater knowledge of the necessary tools and procedures for effective implementation, enhancing fraud detection capabilities. Conversely, the absence of significant differences in fraud prevention and detection effectiveness across experience levels suggests a need for targeted training and development initiatives.

It may be beneficial to develop training programs that enhance fraud detection skills, independent of employees' years of experience. Additionally, there should be a focus on raising awareness about the importance of internal control tools to ensure high efficiency and effectiveness in combating fraud-related challenges. Engaging experts in developing robust internal control systems could further improve overall performance and increase trust in companies listed on the Palestine Exchange.

These results align with previous studies, including (Maulani et al, 2024), which demonstrated that while internal control significantly enhances fraud prevention, auditor integrity was not notably related. Similarly, (Widiantari & Bella, 2023) highlighted the importance of good governance and internal control in fraud prevention, emphasizing the need for ongoing focus on internal control implementation regardless of employee experience levels.

4.6.5 Job Title

The Fifth sub-hypothesis, which states that “there are statistically significant differences in the level of internal control in detecting fraud among companies listed on the Palestine Exchange according to Job Title,” was tested using one-way analysis of variance (ANOVA) to examine the differences in the level of internal control in detecting fraud among companies listed on the Palestine Exchange according to Job Title.

Table (4.13): One Way Anova results in applying the level of application of internal control in detecting fraud among companies listed on the Palestine Exchange according to Job Title.

		ANOVA				
		Sum of Squares	Df	Mean Square	F	Sig.
Internal control	Between Groups	4.370	6	0.728	4.107	0.111
	Within Groups	64.199	362	0.177		
	Total	68.569	368			
Fraud Prevention and Detection	Between Groups	6.741	6	1.124	4.035	0.234
	Within Groups	100.808	362	0.278		
	Total	107.550	368			
Total	Between Groups	4.475	6	0.746	4.323	0.432
	Within Groups	62.455	362	0.173		
	Total	66.930	368			

The significance level in the analysis indicates no substantial differences between functional groups concerning the application of internal control and fraud detection. The significance value for internal control was 0.111, suggesting that differences among groups are not statistically significant at the conventional threshold of 0.05. Similarly, the effectiveness of fraud prevention and detection yielded a significance value of 0.234, indicating a lack of clear significant differences. Thus, these values imply that the observed variations in internal control and fraud detection levels among functional groups may be coincidental rather than indicative of genuine effects.

This finding suggests that there are no fundamental differences in understanding or application across individuals in different job roles. The one-way analysis of variance (ANOVA) results show no significant differences in internal control application and fraud detection levels among various functional groups within companies listed on the Palestine Exchange. The data analysis values indicate a statistically insignificant variance, meaning that the differences observed are likely due to random factors rather than meaningful influences related to specific job titles.

From the researcher's perspective, these findings highlight the need for further investigation into the factors that influence the effectiveness of internal control and fraud detection. This may point to the significance of aspects such as organizational culture or training, rather than relying solely on job titles as determinants of control effectiveness. The results also suggest that all job groups, regardless of title, may follow similar practices regarding internal control, emphasizing the importance of developing a unified control framework to ensure consistency in methods and tools used across all functions.

These findings align with (Alsharari et al, 2023), who emphasized the role of organizational culture in enhancing internal control systems, suggesting a deeper exploration of this area. (Sulaiman et al, 2024) highlighted the necessity of continuous employee training as a key factor influencing internal control efficiency, supporting the notion of not relying solely on job titles as determinants. Additionally, (Lian et al, 2023) discussed how all functional groups tend to adopt similar management control practices, further underscoring the need for a cohesive control framework. Therefore, these studies stress the importance of investigating other factors that may impact the effectiveness of internal control and fraud detection, particularly focusing on fostering a culture of training and collaboration among all organizational members.

4.7 Regression Analysis:

To verify the second hypothesis, which asserts a statistically significant effect of applying the dimensions of internal control—namely, the control environment, risk assessment, control activities, information and communication, and monitoring—on fraud prevention and detection in companies listed on the Palestine Exchange, multiple linear regression analysis was employed. This analysis aimed to establish the relationship between the effectiveness of internal control and its impact on fraud prevention and detection within these companies.

The results of the regression analysis confirmed the model's suitability at a confidence interval of 95%, providing robust support for the hypothesis. A statistically significant relationship was identified, indicating that the implementation of internal control dimensions plays a crucial role in enhancing fraud prevention and detection capabilities among the listed companies. This significance is further illustrated in Table 4.14, where the results clearly delineate the positive impact of these internal control components on mitigating fraud risks.

Table (4.14): Model Summary.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.583 ^a	0.340	0.331	0.44220

a. Predictors: (Constant), Control Environment, Risk Estimation, Control activities, Information on Contact, Monitoring

The previous table reveals a correlation coefficient of approximately (0.583), indicating a moderate positive relationship between the application of internal control dimensions and the effectiveness of fraud prevention and detection. This finding suggests that as companies enhance their internal control practices, their capability to detect and prevent fraud is likely to improve. The R-squared value of around (0.340) signifies that approximately (34%) of the variance in fraud prevention and detection can be attributed to the internal control dimensions being examined. While this percentage reflects moderate explanatory power, it also underscores the potential influence of other factors beyond the specific internal control dimensions on fraud detection and prevention.

The adjusted R-squared value of (0.331) reinforces this understanding by accounting for the number of predictors in the model. This value is closely aligned with the R-squared value, indicating that the model adequately fits the data, even with the inclusion of additional variables that may not have been considered. In summary, the findings highlight the critical importance of effectively implementing these internal control dimensions—namely, the control environment, risk assessment, control activities, information and communication, and monitoring—to strengthen mechanisms for fraud prevention and detection. This underscores the necessity for companies to continually assess and enhance their internal control systems to mitigate fraud risks effectively. Moreover, organizations should remain vigilant in considering other external factors that may influence fraud detection and prevention, thus ensuring a comprehensive approach to risk management.

Table (4.15): ANOVAa

		ANOVAa				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.569	5	7.314	37.403	.000 ^b
	Residual	70.981	363	0.196		
	Total	107.550	368			

The ANOVA table presented indicates a significance level (Sig.) of 0.000, which reveals a statistically significant relationship between the dimensions of internal control and the detection and prevention of fraud in companies listed on the Palestine Exchange. A p-value below 0.05 further substantiates that these results are not random but reflect authentic effects within the data, thus bolstering confidence in the study’s findings. Consequently, it can be inferred that the examined dimensions of internal control—including the control environment, risk assessment, control activities, information and communication, and monitoring—are vital in enhancing the efficacy of fraud detection and prevention strategies. This highlights the necessity of concentrating on the development and implementation of these dimensions as a comprehensive strategy to combat fraud.

Companies listed on the Palestine Exchange are encouraged to invest in enhancing these internal control dimensions to strengthen their integrity and reliability. The significance level supports the research hypotheses regarding the crucial role of internal control in reducing fraud, opening avenues for further investigation in this field. Overall, the results

affirm the theoretical and practical implications of the study, underscoring the effectiveness of employing the dimensions of internal control as a strategic approach to diminish fraud risks. This approach contributes to enhancing the overall performance and sustainability of these companies. The findings advocate for a proactive stance on internal controls, recommending that organizations prioritize their development to protect against fraudulent activities and improve stakeholder confidence.

Table (4.16): Coefficients.

		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	T	Sig.
1	(Constant)	1.079	.236		4.582	.000
	Control environment	.110	.064	.103	1.734	.084
	Risk assessment	.134	.067	.131	2.011	.045
	Control activities	.533	.081	.450	6.594	.000
	Information and communication	-.078	.065	-.084	-1.206	.229
	Monitor	.038	.067	.037	.573	.567

The regression analysis assesses how various internal control dimensions' influence fraud prevention and detection. The coefficients indicate the following:

1. **Control Environment:** A coefficient of **0.110** implies that enhancing the control environment may slightly improve fraud detection, though its statistical significance ($p = 0.084$) is not firmly established. This suggests the need for further research to verify the impact of this dimension. Despite its inconclusive nature, improving the control environment remains vital for overall performance, supported by (Dagane's, 2024) findings on the positive influence of internal controls, even if (Insani et al, 2023) did not specifically confirm its impact.
2. **Risk Assessment:** The coefficient of **0.134** reveals a significant positive effect ($p = 0.045$), indicating that bolstering risk assessment correlates with better outcomes. This finding stresses the importance of advanced risk management strategies, as corroborated by (Mansyuri et al, 2024) and Nwite et al. (2024), who recognized its role in enhancing information reliability and fraud prevention.
3. **Control Activities:** With a coefficient of **0.533** and a highly significant p-value ($p < 0.001$), this dimension demonstrates a strong impact on fraud prevention. The results emphasize the need for effective control systems to achieve organizational

objectives. Continuous training and updating technology are recommended to optimize these systems, echoing findings by (Widiantari & Bella, 2023) and (Shakeel et al, 2023), which affirmed its positive influence without any conflicting evidence.

4. **Information and Communication:** A coefficient of -0.078 suggests a negative effect, although it lacks statistical significance ($p = 0.229$). This indicates that the relationship between information strategies and fraud prevention is unclear. The researcher highlights the need to evaluate communication effectiveness. Studies by (Nisak & Rochayatun, 2023) and (Maulani et al, 2024) did not confirm the negative impact observed here, emphasizing the need for well-rounded strategies in communication.
5. **Monitoring:** The coefficient of 0.038 shows a positive but non-significant effect ($p = 0.567$), indicating that current monitoring levels do not substantially impact fraud detection. This result points to the necessity of reevaluating monitoring practices. While a positive effect is seen, the lack of significance suggests potential issues, such as unclear guidelines or inefficiencies. Previous research, including (Arifia et al, 2023), addressed internal control's role in fraud prevention without focusing on performance monitoring, and (Kesuma & Fachruzzaman, 2024) could not draw definitive conclusions about its effectiveness.

In conclusion, these findings reveal varied influences of different internal control dimensions on fraud detection, with risk assessment and control activities showing significant effects. Organizations should prioritize enhancing these areas while also addressing weaknesses in control environments, communication strategies, and monitoring practices.

4.8 Pearson correlation analysis:

To validate which asserts a statistically significant relationship between the application of internal control dimensions (control environment, risk assessment, control activities, information and communication, and monitoring) and fraud prevention and detection in companies listed on the Palestine Exchange, Pearson's correlation test was employed. This test aimed to determine the relationship between internal control levels and their effectiveness in preventing and detecting fraud within these companies. The results demonstrate that the model is suitable at a 95% confidence interval, confirming the

presence of a significant relationship. This significance is clearly illustrated in **Table 4.17**.

Table No. (4.17) to measure the Pearson correlation between the dimensions of internal control over fraud prevention and detection for companies listed on the Palestine Exchange.

Dimensions	Names	Levels
Control environment	Pearson Correlation	0.445**
	Sig. (2-tailed)	0.000
	N	369
Risk assessment	Pearson Correlation	0.449**
	Sig. (2-tailed)	0.000
	N	369
Control activities	Pearson Correlation	0.563**
	Sig. (2-tailed)	0.000
	N	369
Information and communication	Pearson Correlation	0.388**
	Sig. (2-tailed)	0.000
	N	369
Monitoring	Pearson Correlation	0.400**
	Sig. (2-tailed)	0.000
	N	369

Table 4.17 presents the results of the Pearson correlation test, which posits a statistically significant relationship between the dimensions of internal control (control environment, risk assessment, control activities, information and communication, and monitoring) and the prevention and detection of fraud in companies listed on the Palestine Exchange. The findings reveal a positive and significant correlation across all dimensions, with statistical values significant at the **0.000** level, demonstrating strong confidence in the results:

1. **Control Environment:** A correlation value of **0.445** indicates a moderate relationship, highlighting that a robust control environment underpins all internal control practices. It reflects the company's culture, values, and ethics, enhancing awareness and compliance with regulations, thus reducing fraud risk. Senior management support and effective employee communication are essential for fostering a strong control environment.
2. **Risk Assessment:** This dimension shows a correlation of **0.449**, underscoring its critical role in fraud prevention and detection. Effective risk assessment enables organizations to identify and analyze potential fraud risks, facilitating the

development of appropriate strategies. This emphasizes the necessity of effective risk assessment models for informed decision-making and fraud mitigation.

3. **Control Activities:** With a correlation value of **0.563**, a strong relationship is established, indicating the significance of control activities in fraud reduction. Effective controls enhance trust between management and stakeholders, making it difficult for fraudulent activities to occur. Organizations should invest in strengthening these mechanisms and provide training for employees on compliance.
4. **Information and Communication:** A correlation of **0.388** reveals a positive but weaker relationship compared to other dimensions. Timely and accessible information enhances the detection of fraudulent activities. Improving communication across departments aids in effective information exchange, reducing fraud risk. Companies should focus on enhancing information systems and communication strategies.
5. **Monitoring:** A correlation value of **0.400** emphasizes the importance of monitoring activities in reinforcing internal control systems. Effective monitoring ensures that control procedures are followed and allows for quick detection of violations. Organizations should establish regular monitoring practices and leverage technology for improved accuracy and effectiveness.

The Pearson correlation test results align with numerous studies indicating positive relationships between internal control dimensions and fraud prevention. (Dagane, 2024) affirmed that all internal control elements positively influence fraud detection, particularly emphasizing the control environment and risk assessment. (Nwite et al, 2024) found significant effects of control environment and activities on fraud prevention, aligning with the correlation values in this study. (Mansyuri et al, 2024) highlighted that reliable internal controls enhance the accuracy of financial information and operational efficiency. (Widiantari & Bella, 2023) noted that effective governance and internal controls significantly impact fraud prevention, stressing the importance of communication and information sharing. (Insani et al, 2023) demonstrated that strong internal controls positively affect fraud prevention, underscoring the need for effective monitoring systems. (Shakeel et al, 2023) highlighted the role of internal control components in detecting occupational fraud, reinforcing the importance of communication and information exchange.

Chapter Five: Discussion

5.1. Study Results:

Based on the results of the study, the main questions that highlight the relationship between the dimensions of internal control and the efficiency of fraud detection in companies listed on the Palestine Stock Exchange can be answered, with answers that clarify the main results reached:

1. The results indicate that companies listed on the Palestine Exchange exhibit a high level of application of internal control in detecting fraud. The data reveal that these companies are making considerable efforts to activate the necessary systems and procedures to minimize fraud-related risks, enhancing their effectiveness in ensuring the integrity of financial and accounting operations. Furthermore, these companies are committed to improving transparency and complying with local and international regulations. Internal control also provides effective mechanisms for detecting any violations or irregularities in a timely manner, contributing to minimizing the impact of fraud on the financial stability of the companies. The study highlights the strong correlation between an institutional culture that supports ethical values and the use of modern technology in implementing controls, further enhancing the companies' ability to detect suspicious activities and take appropriate preventive measures. Overall, the study demonstrates that improving and developing internal control systems will significantly contribute to strengthening the financial sustainability of Palestinian companies and increasing their capacity to face economic and financial challenges.
2. The study results show that companies listed on the Palestine Exchange apply internal control systems at a very high level to detect fraud. The different dimensions of internal control displayed very high application levels, indicating that these companies place great emphasis on improving the work environment and encouraging ethical behaviors that contribute to fraud prevention. The study also highlights that these companies make notable efforts to assess risks and identify potential opportunities for fraud, although there is room for continuous improvement in this process. Additionally, the effective implementation of control activities, such as process verification and procedure adoption, strengthens the companies' ability to detect violations swiftly. Effective communication processes play a key role in disseminating internal control policies and procedures at all organizational levels,

enhancing oversight of financial activities. In terms of monitoring, the companies showed a strong commitment to continuously reviewing the effectiveness of internal control systems, reflecting their readiness to adapt to new changes or threats. Overall, the results confirm that companies listed on the Palestine Exchange are applying integrated and advanced internal control systems primarily aimed at detecting and preventing fraud, thereby enhancing financial integrity and transparency in the business environment.

3. The results indicate that most participants in the study believe that the internal control procedures applied by companies are highly effective in detecting and preventing fraud. These findings suggest a high level of trust among participants in the efficiency of the applied control systems, reflecting the positive impact of these systems in protecting companies from fraud-related risks. This trust also shows that companies are making significant efforts to continuously develop and strengthen internal control mechanisms, thereby improving the work environment and reducing the likelihood of financial fraud. By implementing strong control systems, companies can enhance financial protection, as these systems contribute to the early detection of any violations or fraudulent attempts, thereby minimizing the financial damages and disruptions that may result from such activities. Moreover, these results emphasize that the application of effective control measures not only improves internal performance but also strengthens trust between management, shareholders, and customers, thereby contributing to higher levels of transparency and credibility within the organization. These findings suggest that companies relying on stringent internal controls are better positioned to maintain financial stability and achieve sustainable development by minimizing financial risks. Therefore, strengthening and developing control systems is essential to ensure a fraud-free work environment, supporting the long-term sustainability of the organization.
4. The study results indicate that the internal control environment plays a significant role in shaping the organizational culture of institutions, contributing to the reduction of fraud risks by enhancing awareness within the organization and ensuring strict adherence to established policies and procedures. When the internal control environment is strong and effective, it helps reduce opportunities that individuals may exploit for fraudulent activities. Additionally, the risk assessment analysis demonstrated that it plays a major role in identifying potential risks the

organization may face, helping to formulate effective strategies for reducing fraud before it occurs. By accurately predicting potential risks, preventive measures can be taken to avoid fraud. Regarding the effectiveness of control activities, the results showed a significant impact on enhancing trust between management and stakeholders, making fraudulent activities more difficult to carry out. When control systems are robust, employees and stakeholders trust the integrity of the system, which helps reduce fraud risks. On the other hand, the information and communication analysis revealed that effective communication and timely provision of information are crucial factors for detecting fraud. A delay or lack of information could lead to delays in detecting fraudulent activities or difficulties in tracking them. The study also highlighted that the internal monitoring dimension is essential to ensure the proper application of control policies and procedures, contributing to the swift detection of any violations. With effective control systems in place, organizations can quickly identify fraudulent activities, enabling them to take immediate action to mitigate the consequences. Overall, these results confirm the critical and necessary role of the internal control dimensions in protecting organizations from fraud by enhancing the effectiveness of the policies and procedures in place.

5. The analyses revealed a moderate positive relationship between the application of internal control dimensions and the effectiveness of fraud prevention and detection. The analysis indicated that 34% of the variation in fraud prevention and detection could be explained by the internal control dimensions, while the remaining variation was attributed to other factors not included in the model. These results affirm the model's adequacy for analysis at a 95% confidence level. Furthermore, the results showed a statistically significant relationship between the internal control dimensions and fraud prevention and detection, supporting the study's hypothesis. Additionally, the analysis revealed differences in the impact of internal control dimensions on fraud prevention and detection among companies listed on the Palestine Exchange. The impact of the control environment was found to be weakly positive but not statistically significant, suggesting the need to strengthen this dimension for greater effectiveness. On the other hand, risk assessment showed a positive and statistically significant impact, highlighting the importance of improving risk assessment strategies to enhance fraud prevention mechanisms. Control activities showed a very strong and statistically significant impact,

emphasizing their critical role in achieving fraud prevention goals. In contrast, the information and communication dimension showed a negative, non-statistically significant impact, indicating the need to reconsider communication strategies to ensure their effectiveness in reducing fraud. Finally, the monitoring dimension showed a weak positive but statistically insignificant impact, highlighting the importance of improving monitoring processes to enhance their effectiveness and strengthen their role in fraud reduction.

5.2. Recommendations

Based on the previous results, the study recommends a number of recommendations, the most prominent of which are:

1. Comprehensive fraud prevention strategies should be developed, including regular assessments and system updates to enhance detection and prevention effectiveness .
2. It is advisable to strengthen the control environment by organizing workshops and educational seminars aimed at promoting organizational culture and ethical values, thereby contributing to increased commitment and compliance with internal policies .
3. The mechanisms used for risk assessment should be enhanced by utilizing advanced analytical techniques and expanding the scope of assessments to include all aspects of operations .
4. Focus should be placed on improving the effectiveness of control activities by applying new performance measurement methods and ensuring that all employees participate in these activities to enhance commitment and knowledge .
5. Internal information and communication channels should be strengthened to ensure the rapid and transparent flow of necessary information between departments, facilitating the decision-making process and reducing the risks of fraud .
6. Targeted training programs should be designed that consider gender differences, in addition to other programs that cater to various age groups and academic levels to ensure the improvement of skills and competencies related to control.
7. It is recommended to design specialized training programs to raise the skills of employees in the field of fraud detection, with a focus on the importance of

internal control and its tools, which ensures high effectiveness and efficiency in facing fraud challenges.

8. Specialized experts should be hired to develop internal control systems, in addition to conducting analyses to understand the impact of factors such as gender, age, academic qualifications and years of experience on the effectiveness of control, which enhances overall performance and increases confidence in companies listed on the Palestine Exchange.
9. It is advisable to enhance the culture of control within companies through continuous training and providing a work environment that encourages transparency and accountability.
10. Flexible risk management strategies should be developed to keep pace with the rapid changes in the business environment.
11. It is advisable to re-evaluate internal communication strategies to ensure effective information flow, in addition to developing a more efficient monitoring system to follow up on performance and ensure fraud prevention objectives are achieved.

5.3 Impacts and limitations

Based on the study results, it can be observed that the application of internal control systems in companies listed on the Palestine Stock Exchange has a significant positive impact on detecting fraud and reducing its risks. However, there are some limitations that may affect the effectiveness of these systems. For example, some companies may lack full implementation of internal control procedures, leading to gaps in detecting fraudulent activities. Additionally, certain external factors, such as economic challenges or legislative changes, may affect companies' ability to enhance the effectiveness of internal control systems. Therefore, the need to continuously improve these systems remains essential to ensure maximum protection against fraud.

5.4 Proposed Future Research

This study serves as a starting point for a better understanding of internal control and its impact on fraud detection, but there are many areas that can be explored in the future. Among these areas, studies could be conducted on small and medium-sized enterprises in Palestine, where the challenges of applying internal control systems may be greater compared to large companies. The impact of dealing with companies outside the stock

market on fraud detection effectiveness could also be studied, as well as the methods that can be used to improve controls in these companies. Additionally, the role of modern technology in enhancing internal control systems in small and medium-sized enterprises could be explored. Below are some future research topics that could contribute to expanding knowledge on the impact of internal control on fraud detection in companies listed on the Palestine Stock Exchange:

- A study on the impact of internal control in small and medium-sized companies compared to large companies in Palestine.
- An analysis of the relationship between the level of education and training of employees in Palestine Stock Exchange companies and the effectiveness of internal control system implementation.
- Research on the role of modern technologies (such as artificial intelligence and data analytics) in enhancing the effectiveness of internal control systems in listed companies.

5.5. Beneficiaries of the Study Results

Many parties will benefit from the results of this study. In particular, financial institutions in Palestine can benefit from these findings to improve their internal control systems, which will help reduce fraud-related risks and enhance the transparency of financial operations. This study will also benefit companies listed on the Palestine Stock Exchange by providing insights into how to improve the implementation of their internal control systems. Moreover, policymakers and legislators can use these results to develop and update laws related to internal control in companies, which will contribute to enhancing the integrity and transparency of financial markets in Palestine.

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Appendices

Appendix No.1 : The questionnaire is in Arabic



الجامعة العربية الأمريكية
كلية الدراسات العليا - رام الله
تخصص المحاسبة والتدقيق
الاستبيان

أخي الموظف ،،، أختي الموظفة ...

تحية طيبة وبعد ،،،

تقوم الباحثة بدراسة بعنوان:

Investigating the Role of Internal Control in Fraud Detection: Evidence from Companies Listed on the Palestine Exchange.

"التحقق من دور الرقابة الداخلية في اكتشاف الاحتيال: الأدلة من الشركات المدرجة في بورصة فلسطين."، وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في (المحاسبة والتدقيق) من الجامعة العربية الأمريكية.

ويسرُّ الباحثة أن تضع بين أيديكم الاستبانة المرفقة، راجيةً منكم التكرم بالإجابة على جميع فقراتها بدقة وعناية، وذلك بوضع إشارة (X) في خانة الخيار الذي يعبر عن وجهة نظركم. علماً بأن إجاباتكم سوف تُعامل بسريّة تامّة، ولن تُستخدم هذه المعلومات إلا لأغراض البحث العلمي فقط. مع جزيل الشكر والامتنان لحسن تعاونكم

Mohammed.abusharbeh@aaup.edu

الدكتور محمد أبو شربة.

S.alsawafta1@student.aaup.edu .الطالبة: شيماء خلدون الصوافطة.

الجزء الأول: البيانات الشخصية والوظيفية (الديموغرافية)

يرجى التكرم بوضع إشارة (x) في المربع المظلل المحاذي للإجابة الممثلة لوضعكم:

أنثى		ذكر		الجنس
من 25 - اقل من 35 سنة		اقل من 25 سنة		العمر
أكثر من 45 فأكثر		من 35 - اقل من 45 سنة		
ماجستير		بكالوريوس		المؤهل العلمي
		دكتوراه		
من 5 - اقل من 10 سنوات		اقل من 5 سنوات		سنوات الخبرة
من 15 - اقل من 20 سنة		من 10 - اقل من 15 سنوات		
		من أكثر من 20 فأكثر		
مساعد اداري		مدير		المسمى الوظيفي
مدقق حسابات		محاسب		
ضابط ائتمان		موظف خدمة العملاء		
أخرى حدد		امين صندوق		

القسم الأول: فقرات الاستبانة

الرجاء وضع علامة (√) أمام البنود التي تتناسب مع وضعك:

الرقم	الفقرات	موافق بشدة	موافق	محايد	معارض	معارض بشدة
<p>المجال الأول: بيئة الرقابة: هي مجموعة من السياسات والإجراءات التي تضعها الإدارة لضمان تحقيق الأهداف التنظيمية والحفاظ على الموارد. تشمل هذه البيئة القيم الأخلاقية، هيكل التنظيم، توزيع الصلاحيات والمسؤوليات، والتزام الإدارة العليا بأهمية الرقابة الداخلية.</p>						
1.	تتم مراجعة سياسات الرقابة الداخلية لضمان مواكبة التطورات القانونية والتنظيمية.					
2.	يتم تحديد المخاطر المحتملة ضمن بيئة الرقابة الداخلية					
3.	تقوم الشركة بشكل دوري بمراجعة وتقييم استراتيجيات الرقابة الداخلية.					
4.	يتم توفير التدريب والتطوير المستمر للموظفين لتحسين مهاراتهم في مجال الرقابة الداخلية.					
5.	تشجع البيئة الرقابية على تعزيز ثقافة الامتثال والنزاهة داخل بيئة الرقابة الداخلية.					
6.	توفر الشركة آليات فعالة لتقديم الشكاوى والملاحظات المتعلقة ببيئة الرقابة الداخلية.					
<p>المجال الثاني: تقييم المخاطر: هو عملية تحديد وتقييم العوامل التي قد تؤثر على تحقيق أهداف المنظمة. يهدف التقييم إلى تحديد المخاطر المحتملة وتقدير احتمال حدوثها وتأثيرها، ومن ثم اتخاذ الإجراءات اللازمة للتعامل معها.</p>						
7.	يتم إجراء تحليل دوري لتحديد المخاطر المحتملة داخل البيئة التي تعمل فيها الشركة.					
8.	يحدد تأثير المخاطر واحتمالية حدوثها في سياق العمل الحالي من خلال مراجعات دورية.					
9.	يتم إعداد تصنيف شامل للمخاطر المحتملة وتحديد أولوياتها.					
10.	تعتمد استراتيجيات محددة للتعامل مع المخاطر المحتملة والحد من تأثيرها.					

					11. يوجد تقييم لتأثير تغيرات البيئة الخارجية على مختلف مجالات المخاطر.
					12. يتم توثيق نتائج تقييم المخاطر وتقاريرها لاستخدامها في تحسين العمليات واتخاذ القرارات.
المجال الثالث: أنشطة الرقابة: هي الإجراءات والسياسات التي تنفذها المنظمة للتأكد من تحقيق أهدافها ومنع وقوع الأخطاء أو الاحتمالات. تشمل هذه الأنشطة العمليات اليومية، الفحوصات الدورية، والمراجعات الداخلية.					
					13. تتضمن أنشطة الرقابة الداخلية التدقيق الشامل للعمليات المالية والتشغيلية.
					14. تُجرى مراجعات دورية لتقييم فعالية العمليات والإجراءات الداخلية في الشركة.
					15. يُجرى تقييم دوري لمدى الامتثال للسياسات والإجراءات المحددة في بيئة العمل.
					16. تشمل أنشطة الرقابة الداخلية التحقق من تنفيذ إجراءات الأمان وحماية المعلومات.
					17. تُجرى تحقيقات داخلية للتحقق من التزام الموظفين بمعايير الأخلاق والسلوك المهني.
					18. تُجرى مراجعات لتقييم فعالية نظام الرقابة الداخلية في التعامل مع التحديات الجديدة.
المجال الرابع: المعلومات والاتصال : هما عنصران حيويان في نظام الرقابة الداخلية، حيث تشمل توفير معلومات دقيقة وموثوقة في الوقت المناسب، وضمان التواصل الفعال بين مختلف مستويات المنظمة لضمان تدفق المعلومات بالشكل المناسب.					
					19. يُجرى تحديث سياسات حماية المعلومات داخل الشركة بشكل دوري.
					20. يتم تقييم دوري لفعالية إجراءات الأمان لحماية المعلومات الحساسة.
					21. تُجرى مراجعات دورية لتقييم استعداد الشركة لمواجهة التهديدات الأمنية الرقمية.
					22. توجد مراجعات دورية للتحقق من سلامة البرامج والأنظمة الرقمية المستخدمة في الشركة.

					23. يتم تقييم دوري لمدى استعداد الشركة للتعامل مع حالات فقدان البيانات أو التسريب.
					24. يُجرى تقييم دوري لفعالية استراتيجيات الاستجابة للطوارئ الرقمية في الشركة.
<p>المجال الخامس: المتابعة: هي عملية مستمرة تهدف إلى تقييم فعالية نظام الرقابة الداخلية بمرور الوقت. تشمل المراقبة المراجعات الدورية، تقييم أداء النظام، وتحديث السياسات والإجراءات وفقاً للتغيرات البيئية والعملية.</p>					
					25. يُجرى تقييم دوري لإجراءات الرقابة الداخلية في الشركة.
					26. يتم متابعة دورية لضمان تنفيذ السياسات والإجراءات المراقبة بشكل صحيح.
					27. يتضمن خطط الرقابة الداخلية آليات لمراقبة تغييرات البيئة التشغيلية للشركة.
					28. يتم مراقبة الالتزام بالسياسات والإجراءات المراقبة في جميع مستويات الشركة.
					29. تُجرى مراجعات دورية للتأكد من مطابقة العمليات الداخلية للمعايير والمتطلبات المحددة.
					30. يُجرى تقييم دوري لكفاءة أنظمة المراقبة الداخلية في التعامل مع التحديات والتطورات الجديدة.
<p>المجال السادس: منع واكتشاف الاحتيال: تشمل مجموعة من السياسات والإجراءات المصممة لمنع حدوث الاحتيال واكتشافه في حال وقوعه. تشمل هذه الإجراءات فصل الواجبات، تنفيذ عمليات مراجعة داخلية وخارجية، والتحقيقات الفورية عند الاشتباه في وجود احتيال.</p>					
					31. تعتمد الشركة تقنيات حديثة لرصد وتحليل البيانات لكشف احتمالية الاحتيال.
					32. تتبنى الشركة سياسات وإجراءات صارمة للتحقق من بيانات العملاء والشركاء التجاريين بهدف منع الاحتيال.
					33. يتلقى موظفو الشركة تدريبات دورية حول كيفية التعرف على طرق الاحتيال وأساليب التصدي لها.
					34. توفر الشركة قنوات اتصال للعاملين للإبلاغ عن أي نشاط يثير الشكوك بخصوص الاحتيال.

					35. يتم إجراء تدقيق خارجي للحسابات بانتظام للتحقق من صحة التقارير المالية واكتشاف لأي تلاعب.
					36. يتم مراجعة وتقييم نظام الرقابة الداخلية بشكل دوري لتحديثه وتحسينه.
					37. تستخدم الشركة تقنيات الذكاء الاصطناعي أو التحليل الضخم لتعزيز جهود كشف الاحتيال.
					38. تتبادل الشركة معلومات حول حالات الاحتيال المكتشفة مع سلطات الرقابية المختصة
					39. تتبادل الشركة معلومات حول حالات الاحتيال المحتملة والمكتشفة لتعزيز الشفافية والنزاهة في السوق.

شاكرين لكم حسن تعاونكم ...

Appendix No.2 List of arbitrators

#	Arbitrators	Job title	University
1.	Dr. Othman Ahmad Khalil Sawafta.	Associate Professor	Palestine Technical University Khadoori
2.	Dr. Anas Al-Masry.	Assistant Professor	Palestine Technical University Khadoori
3.	Dr. Fidaa Qarmash.	Assistant Professor	Palestine Technical University Khadoori
4.	Dr. Osama Omar Khaddar.	Assistant Professor	Palestine Technical University Khadoori
5.	Dr. Hosni Shank.	Assistant Professor	Palestine Technical University Khadoori

Appendix No.3: Distribution of the number of employees and managers in Palestine Exchange institutions

Distribution of the Insurance Sector (Palestinian Financial Market Authority, 2023)

Name of Company	Number of Manger	Number of Employees
AL-Ahleia Insurance Group (AIG)	14	156
United Global Insurance (GUI)	30	195
Mashreq Insurance Company (MIC)	15	220
National Insurance Company (NIC)	9	270
Palestine Insurance Company (PICO)	12	206
Palestinian Takaful Insurance Company (TIC)	15	223
Trust International Insurance (TPIC)	5	288
Total	100	1558
Name of Company	Number of Manger	Number of Employees
Arab Palestinian Investment Company (APIC)	6	1650
Commercial Real Estate Investment (AQARIYA)	3	3
Arab Investors (ARAB)	5	3
Arkan Real Estate (ARKAAN)	2	11
Jerusalem for Real Estate Investments (JREI)	9	-
Palestine Development and Investment Company (PADICO)	1	-
Palestinian Investment and Development (PID)	7	528
Palestine Industrial Investment Company (PIIC)	1	-
Palestine Real Estate Investment (PRICO)	1	
Sanad for Construction Resources (SANAD)	2	70
Union for Reconstruction and Investment (Name not provided)	-	33
Total	37	2228
Name of Company	Number of Manger	Number of Employee
Arab Palestinian Paint Company (APC)	12	232
Palestine Poultry (AZIZA)	19	398
Beit Jala Pharmaceuticals (BJP)	23	456
Birzeit Pharmaceuticals (BPC)	26	432
Golden Wheat Mills Company (GMC)	6	47
Jerusalem Cigarette Company (JCC)	9	101
Jerusalem Pharmaceuticals (JPH)	7	420
Palestine Plastics Industries (LADAEN)	8	145
National Aluminum and Profiles Company (NAPCO)	18	345

National Carton Industry (NCI)	13	77
Vegetable Oil Mills (Name not provided)	17	121
Total	159	2754
Name of Company	Number of Manger	Number of Employee
National Towers (ABRAJ)	32	234
Arab Hotels Corporation (AHC)	18	231
Nablus Specialized Surgical Center (NSC)	14	345
Palestine Telecommunications Company (OOREDOO)	43	1234
Balaqar Real Estate for Development, Management, and Operation (PALAQAR)	18	454
Palestinian Telecommunications Company (PALTEL)	23	1432
Palestinian Electricity Company (PEC)	7	198
Ramallah Summer Resorts (RSR)	8	32
Palestinian Distribution and Logistics Services (WASSEL)	4	123
Total	167	5073
Name of Company	Number of Manger	Number of Employee
Arab Islamic Bank (AIB)	35	678
Bank of Palestine (BOP)	15	1,799
Palestinian Islamic Bank (ISBK)	11	692
Palestinian Investment Bank (PIBC)	24	356
Palestine Exchange (PEX)	11	45
Al-Quds Bank (QUDS)	27	990
Safa Bank (SAFABANK)	7	234
National Bank	14	543
Total	144	4327

التحقق من دور الرقابة الداخلية في اكتشاف الاحتيال: الأدلة من الشركات المدرجة في بورصة فلسطين.

شيماء خلدون أحمد الصوافطة

د. محمد أبو شربة

د. زهران دراغمة

د. حسني شنك

ملخص

تهدف هذه الدراسة إلى استكشاف دور الرقابة الداخلية في الكشف عن الاحتيال، مستندة إلى أدلة من الشركات المدرجة في بورصة فلسطين، اعتمدت الدراسة على منهج وصفي تحليلي، باستخدام تصميم بحثي كمي مناسب. شملت عينة الدراسة جميع الشركات العامة الفلسطينية المدرجة في بورصة فلسطين. وبلغ حجم العينة (376) موظفًا تم اختيارهم من خلال تقنية العينة العشوائية البسيطة، وتم استرداد (369) استبيانًا، مما أسفر عن معدل استجابة قدره (98.1%). وجدت الدراسة أن الجنس يؤثر بشكل كبير على فعالية الكشف عن الاحتيال داخل أنظمة الرقابة الداخلية، مما يشير إلى أن الرجال والنساء قد يكون لديهم طرق مختلفة في تحديد الأنشطة الاحتمالية. ومع ذلك، لم تُظهر عوامل ديموغرافية أخرى مثل العمر، المؤهلات التعليمية، سنوات الخبرة، والمسمى الوظيفي أي تأثير ملحوظ على قدرات الكشف عن الاحتيال. بالإضافة إلى ذلك، أكدت الدراسة على أهمية الأبعاد الأساسية للرقابة الداخلية، بما في ذلك بيئة الرقابة، تقييم المخاطر، فعالية الرقابة، المعلومات والاتصالات، والمتابعة. تلعب كل من هذه الأبعاد دورًا حيويًا في إنشاء إطار عمل قوي للرقابة الداخلية، الذي لا يمنع الاحتيال فحسب، بل يساعد أيضًا في اكتشافه مبكرًا. على سبيل المثال، تعزز بيئة الرقابة الثقافية الأخلاقية، بينما يحدد تقييم المخاطر المحتملة للاحتياج، وتضمن المراقبة إشرافًا مستمرًا. وأظهرت الشركات المدرجة في بورصة فلسطين أن تعزيز هذه الأبعاد يؤدي إلى تحسين الوقاية من الاحتيال، وزيادة الاستقرار المالي، وزيادة الثقة في الحوكمة. تقترح النتائج أنه ينبغي على المنظمات اعتماد نهج شامل ومتكامل للرقابة الداخلية لتقليل مخاطر الاحتيال وضمان الصحة المالية على المدى الطويل.

استنادًا إلى هذه النتائج، أوصت الدراسة بضرورة وجود استراتيجيات شاملة للوقاية من الاحتيال، والتي تشمل التقييم الدوري وتحديث الأنظمة لتعزيز فعالية الكشف والوقاية. كما أكدت على أهمية تعزيز بيئة الرقابة من خلال تنظيم ورش عمل وندوات تعليمية لتعزيز الثقافة التنظيمية والقيم

الأخلاقية، مما يسهم في زيادة الالتزام بالسياسات الداخلية. بالإضافة إلى ذلك، شددت الدراسة على الحاجة إلى تعزيز آليات تقييم المخاطر من خلال الاستفادة من التقنيات التحليلية المتقدمة وتوسيع نطاق التقييمات لتغطية جميع جوانب العمليات.

الكلمات المفتاحية: الرقابة الداخلية، كشف الاحتيال، بورصة فلسطين، تقييم المخاطر، بيئة الرقابة.