



**Arab American University**

**Faculty of Graduate Studies**

**Fraud Detection and Prevention in Securities: The Case of Palestine**

**Securities Sector**

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**This thesis was submitted in partial fulfillment of the requirements**

**for the Master`s degree in Fraud Protection**

**8 /2025**

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## Thesis Approval

### “Fraud Detection and Prevention in Securities: The Case of Palestine Securities Sector”

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This thesis was defended successfully on 02.08.2025 and approved by:

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## **Declaration**

I declare that the work in this study entitled “Fraud Detection and Prevention in Securities: The Case of Palestine Securities Sector” was carried out by me under the supervision of Dr. in the Department of Fraud protection. Also, I declare that the information in this study is the result of my own work and it has not been presented before in another degree, diploma, or another university.

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## **Dedication**

To my father, the light that guides with his wisdom and presence, a pillar of strength and a source of endless inspiration.

To my mother, my lamp and the light of my eyes, and the eternal supporter who never stopped giving me love and patience.

To my brothers, my partners in life and my support in every step, who were and still are my constant source of support.

To all my loved ones, who have positively influenced my life, with their kind words, their continuous support, and their presence in every moment of my life.

To the souls of the martyrs who sacrificed their lives for our dignity and our land, and made us people whose sacrifices will never be forgotten.

## **Acknowledgement**

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Finally, to myself who was patient, insisted, and worked hard until I reached this achievement, striving to achieve the best.

To everyone, all thanks and appreciation.

## **Abstract**

This study aims to explore the reality of fraud detection and prevention in securities in Palestine Securities Sector. Besides, exploring the reasons for occurrence of fraud, identifying the most prevalent types of fraud as well as the red flags" that signal potential financial fraud in the Palestinian securities sector. Additionally, exploring the most followed fraud detection and prevention mechanisms in Palestine. The study used the mixed research approach using interviews and questionnaire design. The data was taken from a sample of (141) external and internal auditors.

The study results demonstrated that the auditors were rarely interacted with fraud cases. Moreover, the highest percentage of them stated that they have moderate level of training in fraud detection and prevention. Besides, there are several reasons of potential fraud in Palestine securities sector. The most demonstrated reasons of committing fraud are poor management policies, inadequate training of those responsible for fraud detection. Additionally, economic pressure, and lack of government intervention. Furthermore, the most prevalent types of fraud in Palestine securities sector are misappropriation of funds, accounts manipulation to conceal theft or inflate company value. Likewise, creating or altering documents to support fraudulent claims or transactions.as well as false financial statements and using of companies` assets to personal use.

Additionally, the study revealed that the most common indicators or red flags that signal potential financial fraud in the Palestinian securities sectors are financial statements discrepancy due to inconsistent comparative numbers between balance sheets, income statements and cash flow statements.

The researcher suggested that there is a necessity to invest in auditors` training and development their competencies and qualification in fraud prevention and detection through continuous training and improvement and encouraging them to have professional certificates. Furthermore, Palestine securities sector should establish and develop clear strategies to conduct regular assessments and system developments to increase the quality of fraud prevention and detection practices. Eventually, there is a necessity to strengthen the internal communication and information instruments to confirm the rapid and transparent flow of information among the different departments in the company.

Keywords: Fraud – Fraud Prevention – Fraud Detection- Palestine securities sector- securities sector- red flags – internal controls- financial fraud types – technical tools – regulatory framework – financial fraud- fraud examination training – financial crimes – fraud theories.

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**List of Abbreviations**

1.	AUC	Arab American University
2.	PEX	Palestine Exchange
3.	MENA	Middle East and North Africa
4.	IAS	International Auditing Standards
5.	CPA	Certified Public Accountant
6.	ACPA	Arab Certified Public Accountant
7.	IC	Internal Control
8.	IOSCO	International Organization of Securities Commissions
9.	AI	Artificial Intelligence
10.	IT	Information Technology
11.	UK	United Kingdom
12.	USA	United States of America
13.	ACFE	Association of Certified Fraud Examiners
14.	PwC	PricewaterhouseCoopers
15.	IOSCO	International Organization of Securities Commissions
16.	M	Mean
17.	S.D	Standard Deviation
18.	ANOVA	Analysis of Variance
19.	SPSS	Statistical Package for the Social Sciences

## **Chapter One**

### **Introduction**

#### **1.1 Introduction**

International Standard on Auditing (ISA) 240 defined fraud as “An intentional act by one person or more persons among management, employees, or third parties, involving the use of deception and to obtain an unjust or illegal advantage”. Likewise, the Institute of Internal Auditors (IIA`s) stated that fraud is "Any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage”.

A study performed by the PricewaterhouseCoopers (2020) in (99) territories around the world found that approximately 47% of international businesses were suffered of fraud in 2019 compared to 49% in 2018, 36% in 2016, and 37% in 2014. The study found that total loss due to fraud in 2020 were more than \$42 billion. Besides, fraud affects negatively the reputation of the business, and decreasing its market share and market value on the financial markets.

According to the Middle East and North Africa region (MENA) and the Middle East the fraud has increased from 25% in 2016 to more than 35% in 2018 that is an increase by more than 10% within two years, this indicates the high spread and prevalence of fraud and fraudulent practices in Middle East (Alfordy, 2022)

There are several studies have explored the fraud detection and prevention. for instance, Hakimi and Rahmat (2019) explored fraud prevention in banking institutions in Saudi Arabia. Furthermore, Alanezi and Brooks (2014) explored the way that online fraud control are used in financial institutions in Saudi Arabia. Likewise, In'airat (2015) examined the effect of corporate governance on decreasing fraud detection and prevention in private sector.

International Audit Standard (IAS) 240 pertained to the responsibilities of the auditors relating to fraud in an audit of financial statements states that the basic responsibility for the fraud prevention and detection is the responsibility of both the senior executive management and the board of directors (International Audit Standard Board, 2023).

It is interesting that senior management with the oversight of those charged with governance, emphasize very much on fraud prevention that may decrease opportunities for fraud to occur, and fraud deterrence, that could convince persons not to commit fraud since of the potential of detection and punishment (Dagane, 2024).

This involves a commitment to establishing an honesty culture and ethical conduct that can supported by an efficient monitoring by those charged with governance oversight by those charged with governance includes taking into consideration the likelihood for override of controls or other improper influence over the financial; reporting process, such as efforts by management to manage earnings to influence the analysts perception as to the performance of the organization and its financial performance (El-shbrawy et al., 2024).

Furthermore, IAS 240 insisted that the “responsibility of the auditor in fraud prevention and detection is to obtain reasonable assurance that the financial statements are free from material misstatement, whether produced by fraud or error. Owing to the inherent limitations of an audit, there is a mandatory risk that some material misstatements of the financial statements may not be detected, even though the audit is properly planned and performed in accordance with the ISAs”.

According to the Palestinian Central Bureau of Statistics, there were (1434) reported fraud offenses in Palestine in 2022. The most common type of fraud offenses is fraud/swindle that was (1082) cases. The second most common is perjury (115) cases (PCBS, 2023). However, the anti-fraud regulations and laws in Palestine are still weak and they cover just a few range of practices and sectors and most of these laws and regulations either focus on public sector or banking and insurance sector. Moreover, these laws and regulations do not emphasize on the role of new technologies such as the role of artificial intelligence and big data processing on the fraud prevention and detection practices and efforts of auditors (Abueid & Hakami, 2023).

According to Wall & Fogarty (2018) who performed a systematic study based on a review of a large number of previous studies around the world, they found that the lack of anti-fraud prevention and detection practices, poor qualifications and competencies of internal and external auditors, poor management competencies and practices, and expansion of more sophisticated criminals have increased the widespread of fraud practices in financial and securities markets.

Thus, fraud prevention and detection are a challenge that businesses and organizations confront nowadays as several businesses in developed and developing countries have suffered significantly due to it. The fraudulent practices have massive negative impacts on economic development and the financial performance of the business.

## 1.2 Problem of the Study

IAS 240 stated that the auditor is “Basically responsible for maintaining professional skepticism during the audit process performance when obtaining reasonable assurance, taking into consideration the likelihood for management ignore of internal controls and identifying the reality that audit activities and procedures that are active for discovering error may not be effective in detecting fraud. Thus, the requirements in this ISA are established to help the auditor in detecting and preventing the risks of material misstatement due to fraud and in creating policies and actions to find out such misstatement”.

From another perspective, Abu Amuna and Abu Mouamer (2020) found that the auditors in Palestine in general do not have the adequate knowledge, and experience to detect and prevent the fraud in Palestinian financial market and how to deal with these cases even if the auditor detect these cases. Furthermore, there is a limited studies and researches have explored the fraud prevention and detection practices in Palestine. Thus, the problem of the study is embedded in this question:

**What is the reality of fraud detection and prevention in Palestinian securities sector?**

### 1.3 Study Objectives

This study aims to explore the reality of fraud detection and prevention in Palestine Securities Sector.

Based on the major objective of this study, the researcher identified the following minor objectives:

1. Exploring the reasons for occurrence of fraud in Palestine Securities Sector.
2. Identifying the most prevalent types of fraud in Palestine Securities Sector.
3. Exploring the specific indicators or "red flags" that signal potential financial fraud in Palestine Securities Sector.
4. Exploring the most followed fraud detection mechanisms in Palestine Securities Sector.
5. Examining the most common followed fraud preventive mechanisms in Palestine Securities Sector.

### 1.4 Thesis Significance

#### **Theoretical Significance**

This study has theoretical participation, as it explores the actual fraud prevention and detection practices that are used in Palestinian context as the researcher found that there is a gap in studies that explored this topic. Besides, this study is expected to be a valuable secondary source for other novel studies and researches in this regard.

Recently, there is also an increasing involvement in fraud prevention and detection either in developed or developing countries and economies due to the massive development in the fraud techniques and practices either from employees or

the senior executive managements of listed companies. Thus, the cost of the fraud is devastating for individuals, organizations and the economic development.

### **Practical Significance**

Practically, this study is important for accountants and internal as well as external auditors to identify the best fraud prevention and detection practices that are proper and efficient in Palestinian context. Likewise, it`s important to senior executive managements and the board of directors to set the efficient and effective policies and strategies to fight fraud and fraudulent practices in Palestinian securities with especial focus on increasing the efficiency of the management and enhancing the quality of the internal control system. This study also has practical contribution to the policy makers and regulators as this study provide them with relevant information to set laws, regulations and policies to prevent fraud in Palestine securities sector.

### **1.5 Questions of the Study**

This study will answer the following question:

What is the reality of fraud detection and prevention in Palestine Securities Sector?

Based on the major question, the researcher derived the following minor questions:

1. What are the reasons for occurrence of fraud in Palestine Securities Sector?
2. What are the most prevalent types of fraud in Palestine Securities Sector?
3. What are the specific indicators or "red flags" that signal potential financial fraud in the Palestine Securities Sector?
4. What are the most followed fraud detection mechanisms in Palestine Securities Sector?

5. What are the most common followed fraud preventive mechanisms in Palestine Securities Sector?

## 1.6 Hypotheses of the Study

Based on the study questions and objectives, the researcher presented the following hypotheses:

1. Lack of internal control efficiency and quality is the major reason for occurrence of fraud in Palestine Securities Sector.
2. False financial statement is the most prevalent types of fraud in Palestine Securities Sector.
3. There is moderate level of fraud indicators or "red flags" that signal potential financial fraud in the Palestine Securities Sector.
4. External and internal audit are the most followed fraud detection mechanisms in Palestine Securities Sector.
5. Have a code of conduct or ethics policies are the most common followed fraud preventive mechanisms in Palestine Securities Sector.

## 1.7 Definition of terms

**Fraud:** “An intentional act by one or more persons among management, those charged with governance, employees, or third parties, involving the use of deception to get an unjust or illegal advantage”. (International Auditing and Assurance Standards Board, 2023, P. 273).

**Fraud risk factor:** “Events or conditions that indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud.” (International Auditing and Assurance Standards Board, 2023, P. 273).

**Fraud Prevention:** is “An activity performed by the organization management that includes setting clear policies, strategies, systems, and procedures to confirm that the required actions and procedures have been implemented by the board of directors and senior management and other corporate human resources to provide sufficient assurance in achieving reliability of financial reporting, efficiency of processes and operations and to be in line with applicable laws and regulations” (Sidik, 2016).

**Fraud Detection:** “this fraud will be reflected through the arise of specific characteristics, both environmental conditions and the behavior of the person. Characteristics of a particular setting or condition, behavior conditions off an individual called red flags that are indictors of fraud. Even though the arise of the red flag is not always is a fraud indictor, this red flag often emerges in every case of fraud that takes place” (Tuanakotta, 2018).

**Fraudulent Financial Reporting:** “Intentional misstatements, including omission of amounts or disclosures in financial statements, to deceive financial statement users”. (Association of Certified Fraud Examiners, 2018)

**Misappropriation of assets:** “Encompasses the theft of an organization’s assets and is usually committed by workers in fairly small and immaterial amounts. On the other hand, it can furthermore include management who are typically more proficient of concealing or concealing misappropriations in conducts that are hard to discover” (Paranoan, 2022).

## 1.8 Tentative Study Design

This study consists of five chapters. The first chapter is the introductory chapter that presents the research problem, questions, objectives and hypotheses of the study as well as the theoretical and practical implication of the study and its limitations.

The second chapter is the theoretical framework. Literature review and hypotheses development through presenting the most prevalent theories that explained fraud and fraud detection and prevention, the fraud in securities markets, factors contributing to fraud in the Palestinian securities sector, detection and prevention mechanisms, and gaps in the existing literature.

The third chapter, presents and explains the research approach, research design, research philosophy, data collection methods, population and sample of the study, estimating reliability and validity of the instrument, and the statistical analysis that the researcher will use to analyze the data of the study.

Chapter Four, summaries the findings of the study through answering the research questions and objectives as well as examining the hypotheses of the study. The researcher will perform an analysis of fraudulent activities in the Palestine securities sector, types of fraudulent activities, identification of vulnerabilities and weaknesses and case studies of previous fraudulent incidents and detection mechanisms and technologies. Besides, exploring the traditional detection methods through exploring the Technology-Driven Approaches (e.g., Data analytics, artificial intelligence).

Chapter five includes conclusion, discussion of the study results, practical implications of the study, theoretical implication of the study, recommendations, limitations of the current study and suggestions for further studies and research.

## **Chapter Two**

### **Literature Review**

#### **2.1 Introduction**

This section presents the literature review of the study by presenting and discussing the definition of fraud, its prevalence, types of fraud, exploring the most prevalent theories that explain fraud, with a special emphasis on fraud triangle theory, fraud diamond theory, and fraud management cycle theory. Furthermore, we will discuss the definition of fraud prevention and detection and the most commonly used fraud prevention and detection tools. Instruments and mechanisms, either classically used tools or those based on modern technology. In addition, we will discuss the concept of red flags and the most prevalent types of fraud in financial markets.

#### **2.2 Fraud Definition**

There are a several definitions of fraud in organizations. The first definition of fraud was presented by Cressey (1953), who specifies that there are three elements that usually exist in incidents of fraud: coercion, incentive, and rationalization. Paranoan, Sabandar, Paranoan, Pali, and Pasulu (2022) defines fraud as “a form of deliberate mistake that leads to harm or loss without the hurt party being aware of it and provides an advantage for the fraud perpetrators”.

The Oxford English Dictionary (2019) states that fraud is “illegal, unlawful, and unethical practices, conducts, or criminal deception directed to achieve financial or personal interests and gains”. Whereas, Merriam-Webster Dictionary (2019) defines fraud as “a trick that is a craft procedure or practice that results in deceiving or defrauding. Whereas, a trick refers to a quick or artistic way of getting a result”.

According to the International Audit Standard (IAS 240) (2023) the fraud is “an intentional act by one person or more persons among management, employees, or third parties involving the use of deception and to obtain an unjust or illegal advantage.". While, the International Internal Auditors (IIA) (2017) stated fraud is "any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent on the threat of violence or physical force. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage”

According to the Panel of Auditors of the United Nations, fraud is “a wide diversity of behaviors and practices that may encompass manipulation, forgery, or alteration of account books or documents, misappropriation of company assets, concealment or omission of the effects of transactions in account books or documents, the recording of transactions devoid of content, and the incorrect application of accounting methods”.

ACFE classified fraud into three types: fraud on statements, misappropriation of assets, and corruption. The most severe type is fraud in the financial statements, as it leads to huge losses.

The ACFE (2007) defines fraud as “a deliberate action of dishonesty or practice of other prejudicial means that assists in depriving an individual or company of property or money”.

The Canadian Institute of Chartered Accountants (1998) defines fraud as “the activities or actions committed intentionally to deceive, and they involve a misappropriation of assets or a misrepresentation of financial information to hide a misappropriation of assets or other purposes”.

Said, Alam, Karim and Johari (2018) stated that employees' fraud is "an intentional or unintentional misbehavior, misconduct, or misappropriation of the assets of the business by staff from which the organization may incur losses."

Roudaki, Clark, and Alias (2010) stated that fraud is misstatements taking place due to fraudulent financial reporting and misappropriation of organization assets.

Singleton, Bologna, Lindquist, and Singleton (2006) defined fraud as "the intentional misrepresentation of the company's financial position by misrepresenting the financial statements to deceive users." (P. 41). Likewise, Suh, Nicolaides, and Trafford (2019) defines occupation fraud as "a type of fraud that is committed against a business by its staff and is often distinguished as internal, insider, or employee fraud".

Kranacher and Riley (2019) argue that there are three components of fraud practices and incidents such as misappropriation of business resources and assets, awareness that the financial statements are unrealistic and convey false information, and dependence on the inaccurate and incorrect information provided by the victims.

Kurpierz and Smith (2020) stated that fraud is "a formal and practical term that is used as an umbrella system to define a great number of deceitful and destructive conducts that lead to financial losses or collateral damage that affect negatively the relationship of the business with its external environment, organization reputation, employee morality and ethics, and branding" (P. 177).

According to Magablih and Alshira'h (2021) a fraud is an intentional act committed by the employee and related individuals, for instance, senior executive management and staff. The fraudulent practices distort the corporate financial statements, and these actions and practices are committed to obtain personal self-interest. These fraudulent practices lead to

harm or loss to others, especially users of the corporate financial statements, such as investors, shareholders, and other stakeholders.

Abdullahi and Mansor (2015) defined fraud as “a deliberate or negligent act in performing something or not performing a specific thing that ought to be carried out, thus the financial statements of the business are materially misleading” (P. 38).

*The researcher in this study defined fraud as any deliberate wrongful or false representation, including failure to declare information or abuse of position.*

### **2.3 The Prevalence of Fraud**

According to PricewaterhouseCoopers (2020), which performed in (99) regions around the world, found that 47% of international businesses suffered of fraud in 2019 compared to 49% in 2018, 36% in 2016, and 37% in 2014. These fraudulent practices led to a loss of more than \$42 billion in 2018. Besides, these fraud incidents have negatively affected corporate reputation, brands, and market share.

According to the distribution of companies based on the fraud incidents, the ACFE (2020) found that 44% of companies that have suffered from fraud are privately held companies, 26% are publicly held companies, 16% are government enterprises, and 9% are NGOs. However, a study performed by ACFE (2018) demonstrated that half of the companies that suffered of fraud in the MENA region were private companies, 31% were public companies, 8% were government enterprises, and 6% were NGOs. Likewise, PwC (2020) revealed that there was an increase in financial and fraud crimes in the MENA region, as financial crimes jumped from 36% in 2018 to more than 46% in 2020. The most common types of financial crimes were customer and procurement crimes, corruption, and bribery. Moreover, the study demonstrated that the most common tools and practices to

detect and prevent fraud are involvement in increasing the effectiveness and efficiency of internal control in businesses, investment in employees` training and development on how to detect and deal with fraudulent practices and incidents.

According to the Association of Certified Fraud Examiners (ACFE) report to the Nations, financial statement fraud and securities fraud remains significant concerns, with schemes usually enduring an average of 16 months before detection. Furthermore, it estimated that organizations lose approximately 5% of their annual revenues to fraud, with securities and investment fraud being a considerable subset. Furthermore, SEC reported that in 2022, it brought 834 enforcement actions related to securities fraud, recovering more than \$4.2 billion in disgorgements, schemes, insider trading, and misrepresentations to investors (SEC Annual Enforcement Results, 2022).

In a study published in the *Journal of Financial Crime* (2023) confirmed that securities fraud cases increased by more than 12% globally in 2022 compared to 2021.

## 2.4 Theories and Models of Fraud

There are several theories that have explained the fraud at workplace in organizations. The most prevalent theories are the Fraud Triangle Theory, the Fraud Diamond Theory, and Fraud Management life cycle Theory.

### 2.4.1 *Fraud Triangle Theory*

The most prevalent model to study fraud is the Fraud Triangle Theory, which was presented for the first time by Donald Cressey in 1950 and claimed that there are three conditions of fraud: pressure or incentive, opportunity, and rationalization or attitude (Huang et al., 2017).

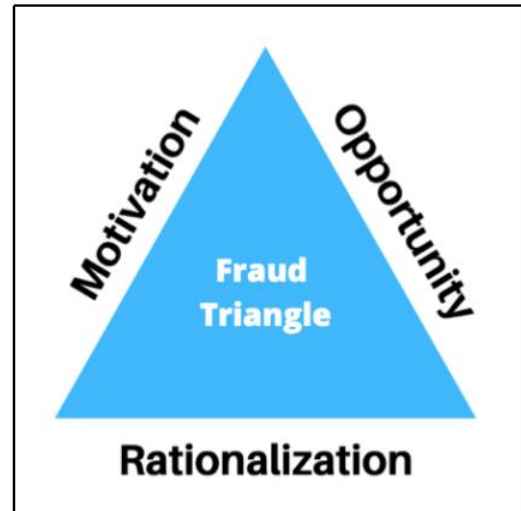


Figure 1 Fraud Triangle Theory Dimensions

**Pressure:** The pressure to commit fraud takes place when financial stability is endangered, there is competition in the market or failure of businesses, and there are adequate and satisfactory levels of financial performance and profitability. Thus, senior executive management is threatened with unsatisfactory levels of performance. However, opportunity takes place as a result of transactions that are unfair in size, rely on a large number of accounting estimates, subjective considerations or an uncertain environment, international transactions and operations, and cultural differences (Schuchter & Levi, 2016).

Senior executive management or employees may have the reinforcement or pressure to commit fraud based more on their conditions, for instance, confronting a financial crisis or the bad habits of individuals, for instance, gambling or drinking or having unrealistic inspirations and interests (Wells, 2017).

**Rationalization:** It refers to the individual's attitude towards justification of the actions taken. This is because of inadequate information and communication concerning ethical standards that ought to be adopted and spread in the company, aggressive financial performance growth, and failure to use accounting systems and an effective and efficient internal control system in the organization (Boddy et al., 2015).

According to Holtfreter (2015), both men and women give the same explanation and rationalization of fraud commitment and stealing from their businesses. They said that they were borrowing and intended to repay their organization at some point in the future. However, according to the prosecution for fraud commitment and financial crimes, Holtfreter (2015) found that the men stated that they have certain practices due to financial needs, for instance, gambling debt or habits. On the other hand, the motivation for women was medical expenses or medical expenses for their children or their family members. Sidorov (2015) argued the most prevalent incentives for fraud commitment are salary increases, promotion, titles, bonuses.

**Opportunity:** The workplace environment provides employees or managers with an opportunity to commit fraud due to the existence of a weak internal control system or inefficient management supervision. Thus, Boyle (2015) claimed that internal controls of the business should be active in identifying the opportunities component of the fraud triangle. The intention of individuals who commit fraud differentiates mistakes from errors

or fraud as fraud perpetrators commit fraud to achieve their personal and self-interests at the expense of other stakeholders and parties in the business (Sidorov, 2015).

Button, Blackburn, Lewis, and Shepherd (2015) stated that based on the Fraud Triangle theory, the main factors influencing the occurrence of fraud are: intention, incentive/pressure, opportunity, and rationalization/attitude. Likewise, according to Ishida, Chang, and Taylor (2016), rationalization is “the fraudsters’ attitude, a mindset, a character, or a set of values that give them the opportunity to do fraudulent acts knowledgeably and desirably without regret. Moreover, Ishida et al. (2016) argued that the more incentives drive employees and managers to be able to rationalize their unethical behavior and practices.

Schuchter and Levi (2015) performed a study to examine which triangle of the Fraud Triangle theory is the most significant to explain the fraudulent practices, illegal conducts, and behavior of fraudsters in USA. The study demonstrated that opportunity is a significant element in fraud commitment. Whereas, rationalization and pressure were the least likely components influencing fraud commitment. Likewise, Owusu, Koomson, Alipoe, and Kani (2022) found that pressure, opportunity, and rationalization are significant predictors of fraud commitment in companies owned by the state in Ghana.

Skousen and Twedt (2009) examined the effectiveness and efficiency of fraud prevention in companies using the Fraud Triangle theory. The researchers found several measures and proxies to measure the three components of this model, which are: the pressure proxies, which included the financial performance of the companies; the expectations of analysts of the financial performance of the company; the compensation and reward of senior managers; and the wealth and prevalence of financial targets.

Whereas, the opportunity proxies included organizational structure and culture, monitoring and controlling functions, ownership structure, and internal controls. Whereas, they measured rationalization by expectations, communication, relationships with auditors, and a historical record of individuals` misbehavior. The study demonstrated that there is a positive correlation between the necessity of the company for cash and financial leverage, maintaining a high market value of the business, and fraud commitment in the company. Furthermore, they found that increasing audit committee independence increases the effectiveness and efficiency of fraud prevention in the company. Moreover, increasing the quality of internal control will help decrease the likelihood of fraud commitment and occurrence.

#### 2.4.2 *Fraud Diamond Theory*

Wolfe and Hermanson (2004) developed the fraud diamond theory as they stated that it`s an expansion of the triangle fraud theory. The supporters of the fraud diamond theory argued that the fraud triangle theory is important for accountants to recognize and manage fraud. Conversely, the fraud diamond theory is important because it supports the previous theory by adding the capabilities of individuals.



Figure 2 Fraud Diamond Theory

Abdullah, Muhammad, and Nuhu (2015) argued that even though incentives, opportunities, and rationalization for fraud exist, it is impossible to commit fraud unless the individual who commits fraud has the abilities and capabilities to do so.

According to Wolfe and Hermanson (2004), capabilities refer to traits and abilities of individuals that affect their decision to commit or not to commit fraud. Even the existence of incentives, opportunities, and rationalization.

According to Almalki (2022), there are four elements of capability, which are:

1. The position, rank, or importance of the individual's work in the organization.
2. The existence of a smart and clever person to commit fraud, the good awareness of and understanding of the internal control failures and weaknesses in the organization, and having the capability to exploit the weaknesses in the internal control system in the organization.
3. Having a high level of self-confidence that he or she will not be caught or that their fraud practices will not be detected. Besides, he/she has such a high level of commitment that he/she is able to get out of the problem easily.
4. The ability and aptitude to affect and lead other staff to hide or commit fraud. This individual has the ability and capacity to convince others, which gives him/her the opportunity to persuade others to commit fraud or to overlook the fraud.

The fraud diamond theory is an enhancement and development of the fraud triangle theory, as it added personal capabilities to the Fraud Diamond theory to develop and improve its predictability (Suh, Nicolaides & Trafford, 2019). This theory adds value to the board of directors and senior executive management of the organization to set efficient

and effective controls and measures that will decrease the temptation of fraud in the organization from those who are in influential positions (Wolfe and Hermanson, 2004).

According to Rizki and Yovita (2024) found that there is a negative and significant effect of capability variable as construct of fraud diamond theory on fraudulent in financial statements of industries in the real estate, construction, and property sectors in Indonesia during 2020 -2022. conversely, pressure, opportunity, and rationalization have an insignificant effect on fraudulent financial statements. Likewise, in a study performed by Boyle, Dezoort and Hermanson (2015) to compare the efficiency of the fraud triangle theory compared to the fraud diamond theory, the study found that the fraud diamond theory is more efficient in fraud detection compared to the triangle model. The study demonstrated that capability has a significant effect on fraud commitment.

Lokanan (2015) adopted the case study method and the critical discourse analysis to examine if the fraud triangle theory could be an efficient model to detect fraud and fight it at Walmart an USA retail store, KPMG is one of big four audit companies, and Lehman Brothers which is a former large-scale investment bank. The study found that this model is inefficient in fraud detection as it cannot be used in all cases of fraud as not all three components of this model are always present in cases of fraud commitment detected. Besides, this model works poorly in explaining the fraudsters actions and behavior. Thus, a more comprehensive model for explaining fraud commitment is required to support the fraud triangle theory.

### 2.4.3 Fraud Management Life Cycle Theory

Wilhelm (2004) presented the fraud management theory in 2004. According to Njenga and Osiema, (2013) the fraud management cycle as “a network of interrelated stages where each stage is a total of elements that are interrelated, interdependent, and dependent actions and practices, activities, operations, and functions that act an essential role in fraud control”.

Fraud Management Lifecycle Theory

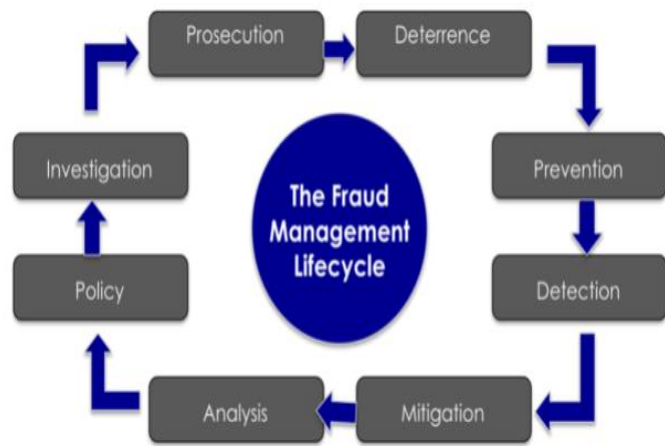


Figure 2.3: Fraud management lifecycle

Source: Arctic-intelligence.com

Figure 3 Fraud Management Life Cycle

The fraud management cycle starts with a clear and obvious definition of different stages within the cycle to give experts and professionals the opportunity to communicate more efficiently with shareholders and other stakeholders in the business and its industries, within their organizations, and among themselves (Wilhelm, 2004).

According Kimani (2011), there are eight interrelated stages of the fraud life cycle that begin with deterrence of prevention encompasses a set of activities and does that are significant to prevent or impede any temptation to deceive, dishonesty, or fraud. The importance of this stage is to confirm the prevention and deterrence of fraud before it is committed by establishing fear, results, or making it difficult to commit fraud in the organization.

The second stage is the detection stage, which involves investigating fraud, trails, and the success of fraud. This stage ought to demonstrate that the trails of fraud and fraud commitment have been discovered (Ijeoma & Aronu, 2013).

The third stage is the prevention stage, which encompasses procedures and activities set to protect the organization from fraud commitments and activities and actions against fraud commitments (Kimani, 2011).

The fourth stage includes fraud mitigation, which includes preventing and stopping fraudsters from committing fraud in an attempt to finalize and end their fraudulent mission, thereby decreasing their chances of success. The mitigation actions and activities may be adopted promptly, or they may be deferred. This stage includes actions that are directed to decrease the degree of the fraud, cut the number of losses charged throughout the fraud, and make the efforts and expenses necessary to compensate for or reverse the effect of the fraud (Wilhelm, 2004).

The fifth stage is the analysis stage, as this stage is important to provide information on the essential reasons and factors that had led to the fraud commitment or fraudulent practices and activities (Akelola, 2012). The analysts give an evaluation and assessment report in mitigation concerning measurement and estimation of activity performance in entirety acting on fraud detection alerts to decrease losses due to fraud.

Fraud policy is the sixth stage; the fraud stage refers in the organization is a basic statement that specifies the attitudes of the company toward fraud. The fraud policy helps candidates recognize fraudulent activities and illustrates and specifies the actions to be taken in case of fraud, financial crime, or the existence of suspicious activities. The fraud policy encompasses setting policies that prevent fraudulent practices, assessment and

evaluation of the fraud policies, and communication to the staff to attempt to decrease the cases of fraud in the organization (Ina, 2016).

Policy development encompasses three distinct aspects: setting the policy, assessing and demonstrating that everyone in the organization has adequate awareness of this policy to decrease opportunities for committing fraudulent activities, and decreasing real fraud cases (Akelola, 2012).

The seventh stage is the examination or investigation stage, which focuses mainly on getting adequate evidence and information to inhibit fraud, proving that theft assets are entirely recovered or given back to legal owners, and providing sufficient confirmation to improve accomplishments in providing evidence to law courts and imprisoning or punishing the fraud perpetrators (Nenga & Osiema, 2013). This stage focuses basically on examinations inside the company, investigations outside the company, and coordination with low-level enforcers. Investigations within the business will encompass investigations and examinations of employees and individuals' trading with the business, for instance, suppliers, consultants, or wholesalers, whereas investigations outside the company involve inspecting and investigating customers, fraudsters, and organized groups (Wilhelm, 2004).

The eighth stage is the delivery of evidence in law court; prosecution is “the establishment and acting of legal actions against somebody in respect of a criminal charge” (Oxford Dictionary).

According to Chepkoech and Rotich (2017), the prosecution of perpetrators of fraud is essentially directed at preventing the commission of fraudulent activities and compensating the victimized by punishing the perpetrators. Besides, prosecution aims to confirm that the reputation of the business is maintained and supported by preventing and

fighting fraudulent practices and financial crimes, confirming that fraud perpetrators are clearly recognized, prosecuted, and punished. This is the last stage in the fraud management lifecycle that determines the success or failure of other stages in the fraud management lifecycle.

These actions and doings ought to be clear to the potential fraudsters who might target the business, and it should become clear to them that the fraudulent activities and actions will be detected and punished. Besides, the prosecution aims to detect and recover the stolen resources and assets and to compensate the aggravated individuals (Ina, 2016).

According to the fraud management lifecycle, there are specified methods to control and manage fraudulent activities. These stages may be efficient, may not be comprehensive, and they are not the merely stages to control, detect, and prevent fraud. Besides, these stages are not always linear, as argued by the followers and proponents of this theory (Ijeoma & Aronu, 2013). Besides, there are other processes to manage fraud and decrease the inclination toward fraud, such as increasing the efficiency of the internal control systems, adequate and satisfactory financial and nonfinancial compensation and remuneration system, ownership options, and adequate training and awareness campaigns on fraud detection, prevention, and its consequences. Besides, following these stages of fraud management lifecycle theory takes a long period of time.

Table 1 Comparison of Fraud Theories

Aspect	Fraud Triangle	Fraud Diamond	Fraud Management Lifecycle
<b>Focus</b>	Explains why fraud occurs	Explains <i>who</i> commits fraud (capability added)	Provides <i>how</i> to manage and control fraud systematically
<b>Main Components</b>	Pressure, Opportunity, Rationalization	Pressure, Opportunity, Rationalization, Capability	Deterrence, Prevention, Detection, Mitigation, Analysis, Policy, Investigation, Prosecution
<b>Strengths</b>	Simplicity, widespread use	Adds personal traits, better predictive power	Holistic approach, organizational focus
<b>Limitations</b>	Oversimplification, ignores individual skills	Measurement of capability is complex	Resource-heavy, complex to implement fully

## 2.5 Types of Fraud

As the following graph presents there are three types of fraud: corruption, asset misappropriation, and financial statement fraud.

Corruption originates from conflicts of interest, as has been explained by the agency theory.

1. Corruption takes place when senior executive management deliberately misuses their assigned power and position to achieve their own interests at the expense of the shareholders and stakeholder interests. Corruption may be in the form of bribes or the arrangement of procurement schemes that give them the opportunity to use the resources and assets of the organization. illegal operations, activities, and coercions (Abdullahi & Mansor, 2015). According to Almalki (2022), there is a positive correlation between corruption and the probability of fraud commitment in business, earnings manipulation, earnings management, and creative accounting.
2. Asset misappropriation is a specific type of fraud in which managers discharge cash from the organization, establish fraudulent disbursements, and obtain companies` assets illegally or unethically (Nia & Said, 2015).
3. Manipulation of financial statements has two categories: either overestimation of income, revenues, and assets or underestimation of organization liabilities and leverage (Lisic, Silveri, Song & Wang, 2015). The aim of the overestimation of the financial statements is to assume that the financial performance and efficiency of the business activities and operations exceed their actual financial performance to maintain the high market value of the business and to improve the senior management compensation and remuneration that are based on the company's financial performance and well-being.

However, the goal of the underestimation is to overcome some obligations, such as tax obligations and tax disbursements (Wells, 2017).

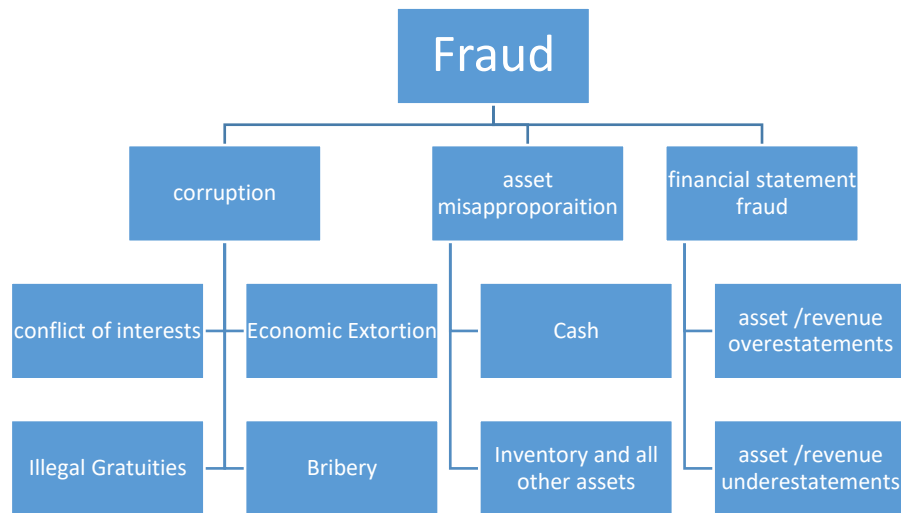


Figure 4 Types of Fraud in Organizations.

## 2.6 Fraud Prevention

According to the fraud triangle theory, the essential root of fraud is either necessity, greed, or opportunity. However, in order to prevent fraud, it's important to identify and eliminate the reasons for fraud. This takes place through the process of hiring ethical employees and managers, increasing awareness of fraud consequences, improving the ethical culture and environment of the company, and increasing the efficiency and effectiveness of the internal control system in the business (Chepkoech & Rotich, 2017),

Fraud prevention refers to an activity performed by the board of directors and senior executive management in terms of setting clear policies, procedures, and systems that confirm that the required actions have been adopted by the board of directors, senior executive management, and other company staff to provide satisfactory and sufficient assurance in increasing the reliability of the financial statements, ensuring compliance with

the laws and regulations, and efficient activities and operations of the company (Sidik, 2016).

## **2.7 Fraud Detection**

It's necessary to mention that measurement of fraud detection differs among types of fraud. Thus, in order to detect fraud, it's necessary to have a good level of awareness of the various types of fraud that may take place in businesses. The detection of fraud usually takes place by concentrating on indirect evidence. Fraud indications are often indicated by the emergence of symptoms, for instance, a change in the individual's lifestyle and behavior, customers' complaints, or suspicious documentation. Thus, the fraud detection indications are associated with the behavior of the individuals or the conditions' environment (Sidik, 2016). These indications of fraud commitment are usually called red flags, which are danger signs (Irwandi, Ghozali, Faizal, & Pamungkas, 2019).

## **2.8 Fraud Prevention and Detection Tools and Instruments**

Eiya, Otalor and Awili (2013) found that forensic accounting plays an essential role in fighting corruption and fraudulent practices, as it acts an essential role in managing fraud as the forensic accountants have good knowledge and expertise to articulate their opinions in fraud investigation and detection. Moreover, Albercht, Albrecht, Albrecht, Zimbelman (2018) found that technological breakthroughs and developments such as the invention of artificial intelligence have enabled the development of innovative tools and instruments to detect fraudulent practices, either in data collection, data processing, or transaction analysis, to identify fraudulent signs.

Bierstaker, Brody and Pacini (2006) found that password protection, firewalls, and computer antivirus are crucial tools and techniques to detect and prevent fraudulent practices. Furthermore, Chen, Liou, Chen and Wu (2019) found that data mining techniques have an essential role in fraud detection and prevention in businesses. In the same context, Rahman and Anwar (2014) demonstrated that firewalls, passwords, protective software, and filtering are efficient and effective tools to detect and prevent fraudulent practices in listed companies.

Chen et al. (2019) demonstrated that efficient and effective internal control systems and developed protection software play an essential role in fraud prevention and detection in listed companies in Malaysia.

Othman, Aris, Mardziah, Zainan and Amin (2015) found that the most efficient fraud detection and preventions instruments are increasing the efficiency of the board of directors and audit committee, enhancing the quality of internal control, setting clear policies for reporting fraud, rotating employees, hotlines for antifraud, recruiting and hiring forensic accountants, arranging fraud detection and prevention training , the existence of fraud investigation departments, fraud awareness and knowledge programs, and anti-whistleblowing policies.

Lee and Fargher (2023) found that the existence of hotlines, efficient corporate governance mechanisms, and a sound ethical code increased the efficiency and effectiveness of fraud detection and prevention in companies. According to Sujana, Saputra and Manurung (2020) the most efficient tools and policies to detect and prevent fraud are the existence of efficient and effective policies that fight corruption and fraud practices, reviews of contracts with different vendors, reference checks of employees and staff,

performing analytical reviews, protection passwords, firewalls, data mining, using artificial intelligence in audit practices, discovery samplings, fraud reviews, promoting ethical behavior and a code of ethics, and a code of conduct.

Paranoan et al. (2022) examined the role of fraud prevention, detection, and investigative audit on fraudulent financial statements in Makassar, Indonesia. The researchers found the most important factors influencing the commitment to fraudulent practices are auditing standards, the audit work environment, independent of the auditor, and due professional care.

## **2.9 Mechanisms in Fraud Detection and Prevention**

According to Sanchez-Martin, Lozano-Reina, Baixauli-Soler and Lucas-Perez (2017), there are basically two mechanisms in fraud prevention and detection: Control mechanisms and incentives and rewards mechanisms.

### **2.9.1 Control Mechanisms:**

The most prevalent and efficient control mechanisms to decrease the potential of fraudulent practices and conducts in the business are the existence of an efficient audit committee that has independent directors (Chen et al., 2019). Actually, the existence of an effective and efficient audit committee prevents and detects financial reporting procedures that are the most significant tools and instruments to disguise and hide fraud occurrences and instances. One of the most basic responsibilities and duties of the audit committee is to control and supervise the financial information disclosure and reporting in the organization (Eulerich, Kremin & Wood, 2019).

There are a number of laws and regulations that mandate organizations and businesses to oversee and monitor their financial reporting activities. For instance, the Sarbanes-Oxley

Act of 2002 mandates that US companies evaluate their internal control mechanisms and to adopt further assistance and advice from external auditors to report fraud. These laws and regulations are directed to confirm that actions of financial fraud are mitigated and decreased, and organizations are involved in morale activities and conduct. Likewise, Coram, Ferguson and Moroney (2008) stated that increasing the effectiveness and efficiency of the internal control environment and supporting the efficiency of the internal audit committee have a significant role in decreasing fraudulent practices in listed companies in New Zealand and Australia.

Yang, Jiao, and Buckland (2017) claimed that ownership structure and the existence of large ownership and institutional ownership decrease the potential fraud commitment. They also noticed that managerial ownership, board independence, and the existence of an internal audit committee have insignificant effects on fraud prevention. Besides, He, Labelle, Piot and Thornton (2009) found that there is a significant role for the board of directors' independence and corporate governance mechanisms in decreasing fraudulent practices in listed companies in Canada.

### **2.9.2 Incentive Mechanisms:**

According to the incentive mechanisms argument, the organization can decrease the temptation of fraudulent practices by increasing the incentives for stakeholders to avoid fraud commitment (Yang et al., 2017). The most significant incentive mechanisms are giving bonuses to senior executive management based on the organization's performance and giving ownership of the company to senior managers, such as the existing stock option plan for managers (Chen et al., 2019). A study of Zhou et al. (2018) that is conducted in listed companies China examined the correlation between CEO and CFO compensation

and the potential of fraud commitment. The study findings demonstrated that senior executive managers with more compensation and reward were less inclined to commit financial fraud.

## **2.10 Nontraditional Approaches of Fraud Prevention and Detection**

Nowadays, with the expansion of technological developments and breakthroughs, organizations can use several fraud detection and prevention instruments that are based on technology, such as big data analysis, increased automation, appointing ethics officers, machine learning, and artificial intelligence (Bologa, Bologa & Florea, 2013)

Akinbowale et al. (2024) found that utilization of efficient technology in fraud detection and prevention acts an essential role in fighting fraudulent in banking institutions in South Africa. Moreover, they found that the most significant technological tools in fraud prevention and detection in banking institutions are firewalls, financial ratio analysis, digital analysis, filtering software, discovery sampling, and virus protection. The most common nontraditional approaches of fraud prevention and detection:

The Big Data analytical method gives organizations the opportunity to deal with and analyze large data sets to prevent and detect fraudulent practices, as this technology transfers raw data into meaningful and valuable information. The most well-known companies that produce big data technologies are SAS, IBM, and Microsoft. Besides, there are other open data sources that businesses can use freely without any cost or charge (Akinbowale et al., 2024).

According to Bologna et al. (2013) there are a large number of fraudulent practices in the health sector in Romania. Thus, the scholars argued that there is a necessity to use big data analytics to increase the efficiency and effectiveness of fraud prevention and detection practices.

Big Data is a more recent technological environment to fight fraud, as these instruments have the ability to analyze large amounts of data that human memory cannot analyze since it cannot process large amounts of data. Besides, even though the organization hired a large number of experts and analysts, the cost of this process is very high. Thus, the solution is to acquire big data analytics to analyze the data to prevent and detect fraudulent practices (Yang et al., 2017).

### **2.10.1 Increased Automation**

There are a number of economic sectors, for instance, the financial services sector, that require advanced technology to detect and prevent fraud in their organizations due to the high losses attributed to these practices, either to financial institutions or the national and global economies in general (Yang et al., 2017).

Siering et al. (2016) analyzed the fraud cases in the financial services sector in the USA and Europe. The researchers suggested that there is a necessity to use an advanced decision support system to track transactions in this complicated sector to detect and prevent fraud.

Van Vlasselaer et al. (2017) argued that automated systems are important tools and techniques to prevent and detect fraud. One of these systems in this regard is the GOTCHA, as this system decreases the cases of fraud in organizations as it helps to analyze the relationship between employees and their organizations to detect fraudulent practices and

actions. Besides, this system analyzes data to infer the likelihood of fraud occurring in the future.

Save et al. (2017) using decision tree-based automated mechanisms to deal with credit card fraud. They found that this technology detects and prevents fraud as it uses complicated algorithms that are holistic. Besides, it analyzes previous transactions that have been conducted with customers.

### **2.10.2 Appointing Ethics Officers, forensic accountants, fraud examiners, and other related jobs and professionals**

Kaptein (2015) found that a number of companies around the globe have recently used advanced instruments and technologies for fraud detection and prevention, for instance, by setting ethics programs and hiring ethics experts. The researcher argued that even though companies have a diversity of alternatives related to ethics programs to select from, it can be hard to estimate which program is the most efficient for the organization. Since the nature and activities of business differ greatly, the ethical program should identify clear ethics officers, investigation policies and procedures, and ethics reporting lines.

### **2.10.3 Machine Learning and Artificial Intelligence (AI)**

Machine learning and AI are tools developed to detect and prevent fraud. Jordan and Mitchell (2015) found that these two mechanisms are effective and efficient to detect and prevent fraudulent practices in financial institutions in the USA. Besides, Bauder and Khoshgoftaar (2018) found that machine learning and AI are tools to detect and prevent fraud in the medical and healthcare sectors in the USA. Moreover, they found that these tools help analyze data using machine-learning-based algorithms.

Qiu and He (2018) found that AI and machine learning instruments play an essential role in decreasing fraud incidents in the Chinese film industry, as they help to analyze a large amount of data and can be efficient and effective instruments for decreasing fraudulent practices.

#### **2.10.4 Red Flags**

Rustiarini and Novitasari (2014) defined red flags are signals and alarms for auditors to concentrate on through the audit performance to get adequate audit results and decrease the fraudulent practices and fraud risk commitment in the organization. Besides, Hanifa and Laksito (2015) stated that red flags are an indicator that are infrequent in the presentation of the financial statements, as well as that they need more investigation. The existence of these red flags is an indication for fraud detection and it is interesting for auditors. Likewise, according to Purwanti and Astika (2017), there is a positive and significant correlation between red flags and the potential of auditors to detect fraudulent practices in organizations.

Fraud prevention and detection is not an easy activity or task performed by external auditors and experts, as they should have a clear and high level of awareness of fraud commitment methods and characteristics (Rustiarini & Novitasari, 2014). Furthermore, the fraud detection does not always have a clear spot as there is no definite way of fraud commitment (Kassem & Higson, 2012).

The existence of weak and inefficient internal control systems as well as weak corporate governance systems will increase the potential for fraud commitment in organizations. Thus, the red flags are efficient methods to detect and prevent fraud (Yucel, 2013).

Efrim-Boritz and Timoshenko (2014) stated that red flags are checklists that help the auditors detect fraud in organizations as they reflect suspicions of probable deceitful conduct. At the same context, Holtzlatt, Needles, and Tschakert (2016) stated that red flags are indications and signs that warn the auditors of fraud commitment in the audited client, as there is a positive correlation between these signs and the risk of fraud commitment at the workplace.

Some of the red flags are the existence of the manager or employee under a high level of financial pressure or severe financial crisis, increased power and authority in the company, rewards and remunerations, rising prices, reducing quality, discrimination and nepotism in vendors, or complaints from customers (Amin, 2019).

Zakaria and Setyahuni (2023) explored the most red flags of fraud commitment detection. They found that financial crisis and pressure, unwillingness to share responsibility and delegating authority, and not taking vacations for long periods of time. aggressive behavior, habits, and drinking drugs and gambling have a positive effect on fraud commitment practices.

Mangala and Kumari (2015) stated that the most prevalent and red flags are criminal experiences, hostile attitudes, exaggerated financial performance targets, and high remuneration and reward system for senior executive management, existence of poor commitment with laws and regulations, high compensation and reward system, and rapid developments and changes in the economic industry, existence of complicated organizational culture and structure, close relationship with suppliers and customers, poor and ineffective separation of responsibilities and duties among employees and coworkers,

and poor job screening, deficiency of the internal control system, and poor physical control policies, procedures and environment.

Moreover, Kramer (2015) found that red flags have a significant role in fraud prevention and detection as they are indicators of possible fraudulent practices. Some of the documented red flags in that study are missing and voided checks, a high amount of expenses compared to the previous years and other competitors in the market, a lifestyle that goes beyond the employee's or manager's salary and income, purchasing expensive things such as expensive automobiles or buildings, or going on vacation on a constant basis within the same year.

According to the ACFE (2016), the most notable red flags are "living beyond income, financial necessity or financial crisis, close relationship with suppliers or customers, family problems and divorce, complaints about the amount of salary and compensation, suspiciousness, not taking vacations for long periods of time, excessive work pressure at the workplace, social isolation, legal background problems, complaints about lack of authority, and instability in life circumstances and conditions."

## **2.11 Fraud in Palestine**

AMAN Foundation (2018) explored the reality of fraud in Palestine and it is prevalence. The study documented that the fraud is a serious problem in Palestine and it needs for real efforts to solve this problem. Moreover, there is a significant increase in fraud in Palestine and the percentage of citizens who considered anti-fraud efforts increased fraud is still weak and inadequate.

Abu Amuna (2018) examined the effect of implementing fraud detection and prevention instruments in decreasing fraud in Ministry of Health in Gaza strip. The study followed the quantitative research approach and exploratory design using questionnaire design. The study results confirmed that there is a high level of application of instruments to detect and prevent job fraud in Ministry of Health in Gaza strip.

Table 2 the Reported Fraud Offenses in Palestine by Type of Criminal Offense and Governorate, 2022

Type of Criminal Offense	Claiming Others Identity (Impersonation)	Official Documents Forgery	Forgery Checks\ Hot Checks	Forgery / Currency Counterfeit Money	Fraud\ s windle	Perjury	Total
Jenin	6	3	0	8	172	30	219
Tubas	0	3	0	0	14	0	17
Tulkarm	1	4	0	12	31	10	58
Nablus	3	8	0	9	85	3	108
Qalqiliya	0	2	0	27	82	3	114
Safit	2	6	0	15	24	5	52
Ramallah & Al-Bireh	26	7	18	4	248	16	319
Jericho & Al-Aghwar	2	7	0	0	59	4	72
Jerusalem	6	6	0	0	48	5	65
Bethlehem	2	17	0	7	98	5	129
Hebron	1	18	3	4	221	34	281
Total	49	81	21	86	1082	115	1434

Source: [www.pcbs.ps](http://www.pcbs.ps)

Table (1) shows the reported fraud offenses in Palestine by type of criminal offense and governorate, 2022. The total reported fraud offenses are 1434. The highest type of reported fraud offenses is fraud/swindle (1082) followed by perjury (115). The most

reported fraud offenses were in Ramallah and AL-Bireh (319) cases followed by Hebron (281).

## **2.12 Types of Fraud in Securities and Financial Market**

There are a number of ways that players in securities markets can commit fraud and be involved in deliberate irregularities actions that most probably encompass fraudulent transactions that are deliberate misrepresentation of information attributed to the trades and dealings, handling of falsified records and documents, and intentionally violating securities laws and regulations (Jonesn, 2012).

Deliberate actions include improper explanation of relationships, mistakes in deriving data from securities, errors in accounting standards and principles, and disclosure failures of securities.

Securities fraud refers to the deliberate utilization of securities through misrepresentations or other deceptive actions with the aim of manipulating someone to trade in a manner that is not good for their own (Straney, 2011). Securities fraud includes a wide diversity of specialized areas and different forms. These conducts lead to huge financial loss and collapse of trust and confidence in the financial market. This section emphasizes on insider trading and market manipulation.

### **2.12.1 Insider Trading**

Wang and Steinberg (2010) defined insiders as the staff, senior executive managers or controlling shareholders of an organization who have awareness of material nonpublic information. In securities markets, fraud actions and conducts practically refers to disproportionate information and to externalities that are not directly involved in transactions. These conducts are usually coordinated by management or the individuals

who have more potential to access internal information inside the organization or they have preferential access to private information (McGeever, 2017). PricewaterhouseCoopers found that approximately (43%) of fraudulent practices are committed by senior executive management and these practices and conducts lead to massive losses and damages in organizations either financially or in collapse of brand image and reputation.

### **2.12.2 Market Manipulation**

The market manipulation in securities markets is to the intentional interferences in the securities prices by significantly changing supply and demand function of the market. In these cases, the prices of securities do not reflect the conditions of the market and this creates high fluctuations in securities prices and creating volatile financial stocks (McGeever, 2017). This type of fraudulent practices and conducts are committed by manipulator trying to create artificial, incorrect or misleading prices and it has an inverse effect on efficiencies of securities and financial markets, transparency, public trust and economic development and expansion (Alexander & Cumming, 2020).

### **2.13 Palestine Exchange (PEX)**

Palestine Exchange (PEX) was created in 1995 to encourage the investment process in Palestine. The Palestine Exchange (PEX) went public corporation in 2010 to enhance transparency and corporate governance standards and principles. The Palestinian Capital Market Authority is the supervisory organization over the PEX. PXE is the first Arab fully automated stock exchange ([www.pse.com](http://www.pse.com)).

Nowadays, the number of listed companies in Palestine is (48) companies with capitalization exceeds \$3 billion. The companies are categorized into five economic

sectors: Banking, insurance, investment, industrial, and service sector. Most of these companies are traded in Jordan Dinar and some of them in US dollar.

The vision of PXE is to "be a model for Arab and regional financial markets, through providing innovative services, proposing ideal investment opportunities in securities, attracting investments, the use of state of the art technology, compliance to the rules of corporate governance, and establishing constructive relations with Arab, regional, and global markets" ([www.pse.com](http://www.pse.com)).

The mission of PXE is "to provide a fair, transparent, and efficient market for trading securities that serve investors, protect their interests, contribute to creating an enabling environment that attracts local and foreign investments, and interact with local and Arab relevant institutions in a manner that serves the national economy and enhances the culture of investment in financial markets" ([www.pse.com](http://www.pse.com)).

Basically, the PXE aims to develop local investment and attract both foreign and Palestinian investors. Besides, increasing the number of listed companies in Palestine to find more investment opportunities for investors to provide innovative and different financial instruments ([www.pse.com](http://www.pse.com)).

The PXE started its work at 18/2/1997 reliant on electronic trading and clearing, depository, and settlement systems. The Trading at PXE conducted daily from Sunday till Thursday. The trading session begins at 9:45 and finishes at 13:30 ([www.pse.com](http://www.pse.com)).

## **Chapter Three**

### **Research Methodology**

#### **3.1 Introduction**

As stated earlier, this study aims to explore the reality of fraud detection and prevention in Palestinian securities sector. This chapter presents the research approach, design, data collection methods, population and sample and sampling selection method as well as the measurement of questionnaire validity and reliability, the statistical analysis techniques and the ethical considerations of this study.

#### **3.2 Research Approach**

According to Mohjan (2020) research is “a framework utilized for planning, implementation, and analysis of a study, the appropriate selection of a proper research design and methodology can provide an effective and efficient original research”. There are basically two types of study methods that are quantitative and qualitative research methods. The selection of a specific research design depends on the type of the data to be obtained and analyzed, Quantitative research design deals with variables using numbers and measured on a ratio scale. However, qualitative research approach is used when dealing with textual, visual, or audio data and information (Saunders, 2015). Often, the qualitative data can be quantified to make analysis more smoothly and to be understood clearly. This quantification finding in the creation of categorical variables for instance dummy variables and interval variables for instance Likert scale measured. In this instance, originally, qualitative data can be analyzed using quantitative methods of data analysis.

The researchers usually follow either quantitative or qualitative research design in their studies. Meanwhile, others use a mixed of quantitative and qualitative research methods to perform their studies. This method of research design integrates both the quantitative and qualitative research approaches data and they usually use the questionnaire and interview or focus group to obtain data.

The researcher in this study used the mixed research approach using both the quantitative and the qualitative to perform this study as the researcher in this study intends to quantify the opinions, attitudes, perceptions and behavior of the examined sample and other defined variables and to generalize findings and outputs from a larger sample population by generating numerical data. This research method implies the obtaining of qualitative data and using quantitative methods and tools of data analysis. Quantitative data is processed by numbers, and it could be secondary data such as the data taken from the statistical data bases and annual reports of the listed companies. The qualitative source is the using the interviews.

### **3.3 Data Collection Methods**

Using two sources of data collection methods: The secondary data that is a revision of previous articles, studies and publications that examined the current topic of the study previously to write the literature review, develop the theoretical framework of the study, design the questionnaire of the study, and compare the results of this study with the findings of previously held studies to shows the similarities and differences among them. Also using the primary data through using questionnaire design to perform the study and to solicit the required information and responses of the studied sample. Besides, using the personal interviews.

The instrument of the study consists of five constructs that are:

1. First Construct: The reasons for occurrence of fraud in Palestine securities sector.
2. Second Construct: The most prevalent types of fraud in Palestine securities sector.
3. Third Construct: The specific indicators or "red flags" that signal potential financial fraud in the Palestine securities sector.
4. Fourth Construct: The most followed fraud detection mechanisms in Palestine securities sector.
5. Fifth Construct: The most common followed fraud preventive mechanisms in Palestine securities sector.

The questionnaire followed Likert scale from five degrees that are strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2) and strongly disagree (1).

The researcher adopted the following scale to evaluate the degree of the agreement.

Table 3 Agreement Descriptor

<i>Mean Likert-type Value</i>	<i>Agreement descriptor</i>
1-1.80	Very Low
1.81 -2.60	Low
2.61 -3.40	Moderate
3.412-4.20	High
4.21-5	Very high

### 3.4 Population

The population of the study is the external auditors in audit offices and internal auditors in Palestine securities sector. The number of registered auditors in Palestinian Association of Certified Public Accountants is approximately (237) auditors (Palestinian Association of Certified Public accountants, 2025).

### **3.5 Sample**

The sample is a subset of the population. The researcher selected a sample of both internal as well as external auditors in Palestine securities sector to achieve the objectives of the study, answer its questions, and examine the validity of the assumed hypotheses of the study. The sample consists of (141) external and internal auditors.

The purposeful sampling selection method is the most efficient and appropriate method to select the units of the sample, as the researcher selected the internal as well as external auditors as the researcher selected auditors who are most relevant to the study objectives. The aim is to obtain detailed and insightful understanding of specific cases or phenomena. Besides, the selected auditors can provide rich and relevant data. Besides, they have specialized knowledge and experience that make their perspectives very important for understanding the fraud prevention and detection process, compliance, and effectiveness. Thus, the purposeful selection method ensures that time and resources are focused on the most informative participants.

### **3.6 Validity and Reliability of the Instrument**

#### **3.6.1 Validity of the Questionnaire**

The obtained data from the studied sample using Google Drive platform has a high extent of credibility and can be utilized in study for a number of justifications: First, Google Forms does not manipulate the responses. However, it provides convenient and easy forms that the investigated sample can fill online. Second, Google forms has the ability to track the IP address of the respondents and it gives the researcher the opportunity to verify the authenticity of individual responses utilizing digital metadata for instance the time it took the respondent to answer the questions, the IP address from which the responses

were filled and even the location of the respondents that can be recognized by the IP addresses.

Validity refers to the expression and measurement if the instrument has the ability to measure the intended behavior or quality it desires to measure precisely and to what extent the instrument is functioning well as planned for it. There are a number of techniques to estimate the validity of the instrument that includes predictive validity, concurrent validity, content validity, construct validity, and criterion related validity.

The researcher measured the content validity of the instrument by taking expert opinion in the questionnaire of the study. As the researcher consulted some experts to assess each expression in the designed questionnaire in terms of its content appropriateness and assess each expression in parallel with the experts` opinions.

Face validity is also used in this study as it refers to “a subjective decision based on the perceptions, attitudes and feelings of the researcher about the functioning of the measuring instrument” (Kaplan and Saccuzzo, 2017). Some of the considerations in this regard are the objective of each statement in the questionnaire and its fitness for the designed questionnaire. Besides, the comprehensibility of the statements for the investigated sample as well as the readability of the statements in the questionnaire and the attractiveness of the statements for the examined sample of the study (Almanasreh, et al, 2019).

### 3.6.2 Reliability of the Questionnaire

Reliability shows the extent to which the instrument is stable and its consistency over time. Thus, it refers to the ability of the questionnaire to give similar findings and outputs when used at different times. Actually, it is unexpected that the same findings will be given every time as a result of differences at the time the questionnaire is used, as well as change in the studied population and the sample. The existence of high correlation among the responses of the examined sample indicate that the instrument has level of reliability and consistency. The researcher used both Cronbach coefficient technique to estimate the reliability of the instrument.

Table 4 Cronbach Alpha of the Questionnaire and Its constructs

<b>Constructs</b>	<b>Cronbach's Alpha</b>	<b>N of Items</b>
Reasons for occurrence of fraud	0.834	19
Types of prevalent fraud	0.94	17
Indicators or "red flags" that signal potential financial fraud	0.961	35
Fraud detection mechanisms	0.813	9
Used fraud preventive mechanisms	0.937	14
<b>Total</b>	<b>0.969</b>	<b>94</b>

### **3.7 Pilot Study**

Pilot study is an instrument that researchers use to get rid of misunderstanding with an inaccurately formulated data gathering instrument. The pilot study is “A preliminary study that the researchers administer prior to the core studies when a problem, process, phenomenon or instrument definite to a specified community, location, object or society is not quite examined. Thus, few is recognized about it” (Mutz and Müller, 2016, P. 35).

The researcher administered the questionnaire to a set of (20) auditors in Palestine securities sector to identify to what extent the questionnaire is valid and reliable before selecting the entire sample of the study and it is the first contact with the examined reality. It gives researchers the potential and opportunity to obtain preliminary awareness and knowledge concerning the examined phenomenon.

### **3.8 Statistical Analysis Methods**

To answer the study questions, achieve its objectives, and examine the validity of the set hypotheses. The researcher used a number of statistical tools and functions to analyze the obtained data and information:

1. The researcher used the frequencies and percentages to analyze the personal and demographic characteristics of the studied sample.
2. The researcher used the descriptive analysis through using means, standard deviation, percentages to measure the studied sample responses about the statements of the questionnaire to show how their responses are centralized or dispersed.
3. The researcher also used Cronbach alpha and split half techniques to estimate the reliability of the studied sample responses.

4. Using Pearson correlation to estimate the validity of the instrument.
5. ANOVA to examine if there are statistically significant differences among the means of more than two groups of respondents such as education level or experience toward the reality of fraud in Palestine securities sector.

### **3.9 Ethical Considerations**

The researcher committed a number of ethical considerations and principles in performing this study as the researcher adhered to the following considerations:

1. The researcher took a permission from Palestine securities sector companies to conduct this questionnaire on the investigated sample.
2. The researcher informed the investigated sample that the participation in this study is voluntary participation and they have the choice to not fill this questionnaire.
3. All the required information was used for academic purposes and the taken information from the investigated sample was dealt secretly and the researcher did not ask about their privacy or personal information about the investigated sample such their names or where the name of the company or institutions where they work.

### **3.10 Summary**

The researcher presented in this chapter the research methodology through identification and explanation of this thesis research approach, design, population and sample of the study, data collection methods, reliability and validity of the instruments, and the used statistical analysis methods and techniques.

## Chapter Four

### Data Analysis & Results

#### 4.1 Introduction

This chapter presents the findings of the thesis to explore the reality of fraud detection and prevention in Palestine securities sector. This chapter consists of two sections that are the findings of the study pertained to the study questions and the second section is related to the findings of the study hypotheses from the perception of the sample.

#### 4.2 Sample Characteristics

The data was taken from a sample of (141) external and internal auditors. The table shows the distribution of the studied sample based on demographic variables.

Table 5 Characteristics of sample (n=141)

Demographics	Answers	Frequency	Percentage (%)
Age	Less than 30 years	32	22.7
	30 -39 years	58	41.1
	40 -49 years	28	19.9
	50 - 59 years	12	8.5
	60 years or more	11	7.8
	Total	141	100.0
Education level	Diploma	1	.7
	Bachelor degree	83	58.9
	Master Degree	51	36.2
	Doctorate degree	6	4.3
	Total	141	100.0
Experience	10 years or less	82	58.2
	11-20 years	42	29.8
	21 years - 30 years	14	9.9
	31 years - 40 years	3	2.1
	Total	141	100.0
position	Internal Auditor	53	37.6
	Junior Auditor	18	12.8
	Partner	30	21.3

Demographics	Answers	Frequency	Percentage (%)
	Senior Auditor	40	28.4
	Total	141	100.0
	Financial Audit	103	73.0
	Operational Audit	14	9.9
Primary Area of Auditing	Compliance Audit	13	9.2
	IT audit	6	4.3
	Others	5	3.5
	Total	141	100.0
	Never	17	12.1
	Frequently (monthly or more often)	16	11.3
Frequency of Interaction with Fraud Cases	Occasionally (every few months)	43	30.5
	Rarely (once a year or less)	65	46.1
	Total	141	100.0
	Extensive	35	24.8
Level of Training in Fraud Detection and Prevention	Moderate	100	70.9
	Sometimes	5	3.5
	Never	1	.7
	Total	141	100.0
Do you have any professional certificate/s in audit?	Yes	78	55.3
	No	63	44.7
	Total	141	100.0

Source: researcher analysis.

The distribution of the studied sample based on age shows that the highest percentage of respondents (41.1%) in the range of (30 – 39) years, (22.7%) were in the range of less than (30) years, (19.9%) were in the range of (40 -49) years, (8.5%) were in the range of (50 -59) years, (7.8%) were in the range of (60) years or more. This indicates that the studied sample basically consisted of auditors in their 30s, assuming that the study basically demonstrates the perspectives or characteristic of this age category. The significant demonstration of respondents under 30 points to a moderately young sample, whereas the smaller proportions in older age brackets propose fewer older participants.

This distribution may affect the general results, basically if age-related factors are relevant to the study's focus.

Concerning educational achievement, the highest portion of the studied sample has a bachelor's degree (58.9%) and (36.2%) had undertaken master degree. Smaller proportions held a diploma (0.70%), and (4.3%) had doctorate. This result indicates that the highest percentage of the investigated sample have completed undergraduate higher education. This indicates that that the sample of the study basically comprises of auditors with higher education qualifications, mostly at the bachelor's and master's levels. This indicates that the population studied values or has access to higher education opportunities. The relatively high percentage of master's degree holders compared to diploma holders or doctorate holders indicates a concentration on postgraduate education that might be related with higher skill levels or professional expertise.

The small percentage of diploma holders assumes that vocational or technical qualifications are less common in this sample, possibly pointing to a demographic that highlights academic rather than technical training. The relatively low proportion of doctorate holders might reflect the challenges or barriers associated with doctoral studies, such as time, financial investment, or availability of research opportunities.

Overall, these findings could imply that the educational background of the sample aligns with professional or academic environments where higher education is valued and prevalent. It also raises questions about access to advanced degrees and whether educational attainment correlates with other variables like employment status, income, or social mobility within this population.

In terms of experience of the studied sample, the analysis shows that (58.2%) they had (10) years or less of experience, (29.8%) were in the range of (11-20) years, (9.9%) were in the range of (21 – 30) years, and (2.1%) were in the range of (31) years – (40) years. This indicates that most of the respondents are somewhat less experienced with 10 years or less in their field. This indicates that the sample basically consists of auditors early in their career or with limited experience. This distribution may have implications for the study results. For example, the perspectives, skills, or attitudes toward particular concerns could be affected by the extent of experience. This dominance of less experienced auditors might indicate a necessity of taking into consideration the way that experience affects the extent of the variables examined.

The sample was predominantly internal auditors (37.6%), with (12.8%) were junior auditors, (21.3%) were partners, and (28.4%) were senior auditors. This distribution shows a diverse group of studied samples across various roles within the audit profession. The representation of professional auditors shows that the sample includes auditors with significant roles that can lead to credibility and depth to insights derived from the data. The relatively low percentage of junior auditors may indicate that the study results are more reflective of experienced professionals rather than entry level auditors and candidates. Existence of mix of roles gives the study the opportunity for comprehensive understanding of internal auditing practices across various organizational levels.

The sample was predominantly financial auditors (73.0%), with operational audit (9.9%), while compliance audit accounted for (9.2%), IT audit for (4.3%), and others for (3.5%).

The analysis shows that the highest percentage of the investigated sample are financial auditors that is 73%. Other types of audits are less represented: operational audits (9.9%), compliance audits (9.2%), IT audits (4.3%), and various other audits (3.5%). This result shows that financial audits are the chief concentration in the sample, signifying that the main concern or activity of the sampled group or organization is associated to financial review and assurance. The comparatively minor extents of operational, compliance, and IT audits indicate that these regions are less highlighted or less common within this context. The existence of other categories of audits (3.5%) proposes some variety in audit activities, even though they are less prominent.

The dominance of financial auditors (73%) could reflect the primary regulatory or organizational priorities, as financial audits are often mandated for compliance, transparency, and stakeholder assurance. The smaller representation of operational and compliance audits may indicate that these areas are secondary concerns or are conducted less frequently. The relatively low percentage of IT audits (4.3%) might suggest either a lesser emphasis on technology-related risk assessments or a potential area for growth, especially given the increasing importance of IT in organizational processes. The diversity in audit types highlights a multifaceted approach to organizational oversight, but the skew towards financial audits might point to an area where further diversification or focus could enhance overall governance.

According to the frequency of interaction with fraud cases, the analysis shows that (12.1%) they never interacted with fraud cases, (11.3%) they frequently that is monthly or more often interacted with fraud cases, (30.5%) were interacted occasionally that is every few months, eventually, (46.1%) expressed that they rarely interacted with fraud cases.

This result demonstrates that a mainstream of persons (46.1%) report seldom work together with fraud cases, signifying inadequate experience or engagement with such events. A substantial percentage (30.5%) run into fraud cases occasionally, inferring moderate exposure. A smaller percentage (11.3%) interacts frequently—monthly or more often—emphasizing a subset of individuals who are greatly involved or perhaps work in environments where fraud is more prevalent or scrutinized. The remaining 12.1% have never interacted with fraud cases, which might suggest they are either not involved in sectors prone to fraud or have had no such incidents in their experience.

The highest percentage of the studied sample demonstrated that their level of training in fraud detection and prevention is moderate (70.9%), (24.8) expressed extensive level, (3.5%) they have limited level, and (0.70%) they have never level of training in fraud detection and prevention. The high percentage (70.9%) with moderate training shows that most auditors have a basic or intermediate understanding of fraud detection and prevention, but may lack advanced skills or in-depth knowledge. The fact that nearly a quarter (24.8%) have extensive training suggests a significant portion of the sample is well-versed in these areas, possibly due to experience or specialized education. The minimal percentages of limited or no training imply that very few participants are entirely unprepared or lacking in fraud-related training, which is positive for overall competence in this field.

Eventually, the study results confirmed that (55.3%) they have professional certificate in audit compared to (44.7%) who do not have any professional certificate in audit. This result indicates a recognized level of expertise and competence. The remaining 44.7% without certification may have different levels of informal experience or education.

### 4.3 Descriptive Statistics

The study used the descriptive analysis using means and standard deviation to answer the questions of the study efficiently and effectively. A greater value for the standard deviation indicates the more scattered the observations are. The low score will indicate that responses are focused and the overall respondents have similar opinions about the statement.

#### Reasons for the potential fraud in Palestine Securities Sector

The researchers used (19) statements to assess the reasons for potential fraud in Palestine Securities Sector. The scale ranged from 1 ("strongly disagree") to 5 ("strongly agree"), with five response options. For analytical purposes, responses were coded from 1 to 5.

The analysis for reasons for the potential fraud in Palestine Securities Sector are depicted in Table 5.

Table 6 Reasons For The Potential Fraud In Palestine securities sector

Variable Name	Item Labels	M.	S.D.	Percentage
R1	Poor management practices	4.29	0.74	85.8%
R2	Economic pressure	4.10	0.92	82.0%
R3	Weakened society values	3.67	0.98	73.3%
R4	Inadequate training of those responsible for fraud detection	4.16	0.86	83.1%
R5	Lack of government intervention	3.73	1.06	74.6%

Variable Name	Item Labels	M.	S.D.	Percentage
R6	Advances in computer technology	3.65	1.03	73.1%
R7	Increased workload	3.58	1.09	71.6%
R8	Political interest	3.62	0.98	72.3%
R9	The belief that all people in managerial positions commit fraud; it's just that not everyone is caught	3.32	1.17	66.4%
R10	Fraud can be justified when managers are treated unfairly (e.g., through low pay, long hours, and high stress).	3.18	1.40	63.7%
R11	Fraud can be justified when managers commit crimes to protect others, such as preventing job loss or covering for mistakes	3.20	1.24	64.0%
R12	Fraud can be justified if it does not harm anyone	2.79	1.44	55.9%
R13	Cultural acceptance of fraud as a means to achieve business success	3.47	1.19	69.4%
R14	pressure from superiors to achieve unrealistic financial goals	3.84	1.07	76.7%
R15	Lack of cooperation between internal and external auditors	3.72	1.05	74.3%
R16	The complexity and ambiguity of financial systems within the company may be an important factor, which makes more room for fraud	4.09	0.81	81.7%
R17	The organizational structure and reliance on a small number of key employees, which limits oversight over them	4.26	0.69	85.1%
R18	Outsourcing critical financial functions without adequate oversight	3.88	0.85	77.6%

Variable Name	Item Labels	M.	S.D.	Percentage
R19	The impact of external factors, such as economic instability or regulatory changes, on operations	3.94	0.93	78.7%
	Total	3.71	1.03	74.2%

Note: M = Mean; SD = Standard Deviation. Source: A Researcher analysis.

The reasons for the potential fraud in Palestine Securities Sector items ranged from 2.79 to 4.29. This means there are several reasons of fraud. The top-ranking item means were for " Poor management practices " (M= 4.29, SD = 0.74), which indicates that participants rated poor management support is the main reason for potential fraud in Palestine securities sector. Also, the poor management practices and inadequate control and supervision create an environment where unethical behavior can flourish, poor management may neglect internal controls, ignore warning signs, or even endorse fraudulent activities to meet targets.

Other items with high mean scores were "The organizational structure and reliance on a small number of key employees, which limits oversight over them" (M=4.26, SD =0.69). as

“Inadequate training of those responsible for fraud detection” (M=4.16, SD=0.86), the lack of adequate training, employees and auditors may lack the skills required and necessary to identify red flags or understand complicated financial transactions that allows fraud to go unnoticed.

"The complexity and ambiguity of financial systems within the company may be an important factor, which makes more room for fraud" ( $M=4.09$ ,  $SD=0.81$ ), These results indicate that there are several reasons for the potential fraud in Palestine securities sector items. Complex and sophisticated organizational structure and convoluted financial transactions can obscure fraudulent activities, making detection more difficult.

The findings of the study demonstrate that financial stress, whether personal or organizational can motivate individuals to commit fraud to alleviate economic hardships or achieve financial goals and objectives. This pressure can be intensified throughout economic downturns or periods of financial instability. Moreover, the weakness of society values highlights on ethics and integrity can decrease the moral barriers to committing fraud. Cultural shifts that tolerate or even encourage unethical behavior can make fraud more prevalent. Besides, lack of governance interventions as poor regulations diminishes accountability, creating an environment where fraud can take place with less fear of repercussions. Additionally, increasing digitalization can help in fraud detection at the same time it provides sophisticated tools for perpetrators to conceal fraudulent activities, manipulates data, or conduct cyber fraud. Furthermore, overburdened employees may experience fatigue and stress, leading to errors or temptations to commit fraud as a shortcut or escape from pressure. Likewise, Political motives or interference can influence organizational decisions, sometimes encouraging or turning a blind eye to fraudulent activities that serve political agendas. Eventually, Managers may rationalize fraudulent acts if they perceive unfair treatment, such as low pay, long hours, or high stress, viewing deception as a response to their grievances.

In conclusion, these factors often interact, creating a complex environment conducive to fraud. Addressing them requires a comprehensive approach including strengthening internal controls, fostering an ethical culture, ensuring proper training, maintaining regulatory oversight, and leveraging technological safeguards. Recognizing the multifaceted nature of fraud risk is essential for organizations aiming to prevent and detect fraudulent activities effectively.

### **What are the most prevalent types of fraud in Palestine Securities Sector?**

The researcher used (17) statements to explore the most prevalent types of fraud in Palestine Securities Sector. The scale ranged from 1 ("strongly disagree") to 5 ("strongly agree"), with five response options. For analytical purposes, responses were coded from 1 to 5.

The analysis for reasons for the most prevalent types of fraud in Palestine Securities Sector are depicted in Table 7.

Table 7 Most Prevalent Types of Fraud in Palestine Securities Sector.

<b>Variable Name</b>	<b>Item Labels</b>	<b>M.</b>	<b>S.D.</b>	<b>Percentage</b>
T1	Misappropriation of funds	4.17	0.93	83.4%
T2	False claims for hours worked/overtime.	3.95	0.99	79.0%
T3	Accounts manipulation to conceal theft or inflate company value.	4.21	0.83	84.1%
T4	Creating or altering documents to support fraudulent claims or transactions.	4.11	0.88	82.1%
T5	Direct stealing of company assets, including money.	3.84	1.05	76.9%
T6	Check forgery and counterfeiting.	3.96	0.83	79.1%

Variable Name	Item Labels	M.	S.D.	Percentage
T7	Adjusting the amounts recorded in accounts receivable to disguise actual financial performance.	3.86	0.98	77.2%
T8	False financial statement.	4.01	0.88	80.1%
T9	Bribery	4.08	0.82	81.6%
T10	Misappropriation of assets	3.93	0.92	78.6%
T11	Misleading financial disclosures are made to paint a financially ailing company to look good.	4.02	0.80	80.4%
T12	Assets are improperly valued to make the balance sheet look good.	3.98	0.80	79.6%
T13	Companies overstate their liabilities and expenses.	3.81	0.92	76.2%
T14	Companies present false revenues in financial statements	3.97	0.89	79.4%
T15	Use of company's assets for personal gain.	4.11	0.80	82.1%
T16	Purchasing scheme involving selling of goods to a close relation at a cheaper price than the actual price	3.90	0.91	78.0%
T17	Exploiting professional capabilities or roles to generate unauthorized personal benefits.	4.17	0.84	83.4%
	Total	4.00	0.89	80.1%

Note: M = Mean; SD = Standard Deviation. Source: A Researcher analysis.

For the most prevalent types of fraud in Palestine Securities Sector items ranged from 3.81 to 4.21, suggesting that there is a high level of perceived prevalent types of fraud in Palestine Securities Sector. The top-ranking item means were for "Accounts manipulation to conceal theft or inflate company value" (M= 4.21, SD = 0.83), which indicates that participants rated accounts manipulation to conceal theft or inflate company value is the most

prevalent type of fraud in Palestine Securities Sector. This sort of fraud includes changing financial records or statements to hide theft, decrease superficial losses, or inflate the company's value falsely. Methods include misrepresenting revenues, minimizing liabilities, inflating assets, or creating fictitious transactions. Such manipulation can mislead investors, creditors, or regulators, and may be used to secure loans, increase stock prices, or conceal financial difficulties.

Other items with high mean scores were "Exploiting professional capabilities or roles to generate unauthorized personal benefits" ( $M=4.17$ ,  $SD =0.84$ ). This type of fraud takes place when persons influence their positions or information within the company to get personal advantages and interests without approval. Such as accepting kickbacks, colluding with suppliers, or manipulating procurement processes for personal gain. It undermines organizational integrity and can lead to conflicts of interest, legal issues, and financial harm.

**What are the specific indicators or "red flags" that signal potential financial fraud in Palestine securities sector?**

The researcher used (8) statements to explore the specific indicators or "red flags" that signal potential financial fraud in the Palestine securities sector. The scale ranged from 1 (strongly disagree") to 5 ("strongly agree"), with five response options. For analytical purposes, responses were coded from 1 to 5.

The analysis for the specific indicators or "red flags" that signal potential financial fraud in Palestine securities sector are depicted in Table 8.

Table 8 specific indicators or "red flags" that signal potential financial fraud in Palestine securities sector.

Variable Name	Item Labels	M.	S.D.	Percentage
I1	Financial statements discrepancy due to inconsistent comparative numbers between balance sheets, income statements and cash flow statements	4.29	0.82	85.8%
I2	Existing unusual transactions, data patterns or trends	4.12	0.79	82.4%
I3	Living beyond one's means as individuals who appear to be living a lavished lifestyle that seems inconsistent with their income	4.10	0.83	82.0%
I4	Unusual secrecy or defensiveness, e.g., when individuals become defensive or secretive when questioned about financial matters, may be attempting to conceal possible fraudulent activities.	4.11	0.81	82.1%
I5	Refusal to go on holiday or delegate tasks	4.03	1.01	80.6%
I6	Unusual or Unauthorized access to financial systems and sensitive data could indicate an insider threat or an external cyber-attack.	4.12	0.82	82.4%
I7	There is an existence of inadequate security measures, encryption, strong passwords, and the lack of regular password changes	4.09	0.83	81.8%
I8	Formal or informal restrictions on the auditor that limit his access to people or	4.11	0.85	82.3%

Variable Name	Item Labels	M.	S.D.	Percentage
	information or his communication with the board members & audit committee			
	Total	4.12	0.84	82.4%

Note: M = Mean; SD = Standard Deviation. Source: A Researcher analysis

For the specific indicators or "red flags" that signal potential financial fraud in the Palestine securities sector items ranged from 4.03 – 4.29., suggesting that there is a high level of perceived specific indicators or "red flags" that signal potential financial fraud in Palestine securities sector. The top-ranking item means were for "Financial statements discrepancy due to inconsistent comparative numbers between balance sheets, income statements and cash flow statements" (M= 4.29, SD = 0.82). Other items with high mean scores were "Existing unusual transactions, data patterns or trends" (M=4.12, SD =0.79), "Unusual or Unauthorized access to financial systems and sensitive data could indicate an insider threat or an external cyber-attack" (M=4.12, SD=0.82).

### **What are the most followed fraud detection mechanisms in Palestine Securities Sector?**

The researcher used (9) statements to explore the most followed fraud detection mechanisms in Palestine Securities Sector. The scale ranged from 1 ("strongly disagree") to 5 ("strongly agree"), with five response options. For analytical purposes, responses were coded from 1 to 5.

The analysis for the most followed fraud detection mechanisms in Palestine Securities Sector are depicted in Table 9.

Table 9 the most followed fraud detection mechanisms in Palestine securities sector .

Variable Name	Item Labels	M.	S.D.	Percentage
M1	Management displays a significant disregard for regulatory authorities.	3.98	0.88	79.6%
M2	Domination of management by a single person or small group without compensating controls	4.22	0.80	84.4%
M3	Management changes its accounting policy, such as changes in policies of pricing inventories or evaluating investments to manipulate the company's financial statements.	4.06	0.92	81.1%
M4	Inadequate monitoring of significant controls and Management failure to correct known reportable conditions on time	4.27	0.63	85.4%
M5	Ineffective accounting staff, IT or internal audit staff, and Audit committee members have little expertise in financial reporting...	4.09	0.78	81.7%
M6	Known history of law violations or claims against the entity or its senior management alleging fraud.	3.95	0.86	79.0%
M7	Failure to record dishonest acts and other disciplinary actions and Lack of key employee training programs.	4.04	0.81	80.7%
M8	Unreasonable time constraints on the auditor regarding the completion of the audit or the issuance of the auditor's report	3.92	0.89	78.4%
M9	High turnover of senior management, counsel, board members or key employees may be an attempt to prevent	3.94	0.90	78.7%

Variable Name	Item Labels	M.	S.D.	Percentage
	them from learning too much about the company.			
	Total	4.05	0.83	81.0%

Note: M = Mean; SD = Standard Deviation. Source: A Researcher analysis

For the most followed fraud detection mechanisms in Palestine Securities Sector items ranged from 3.92 – 4.27., suggesting that there is a high level of perceived followed fraud detection mechanisms in Palestine Securities Sector. The top-ranking item means were for "Inadequate monitoring of significant controls and Management failure to correct known reportable conditions on time" (M= 4.27, SD = 0.63). Other items with high mean scores were "Domination of management by a single person or small group without compensating controls" (M=4.22, SD =0.80), "Ineffective accounting staff, IT or internal audit staff, and Audit committee members have little expertise in financial reporting..." (M=4.09, SD=0.78).

### **What are the most common followed fraud preventive mechanisms in Palestine Securities Sector?**

The researcher used (11) statements to explore the most common followed fraud preventive mechanisms in Palestine Securities Sector. The scale ranged from 1 (strongly disagree") to 5 ("strongly agree"), with five response options. For analytical purposes, responses were coded from 1 to 5.

The analysis for the most common followed fraud preventive mechanisms in Palestine Securities Sector are depicted in Table 10.

Table 10 What are the most common followed fraud preventive mechanisms in Palestine Securities Sector?

<b>Variable Name</b>	<b>Item Labels</b>	<b>M.</b>	<b>S.D.</b>	<b>Percentage</b>
FP1	Have a policy on reporting fraud.	4.50	0.64	90.1%
FP2	Have a fraud investigation policy?	4.39	0.70	87.8%
FP3	Have a code of conduct or ethics policy.	4.40	0.66	87.9%
FP4	Have a computer security policy?	4.41	0.72	88.2%
FP5	Require submission of conflict-of-interest form.	4.25	0.86	85.0%
FP6	Have fraud-related programs or software	4.27	0.88	85.4%
FP7	Conduct pre-employment criminal background checks	4.30	0.83	86.0%
FP8	Have a training manual specific to fraud?	4.20	0.77	84.0%
FP9	Have a hotline or toll-free number in place for reporting fraud cases.	4.12	0.87	82.4%
FP10	The existence of an IT department in Palestine securities sector that deals with data protection and safety issues.	4.25	0.82	85.0%
FP11	The existence of an efficient audit committee to oversight the senior executive management performance and decisions	4.40	0.73	88.1%
FP12	Having hotlines and whistle-blowing policies.	4.22	0.84	84.4%
FP13	Using counter-fraud champions to foster an anti-fraud culture	4.14	0.90	82.8%
FP14	My company has an incident response unit to handle cybercrime.	4.15	0.86	83.0%
	Total	4.29	0.79	85.7%

Note: M = Mean; SD = Standard Deviation. Source: A Researcher analysis.

For the most common followed fraud preventive mechanisms in Palestine Securities Sector items ranged from 4.14 – 4.50., suggesting that there is a high level of perceived most common followed fraud preventive mechanisms in Palestine. The top-ranking item means were for "Have a policy on reporting fraud" (M= 4.50, SD = 0.64). Other items with high mean scores were "Have a computer security policy" (M=4.41, SD =0.72), "Have a code of conduct or ethics policy" (M=4.40, SD=0.66).

#### 4.4 Hypothesis Testing

**There are significant differences in the attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to age, education level, experience, job title, primary area of auditing, frequency of interaction with fraud cases, level of training in fraud detection and prevention, and having professional certificate/s in audit**

##### Age

The researcher used ANOVA procedures to test the above hypothesis as follows:

Table 11 Analysis of the differences in the mean of the attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to age.

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Reasons for the potential fraud	Between Groups	.715	4	.179	.646	.631
	Within Groups	37.632	136	.277		
	Total	38.347	140			
Prevalent types of potential fraud	Between Groups	1.292	4	.323	.797	.529
	Within Groups	55.097	136	.405		
	Total	56.389	140			
Indicators that signal potential financial fraud	Between Groups	.955	4	.239	.735	.570
	Within Groups	44.182	136	.325		
	Total	45.137	140			
	Between Groups	1.391	4	.348	1.306	.271

Fraud detection mechanisms	Within Groups	36.203	136	.266		
	Total	37.594	140			
Fraud prevention mechanisms	Between Groups	.340	4	.085	.222	.926
	Within Groups	52.093	136	.383		
	Total	52.433	140			

Table (11) presents that there are insignificant differences in the mean of the studied sample attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to age.

### Education Level

The researcher used ANOVA procedures to test the above hypothesis as follows:

Table 12 Analysis of the differences in the mean of the attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to education level

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Reasons for the potential fraud	Between Groups	2.603	3	.868	3.325	.022
	Within Groups	35.744	137	.261		
	Total	38.347	140			
Prevalent types of potential fraud	Between Groups	10.342	3	3.447	10.257	.00
	Within Groups	46.047	137	.336		
	Total	56.389	140			
Indicators that signal potential financial fraud	Between Groups	8.703	3	2.901	10.909	.00
	Within Groups	36.433	137	.266		
	Total	45.137	140			
Fraud detection mechanisms	Between Groups	3.478	3	1.159	4.656	.004
	Within Groups	34.116	137	.249		
	Total	37.594	140			
Fraud prevention mechanisms	Between Groups	2.956	3	.985	2.728	.046
	Within Groups	49.478	137	.361		
	Total	52.433	140			

Table (12) presents that there are significant differences in the mean of the studied sample attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to Education level.

Table 13 means, STD, and STD error attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to education level

		N	Mean	Std. Deviation	Std. Error
Reasons for the potential fraud	Diploma	1	2.89	.	.
	Bachelor degree	83	3.63	0.47	0.05
	Master Degree	51	<b>3.87</b>	0.54	0.08
	Doctorate degree	6	3.63	0.75	0.30
	Total	141	3.71	0.52	0.04
Prevalent types of potential fraud	Diploma	1	1.24	.	.
	Bachelor degree	83	3.92	0.59	0.07
	Master Degree	51	4.16	0.54	0.08
	Doctorate degree	6	<b>4.36</b>	0.72	0.29
	Total	141	4.00	0.63	0.05
Indicators that signal potential financial fraud	Diploma	1	1.34	.	.
	Bachelor degree	83	4.10	0.55	0.06
	Master Degree	51	<b>4.26</b>	0.46	0.07
	doctorate degree	6	4.07	0.44	0.18
	Total	141	4.14	0.57	0.05
Fraud detection mechanisms	Diploma	1	3.67	.	.
	Bachelor degree	83	4.04	0.55	0.06
	Master Degree	51	<b>4.36</b>	0.41	0.06
	Doctorate degree	6	4.19	0.33	0.13
	Total	141	4.16	0.52	0.04
Fraud prevention mechanisms	Diploma	1	4.62	.	.
	Bachelor degree	1	2.89	.	.
	Master Degree	83	3.63	0.47	0.05
	Doctorate degree	51	<b>3.87</b>	0.54	0.08
	Total	6	3.63	0.75	0.30

The differences in the first construct that is the reasons for the potential fraud, Indicators that signal potential financial fraud and fraud detection mechanisms were for the best interest of auditors who have master degree. Whereas, it was for the interest of Doctorate regarding Prevalent types of potential fraud and fraud prevention mechanisms.

## Experience

The researcher used ANOVA procedures to test the above hypothesis as follows:

Table 14 Analysis of the differences in the mean of the attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to experience

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Reasons for the potential fraud	Between Groups	.18	3	.06	.21	.89
	Within Groups	38.17	137	.28		
	Total	38.35	140			
Prevalent types of potential fraud	Between Groups	1.32	3	.44	1.10	.35
	Within Groups	55.07	137	.40		
	Total	56.39	140			
Indicators that signal potential financial fraud	Between Groups	1.86	3	.62	1.96	.12
	Within Groups	43.28	137	.32		
	Total	45.14	140			
Fraud detection mechanisms	Between Groups	2.10	3	.70	2.70	.05
	Within Groups	35.49	137	.26		
	Total	37.59	140			
Fraud prevention mechanisms	Between Groups	1.23	3	.41	1.10	.35
	Within Groups	51.20	137	.37		
	Total	52.43	140			

Table (14) presents that there are insignificant differences in the mean of the studied sample attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to experience years. This result indicates that there is no meaningful difference in the auditors' views associated to fraud detection and prevention among Palestine Securities Sector based on the experience of auditors. This means that regardless of the way that long respondents or businesses have been involved

in the industry or relevant activities, their attitudes and perceptions about the significance, efficiency, or recognizing of fraud prevention still considerably the same. This indicates that experience merely does not meaningfully effect views in this context. The irrelevance could be because of numerous issues, for instance prevalent consciousness or standardized training among companies, or an identical extent of exposure to fraud-related matters irrespective of experience period. Eventually, this consequence suggests that factors other than experience—such as education, supervisory environment, or organizational culture—may act a more decisive role in affecting attitudes toward fraud detection and prevention among these businesses.

### Job Title

The researcher used ANOVA procedures to test the above hypothesis as follows:

Table 15 Analysis of the differences in the mean of the attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to job title

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Reasons for the potential fraud	Between Groups	.28	3	.094	.340	.796
	Within Groups	38.06	137	.278		
	Total	38.35	140			
Prevalent types of potential fraud	Between Groups	1.01	3	.337	.834	.477
	Within Groups	55.38	137	.404		
	Total	56.39	140			
Indicators that signal potential financial fraud	Between Groups	.64	3	.215	.661	.578
	Within Groups	44.49	137	.325		
	Total	45.14	140			
Fraud detection mechanisms	Between Groups	.23	3	.078	.286	.836
	Within Groups	37.36	137	.273		
	Total	37.59	140			
	Between Groups	.20	3	.066	.174	.914

Fraud prevention mechanisms	Within Groups	52.24	137	.381		
	Total	52.43	140			

Table (15) presents that there are insignificant differences in the mean of the studied sample attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to job title. This means that within Palestine Securities Sector, the attitudes and perceptions of auditors concerning the reality of fraud detection and prevention do not considerably differ based on their job titles. This assumes that there is an identical awareness or perception among various organizational levels, for instance senior executive management, accountants, auditors, or other employee and functional roles.

There are a number of determinants that may act a role in this uniformity of responses such as the corporate culture and communication instruments and channels might support a common understanding or related experience to fraud prevention initiatives, leading to similar perceptions. Besides, training programs or policies associated to fraud detection could be consistently spread across job titles, decreasing perceptual differences. Also, this consistency might reveal a wider related element, for instance the general level of fraud consciousness or the development of internal controls in Palestinian businesses, which influences all employees equally without regard of their position.

#### **Primary Area of Auditing:**

The researcher used ANOVA procedures to test the above hypothesis as follows:

Table 16 Analysis of the differences in the mean of the attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to job title

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
	Between Groups	.242	4	.061	.216	.929

Reasons for the potential fraud	Within Groups	38.104	136	.280		
	Total	38.347	140			
Prevalent types of potential fraud	Between Groups	.497	4	.124	.302	.876
	Within Groups	55.892	136	.411		
	Total	56.389	140			
Indicators that signal potential financial fraud	Between Groups	.580	4	.145	.442	.778
	Within Groups	44.557	136	.328		
	Total	45.137	140			
Fraud detection mechanisms	Between Groups	.462	4	.115	.423	.792
	Within Groups	37.132	136	.273		
	Total	37.594	140			
Fraud prevention mechanisms	Between Groups	.661	4	.165	.43	.78
	Within Groups	51.773	136	.381		
	Total	52.433	140			

Table presents that there are insignificant differences in the mean of the studied sample attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to primary Area of Auditing. This result indicates that all auditors regardless of their area of auditing have similar views and beliefs concerning the efficiency and significance of fraud detection and prevention procedures. There are a number of factors that may explain this result. One of these factors is the shared professional standards and ethical policies and procedures among the different auditing disciplines that could increase and nurture a shared awareness of fraud risks and prevention strategies. Internal as well external auditors are expected to be trained to understand the necessity of fraud prevention and detection that affects auditors' perceptions. Additionally, the supervisory and regulatory environment may execute stable prospects and practices across diverse auditing areas, further aligning attitudes.

Furthermore, the results may reveal a shared experience to fraud-related concerns within these businesses, leading to similar views of the challenges and efficiency of detection procedures. It is furthermore likely that the nature of the Palestinian financial market or the definite features of Palestine securities sector do not differ considerably through diverse auditing areas in terms of fraud-related concerns.

## **Interviews responses**

### **First interview with Financial follow up unit combating fraud in the securities sector**

#### **The Role of the Financial Follow-Up Unit in Combating Fraud in the Securities Sector**

##### **1. The Unit's Primary Role:**

1. The Financial Follow-Up Unit monitors and controls financial activities in the market to detect and prevent fraud. The Unit is responsible for receiving reports of suspected fraud, as fraud is considered a predicate offense of money laundering.
2. Contributes to enhancing transparency and confidence in the financial system by monitoring compliance with regulations and laws.
3. Cooperates with regulatory and security agencies to combat financial crimes, including the Palestine Capital Market Authority.

##### **2. Cooperation with Other Parties:**

1. Exchanges information with financial institutions and regulatory authorities.
2. Participating in coordination committees to combat financial crimes at the local and international levels, as the Financial Follow-up Unit is a member of the Egmont Group of Anti-Money Laundering and Counter-Terrorism Financing Units. The Unit works to exchange information with international and local financial bodies to expand the fight against financial crimes and prevent the spread of fraud across borders.
3. Working with judicial authorities: Providing evidence and data to support criminal investigations. Upon detection of any fraudulent transactions, the Unit has the

authority to take immediate legal action, including imposing fines, suspending licenses, and referring cases to judicial authorities.

#### **4. The Unit's Main Priorities:**

1. **Developing Early Fraud Detection Systems:** The Unit relies on the use of advanced technologies to analyze big data to monitor unusual patterns and suspicious activities in the financial market.
2. **Enhancing Compliance with Laws and Financial Disclosure:** The Unit oversees the implementation of regulations to ensure that companies and investors comply with transparency and financial disclosure standards, reducing the opportunities for market manipulation.

#### **5. Fraud Detection Mechanisms**

Technical Tools and Systems Used:

1. Electronic platforms for reporting suspicious activities.
2. Risk analysis programs for monitoring financial transactions.

#### **6. Financial Pattern Analysis:**

1. Monitor recurring or unusual activity that may indicate fraud.
2. Use big data to identify suspicious transactions.
3. Analyze trading behavior to detect market manipulation.

#### **7. Warning Indicators:**

1. Repeated suspicious trading.
2. Deviation from expected financial data.
3. Increased reporting about a particular company or investor.

## **8. Dealing with Incoming Reports:**

1. Analyze reports and verify their credibility.
2. Contact financial institutions to verify reported activities.
3. Take immediate action in urgent cases.

### **Technology and Data Analysis**

1. Develop machine learning algorithms to detect fraud in real-time.
2. Analyze big data to detect abnormal relationships between accounts.
3. Integrate data from multiple sources to identify suspicious activity.

### **Challenges in Using Technology:**

1. The need to continually update systems to keep pace with evolving fraud techniques.
2. Process massive amounts of data to ensure accurate analysis.
3. Coordination between institutions to share data effectively.

### **Legislation and Policies**

1. Existing laws form a strong framework.
2. Provide recommendations for amending laws based on new challenges.
3. Organize workshops with relevant authorities to update regulations.

### **Capacity Building and Awareness**

Raising awareness among financial sector workers:

1. Organizing conferences and workshops on the latest financial fraud methods.
2. Publishing periodic reports on new threats and fraudulent methods.
3. Training for Financial Institutions:
4. Preparing training programs for bank and brokerage staff.

5. Developing specialized courses on analyzing suspicious transactions.
6. Investor Awareness:
7. Publishing educational materials online and in the media.
8. Issuing official warnings when new fraudulent methods are discovered.

### **Challenges and Case Studies**

#### Challenges in Combating Fraud:

1. Evolution of fraudulent methods beyond traditional systems.
2. Evading Oversight

Using sophisticated techniques to conceal suspicious activities: Fraudsters are resorting to sophisticated methods such as encryption and digital identities, making them more difficult to track. Distributing fraudulent activities across multiple financial systems: Some perpetrators distribute their transactions across multiple financial platforms and international banks, complicating tracking.

Taking advantage of different legal systems: Fraudsters exploit legal gaps between countries to evade oversight, which calls for enhanced international cooperation.

Manipulating financial reports: Financial statements are falsified or altered in professional ways to deceive regulatory authorities.

#### Future Directions

#### **Enhancing confidence in the financial system:**

1. Increase transparency in financial disclosure.
2. Develop direct communication channels with investors to report violations.

The Financial Monitoring Unit seeks to develop more effective strategies to combat financial fraud and ensure a transparent and safe investment environment for all.

## **Second interview with Palestine Capital Market Authority**

### **1. What are the main strategies the Authority follows to detect fraud in the securities sector?**

The Authority relies on a multi-faceted approach that includes continuous monitoring, proactive investigations, the application of advanced data analysis techniques, and enhanced cooperation with local and international entities. Transparency is also enhanced by requiring companies to accurately disclose financial statements.

### **2. How does the Authority assess the level of fraud in the local financial market?**

The assessment is based on multiple indicators, including the number of cases detected, the frequency of suspicious activity, and the level of investor complaints. Data analysis systems are also used to detect abnormal patterns in the market.

### **3. What control measures have been taken to ensure transparency in trading operations?**

These control measures include imposing strict disclosure standards, strengthening automated monitoring systems, requiring companies and investors to adhere to professional codes of conduct, and conducting regular audits.

### **4. How does the Authority monitor suspicious activity in the market?**

This is achieved through advanced data analysis systems, coordination with other regulatory authorities, and analysis of suspicious transaction reports submitted by brokerage companies.

**5. What penalties are imposed on entities involved in fraud?**

Penalties range from financial fines, license suspension, bans from engaging in financial activities, and sometimes legal accountability for those responsible for the fraud.

**6. How is cooperation with local and international bodies conducted to detect cross-border fraudulent activities?**

Cooperation is achieved through the exchange of information, signing agreements with international regulatory bodies, and participating in global forums and conferences to combat financial crime.

**7. Are there agreements with international bodies to combat financial crime in the markets?**

Yes, there are cooperation agreements with organizations such as the International Organization of Securities Commissions (IOSCO) and other financial bodies to ensure coordinated international efforts.

**8. What steps is the Authority taking to raise investor awareness about fraud?**

The Authority conducts awareness campaigns, publishes guidance manuals, and holds seminars and workshops to enable investors to recognize fraudulent methods and protect themselves from them.

**9. Are big data analytics and artificial intelligence tools used to detect suspicious patterns in the market?**

Yes, these tools are used to analyze massive amounts of data and identify unusual patterns that may indicate fraudulent activity.

**10. How do electronic reporting systems help improve fraud detection?**

These systems provide a quick and effective means of reporting suspicious activity, contributing to immediate intervention and mitigating the impact of fraud.

**11. Can you share examples of recently uncovered fraud cases and how they were dealt with?**

Cases of stock price manipulation were uncovered, and strict action was taken against those involved, including financial fines and license revocation.

**12. What lessons have been learned from these cases to improve future procedures?**

Strengthening oversight mechanisms, increasing investor awareness, and updating laws to keep pace with developments in fraud methods.

**13. What are the most prominent challenges facing the Authority in preventing fraud?**

Challenges include the evolution of fraud methods, the difficulty of tracking cross-border transactions, and the need for greater integration between different technological systems.

**14. How does the Authority plan to enhance investor confidence in the financial market?**

By enhancing transparency, improving oversight procedures, developing whistleblowing systems, and providing stronger protection for investor rights.

**15. Do you believe that current legislation is sufficient to combat fraud?**

The current legislation is robust, but it needs to be continuously updated to keep pace with rapid developments in financial markets and fraudulent methods.

**16. Are the laws updated periodically to keep pace with market developments?**

Yes, the laws are updated regularly based on economic and technological changes to ensure the effectiveness of anti-fraud measures.

## Chapter Five

### Discussion and Recommendations

This study aims to explore the reality of fraud detection and prevention in Palestine securities sector. This section summarizes and discusses the findings of the study through answering the research questions and hypotheses.

#### 5.1 Discussion of Results

The study results demonstrated that the auditors were rarely interacted with fraud cases. Moreover, the highest percentage of them stated that they have moderate level of training in fraud detection and prevention. Eventually, there are several auditors who do not have professional certificate in audit. Thus, these findings may affect negatively on the auditors' competencies to detect and prevent fraud.

The study found there are several reasons of potential fraud in Palestine Securities Sector. The most demonstrated reasons of committing fraud are poor management policies, inadequate training of those responsible for fraud detection. Additionally, economic pressure, and lack of government intervention.

The study results demonstrated the most prevalent types of fraud in Palestine Securities Sector are misappropriation of funds, accounts manipulation to conceal theft or inflate company value. Likewise, creating or altering documents to support fraudulent claims or transactions, as well as false financial statements and using of companies' assets to personal use.

The most common indicators or red flags that signal potential financial fraud in Palestine Securities Sector are financial statements discrepancy due to inconsistent comparative numbers between balance sheets, income statements and cash flow

statements. Additionally, unusual secrecy or defensiveness, e.g., when individuals become defensive or secretive when questioned about financial matters, may be attempting to conceal possible fraudulent activities. Furthermore, unusual or unauthorized access to financial systems and sensitive data could indicate an insider threat or an external cyber-attack.

The study revealed that the most prevalent reasons of fraud commitment are: Domination of management by a single person or small group without compensating controls. Likewise, inadequate monitoring of significant controls and management failure to correct known reportable conditions on time. Besides, ineffective accounting staff, it or internal audit staff, and audit committee members have little expertise in financial reporting. Eventually, failure to record dishonest acts and other disciplinary actions and lack of key employee training programs.

The study result demonstrated that there are several fraud prevention mechanisms in Palestine Securities Sector are setting a clear and efficient reporting and investigation fraud policy, developing a clear and efficient code of conduct and code of ethics, and investment in employees and auditors in fraud prevention and detection. This result indicates that Palestine Securities Sector have a high extent of commitment of fraud detection and prevention this also demonstrates that using technology in fraud prevention enhances the ability of the companies and the auditors' competencies to detect and prevent fraud. Thus, this increases the integrity of the financial activities of the company. Additionally, the implementation of effective and efficient auditing policies and procedures for verifying customers and companies partner data shows the dedication of the

companies to nurture trustworthiness and integrity of companies in the business environment.

There are significant differences in the mean of the studied sample attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to Education level. The differences in the first construct that is the reasons for the potential fraud, Indicators that signal potential financial fraud and fraud detection mechanisms were for the best interest of auditors who have master degree. Whereas, it was for the interest of doctorate regarding Prevalent types of potential fraud and fraud prevention mechanisms.

That there are insignificant differences in the mean of the studied sample attitudes and perceptions of the reality of fraud detection and prevention in Palestine Securities Sector attributed to experience years, job titles, and primary Area of Auditing.

## 5.2 Recommendations

Based on the findings of the study, I suggest the following suggestions to enhance the quality of the auditors in detecting and preventing fraudulent practices:

1. There is a necessity to invest in auditors` training and development their competencies and qualification in fraud prevention and detection through continuous training and improvement and encouraging them to have professional certificates such as fraud examination certificates, CPA, APCA, CFA, and other professional certificates. Additionally, arrangement of seminars that aim to support the control environment and promoting organizational culture that fight fraudulent practices.
2. Palestine Securities Sector should establish and develop clear strategies to conduct regular assessments and system developments to increase the quality of fraud prevention and detection practices.
3. There is a necessity to strengthen the internal communication and information instruments to confirm the rapid and transparent flow of information among the different departments in the company.
4. The Palestine Securities Sector should boost and develop flexible risk management strategies and policies to ensure effective and efficient information flow, and there is a necessity to ensure that the fraud prevention and detection objectives are met.
5. There is a necessity to integrate advanced technologies such as AI application and big data analytics in fraud prevention and detection in Palestine Securities Sector to increase the effectiveness and efficiency of fraud prevention and detection.
6. There is a necessity to perform further studies and researches related to the effect of an efficient internal control systems on the prevention and detection of fraud in

Palestine Securities Sector. Besides, this study explored the attitudes and perceptions of a small sample size of auditors. Thus, further studies to cover a larger sample to more representative for the entire external, internal auditors, and fraud examiners.

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## Appendices

### Appendix (1): Questionnaire of the Study

الجامعة العربية الأمريكية  
ARAB AMERICAN UNIVERSITY



### Postgraduate Deanship

Dear researchers,

After greetings

This questionnaire is a research tool specifically designed to complete the requirements for a master's degree in Fraud Protection at the Arab American University and entitled: "**The Reality of Fraud Detection and Prevention in Palestinian Securities Sector**". This has included definitions of the terms needed to fill out the questionnaire in the designated places whenever necessary.

To achieve this purpose, I ask for your assistance in providing accurate and objective answers to the questions contained in this questionnaire. The information collected through this questionnaire will be used for scientific research purposes only.

I will maintain strict confidentiality of this information and its source. And your participation and views are greatly appreciated and respected.

- *Write tick (✓) the or provide the number that is appropriate to respond to each of the question.*

<b>The first section : demographic data</b>
---

**1. How older you in years**

(.....) years.

**2. Academic achievement**

- |  |  |
|--|--|
| <input type="checkbox"/> Diploma or Less   | <input type="checkbox"/> Master`s Degree |
| <input type="checkbox"/> Bachelor`s degree | <input type="checkbox"/> Doctorate       |

**3. How many years they have worked in Audit field**

(.....) years.

**4. Job title**

- |   |   |
|---|---|
| <input type="checkbox"/> Internal auditor employees | <input type="checkbox"/> Senior auditor |
| <input type="checkbox"/> Junior Auditor             | <input type="checkbox"/> Partner        |

**5. Do you have a professional certificate?**

- Yes  No

**6. If your answer for the previous question is yes. What is it**

.....

**Second Section : Constructs of the study**

**Please rate your level of agreement on the following questions**

No.	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>First Construct: What are the reasons for occurrence of fraud in Palestine securities sector?</b>						
1.	Poor management practices					
2.	Economic pressure					
3.	Weakened society values					
4.	More sophisticated criminals					
5.	Inadequate training of those responsible for fraud detection					
6.	Lack of government intervention					
7.	Advances in computer technology					
8.	Increased workload					

9.	Political interest					
10.	all people in managerial positions commit fraud, it is just not everyone is caught					
11.	the fraud can be justified if the company is not fair in its treatment of managers that is low pay, long hours, and much stress.					
12.	The fraud can be justified if its committed by managers to protect others that is save somebody from being fired, cover unwanted mistakes somebody has made					
13.	The fraud can be justified if it does not hurt other parties that is when a top manager uses his position in the company or company ties to arrange personal; deals or					

	benefits with third parties that will not affect the company					
<b>Second Construct: What are the most prevalent types of fraud in Palestine Securities Sector?</b>						
1.	Misappropriation of funds					
2.	False claims for hours worked/overtime					
3.	Accounts manipulation					
4.	False documentation					
5.	Theft					
6.	Check forgery and counterfeiting					
7.	Accounts receivable manipulation					
8.	False financial statement					
9.	Bribery					
10.	Misappropriation of assets					
11.	Misleading financial disclosures are made to paint					

	a financially ailing companies to look good.					
12.	Assets are improperly valued to make the balance sheet look good					
13.	Companies overstate their liabilities and expenses.					
14.	Companies present false revenues in financial statement					
15.	Use of company`s assets for personal gain					
16.	Purchasing scheme involving selling of goods to a close relation at a cheaper price than the actual price					
17.	A person uses his profession to create expenses for personal or inappropriate use					
<b>Third Construct:</b> What are the specific indicators or "red flags" that signal potential financial fraud in the Palestinian securities sector?						

1.	Existing of revenue fluctuations such as sudden or unexpected change in revenue that cannot be explained.					
2.	Financial statements discrepancy due to inconsistent comparative numbers between balance sheets, income statements and cash flow statements					
3.	Existing of unusual transactions, data patterns or trends					
4.	Living beyond one's means as individuals who appear to be living a lavished lifestyle that seems inconsistent with their income					
5.	Unusual secrecy or defensiveness e.g. when individuals become defensive					

	or being secretive when questioned about financial matters may be attempting to conceal possible fraudulent activities.					
6.	Refusal go on holiday or delegate tasks					
7.	Unusual or Unauthorized access to financial systems and sensitive data could be an indication of an insider threat or a possible external cyber-attack.					
8.	Existence of inadequate security measures, encryption, strong passwords, the lack of changing passwords regularly.					
<b>Fourth Construct: What are the most followed fraud detection mechanisms in Palestine?</b>						
1.	Enhancing the quality of the internal audit department.					

2.	Employee notification through existence of a hotline where employees or managers can anonymously disclose witnesses' cases of fraud					
3.	Accidental discovery					
4.	The appointment of an efficient external audit for detecting instances of fraud in the company					
5.	Anonymous letter/notification					
6.	Existing of an efficient internal control unit responsible for fraud detection and prevention					
7.	Specific investigation by management					
8.	Police notification					

9.	Payment of monetary incentives for whistle blowing					
<b>Fifth Construct: What are the most common followed fraud preventive mechanisms in Palestine?</b>						
1.	Have a policy on reporting fraud					
2.	Have a fraud investigation policy?					
3.	Have a code of conduct or ethics policy					
4.	Have a computer security policy?					
5.	Require submission of conflict of interest form					
6.	Have fraud related program					
7.	Conduct pre-employment criminal background check					
8.	Have a training manual specific to fraud?					

9.	Have a hotline or toll-free number in place for reporting fraud cases					
10.	The existence of an IT department in Palestine securities sector that deals with data protection and safety issues					
11.	The existence of an efficient audit committee to oversight the senior executive management performance and decisions					

## **Interview checklist**

**Dear respondents,**

My name is Dalal. I am a master student in accounting at Arab American University and I am approaching your respectful company to gather valuable data about a pertaining research phenomenon that is am trying to explore under a thesis that explores the reality of fraud detection and prevention in Palestinian securities sector. Please note that this interview will take only 30 minutes of your valuable time.

I thank you all advance for giving me the chance to apply scientific research on real accounting cases based on primary data from your informants.

I hereby ensure you that the information provided from your side will only be used for research purpose and will be treated with high confidentiality.

Thank you

## **Interview questions**

1. Brief presentation about your current position?
2. How long have you been at the company?
3. What job titles have you had, and what are the responsibilities of your current title?
4. What or where is the biggest risk to the company for fraud?
5. Have you in or witnessed fraudulent or questionable behavior within the company?
6. Have you ever been asked to participate in or ignore a fraudulent act with the company?
7. Are there any activities of the company that you consider fraudulent, immoral or criminal?
8. How do you detect fraudulent activity, and what tools do you use in the process?

9. What is your approach to conduct a fraud investigation?
10. How do you stay updated with fraud prevention practices and regulations?
11. Explain how you would handle a situation where a colleague may be involved in fraud?
12. What are the most challenging aspect of working as a Fraud Analyst?
13. What tools or software you use for fraud detection and prevention?
14. Describe a time when you discovered a previously unknown fraud scheme. How do you discover it? And how did you handle it?
15. How do you ensure confidentiality and data protection when conducting fraud investigations?
16. Describe your experience with data analysis and reporting in the context of fraud prevention.
17. What are the biggest challenges currently faced by the fraud prevention team, and how does the company support the team in addressing these challenges?

## الملخص

تهدف هذه الدراسة إلى استكشاف واقع كشف ومنع الاحتيال في قطاع الأوراق المالية الفلسطيني. بالإضافة إلى ذلك، تسعى الدراسة إلى التعرف على أسباب حدوث الاحتيال، وتحديد أكثر أنواع الاحتيال انتشارًا بالإضافة إلى العلامات التحذيرية التي تشير إلى احتمال وجود احتيال مالي في قطاع الأوراق المالية الفلسطيني. كما تهدف الدراسة إلى استكشاف الآليات الأكثر اتباعًا للكشف عن الاحتيال ومنعه. استخدمت الدراسة المنهج البحثي المختلط، حيث تم الاعتماد على المقابلات وتصميم الاستبيانات. وتم جمع البيانات من عينة مكونة من (141) مدقق داخلي وخارجي.

وأظهرت نتائج الدراسة أن المدققين نادرًا ما يتعاملون مع حالات الاحتيال. كما أشار أعلى نسبة منهم إلى أن لديهم مستوى متوسط من التدريب في مجال كشف ومنع الاحتيال. بالإضافة إلى ذلك، توجد عدة أسباب محتملة لحدوث الاحتيال في الشركات المدرجة في فلسطين، من أبرزها ضعف السياسات الإدارية، وعدم كفاية التدريب للمسؤولين عن الكشف عن الاحتيال، بالإضافة إلى الضغوط الاقتصادية وعدم تدخل الحكومة. ومن ناحية أخرى، فإن أكثر أنواع الاحتيال انتشارًا في الشركات المدرجة في فلسطين تتضمن اختلاس الأموال، والتلاعب في الحسابات لإخفاء السرقة أو تضخيم قيمة الشركة، وكذلك إنشاء أو تعديل المستندات لدعم المطالبات أو المعاملات الاحتيالية، بالإضافة إلى البيانات المالية الزائفة واستخدام أصول الشركات لأغراض شخصية، وكما كشفت الدراسة أن أكثر المؤشرات أو العلامات التحذيرية التي تدل على وجود احتمالية لحدوث احتيال مالي في قطاع الأوراق المالية الفلسطيني هي وجود تفاوت في البيانات المالية نتيجة عدم تطابق الأرقام المقارنة بين الميزانيات العمومية، وبيانات الدخل، وبيانات التدفقات النقدية.

واقترحت الباحثة ضرورة الاستثمار في تدريب المدققين وتطوير كفاءاتهم ومؤهلاتهم في مجال الوقاية والكشف عن الاحتيال من خلال التدريب المستمر والتحسين، بالإضافة إلى تشجيعهم على الحصول على شهادات مهنية. علاوة على ذلك، ينبغي للشركات المدرجة في فلسطين وضع استراتيجيات واضحة لإجراء تقييمات منتظمة وتطوير الأنظمة بهدف تحسين جودة ممارسات الكشف عن الاحتيال ومنعه. وفي النهاية، هناك حاجة لتعزيز الاتصالات الداخلية وأدوات المعلومات لضمان تدفق سريع وشفاف للمعلومات بين مختلف الأقسام في الشركة.

الكلمات المفتاحية: الاحتيال- الرقابة على الاحتيال – كشف الاحتيال – قطاع الأوراق المالية في فلسطين- قطاع الأوراق المالية – العلامات التحذيرية- مؤشرات الخطر- الضوابط الداخلية- أنواع الاحتيال المالي – الأدوات التقنية – الإطار التنظيمي – الاحتيال المالي- تدريب على فحص الاحتيال- الجرائم المالية- نظريات الاحتيال.