Arab American University

Faculty of Graduate Studies

Department of Administrative and Financial Sciences

Ph.D. Program in Accounting and Finance

Board Characteristics and the Informativeness of Accounting Earnings: Empirical Evidence from Palestine Exchange (PEX) and Amman Stock Exchange (ASE)

Samih Mohammad Yousef Yousef

202113130

Dissertation Committee:

Prof. Veronica Paz

Prof. Suneel Meheshwari

Dr. Mohammad Abu Sharbeh

This Dissertation Was Submitted in Partial Fulfilment of the Requirements for the Doctor of Philosophy (Ph.D.) Degree in Accounting and Finance.

Palestine, February / 2025

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Dissertation Approval

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This dissertation was defended successfully on 27/02/2025 and approved by:

Dissertation Committee Members:

Name	Title	Signature
1. Prof. Veronica Paz	Main Supervisor	
2. Prof. Suneel Meheshwari	Member of Dissertation Committee	
3. Dr. Mohammad Abu Sharbeh	Member of Dissertation Committee	

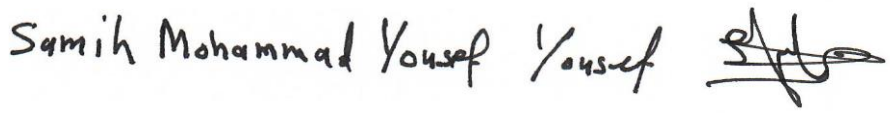
Palestine, February / 2025

Declaration

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

Student Name: Samih Mohammad Yousef Yousef

Student ID: 202113130

Signature: 

Date of Submitting the Final Version of the Dissertation: 19.3.2025

Dedication

After being blessed by God to complete this research, I dedicate it to my mother, the lady of inspiration, mercy, and humanity, for her endless sacrifices, limitless tenderness, and unwavering prayers. My children, the apples of my eye—Hanin, Nadin, Amal, and Mohammad—inspire my thoughts and brighten my journey.

To the soul of my father, whom I never met but whose name continues to accompany and surround me from above. To the soul of my brother, educator Walid, and his eternal tenderness. To the soul of my brave brother, Youssef, and his touching memory, which lives on in my heart.

To my beloved brothers and sisters, for their endless love and f encouragement.

To my devoted friends for their encouragement, support, and faith in me.

To the distinguished academic lecturers who have graciously offered their expertise and guidance: Dr. Nasr AbdulKarim, Dr. Ashraf Al-Mimi, Prof. Veronica Paz, Dr. Hassan Abu Hassan, Dr. Zahran Daraghmeh, and Dr. Ibrahim Awad.

To that shining institution—my beloved university, the Arab American University, its administration, faculty, and staff—who provided me with the most incredible opportunity for advancement and scientific development.

To my beloved country and my patient, compassionate people who long for freedom and light.

To everyone who chooses to light a candle rather than curse the darkness

This achievement is dedicated to all of you.

Sincerely: Samih Mohammad Yousef Yousef

Acknowledgments

I profoundly appreciate the contributions of all those who have assisted in completing this research.

First and foremost, I would like to extend my heartfelt appreciation to the supervision committee: Prof. Veronica Paz, Prof. Suneel Meheshwari, and Dr. Mohammad Abu Sharbeh. Their guidance, encouragement, and expertise were indispensable during this endeavor. Their insightful advice and constructive feedback substantially improved the quality of this work.

I am also grateful to the Arab American University for the resources and support essential for completing this research. I am particularly grateful to Dr. Nouar Qutub, Dr. Nasr Abdulkarim, Dr. Ashraf Al-Mimi, and the administrative team for their support and collaboration throughout my research.

I am grateful to my colleagues and peers for the collaboration and the numerous conversations that have inspired new ideas and perspectives.

Last but not least, I profoundly appreciate the unwavering support and compassion of my family and friends, who have given me the strength to persevere and complete this work.

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Abstract

This research examines the relationship between board characteristics and the informativeness of accounting earnings in explaining stock returns for the Palestine Exchange (PEX) and Amman Stock Exchange (ASE) listed companies. It aims to assess how variables such as board reputation, independence, competence, compensation, and board size influence earnings informativeness in the two emerging markets.

The research utilizes panel data of nonfinancial listed companies from 2013 to 2023, obtaining 327 and 1081 observations for PEX and ASE, respectively. Diagnostic tests were performed to ensure the reliability and robustness of the models. Fixed-effects regression models were employed.

EPS and ΔEPS significantly explain stock returns in both markets, supporting earnings response coefficient theory. However, board characteristics had subtle effects. Despite positively affecting returns, board reputation negatively reduced the link between earnings and stock returns in both exchanges, possibly due to a focus on reputational stability above informativeness. Board independence increased earnings informativeness in ASE but decreased it in PEX, probably due to symbolic governance. Board competency lowered earnings informativeness in ASE, suggesting a focus on broader performance indicators and conservative accounting, but has an insignificant effect on PEX earnings informativeness since well-governed, highly competent boards may already price earnings. Board compensation increased earnings informativeness in both exchanges, possibly through pay-for-performance alignment and governance. Finally, larger boards increased earnings informativeness in PEX due to better monitoring and signaling but decreased it in ASE due to coordination issues and non-financial information. These findings demonstrate the complicated and context-dependent link between board qualities and informativeness regarding emerging market earnings.

For control variables, leverage does not affect returns. Firm size had little impact on returns in the two markets, except for the ΔEPS model for ASE, which showed a positive correlation. Corporate age increases PEX returns but not ASE. The two ownership concentration factors, TOP1 and TOP5, showed contradictory results in explaining stock returns between the two exchanges.

This research adds empirical evidence from two understudied emerging markets to corporate governance literature. Governance arrangements are crucial to the informativeness of accounting earnings. It helps governments, investors, and corporate executives improve financial transparency and governance in developing economies.

Keywords: Board Characteristics, Informativeness, Palestine Exchange (PEX), Amman Stock Exchange (ASE), Earnings Per Share (EPS).

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List of Definitions of Abbreviations

Abbreviations	Title
ASE	Amman Stock Exchange
BoD	Board of Directors
CSR	Corporate Social Responsibility
EPS	Earnings Per Share
ERC	Earnings Response Coefficient
IFC	International Finance Corporation
JSC	Jordan Securities Commission
NCI	Non-Controlling Interest
OECD	Organization for Economic Co-operation and Development
PCMA	Palestine Capital Market Authority
PEX	Palestine Exchange
PMA	Palestine Monetary Authority

Chapter One: Introduction

1.1. Background

Many corporate governance discussions in recent years have centered on the appropriate characteristics of the board of directors. It has been shown that the quality of a company's earnings is a significant factor in determining its long-term viability (Iliev & Lowry, 2015). A stronger earnings-returns relationship is created when directors effectively manage accounting standards and give accounting information that accurately represents underlying economic activities (Almutairi & Quttainah, 2020).

When overseeing management and assuring the integrity of financial reports, the board of directors (BoD) is an essential component of good governance. Fama and Jensen (1983) argued that the board of directors may minimize agency costs by splitting management and control functions; in this model, the board of directors ratifies and oversees the choices taken by senior management. Board of Directors (BoD) features, including board size, composition, and independence, have been demonstrated to affect the usefulness of accounting profits in the past (Klai & Omri, 2013; Firth et al., 2006).

The literature on corporate governance employs different theoretical perspectives, such as agency, stewardship, and resource dependency, to explain the impact of various leadership arrangements, such as the CEO-chair duality and board structures, on organizational performance.

According to agency theory (Jensen & Meckling, 1976), managers do not always prioritize shareholders' interests. The problem is that they just care about themselves and what benefits them the most (Clarke, 2007). Therefore, there may be friction between them. Managerial ownership and incentive packages are two methods for better aligning shareholder interests with those of managers and reducing agency costs (Warfield et al., 1995).

The level of managerial ownership varies from firm to firm, and some executives may be swayed to make accounting choices that benefit their bottom lines. This means that the degree to which these two measures will limit management's ability to take advantage of situations differs from business to business. According to the idea, non-CEO

duality in leadership (Peng et al., 2007) and independent directors (Ramdani & Witteloostuijn, 2010) are required for effective monitoring.

Conversely, stewardship theory (Donaldson & Davis, 1991) argues that managers and directors should act in a way that benefits shareholders since they are stewards (Ramdani & Witteloostuijn, 2010). Directors are seen as providing good industry understanding and technical experience, and a combined chair-CEO is seen as an efficient provider of superior shareholder returns (Peng et al., 2007). Davis et al. (1997) found that steward directors were more dedicated to their roles and had a deeper understanding of the business and its nuances.

In resource-dependence theory, Pfeffer and Salancik (1978) suggested that organizations rely on external resources and that their actions are shaped by attempts to regulate these dependencies. Boards' capacity to secure more and better company resources is central to the resource-dependence theory (Peng et al., 2007). Hillman & Dalziel (2003) organize board resource provisions based on the literature into two categories: (1) human capital (such as experience, expertise, knowledge, skills, reputation, administrative advice, and counsel, assistance in formulating major firm decisions, and ability to improve the company's public image) and (2) relational capital (such as linking the company to major stakeholders, building relations with other economic entities, diffusing innovation, and facilitating acclaim).

A company's chances of survival improve when its resources are optimized to minimize transaction costs (Ramdani & Witteloostuijn, 2010), reduce uncertainty, and lessen its reliance on external contingencies (Jensen & Meckling, 1976).

Managerial manipulation of reported results weakens the association between stock returns and earnings (Holthausen & Verrecchia, 1988). Management may be disciplined, and good corporate governance can strengthen the correlation between reported earnings and stock returns. According to previous research (Iliev & Lowry, 2015; Vintila & Nenu, 2015; Anderson et al., 2004; Jeon & Sohn, 2005; Mercer, 2004), market participants value boards that are effective in preventing management opportunistic behavior and inducing management to report high-quality earnings. It has been shown that the quality of a company's earnings is a major factor in determining its long-term viability (Iliev & Lowry, 2015).

A stronger earnings-return relationship is established when directors effectively monitor accounting practices and deliver accounting information that accurately represents underlying economic activity. Additionally, markets often anticipate a more robust correlation between profits and stock returns when boards welcome resource-rich directors and steward directors who are likely to behave in the best interests of shareholders. Directors with access to significant resources (such as suppliers, customers, and shareholders) may be able to provide these to their companies, which may be invaluable during strategic planning and execution (Zahra & Pearce, 1989). Directors with stewardship tend to be more dedicated to their roles and have a deeper understanding of the sector and its technical aspects (Davis et al., 1997).

The effectiveness of the board's capacity to watch out for shareholders' interests has been seen as heavily dependent on the makeup of the board. According to some authors (Hossain et al., 2000; Booth & Deli,1996), inside directors are familiar with the company's day-to-day operations, while independent directors bring objectivity and expertise gleaned from their familiarity with and experience in other business pursuits. Therefore, the value of independent directors is tied to their capacity to appraise company performance without bias, whereas the value of inside directors is tied to their proximity to management and potential lack of objectivity, making them less effective as corporate monitors.

1.2. Problem Statement

Focused on accounting information, earnings serve as a critical indicator of a company's operational success and play a pivotal role in investment decision-making. They represent the bottom line of the income statement and are believed to signal the company's potential for future profitability (Beaver, 1998). Therefore, the informativeness of earnings is crucial (Ball, 2006; Francis et al., 2004).

The board's effectiveness in overseeing internal control systems and the financial reporting process can vary depending on the board's characteristics (Klein, 1998; Hermalin & Weisbach, 1991). This study examines whether board traits influence the informativeness of earnings, given that board members are tasked with ensuring the accuracy of accounting information in financial reports (Hermalin & Weisbach, 2003; Kanakriyah, 2021).

The impact of corporate governance mechanisms, particularly board characteristics, on the quality and informativeness of accounting earnings, is an important but understudied topic in emerging markets like Palestine and Jordan, characterized by evolving regulations and developing capital markets. The research problem revolves around understanding how the characteristics of corporate boards of the companies listed on the two markets affect the usefulness of accounting earnings in explaining stock returns.

1.3. Research Questions

The interplay between board characteristics and the informativeness of accounting earnings is a critical area of corporate governance research, particularly in emerging markets like Palestine and Jordan. Effective corporate governance mechanisms are essential for ensuring transparency and reliability in financial reporting, which, in turn, affects investor confidence and market performance. This research investigates the impact of various board characteristics —reputation, independence, competence, compensation, and size—on the informativeness of accounting earnings for companies listed on the Palestine Exchange (PEX) and the Amman Stock Exchange (ASE). By examining these characteristics, the research aims to shed light on how governance structures can enhance or undermine the quality of financial information provided to the market. Herein lies the crux of the debate in this research: how these specific governance practices influence financial reporting quality. This debate can be delineated through the formulation of precise research questions that guide the inquiry toward achieving the study's objectives;

- **Question 1:** How does the board's reputation influence accounting earnings' informativeness concerning PEX and ASE stock returns?
- **Question 2:** To what extent do independent directors enhance the informativeness of accounting earnings in explaining stock returns in PEX and ASE?
- **Question 3:** What is the impact of board competence on the informativeness of accounting earnings regarding stock returns in PEX and ASE?
- **Question 4**: How does the total annual cash compensation of the board relate to the informativeness of accounting earnings concerning stock returns in PEX and ASE?

- **Question 5:** What is the relationship between board size and the informativeness of accounting earnings concerning stock returns in PEX and ASE?

1.4. Research Hypotheses

Building on the literature review, this research aims to test the following hypotheses to explore the relationship between board characteristics and the informativeness of accounting earnings in explaining stock returns for companies listed on the Palestine Exchange (PEX) and the Amman Stock Exchange (ASE):

- **H1**: The board's reputation positively and significantly affects the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.
- **H2**: Boards with more independent directors significantly increase the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.
- **H3**: The board's competence positively and significantly affects the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.
- **H4**: The total board annual cash compensation significantly impacts the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.
- **H5**: The board size significantly affects the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.

Each hypothesis is grounded in empirical research and theoretical frameworks, offering a structured approach to analyzing how different board characteristics impact financial reporting quality. The hypotheses and the relationship between these variables are illustrated in Figure (1.1) below:

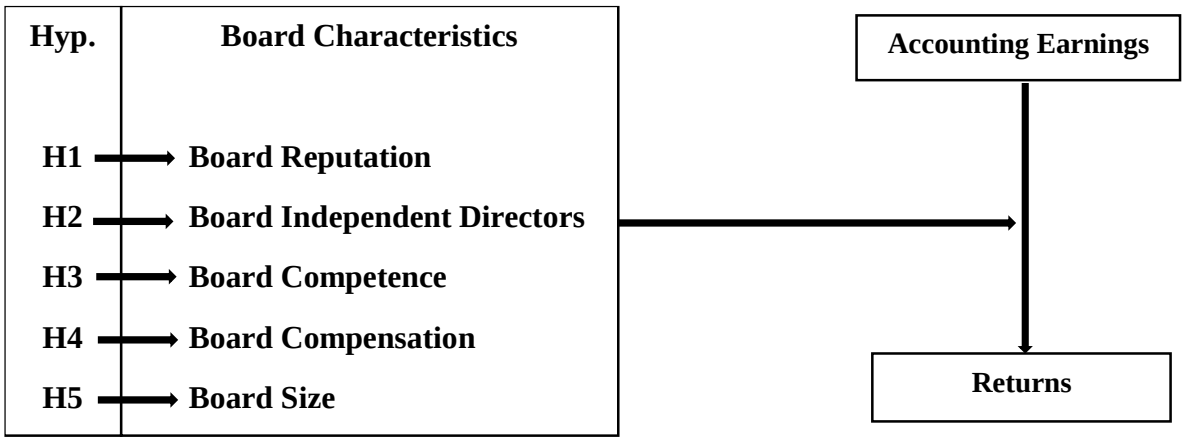

Figure 1.1: Hypotheses

In Chapter 2, these hypotheses will be elaborated upon with detailed justifications, drawing on existing literature and empirical evidence to underline their relevance and importance in the context of this research.

1.5. Research Objectives

This research aims to examine the impact of board characteristics on the informativeness of accounting earnings in explaining stock returns for companies listed on the Palestine Exchange (PEX) and the Amman Stock Exchange (ASE) and conduct a comparative analysis of the findings between the two markets.

As a result, the study concentrates on verification and achieving the following 5 objectives specifically:

- **Objective 1:** Examine the influence of board reputation on the informativeness of accounting earnings concerning stock returns.
- **Objective 2:** Investigate how boards with more independent directors enhance the informativeness of accounting earnings in explaining stock returns.
- **Objective 3:** Assess the impact of board competence on the informativeness of accounting earnings regarding stock returns.
- **Objective 4:** Evaluate the relationship between total board annual cash compensation and the informativeness of accounting earnings regarding stock returns.
- **Objective 5:** Analyze the link between board size and the informativeness of accounting earnings regarding stock returns.

1.6. Significance of the Research

Corporate governance has become essential in developing economies and the Middle East and North Africa following the financial crisis many nations encountered at the start of the new millennium. The Companies Law in Jordan was revised to emphasize the function of boards of directors and financial accountability to raise the bar for corporate governance and management. Capital market laws were also amended to improve financial reporting transparency and fortify investor and shareholder rights (Amman Stock Exchange [ASE], 2024).

In 2009, the Palestine Capital Market Authority (PCMA) released a corporate governance code for family-owned businesses, along with many rules and instructions urging businesses to follow good governance practices (Palestine Capital Market Authority [PCMA], 2009). Additionally, the Palestine Monetary Authority (PMA) implemented regulations to oblige businesses to adhere to basic governance criteria (Palestine Monetary Authority [PMA], 2017). Considerable progress has been made in incorporating corporate social responsibility and sustainability principles into business disclosure mandates.

The role of auditing and oversight firms was reinforced to guarantee adherence to good governance practices and compliance with both public and private legislation (Palestine Exchange [PEX], 2022). A greater emphasis on sound governance reflects how important good corporate management is for encouraging sustainable growth and boosting investor confidence in business operations. As a result, reliable accounting data reflecting these operations is essential for making investment decisions and driving economic reforms in the relevant nations.

As demonstrated by the presentation of trustworthy accounting data, strong corporate governance is thought to promote sustainable business growth and, more significantly, boost investor confidence in corporate operations (Amman Stock Exchange, 2023). Jordan's corporate governance structure has experienced significant changes since the Companies Law was passed in 1997. One of the most notable changes was reorganizing and clarifying the board of directors' responsibilities (World Bank, 2015).

As part of their responsible role in directly supervising the accuracy of accounting information, the PCMA, the PEX, and the PMA issued a number of regulations,

legislation, guidelines, and mandates at the beginning of the new millennium with the goal of enforcing governance rules and best practices. According to reports, Jordan and Palestine have significantly improved their corporate governance (World Bank, 2017).

Empirical research on the qualities of boards and their oversight of the quality of accounting information in Jordan and Palestine has been limited since these governance reforms. This field of study will demonstrate how board attributes in Palestine and Jordan affect the usefulness of accounting data. Furthermore, as the stock markets in Jordan and Palestine are still developing, factual data about the influence of board characteristics may offer insightful information to global investors. The results of this study may help Jordanian and Palestinian regulatory organizations enhance their corporate governance procedures in the future.

Understanding how board characteristics impact the informativeness of accounting earnings in the Palestine Exchange (PEX) and Amman Stock Exchange (ASE) is crucial for market development and stability.

1.6.1. Practical Significance

This research addresses a significant gap by examining the specific board traits that enhance the informativeness of financial information for decision-making in these distinctive economic landscapes. The research's practical significance lies in the following:

1. **Enhancing Financial Reporting Quality**: It identifies board traits that correlate with more informative financial statements, thereby improving financial reporting practices in emerging markets.

2. **Informing Policy Development**: The findings guide the development of policies aimed at enhancing the relevance and reliability of accounting earnings. This is particularly valuable for regulators and policymakers in Palestine, Jordan, and similar settings.

3. **Advancing Corporate Governance**: By exploring the relationship between board characteristics and financial reporting informativeness, the research contributes to broader discussions on corporate governance in developing economies.

4. **Real-world Implications**: The insights gained are directly relevant for investors, businesses, and regulators, providing actionable knowledge to improve investment decisions and market efficiency in PEX, ASE, and similar markets.

5. **Enhancing Insights for Other Stakeholders**: It provides actionable insights for other stakeholders navigating the intricacies of emerging markets, delivering tangible benefits across various interests.

1.6.2. Academic Significance

The research's academic significance lies in the following contributions:

1. **Empirical Studies Lacking:** There is a noticeable scarcity of empirical research linking the attributes of boards and the informativeness of accounting earnings in the markets of Palestine and Jordan, especially in light of the recent governance reforms enacted in both nations.

2. **Unexplored Traits on Developing Economies:** Although numerous studies have investigated the effects of board composition regarding size and independence, limited research exists on certain board attributes, such as experience, educational background, and reputation, particularly in Palestine and Jordan. Furthermore, examining the influence of these aspects on the informativeness of accounting earnings is quite uncommon and remains uninvestigated in both markets.

3. **More added factors:** Including some control factors such as ownership concentration and corporate age in testing the informativeness of accounting earnings in explaining stock returns is still undiscovered in the Palestine and Jordan markets.

4. **Comparison between markets:** This research compares the impact of board characteristics on the informativeness of accounting earnings between two markets (Palestine and Jordan). This comparison provides deeper, valuable insights into board characteristics and earnings informativeness across the two economies.

1.7. Scope of the Research

This research focuses on all non-financial public shareholding companies listed on the Palestine Exchange (PEX) and Amman Stock Exchange (ASE). Specifically, it includes:

- **Companies Included**: The study encompasses 33 companies listed on the Palestine Exchange (PEX) and 100 on the Amman Stock Exchange (ASE).
- **Period**: The research spans eleven years, from 2013 to 2023.
- **Exclusions**: The scope excludes financial companies and privately held firms or other regions outside of these specific stock exchanges.

- **Focus Areas**:

- Analysis of board reputation, independence, competence, compensation, and size.
- Comparative analysis between the two stock markets.
- Insights into how board characteristics influence financial reporting informativeness in emerging market contexts.

1.8. Conceptual and Operational Definitions

In this research, the following key terms are defined both conceptually and operationally to ensure clarity and consistency:

1. Board Reputation

- **Conceptual Definition**: Board reputation refers to the collective perception of a board's effectiveness, integrity, and professionalism within the corporate and investment community (Fama & Jensen, 1983).
- **Operational Definition**: In this research, board reputation is measured by the number of directorships held by board members, awards received, and the inclusion of members with significant external directorships or those who have received national recognition for their board performance (Ferris et al., 2003; Knyazeva et al., 2013).

2. **Independent Directors**
   - **Conceptual Definition**: Independent directors are board members who do not have any material or pecuniary relationship with the company or its related entities, except for board membership (Cotter et al., 1997).
   - **Operational Definition**: The proportion of independent directors on the board is calculated by dividing the number of independent directors by the total number of directors on the board (Kanakriyah, 2021; Shahrier et al., 2020).

3. **Board Competence**
   - **Conceptual Definition**: Board competence refers to the skills, knowledge, and experience possessed by board members that enable them to effectively oversee and guide the company's strategic direction and performance (Johnson et al., 2013).
   - **Operational Definition**: Board competence is evaluated based on educational qualifications, financial experience, and managerial experience of board members. Specific indicators include the number of board members with advanced degrees, relevant industry experience, and previous executive roles (Jin & Mamatzakis, 2018; Darmadi, 2013).

4. **Board Compensation**
   - **Conceptual Definition**: Board compensation encompasses the financial remuneration provided to board members in return for their services, including cash payments, stock options, and other benefits (Davis & Stobaugh, 1995).
   - **Operational Definition**: Board compensation is quantified as the total annual cash payments made to all board members. This includes base salary, bonuses, and other cash incentives (Almarayeh, 2023; Brick et al., 2006).

5. **Board Size**
   - **Conceptual Definition**: Board size refers to the total number of directors serving on the board of a company (Jensen, 1993).
   - **Operational Definition**: Board size is measured by counting the total number of directors on the board (Ahmed et al., 2006; Andres & Vallelado, 2008).

6. The Informativeness of Accounting Earnings

- **Conceptual Definition**: Accounting earnings are the profits that a business reports and uses to evaluate its performance using particular accounting techniques (Barth et al., 2016). The most used indicator of accounting earnings is earnings per share (EPS) . The informativeness of earnings refers to the degree to which yearly accounting earnings provide useful information, which is commonly proxied by the earnings association with stock returns. More useful earnings result in a stronger response from investors, as indicated by changes in security returns (Vafeas, 2000; Warfeld et al., 1995).

- **Operational Definition**: The informativeness of accounting earnings can be assessed by calculating the earnings response coefficient through regression analysis of the relationship between returns and earnings. This examines the market's reaction to different earnings releases (Maneeroj, 2006; Ahmed et al., 2006; Vafeas, 2000; Warfeld et al., 1995).

7. Stock Returns

- **Conceptual Definition**: Stock returns are the investment returns investors realize from their investments in company stocks and serve as a significant indicator of market performance and investment efficiency (Fama & French, 1992). It represents the income shareholders earn from investing in certain companies (Violita & Soeharto, 2019).
- **Operational Definition**: Stock returns are quantified by considering all the returns obtained by investing in the stock, which includes changes in the stock price (capital gains) as well as any dividends and distributions received by shareholders during a specified timeframe. (Bollen, 1998; Easton & Harris,1991).

Chapter Two: Literature Review

2.1. Preface

This chapter lays the theoretical groundwork for exploring the relationship between board characteristics and the informativeness of accounting earnings, focusing on the Palestine Exchange (PEX) and the Amman Stock Exchange (ASE). The chapter is structured to comprehensively review existing literature and empirical studies related to corporate governance and firm performance, particularly within emerging markets.

By synthesizing the findings of prior studies and analyzing theoretical perspectives, this chapter aims to highlight the significant role of board attributes in enhancing financial reporting transparency and reliability. Through this examination, we develop and propose hypotheses to guide the empirical analysis in subsequent chapters, thereby contributing to a deeper understanding of corporate governance dynamics in the context of PEX and ASE-listed companies.

2.2. Theoretical Framework

2.2.1. Corporate Governance

Corporate governance is a fundamental element in enhancing investor confidence, increasing competitiveness, and fostering economic growth. As James Wolfensohn stated in 1998, "Corporate governance is now as important in the global economy as the government of countries." Effective corporate governance helps prevent corporate scandals, fraud, and potential civil and criminal liabilities. Good governance also enhances the company's image and reputation, making it more attractive to investors, suppliers, customers, and other stakeholders (Wolfensohn, 1998; Todorovic, 2013). Research indicates that good corporate governance brings direct economic benefits to companies, making them more profitable and competitive. For investors, the implementation of corporate governance principles such as transparency, protection of shareholder rights, and equitable treatment of shareholders are crucial aspects that ensure the return on their investments (Todorovic, 2013).

Discussion on corporate governance began in the early 1980s when American managers neglected shareholder interests, leading to a drop in share prices. For many years, the Organization for Economic Co-operation and Development (OECD) has been

at the forefront of this work. OECD member governments aim to ensure good corporate governance practices as a crucial element for promoting prosperity and economic growth. In 1999, the OECD published its Principles of Corporate Governance, the first international code approved by governments (OECD, 2004). These Principles focus on publicly traded companies and aim to assist governments in evaluating and improving their legal, institutional, and regulatory frameworks for corporate governance (Todorovic, 2013; Gyamerah & Agyei, 2016). They also provide guidance for stock exchanges, investors, corporations, and other stakeholders in developing good corporate governance practices (Gyamerah & Agyei, 2016).

Every nation has its own set of accountable institutions and corporate governance policies; no one framework is appropriate for every market. Because of this, the OECD Principles are optional guidelines that nations are free to modify and put into practice in accordance with their own customs and market conditions (OECD, 2004). Corporate governance has attracted a lot of attention lately, in both theory and practice (Parker, 2007). According to Parker (2007), corporate governance has garnered the greatest interest and discussion from lawmakers, regulators, professions, business organizations, the media, and the general public (Todorovic, 2013).

Corporate governance, although defined differently, is generally understood to be "the system by which companies are directed and controlled" (Cadbury, 1992). More precisely, it strikes a balance between the interests of different parties. According to the International Finance Corporation (IFC), it has to do with the relationships among the management, Board of Directors, controlling shareholders, non-controlling interest, and other stakeholder (IFC, 2005). Comparably, corporate governance is described by the OECD as including the interactions between a company's owners, management, board, and other stakeholders and providing a framework for establishing goals and keeping track of results (OECD, 2004).

Good corporate governance is crucial for enhancing company integrity, efficiency, and the financial markets. Poor governance can lead to financial difficulties and fraud, while strong governance helps companies raise capital more easily and at lower costs, leading to long-term profitability and competitiveness. High governance standards reduce operational risks and attract investors, promoting growth and development. Research supports that investors prefer well-governed firms. Investors tend to invest in companies

with better governance systems and are more likely to invest in companies they know about. Additionally, foreign investors favor companies with less information asymmetry (Covrig et al., 2006; Parker, 2007; Todorovic, 2013; Gyamerah & Agyei, 2016; Kavadis & Thomsen, 2023; Almashhadani & Almashhadani, 2023).

2.2.2. Board Characteristics

The board of directors plays a pivotal role in corporate governance by representing shareholders' interests and overseeing management to align with company objectives. According to agency theory, the board acts as an intermediary between shareholders (principals) and executives (agents), aimed at mitigating agency conflicts (Jensen & Meckling, 1976).

A dynamic and well-structured board of directors, which acts as the highest decision-making body to guarantee the firm's profitability, supports a strong corporate governance framework. However, any deviation or moral hazard on the part of the board or its members can have detrimental effects on the company and even put it in danger of going bankrupt.

Board Size and Decision-Making

The size of the board influences its effectiveness in decision-making and governance oversight. Research suggests smaller boards can facilitate quicker decision-making due to fewer bureaucratic hurdles, whereas larger boards may offer broader expertise and perspectives (Yermack, 1996). The optimal board size often balances these factors to ensure efficient governance without sacrificing diversity of thought.

In Palestine, according to Article 104 of Companies Law No. 12 of 1964, the number of board members in public shareholding companies should range from a minimum of five to a maximum of eleven. However, a new Companies Law was recently enacted in Palestine (Companies Law No. 42 of 2021), which mandates that the board of directors of public shareholding companies must consist of a minimum of five members and a maximum of thirteen members, as specified in Article 104 of the mentioned law.

According to Article 132 of the Jordanian Companies Law No. 22 of 1997, a public shareholding company should be managed by a board of directors consisting of at least three and, at most, thirteen members.

Board Expertise, Experience, and Diversity

The board's effectiveness also hinges on the collective expertise, experience, and diversity of knowledge among its members. Boards comprising individuals with diverse professional backgrounds, industry experience, and demographic representation are better equipped to provide strategic guidance and oversee management effectively (Adams & Ferreira, 2009; Carter et al., 2010). This diversity helps anticipate market trends, assess risks, and seize opportunities critical for company success.

Independence and Leadership

The independence of board members from management is essential to prevent conflicts of interest. Regulatory frameworks often mandate a minimum percentage of independent directors (Fama & Jensen, 1983). Effective boards appoint an independent chairperson to lead discussions impartially and ensure robust governance practices (Hermalin & Weisbach, 2003).

Roles and Responsibilities

The board's primary duties include strategic guidance, oversight of financial reporting, and executive compensation. According to the OECD Principles of Corporate Governance (1999), boards are accountable for setting corporate goals, evaluating management performance, and ensuring stakeholder transparency.

Effectiveness and Performance

Board effectiveness is measured by its impact on firm performance and shareholder value. Studies by Yermack (1996) and Dalton et al. (1998) indicate a positive correlation between board characteristics (such as size, independence, and expertise) and company performance metrics.

2.2.3. The Informativeness of Accounting Earnings

Informative accounting earnings furnish investors and stakeholders with relevant information regarding a company's financial performance and future prospects. Understanding this concept is crucial in the field of corporate finance and financial reporting, as earnings play a significant role in predicting profitability and operational efficiency. Earnings informativeness pertains to the extent to which annual accounting

earnings offer valuable information, often measured by the association between earnings and stock returns. Greater profitability leads to a more pronounced response from investors, as evidenced by variations in securities returns (Vafeas, 2000; Warfeld et al., 1995).

According to the information content theory in accounting, earnings informativeness is influenced by factors such as the quality of earnings, relevance of accounting policies, and transparency of financial disclosures (Ohlson, 1995; Feltham & Ohlson, 1995). High-quality earnings are characterized by their ability to accurately reflect a company's underlying economic reality, thereby reducing information asymmetry between managers and investors (Barth et al., 2001).

Empirical studies have shown that firms with more informative earnings experience lower cost of capital, higher valuation multiples, and increased investor confidence (Easton & Harris, 1991; Francis et al., 2004). For instance, research by Lev (1989) and Collins & Kothari (1989) demonstrates a positive market reaction to earnings announcements that contain new, relevant information.

2.2.4. Governance and Earnings Theories

Governance and earnings theories provide frameworks for understanding how corporate governance structures influence the informativeness and quality of earnings companies report. These theories are crucial in assessing how governance mechanisms impact financial reporting practices and, consequently, investor perceptions and market outcomes.

1. Agency Theory

A key idea in corporate governance is agency theory, which describes the interaction between principals (shareholders), who supply capital, and agents (managers), who have the authority to operate the business. Managers are believed to be bound by a contract to operate in the shareholders' best interests. Jensen and Meckling (1976) note that most major firms have a separation of ownership and management, which allows managers to avoid taking financial responsibility for their choices and creates possible conflicts of interest.

Bratton and McCahery (1999) recommend using internal control mechanisms as an alternate means of protecting non-controlling interest (NCI) in businesses with controlling shareholders and less liquid secondary markets. One reasonable choice in this context is the board of directors. The expropriation of minority shareholders and creditors by dominating shareholders often occurs in many nations. Hence, La Porta et al. (2000) argue that investor protection is essential.

Bushman and Smith (2001) highlight that accounting can be used as a control mechanism through which investors and shareholders can monitor managers' actions. They claim that accounting plays a significant role in contracts with managers by providing variables for defining the basis of their benefit plans (incentives). Lopes (2008) adds that agency conflict is exacerbated by information asymmetry. Accounting contributes to corporate governance mechanisms by providing useful information to decision-makers, reducing information asymmetry, and mitigating the impact of agency conflicts.

Effective governance mechanisms, such as board independence and compensation structures, are designed to mitigate agency problems and enhance the credibility of reported earnings (Fama & Jensen, 1983). The Board of Directors is accountable to all shareholders through the general meeting of shareholders. Therefore, the role of the board of directors is crucial in enhancing the informativeness of earnings (Klein, 2002; Chiraphol et al. 2021).

2. Stewardship Theory

Stewardship theory contrasts with agency theory by suggesting that managers, as stewards, are motivated to act in the best interests of shareholders. This theory posits that managers derive satisfaction from organizational success and are intrinsically motivated to achieve the firm's goals. Davis, Schoorman, and Donaldson (1997) argue that when organizations trust their managers and give them autonomy, managers are more likely to act as effective stewards, leading to higher-quality earnings reporting.

3. Resource Dependence Theory

Pfeffer and Salancik proposed the resource dependence theory in 1978. This theory recognizes the influence of external factors on organizational behavior and asserts that managers can reduce environmental uncertainty and dependence despite being

constrained by their context. The theory describes the corporation as an open system dependent on contingencies in the external environment.

Resource-dependence theory pertains to a board's capacity to provide the company with increased and more valuable resources (Peng et al., 2007). Resources enhance a firm's likelihood of existence by diminishing its reliance on external factors (Jensen & Meckling, 1976), decreasing uncertainty within the firm (Booth et al., 2002), and limiting the expenses associated with transactions (Ramdani & Witteloostuijn, 2010).

Nevertheless, extensive empirical evidence indicates that directors vary in their ability to effectively monitor, provide good recommendations, and get necessary resources.

4. Information Asymmetry Theory

Information asymmetry theory addresses the discrepancies in information access between insiders (management) and outsiders (investors), which significantly impact the quality and informativeness of earnings disclosures. The theory suggests that insiders typically possess more detailed and timely information about the company's operations and future prospects than external investors, leading to potential inefficiencies in market behavior and investment decisions.

Verrecchia (2001) emphasizes that effective corporate governance mechanisms, such as transparency and robust disclosure practices, play a crucial role in mitigating information asymmetry. By ensuring that relevant and reliable earnings information is disclosed, these mechanisms enhance market efficiency. Enhanced transparency and disclosure practices allow investors to make more informed decisions, thereby reducing the adverse effects of information asymmetry.

Additionally, Healy and Palepu (2001) argue that firms with better disclosure practices tend to enjoy lower costs of capital. They suggest that when companies provide high-quality, comprehensive information, it reduces investors' uncertainty and perceived risks associated with their investments. This leads to increased investor confidence and a higher level of trust in the financial markets.

Moreover, Diamond and Verrecchia (1991) propose that voluntary disclosure can serve as a signal of firm quality. Firms that voluntarily disclose more information may be

perceived as having better prospects, thereby attracting more investment and potentially enhancing their valuation. This signaling effect can help differentiate high-quality firms from lower-quality ones, further contributing to market efficiency.

5. Stakeholder Theory

Stakeholder theory expands the traditional focus of corporate governance beyond just shareholders to include a broader range of stakeholders, such as employees, customers, suppliers, and the community. This theory posits that the success and sustainability of a business depend on its ability to balance and address the interests of all these parties.

Freeman (1984), a pivotal figure in the development of stakeholder theory, argues that governance structures that take into account the interests of various stakeholders lead to more comprehensive and reliable earnings reporting practices. By integrating stakeholder interests into governance frameworks, companies can foster a more inclusive and responsible approach to decision-making. This not only enhances the quality of earnings reports but also promotes transparency and accountability.

Donaldson and Preston (1995) further assert that stakeholder theory provides a normative, instrumental, and descriptive approach to understanding how corporations operate. Normatively, it suggests that managers have an ethical obligation to consider stakeholders' interests. Instrumentally, it implies that companies that effectively manage stakeholder relationships are more likely to achieve sustained competitive advantage. Descriptively, it provides a realistic picture of how organizations function by recognizing the multitude of interests they must manage.

Moreover, Clarkson (1995) highlights that managing stakeholder relationships effectively can lead to improved financial performance and greater corporate resilience. By engaging with stakeholders and addressing their concerns, companies can mitigate risks and leverage opportunities for innovation and growth.

Jones (1995) contributes to the theory by suggesting that ethical relationships with stakeholders can result in trust and cooperation, leading to reduced transaction costs and enhanced firm performance. This perspective underscores the importance of ethical governance practices in achieving long-term business success.

6. Corporate Social Responsibility (CSR) Theory

CSR theory suggests that corporate governance practices influence a company's commitment to ethical behavior and social responsibility, which in turn impacts financial performance and earnings quality. McGuire et al. (1988) discuss how governance frameworks that integrate CSR considerations enhance corporate reputation and stakeholder trust, ultimately contributing to more informative earnings disclosures.

2.2.5. Corporate Governance: Palestine vs Jordan

2.2.5.1. Corporate Governance in Palestine

Corporate governance in Palestine is characterized by unique challenges and opportunities, given the region's political and economic context. Despite these challenges, significant strides have been made to establish robust governance practices.

- Initial Steps and Regulatory Frameworks: The Palestine Capital Market Authority (PCMA), established in 2004, has promoted corporate governance in Palestine. The introduction of the Code of Corporate Governance for Public Shareholding Companies Listed on the Palestine Exchange (PEX) in 2009 laid the foundation for governance practices, focusing on transparency, accountability, and protecting minority shareholders (Palestine Capital Market Authority [PCMA], 2009).

- **Key Milestones and Reforms:** Over the past decade, several key reforms have been implemented to strengthen corporate governance. These include mandatory requirements for board independence, the establishment of audit committees, and the enhancement of disclosure standards. The PCMA and PEX have been proactive in conducting training programs and workshops to raise awareness about corporate governance among listed companies.

- **Effective Oversight and Enforcement:** The PCMA plays a crucial role in monitoring compliance with governance standards. Regular inspections, audits, and enforcement actions ensure that companies adhere to regulatory requirements. This oversight is essential for maintaining market integrity and protecting investor interests.

- **Disclosure and Reporting:** Transparency in corporate governance was emphasized through stringent disclosure requirements. Companies are mandated to publish annual

reports that provide detailed information on their financial performance, governance structures, and risk management practices. This level of disclosure is aimed at fostering trust and confidence among investors.

- **Future Directions and Vision:** The future of corporate governance in Palestine involves addressing challenges related to political instability, economic volatility, and limited market liquidity. Efforts are underway to enhance board diversity, strengthen shareholder rights, and promote ethical business practices. The vision is to create a sustainable and resilient corporate governance framework that supports economic growth and development.

2.2.5.2. Corporate Governance in Jordan

Corporate governance in Jordan has evolved significantly over the past few decades, driven by the need to attract foreign investment and enhance the overall business environment. The development of corporate governance in Jordan can be traced through several key milestones:

- **Early Development and Reforms:** The initial steps towards formalizing corporate governance practices in Jordan began in the early 2000s. The Jordan Securities Commission (JSC) was established in 1997, playing a pivotal role in regulating and overseeing the capital market. The introduction of the Corporate Governance Code for Shareholding Companies Listed on the Amman Stock Exchange (ASE) in 2006 marked a significant milestone, aiming to enhance transparency, accountability, and investor protection (Jordan Securities Commission [JSC], 2006).

- **Enhancement of Regulatory Frameworks:** Over the years, Jordan has continued to refine its corporate governance frameworks. Revisions to the Corporate Governance Code in 2012 and 2017 introduced more stringent requirements for board composition, audit committees, and disclosure practices. These reforms were aimed at aligning Jordan's corporate governance standards with international best practices and improving the investment climate (Amman Stock Exchange [ASE], 2017).

- **Effective Oversight and Monitoring:** The ASE, in collaboration with the JSC, has been instrumental in enforcing corporate governance standards. Regular audits, compliance checks, and mandatory disclosure requirements ensure that listed

companies adhere to established governance practices. This effective oversight has contributed to increased investor confidence and market stability.

- **Disclosure and Transparency:** Disclosure practices in Jordan have seen significant improvements. Companies are required to provide comprehensive annual reports, including detailed financial statements, governance structures, and risk management practices. This transparency is crucial for investors and other stakeholders to be informed in their decision-making.

- **Future Prospects and Challenges:** Looking ahead, Jordan aims to further strengthen its corporate governance framework by enhancing board diversity, improving shareholder rights, and fostering a culture of ethical business practices. However, challenges such as market volatility, regulatory enforcement, and ensuring compliance across all sectors remain.

2.3. Literature Review and Hypotheses Development

Previous research into the connection between corporate governance and firm performance has shown mixed results. Strong company performance has been linked to solid governance in most emerging market research (Farooq et al., 2022; Alodat et al., 2022; Cheung et al., 2014; Klapper & Love, 2004). While other research, such as (Abdallah & Ismail, 2017; Gompers et al., 2003), has failed to find any such link.

In addition to performing control tasks and identifying risks, boards of directors are described as organizational structures that develop overarching policies for the facility, establish necessary strategies, make decisions pertaining to the company's assets, assess the company's performance, appoint the company's chief executive officer, and so on. Several characteristics of the board itself can affect the company's bottom line. (Kanakriyah, 2021).

Empirical finance research considered composition and membership of the board to be crucial to the board's ability to monitor shareholders' interests properly. Corporate governance discussions in recent years have often centered on the makeup and size of the board of directors (Eisenberg et al., 1998; Garg, 2007; Rose, 2007). In addition, a large body of research demonstrates that not all board members perform equivalent oversight, advice provision, and resource acquisition duties. The way these boards work depends on

some characteristics. In what follows, we'll examine how these characteristics might affect the link between earnings and stock returns.

2.3.1. Board Reputation

As Fama and Jensen (1983) discussed, directors have much riding on their reputations as decision experts. Having more directorships is one way the job market recognizes and compensates directors. Both Ghosh et al. (2010) and Fama & Jensen (1983) have shown this to be the case. There is evidence to back up this claim. For instance, research by Ferris et al. (2003) reveals that board members of larger companies and boards are more likely to be invited to join other boards. According to data presented by Knyazeva et al. (2013), large companies have an easier time luring qualified directors from faraway locations. Additional directorships are offered to those who have won national prizes for their work on the board (Shiah-Hou & Cheng, 2012).

According to Quan and Li (2017), directors tend to refrain from accepting directorships in underperforming organizations with lower prestige levels and require more demanding workloads. However, a study conducted by Masulis and Mobbs (2014) reveals that directors serving on boards with high levels of prestige exhibit a lower tendency to miss board meetings and resign from their director positions, even in cases where the firm's performance is subpar, which is more likely to happen in firms with low levels of prestige.

Reputable directors are widely recognized for their ability to obtain significant resources, as viewed through resource dependency theory. Furthermore, according to the research conducted by Clifford et al. (2018), firms with bankers serving on their boards of directors exhibit a decreased likelihood of default compared to their industry counterparts.

In summary, the reputation of directors has the potential to incentivize them to engage in more effective monitoring of companies and allocate essential resources. Therefore, we formulate the following hypothesis:

H1: The board's reputation positively and significantly affects the usefulness of the accounting earnings in explaining stock returns for PEX and ASE-listed companies.

2.3.2. Independent Members

There is also conflicting empirical data about the value of outsiders on boards. In one set of studies, researchers looked at how the makeup of company boards affected the performance and found that having a larger number of independent non-executive board members enhances shareholder returns on investment (Cotter et al., 1997; Lee et al., 1992). Furthermore, Kanakriyah (2021) demonstrated a positive link between the independence of board members and organizational performance. Shahrier et al. (2020) found empirical evidence that the presence of independent board members positively influenced firm performance.

Furthermore, Bekiaris (2021) conducted a study that provided empirical evidence supporting the positive impact of independent directors on bank performance. The findings of this study were aligned with other studies conducted by Andres and Vallelado (2008), Georgantopoulos and Filos (2017), and Liang et al. (2013), which also reported a positive relationship between the presence of independent directors and improved performance.

However, empirical research exploring the unconditional value-relevance of board composition has found that increasing the number of external directors does not inevitably improve performance. Hermalin and Weisbach (1991) found no correlation between board diversity, ownership, and business value. Similarly, Bhagat and Black (1999) reexamined the connection between board structure and firm performance over a more extended testing period, and they came to the same conclusion that there is no significant correlation between board composition and the levels and changes of numerous variables proxying for future firm performance or with stock returns.

Klein (1998) takes a step back from the makeup of the entire board to argue and test whether director affiliation becomes value-relevant in the context of board committees specializing in decision management or decision control. According to him, there is a correlation between the number of insiders on an organization's investment and finance committees and its financial and stock market performance. However, the available evidence did not support outsiders' value of monitoring committees.

Numerous prior studies have shown that having directors from outside the company can help decision-making by providing new perspectives and access to resources. These nominations have the potential to boost the company's financial resources. For example, DeFond et al. (2005) found that the market responds favorably to the news of external director nominations. Therefore, the following hypothesis is advanced by this study:

H2: Boards with more independent directors significantly increase the usefulness of the accounting earnings in explaining stock returns for PEX and ASE-listed companies.

2.3.3. Board Competence

Several empirical studies have highlighted the significance of board competence and investigated its impact on corporate performance. In most situations, researchers analyzed the significance of the education and experience of board members on firm performance (Johnson et al., 2013; Fernandes et al., 2017; Ujunwa, 2012; Jalbert et al., 2002).

Hau and Thum (2009) published an empirical study in which they tested the effect of board competence on performance in more detail using various regression analyses and concluded that the lack of competent board monitoring is a leading explanation for the underperformance of German state-owned banks.

According to an analysis conducted by Fernandes et al. (2017) on 72 publicly traded European banks, those with more autonomous and busy boards saw lower stock returns during the financial crisis than those with more board members with industry-related (i.e., financial) experience. In addition, Board experience and industry-specific competence are positively correlated predictors of firm success, as emphasized in a related literature study by Fernandes et al. (2018).

Darmadi (2013) examined the influence of the educational qualifications of board members on the financial performance of Indonesian-listed firms. The study provided empirical evidence that the educational qualifications of board members matter in explaining either ROA or Tobin's Q. In his study, Ujunwa (2012) found that board nationality, board ethnicity, and the number of board members with a PhD qualification were found to impact firm performance positively.

Jin and Mamatzakis (2018) examined the impact of board competence on the performance of Chinese banks. They found that the financial experience is positively correlated with bank performance and concluded that the competence of directors affected bank performance. The researchers measured the board's competence by employing three dimensions: educational background, financial experience, and managerial experience. Using ten measurement criteria, they developed a special measurement index that included the three mentioned dimensions.

Hau and Thum (2009) studied the biographical background of directors in the largest banks in Germany and assessed the correlation between board competence and bank losses. The study has established a correlation between the level of financial expertise board members possess and the occurrence of financial losses. The research made progress in assessing board competence using qualitative means by gathering a comprehensive range of indicators of competence. The researchers established a set of 14 distinct biographical factors that serve as indicators for assessing board competence. The variables encompass the educational background of a board member, represented by three indicators; financial experience, represented by six indicators factors; and managerial experience, represented by five indicators.

Sidki et al. (2023) found that board members' education and experience have an impact on the financial performance of German state-owned enterprises; they adopted Hau and Thum's (2009) methodological approach to measuring and quantifying competence by using three dimensions to examine the significance for company performance: education, management experience, and industry experience.

Overall, and according to the findings of previous studies, the firm's performance is impacted by the board's competence, reflected in the directors' education and experience. So, we came up with this hypothesis:

H3: The board's competence positively and significantly affects the usefulness of the accounting earnings in explaining stock returns for PEX and ASE-listed companies

2.3.4. Board Compensation

Directors should be compensated appropriately and adequately for the time and energy they put into their roles. Failing to do so may impede the company's ability to recruit, inspire, and keep qualified board members (Davis & Stobaugh, 1995). Directors

dedicated to carrying out their responsibilities and providing better supervision and greater resources should receive higher compensation as a reward for their efforts.

Almarayeh (2023) conducted a study on Jordanian companies to examine how board gender diversity and board compensation affect corporate financial performance; the researcher found that board compensation is associated with improved financial performance.

Based on their findings, Ryan and Wiggins (2004) concluded that independent directors can better supervise companies and increase shareholder returns when compensated. It is more likely that outside directors will obtain a hefty salary when monitoring expenses are considerable. According to Linn and Park (2005), companies that provide their employees with a broader variety of investment possibilities also pay their outside directors more.

However, Brick et al. (2006) found that excessive director compensation results in firm underperformance. In addition, Almutairi and Quttainah (2020) concluded that compensation paid to outside directors is negatively and significantly related to the earnings-return relationship.

Based on mixed results of the previous studies (Almarayeh, 2023; Almutairi et al., 2020), we measure board compensation by the total annual cash paid to the board, and we hypothesize that director compensation may influence the association between accounting earnings and stock returns. Therefore, we developed the following hypothesis:

H4: The total board annual cash compensation significantly impacts the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.

2.3.5. Board Size

The board's size is an essential factor that matters in terms of board effectiveness. Prior studies into board size have yielded contradictory findings. The board's ability to carry out its responsibilities depends on the quality of its members. A large number of board members might be problematic and may point to inefficiencies in the institution's structure (Pathan & Faff, 2013). According to this argument, a negative association between board size and performance was discovered by Rodriguez-Fernandez et al. (2014) and Pathan & Faff (2013). Jensen (1993) found that a bigger board size led to greater process losses because it stifled directors' ability to freely and effectively share

information and ideas. The CEO may be able to exert more authority on the board if the board is large since coalition costs among board members rise with a board size (Eisenberg et al., 1998).

Furthermore, Ahmed et al. (2006) looked at how the size of the board and the number of outside directors on a board affected the relevance of yearly accounting profits as a source of information. Using panel data from New Zealand (NZ) companies for 1991-97, they discovered a negative correlation between board size and earnings informativeness. Also, Abusharbeh et al. (2023) studied the impact of board structure on firms' value for the non-financial listed companies in Jordan; the conclusion revealed a non-significant impact of board size on firm value.

However, many research (Gafoor et al., 2018; Gaur et al., 2015; Andres & Vallelado, 2008) have shown a favorable influence of board size on performance. To back up the claim that a larger board contributes more expertise to the organization in decision-making, Gafoor et al. (2018) studied Indian banks. They discovered a positive influence of board size on bank performance.

It has been suggested by Adams and Mehran (2012) that larger boards have more directors with subsidiary directorships because of the positive correlation between board size and performance. The influence of board size on performance was also positively observed by Andres and Vallelado (2008).

Almutairi and Quttainah (2020) investigated the extent to which board traits enhance the relationship between reported accounting earnings and stock returns in the banking industry across 15 countries. The findings suggested that the size of the board has a positive and significant impact on the relationship between accounting earnings and security returns.

Bekiaris (2021) analyzed how the composition of Greek banks' boards of directors affected their bottom lines. He demonstrated that board size, board independence, and chairman independence have a material impact on bank performance.

Based on these arguments, which exhibited mixed results on the impact of board size, the following hypothesis is proposed:

H5: The board size significantly affects the usefulness of the accounting earnings in explaining stock returns for PEX and ASE-listed companies.

2.3.6. Key Control Variables

Following previous research (Kanakriyah, 2021; Bekiaris, 2021; Almutairi et al., 2020; Ahmed et al., 2006), control variables were included in this research to enhance the analysis and conclusions. We incorporated four control variables proposed in the literature as significant predictors of the variation in the earnings-returns relation.

Firm Size

In addition, we control for firm size due to its effect on overall accounting earnings (Nicolaou, 2004) and consider the differences between firms. Bekiaris (2021) showed that the firm's size, measured by total assets, positively impacted company performance, as hypothesized by his study. To control for the firm size variable, we use the natural log of the total assets to measure the firm size.

Leverage

A company's leverage is the proportion of its financing that comes from debt. The use of high leverage can achieve increases in investment and returns for shareholders if that is deemed appropriate by management. Failure to do so can lead to a decline in worth due to interest payments and credit risk. In their study, Ahmed et al. (2006) used firm leverage as a control variable; they found that leverage was significantly negative, suggesting that firm risk is negatively associated with stock returns. In research conducted by Dzanic (2012), he added leverage as a control variable when he tested the association between ownership concentration and corporate performance; the results showed that leverage has a negative effect on corporate performance.

For this research, we added the total debt as a control variable to control the effect of leverage on earnings-return association and to capture differences in firm leverage.

Corporate Age

As for the effect of corporate age on the informativeness of earnings, previous literature has produced mixed results; some research found that younger listed corporations had weaker corporate governance than older ones due to a lack of experience and resources (Bianchini et al., 2015). Moreover, Loderer & Waelchli (2010) found that publicly traded companies with a history of more than 15 years often perform worse than

their younger counterparts due to an inability to adapt to changing market conditions. However, many researchers have discovered a positive association between corporate age and company success (Manawaduge & De Zoysa, 2013; Musallam, 2015; Qasim, 2014). Upon this, the researcher expects that corporate age may have a controlling role in the informativeness of earnings since older listed companies are believed to have more informative earnings.

Ownership Concentration

Donnelly and Lynch (2002) pointed out that earnings informativeness and the traded market value of firms could vary according to the degree of ownership concentration. Soufeljil et al. (2016) showed the existence of a positive impact and statistically significant concentration of ownership on the firm performance for Tunisian listed companies. In light of previous research, we control for the impact of ownership concentration on earnings informativeness by including the proportion of equity held by the top 5 largest shareholders (TOP5) as a controlling variable. Furthermore, another effect of ownership concentration is the existence of block holders (a block holder is defined as a controlling shareholder who owns a substantive percentage (25%-30%) of a company's shares and, therefore, has a legal right to nullify any corporate decision (Surachai & Nongnit, 2019). In his study, Dzanic (2012) examined the relationship between ownership structure and firm performance using a sample of firms listed on the Zagreb Stock Exchange; the study showed a significant negative relationship between the existence of a block holder and firm performance. To control for the effect of block holders, we include the proportion of equity held by the largest shareholder (TOP1) as a controlling variable.

2.4. Hypotheses and Theoretical Perspectives Alignment

The hypotheses in this research are grounded in key theoretical frameworks that provide a foundation for understanding the relationships between board characteristics and the informativeness of accounting earnings. Each hypothesis is aligned with one of these theoretical perspectives:

2.4.1. Agency Theory

H1: The board's reputation positively and significantly affects the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.

Rationale: Agency theory states that a board with a solid reputation will efficiently oversee and supervise the actions of the management team, thereby minimizing information asymmetry and improving the accuracy and reliability of financial reporting. (Fama & Jensen, 1983).

H2: Boards with more independent directors significantly increase the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.

Rationale: According to agency theory, independent directors not influenced by management offer higher supervision and minimize conflicts of interest, resulting in higher-quality financial reports (Fama & Jensen, 1983).

H4: The total board annual cash compensation negatively impacts the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.

Rationale: Agency theory suggests that when the board's total annual cash compensation is too high, it can create conflicts of interest and hinder its ability to oversee management effectively. This is because high compensation may cause the board members to prioritize their own interests, aligning more with management rather than with shareholders. The decline in supervision can have an adverse impact on the usefulness of accounting earnings in interpreting stock returns (Fama & Jensen, 1983).

2.4.2. Stewardship Theory

H3: The board's competence positively and significantly affects the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.

Rationale: Stewardship theory suggests that competent directors, who are well-versed in relevant areas, act as effective stewards of the company's resources, leading to more informative financial reporting (Davis et al., 1997).

2.4.3. Resource Dependence Theory

H5: The board size positively and significantly affects the usefulness of accounting earnings in explaining stock returns for PEX and ASE-listed companies.

Rationale: According to resource dependence theory, a larger board can provide a broader range of knowledge and resources, hence boosting supervision and transparency in financial reporting. More board members increase the chance of varied viewpoints and talents, which can improve the board's ability to oversee management and assure accurate financial reporting (Pfeffer & Salancik, 1978).

2.5. Gaps in the Literature

Despite the extensive research on board characteristics and firm performance, there remain notable gaps in the literature that warrant further investigation; this research contributes to fulfilling the following gaps:

1. **Contextual Variability**: Existing studies often generalize findings from developed markets to emerging markets like the Palestine Exchange (PEX) and the Amman Stock Exchange (ASE) without considering the unique institutional contexts and regulatory environments of these markets (La Porta et al., 1998; Demsetz & Lehn, 1985). Emerging markets typically face different challenges related to governance practices and economic development, which may influence the effectiveness of board characteristics differently (Claessens et al., 2002).
2. **Unexplored Earnings Informativeness:** Much prior research examined the relationship between board traits and firms' performance. Some prior research tested the correlation between board characteristics and earnings informativeness in some countries. However, examining the earnings informativeness in explaining stock returns in Palestine and Jordan is still unexplored and understudied. The lack of empirical studies on the characteristics of boards and the usefulness of accounting information is apparent in both markets, particularly following the recent governance reforms implemented in the two countries. More research is needed to explore the mechanisms through which board characteristics influence the informativeness of earnings. For instance, studies could explore how board competence enhances

financial oversight practices or how board reputation affects stakeholder perceptions and market reactions (Finkelstein & Hambrick, 1996; Hillman et al., 2000).

3. **Longitudinal Analysis:** Many studies adopt a cross-sectional approach, providing a snapshot of the relationship between board characteristics and firm performance at a specific point in time. Longitudinal studies tracking changes in board attributes over time could offer deeper insights into how these dynamics evolve and their sustained impact on financial reporting quality and market outcomes (Dalton et al., 1998).

4. **Comparative Studies:** Comparative studies between different emerging markets or between emerging and developed markets could provide valuable insights into the relative importance of board characteristics across diverse economic and regulatory contexts (Aguilera & Jackson, 2003; Peng & Heath, 1996).

5. **Board Diversity:** While many studies have examined the impact of board composition in terms of size and independence, there is less exploration of diversity in board characteristics, such as competence and reputation (Erkut et al., 2006; Adams & Ferreira, 2009). Diversity has been shown to bring varied perspectives and potentially enhance board decision-making processes. Yet, its impact on earnings informativeness remains underexplored in the context of PEX and ASE.

Chapter Three: Research Methodology

3.1. Introduction

This chapter examines how board characteristics influence the informativeness of accounting earnings in companies listed on the Palestine Exchange (PEX) and the Amman Stock Exchange (ASE). It outlines the systematic approach used to define the study population, select the sample of companies, and collect relevant data. The chapter details the criteria for company selection based on listing status and sector representation within the exchanges, along with the data collection methods, including financial reports and disclosures. Additionally, it discusses the identification and operationalization of variables related to board composition and informativeness of accounting earnings. It outlines the statistical methods, such as regression analysis, used to test hypotheses.

3.2. Data and Sampling Selection

3.2.1. Data Collection

The data collection process will involve thoroughly examining and extracting relevant information directly from the annual reports and stock price listings, ensuring consistency and accuracy in data retrieval.

This approach entails gathering data from two primary sources: annual reports published by the listed companies on PEX and ASE and annual stock price listings provided by the two exchanges. The annual reports will provide comprehensive insights into board characteristics, financial performance metrics, and other variables details, while the annual stock price listings will offer crucial market valuation data over the eleven-year period from 2013 to 2023. This dual-source method aims to capture a holistic view of how board characteristics and market dynamics influence the informativeness of accounting earnings in emerging markets.

3.2.2. Sampling Selection

This research adopts a comprehensive approach, encompassing all non-financial companies listed on the Palestine Stock Exchange and the Amman Stock Exchange. A comprehensive sampling strategy was employed to ensure a representative sample of the target population, involving 49 companies from the Palestine Stock Exchange and 166

from the Amman Stock Exchange. Financial companies were excluded, resulting in the exclusion of 16 companies from Palestine and 60 companies from Jordan. The focus was primarily on non-financial companies, totaling 33 in Palestine and 106 in Jordan.

Companies with extreme data or lacking data spanning more than six years were excluded, leading to a final sample of 30 companies from Palestine and 99 companies from Jordan, representing 60% of the total market. These companies were selected based on their classification as non-financial, providing a comprehensive dataset covering a period from 2013 to 2023 over an extended research period.

Data was secured over an eleven-year-long research period, allowing for a comprehensive analysis of longitudinal data, considering economic fluctuations and corporate performance dynamics.

The final sample size was robust and substantial, with the study obtaining 327 observations from PEX and 1081 from ASE. This large sample size enhances statistical reliability and enables a comprehensive study of the relationship between board characteristics and the informativeness of accounting earnings. The sample selection was precise to represent a significant proportion of the listed companies in both markets. Table (3.1) below summarizes the sample selection results.

Table 3.1: Sample Selection

Criteria	Companies listed on the PEX	Companies listed on the ASE	Total	Percent
Population size by the end of 2023	49	166	215	100
Exclusion of the financial sector	(16)	(60)	(76)	(35)
Exclude outliers and companies with missing data (blank data) for a period exceeding six years.	(3)	(7)	(10)	(5)
Purposive sample	30	99	129	60

For the purpose of data collection, the following observations were noted:

- For measuring the change in earnings per share (ΔEPS), EPS was computed for the current year and the previous year.

- To measure stock return, the stock price was recorded for the current and previous years.
- To measure the board's reputation, the reputation of each member (an average of over nine members per company) was calculated.
- To measure the board's competence, the efficiency of each member was assessed based on ten indicators (3 for education, 3 for experience, and 4 for management).
- To measure board compensation, the total compensation for all members was calculated.
- Additionally, asset size, leverage ratio, company age, ownership by the largest shareholder, and ownership by the top 5 shareholders were measured.

These measurements constituted 107 indicators and variables over 11 years, resulting in 137,304 data points directly and indirectly utilized in this research.

3.3. Research Model and Analysis Methods

Our approach includes testing the significant association between accounting earnings as the independent variable and stock returns as the dependent variable and assessing whether that association varies as a function of the characteristics of the board.

Figure (3.1) below portrays the research model that represents the basis for testing the effect of the five board characteristics on the relationship between stock return and accounting earnings:

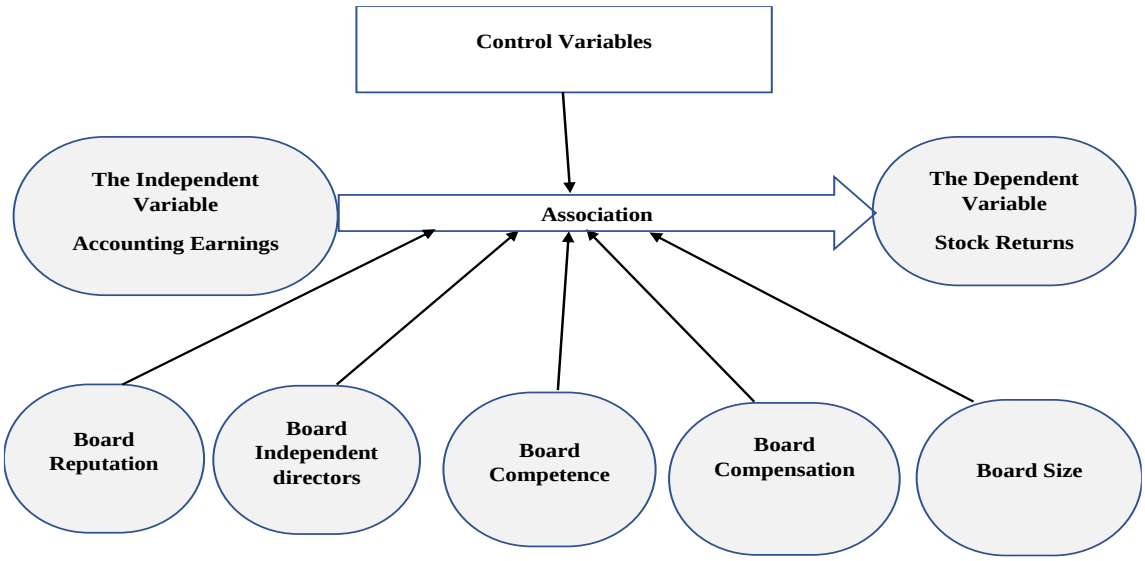

Figure 3.1: The Research Model

3.3.1. Earnings-Returns Specification Model:

Following Kothari & Zimmerman (1995), we use the following model (the returns model) to specify the association between accounting earnings and stock returns:

$$RETURNS_{jt} = a_0 + a_1 EPS_{jt} + u_{jt} \quad \text{..... (1)}$$

Where:

$RETURNS_{jt}$	Stock returns for company j at the end of year t and is calculated as follows: $RETURNS_{jt} = \frac{PRICE_{jt} - PPRICE_{j\,t-1} + DIV_{jt}}{PPRICE_{j\,t-1}}$, following Easton & Harris (1991).
$PRICE_{jt}$	The end-of-year stock price for company j at the end of year t.
$PRICE_{jt-1}$	The end-of-year stock price for company j at the end of year t-1.
DIV_{jt}	The dividend paid for company j through the year t.
EPS_{jt}	Earnings per share for company j for the year t deflated by the end-of- previous year stock price ($EPS_{jt}/\ PRICE_{jt-1}$)
a_0	The Intercept
a_1	The coefficient
u_{jt}	Error terms

3.3.2. The Basic Model

We test the effect of different board characteristics on the earnings-return association by examining the significance of the main effect of the board characteristics variables on the dependent variable (stock returns), and then we add interaction terms of the board characteristics variables with EPS and concluding the effect on the earnings-return association. We start by exploring the main effect of the board characteristics and the control variable resulting in the basic model (equation 2) (Warfield et al., 1995; Almutairi & Quttainah, 2020; Ahmed et al., 2006):

$$RETURNS_{jt} = b_0 + b_1 EPS_{jt} + b_2 REP_{jt} + b_3 IND_{jt} + b_4 COMP_{jt} + b_5 BPAY_{jt} + b_6 BSIZE_{jt} + b_7 COSIZE_{jt} + b_8 TDEBT_{jt} + b_9 AGE_{jt} + b_{10} TOP5_{jt} + b_{11} TOP1_{jt} + e_{jt}$$

Model 1: The Basic Model ..... (2)

Variable's definitions and data types are portrayed in Table (3.2) below:

Table 3.2: Basic model variables and data types

Variable	Description	Data Type
REP_{jt}	The board reputation of company j at year t is measured by the number of directorships held by board members divided by the total board members for company j at year t.	Percentage
IND_{jt}	The proportion of independent directors divided by total board members for company j at year t.	Percentage
$COMP_{jt}$	The board competence is measured through the competence index in Table 2.	Percentage
$BPAY_{jt}$	The total compensation paid to the board of company j as a percentage of its assets in year t.	Percentage
$BSIZE_{jt}$	The board size for company j, at year t, is measured by the number of board directors.	Number
Control Variables:		
COSIZE jt	The natural log of the total assets for company j at year t.	Number
TDEBT jt	Total debt divided by total assets for company j at year t.	Percentage
AGE jt	The corporate age in years since the establishment of company j at year t.	Number
TOP1 jt	The proportion of equity the largest shareholder holds for company j at year t.	Percentage
TOP5 jt	The proportion of equity held by the top 5 largest shareholders for company j at year t.	Percentage
b_0	The Intercept	
$b_1..b_{11}$	The coefficients	
e_{jt}	Error term	

3.3.2.1. Board Competence Index

Based on the studies conducted by Sidki et al. (2023), Jin and Mamatzakis (2018), and Hau and Thum (2009), we constructed an index to assess the level of board competence for the selected companies included in the research sample. We have established a set of 10 distinct criteria indicators that serve as proxies for assessing board competence. The indicators encompass three dimensions: educational background, industry experience, and management experience. Each of these dimensions is represented by a set of specific indicators, with three indications for educational background, three for industry experience, and four for management experience. The ultimate score for the board's competency is determined by dividing the cumulative score of all indicators by the maximum possible score. Table (3.3) below summarizes the competence index.

Table 3.3: Board Competence Measurement Index

Dimension	Indicators (Binomial indicators 1/0)	Yes	No
Education Background	E1: Does the member hold a bachelor's degree?	1	0
	E2: Does the member hold a master's degree?	1	0
	E3: Does the member hold a PhD degree?	1	0
Industry Experience	I1: Does the member have work experience in the company sector?	1	0
	I2: Has the board member previously worked for the company?	1	0
	I3: Has the member had professional experience as an auditor, tax advisor, or consultant?	1	0
Management Experience	M1: Has the member worked as a team leader or department head?	1	0
	M2: Has the member already worked as a mid-manager?	1	0
	M3: Has the member already worked as a top manager?	1	0
	M4: Has the member already worked as a manager in the same company?	1	0

Education background score = (E1 +E2+ E3) / 3

Industry experience score = (I1 +I2+ I3) / 3

Management experience score = (M1 +M2+ M3 + M4) / 4

Board competence score = (E1 +E2+ E3+ I1 +I2+ I3+ M1 +M2+ M3 + M4)/10

3.3.2.2. Coefficients Predicted Signs

In light of the literature review, the data type and the predicted signs of independent variables coefficients are shown in Table (3.4) as follows:

Table 3.4: Coefficients Predicted Signs

Independent Variable	Coefficient	Predicted Sign	Reference
EPS	b_1	+	(Agrawal & Bansal, 2021)
EPS * REP	b_2	+	(Almutairi & Quttainah, 2020)
EPS * IND	b_3	+	(Ahmad et al., 2006)
EPS * COMP	b_4	+	(Jin and Mamatzakis, 2018)
EPS * BPAY	b_5	+/-	(Almarayeh, 2023; Almutairi et al., 2020)
EPS * BSIZE	b_6	+/-	(Bekiaris, 2021; Ahmed et al., 2006)

3.3.3. The Expanded Models

In light of prior research, we expand our research model to test the effect of board characteristics on the earnings-returns relationship by adding interaction terms to the basic model; therefore, other than the research basic model (model 1- equation 2), we consider the interaction variables between EPS and the board characteristics variables to reach the Expanded Basic model (model2):

$$\begin{aligned}\mathrm{RETURNS}_{jt} = b_0 + b_1\,\mathrm{EPS}_{jt} + b_2\,\mathrm{REP}_{jt} + b_3\,\mathrm{IND}_{jt} + b_4\,\mathrm{COMP}_{jt} \\ + b_5\,\mathrm{BPAY}_{jt} + b_6\,\mathrm{BSIZE}_{jt} + b_7\,\mathrm{COSIZE}_{jt} + b_8\,\mathrm{TDEBT}_{jt} \\ + b_9\,\mathrm{AGE}_{jt} + b_{10}\,\mathrm{TOP5}_{jt} + b_{11}\,\mathrm{TOP1}_{jt} + b_{12}\,(\mathrm{EPS}_{jt} * \mathrm{REP}_{jt}) \\ + b_{13}\,(\mathrm{EPS}_{jt} * \mathrm{IND}_{jt}) + b_{14}\,(\mathrm{EPS}_{jt} * \mathrm{COMP}_{jt}) + b_{15}\,(\mathrm{EPS}_{jt} \\ * \mathrm{BPAY}_{jt}) + b_{16}\,(\mathrm{EPS}_{jt} * \mathrm{BSIZE}_{jt}) + e_{jt}\end{aligned}$$

Model 2: The Expanded Basic Model…..…… (3)

Furthermore, to add more reasonable specifications, we create the differenced basic model (model 3) by differencing the earnings variable (ΔEPS instead of using EPS); this is used because we can produce a stationary series by differencing the earnings variable and might get more reliable results:

$$\begin{aligned}\mathrm{RETURNS}_{jt} = b_0 + b_1\,\Delta\mathrm{EPS}_{jt} + b_2\,\mathrm{REP}_{jt} + b_3\,\mathrm{IND}_{jt} + b_4\,\mathrm{COMP}_{jt} \\ + b_5\,\mathrm{BPAY}_{jt} + b_6\,\mathrm{BSIZE}_{jt} + b_7\,\mathrm{COSIZE}_{jt} + b_8\,\mathrm{TDEBT}_{jt} \\ + b_9\,\mathrm{AGE}_{jt} + b_{10}\,\mathrm{TOP5}_{jt} + b_{11}\,\mathrm{TOP1}_{jt} + e_{jt}\end{aligned}$$

Model 3: The Differenced Model..……. (4)

Finally, we add the interaction terms to the differenced basic model to build the Expanded Differenced model (model 4):

$$\begin{aligned}\mathrm{RETURNS}_{jt} = b_0 + b_1\,\Delta\mathrm{EPS}_{jt} + b_2\,\mathrm{REP}_{jt} + b_3\,\mathrm{IND}_{jt} + b_4\,\mathrm{COMP}_{jt} \\ + b_5\,\mathrm{BPAY}_{jt} + b_6\,\mathrm{BSIZE}_{jt} + b_7\,\mathrm{COSIZE}_{jt} + b_8\,\mathrm{TDEBT}_{jt} \\ + b_9\,\mathrm{AGE}_{jt} + b_{10}\,\mathrm{TOP5}_{jt} + b_{11}\,\mathrm{TOP1}_{jt} + b_{12}\,(\Delta\mathrm{EPS}_{jt} * \mathrm{REP}_{jt}) \\ + b_{13}\,(\Delta\mathrm{EPS}_{jt} * \mathrm{IND}_{jt}) + b_{14}\,(\Delta\mathrm{EPS}_{jt} * \mathrm{COMP}_{jt}) + b_{15}\,(\Delta\mathrm{EPS}_{jt} \\ * \mathrm{BPAY}_{jt}) + b_{16}\,(\Delta\mathrm{EPS}_{jt} * \mathrm{BSIZE}_{jt}) + e_{jt}\end{aligned}$$

Model 4: The Expanded Differenced Model …….……. (5)

Table (3.5) below summarizes the research models.

Table 3.5: The Research Models

Coefficient	Model 1 (Basic Model)	Model 2 (Expanded Basic Model)	Model 3 (Differenced Model)	Model 4 (Expanded Differenced Model)
Dependent Var.	RETURNS	RETURNS	RETURNS	RETURNS
Intercept (b_0)	b_0	b_0	b_0	b_0
b_1	EPS	EPS	ΔEPS	ΔEPS
b_2	REP	REP	REP	REP
b_3	IND	IND	IND	IND
b_4	COMP	COMP	COMP	COMP
b_5	BPAY	BPAY	BPAY	BPAY
b_6	BSIZE	BSIZE	BSIZE	BSIZE
b_7	COSIZE	COSIZE	COSIZE	COSIZE
b_8	TDEBT	TDEBT	TDEBT	TDEBT
b_9	AGE	AGE	AGE	AGE
b_{10}	TOP5	TOP5	TOP5	TOP5
b_{11}	TOP1	TOP1	TOP1	TOP1
b_{12}	-	EPS * REP	-	ΔEPS * REP
b_{13}	-	EPS * IND	-	ΔEPS * IND
b_{14}	-	EPS * COMP	-	ΔEPS * COMP
b_{15}	-	EPS * BPAY	-	ΔEPS * BPAY
b_{16}	-	EPS * BSIZE	-	ΔEPS * BSIZE

3.4. Regression Analysis

This section outlines the statistical methods used to test the hypotheses concerning the influence of board characteristics on the informativeness of accounting earnings. The analysis is grounded in agency theory, stewardship theory, and resource dependence theory.

3.4.1. Regression Models

To investigate the significant association between board characteristics and the informativeness of accounting earnings, multiple regression models are employed. These models allow for examining how various independent variables (accounting earnings, board characteristics, the interaction between accounting earnings and board characteristics, and control variables) influence the dependent variable (stock returns); this enables us to assess whether the return-earning association varies as a function of the board characteristics.

3.4.2. Data Analysis and Testing Procedure

The data analysis for this study involves several systematic steps to ensure robust and valid results. These steps are:

1. **Model Specification**: Define and specify the multiple regression models for each hypothesis. By including the relevant control variables for other factors influencing the informativeness of accounting earnings.

2. **Data Collection**: Gather data on board characteristics (e.g., reputation, independence, competence, compensation, and size) and performance metrics from companies listed on the PEX and ASE.

3. **Descriptive Statistics**: Compute summary statistics for the variables to provide an overview of the data. This step helps understand the variables' distribution and central tendencies.

4. **Correlation Analysis**: Perform correlation analysis to explore preliminary relationships between the independent variables (accounting earnings) and the dependent variable (stock returns).

5. **Regression Analysis**: Conduct multiple regression analyses to test each hypothesis. Estimate the coefficients for board characteristics and assess their significance in explaining stock returns. This analysis will help determine the impact of board characteristics on the informativeness of accounting earnings.

6. **Interpretation of Results**: Interpret the regression analysis results in the context of the theoretical frameworks. Determine if the coefficients for board characteristics are statistically significant and align with the proposed hypotheses. Significant positive coefficients for the board characteristics would support the respective hypotheses, indicating that these characteristics enhance the informativeness of accounting earnings.

Chapter Four: Data Analysis and Findings

4.1. Introduction

This chapter extends the methodological framework established in Chapter 3 by conducting a comparative analysis between two key markets (PEX and ASE). Using descriptive statistics, correlation matrices, and regression analysis, the study examines the characteristics and relationships of the independent, dependent, and control variables across both contexts. The analysis employs four models, as outlined in the previous chapter, to rigorously test the hypotheses and assess the strength and direction of relationships within each market. This comparative approach allows for a deeper understanding of the dynamics in both the Jordanian and Palestinian economic environments, providing nuanced insights into the findings.

4.2. Descriptive Statistics

This analysis represents a crucial first step in understanding how board characteristics influence the informativeness of accounting earnings, which is central to this study.

4.2.1. Descriptive Statistics I – Palestine

Table (4.1) below outlines the descriptive statistics-I for the PEX-listed companies; the results can be interpreted as follows:

The dataset contains data from 30 PEX-listed firms with 327 observations per variable. A high sample size allows a more detailed study of board composition and accounting earnings' informativeness, improving statistical reliability. Because all variables have the same amount of observations, direct comparisons and analysis of probable interactions are easier. A balanced dataset has constant observations, which is necessary for drawing accurate managerial and financial conclusions. Overall, the high number of observations supports this chapter's empirical analysis.

Table 4.1: Descriptive Statistics I

Palestine								
Variable	Observations	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
RETURNS	327	-0.081	-0.092	0.963	-1.241	0.511	0.010	2.337
EPS	327	0.213	0.082	4.407	-0.385	0.485	4.018	25.226
DEPS*	327	0.000	0.000	2.219	-2.197	0.246	0.001	42.895
REP	327	6.602	6.111	13.818	3.143	2.200	0.937	3.501
IND	327	0.118	0.111	0.500	0.000	0.091	1.567	7.834
COMP	327	0.723	0.718	0.952	0.488	0.074	0.451	3.704
BPAY	327	0.001	0.001	0.006	0.000	0.001	1.354	5.248
BSIZE	327	8.508	8.000	15.000	4.000	2.207	0.454	2.739
COSIZE	327	17.484	17.375	21.088	13.886	1.482	0.282	2.993
TDEBT	327	0.316	0.309	0.716	0.004	0.175	0.110	2.107
AGE	327	27.771	24.000	78.000	0.000	15.914	1.301	4.232
TOP1	327	0.426	0.338	0.936	0.043	0.263	0.164	1.604
TOP5	327	0.665	0.727	0.990	0.176	0.225	-0.499	2.087

* DEPS is ΔEPS

Stock Returns (RETURNS)

An analysis of Palestinian returns shows that most listed companies perform poorly, with an average return of -8.1 percent. This indicates that, on average, the returns are negative. The median return is slightly negative at -9.2 percent, which supports this view, indicating that companies are earning returns close to or below zero. The maximum return is 96.3 percent, which indicates that some companies are achieving good results. However, the lowest return of -124.1 percent reflects that some companies incurred significant return losses experienced during the study period. This reflects the differences in the performance of listed companies. The standard deviation of 0.511 indicates that returns are volatile, which means that although returns are generally negative, there is a fair amount of volatility around the instrument.

Skewness is close to zero 0.010, suggesting that the distribution of returns is nearly symmetrical, with no significant skew towards very high or very low returns. This implies a relatively even spread of returns across companies, with no dominant trend toward extremely high or low values. The kurtosis value is 2.337, which indicates that the distribution is flatter than a normal distribution, with fewer extreme values. Therefore, although the returns have ups and downs, they do not affect the total return.

Earnings Per Share (EPS)

Palestine's results show an average EPS of 0.213, indicating a stronger ability to generate profits relative to capital employed. However, there is still a wide variation in performance, with earnings per share ranging from a high of 4.407 to a low of -0.385. This indicates that companies are performing poorly and companies are doing well. The standard deviation of 0.485 reinforces this variation and highlights the differences in the effectiveness of financial management across companies.

Delta Earnings Per Share (DEPS or ΔEPS)

The DEPS analysis shows a value of 0.000, indicating no increase in profits for Palestinian companies. The maximum DEPS value is around 2.219, while the minimum remains at -2.197, indicating a performance gap. This shows that some companies have achieved marginal improvements while others have experienced declines. The standard deviation of 0.246 reflects this variation in financial performance across companies.

Board Reputation (REP)

The REP variable has an average value of 6.602. This indicates a relatively strong reputation among board members, suggesting that many hold multiple managerial positions. The maximum value of 13.818 and minimum value of 3.143 highlight considerable variability among companies regarding their board members' reputations. The standard deviation of 2.200 further emphasizes the differences in reputational strength across companies. At the same time, the skewness coefficient of 0.937 and kurtosis of 3.501 suggest that the variable data is more peaked in the middle.

Board Independence (IND)

The mean of IND is 11.8 percent, suggesting that a lower proportion of listed companies have independent boards compared to Jordan. The maximum independent value is 50.0 percent, and the minimum is zero, but the overall reliance on independent board members is weak. The standard deviation of 0.091 shows slight variation across companies regarding autonomy, suggesting that most companies struggle to achieve autonomy.

Board Competence (COMP)

The average score of COMP in Palestine is 72.3 percent, suggesting that most board members demonstrate a reasonable efficiency level. This score reflects the board members' educational qualifications, industry experience, and management roles. The maximum score of 95.2 percent and a minimum of 48.8 percent indicates some variability in board competence across different companies. The standard deviation of 0.074 suggests relatively low variability in board efficiency, indicating a more consistent level of governance practices among Palestinian companies. Notably, there is considerable overlap in board membership across companies, with many companies sharing many of the same individuals on their boards. This shared membership may contribute to the observed consistency in governance practices. However, it could also raise concerns about the diversity of perspectives and independence in board decision-making.

Board Compensation (BPAY)

The average board compensation (BPAY) in Palestine is 0.1 percent of total assets; the median also stands at 0.1 percent, suggesting that most companies allocate about 0.1 percent of their assets to compensate board members. The maximum value of 0.6 percent and a minimum of zero indicate limited variability in compensation levels across companies, reflecting a conservative approach to board remuneration. The standard deviation of 0.001 shows that companies' compensation practices are pretty uniform. Additionally, a skewness value of 1.354 indicates a slight rightward deviation, suggesting the presence of slightly higher compensations, though not to a significant degree. This overall pattern reveals a cautious stance towards board compensation in Palestinian companies.

Board Size (BSIZE)

The average board size is 8.508 members (between 8 and 9 members), with a median of 8, indicating that most companies have moderately sized boards. The range of board members varies from 4 to 15, showing moderate variability across companies. The skewness value of 0.454 suggests a nearly symmetrical distribution, indicating that most companies have similar board sizes without significant deviations—the kurtosis of 2.739 indicates that the distribution is flatter than a normal distribution.

Company Size (COSIZE)

The company's average size is 17,484 (log of total assets) and a median value of 17.375, indicating a balanced distribution with no significant deviations from the center. The highest recorded size is 21,088, and the lowest is 13,886, indicating a wide range of different company sizes in the data set. The positive skewness of 0.282 indicates a low concentration of large companies, while the kurtosis value of 2.993 indicates a flatter distribution.

Leverage (Total Debt to Assets -TDEBT)

The mean TDEBT ratio is 31.6 percent, indicating that Palestinian companies utilize a significant proportion of debt financing. The median debt ratio is closely aligned at 30.9 percent, suggesting a similar distribution of debt levels among most companies. The maximum debt ratio in Palestine is 71.6 percent, indicating that some companies leverage

debt considerably. The minimum debt ratio of 0.4 percent shows that a few companies operate with minimal or no debt.

The standard deviation of 0.175 reveals moderate variability in debt ratios among Palestinian companies. A skewness value 0.110 suggests a nearly symmetrical distribution, with no significant outliers affecting the average. Additionally, the kurtosis of 2.107 indicates that the data has lighter tails and a flatter peak than a normal distribution.

Company Age (AGE)

The average company age in Palestine is 27.77 years, with a median of 24 years, indicating a relative tendency toward older companies. The range extends from 0 to 78 years, with a slight positive skew of 1.301 due to some older companies affecting the average. The kurtosis value of 4.232 suggests the presence of some companies with greater age.

Ownership Concentration (TOP1 & TOP5)

The largest shareholder (TOP1) holds an average of 42.6 percent of the company, with a median of 33.8 percent, indicating considerable ownership concentration. The maximum value of 93.6 percent reflects cases where one shareholder nearly owns the entire company, while the minimum value indicates more distributed ownership in some companies. The top five shareholders (TOP5) collectively control an average of 66.5 percent, with a median of 72.7 percent, demonstrating a relatively high concentration of ownership among the top stakeholders. However, there is some variation, as the minimum TOP5 ownership is 17.6 percent, indicating that ownership is more widely distributed across shareholders in specific companies.

4.2.2. Descriptive Statistics II – Jordan

Table (4.2) below outlines the descriptive statistics for the ASE-listed companies. The results can be interpreted as follows:

The dataset includes 1,080 observations, providing a robust foundation for analysis and enhancing the reliability and validity of the findings. This substantial sample size increases statistical power, allowing for confident conclusions about relationships between variables while reducing the risk of bias. Additionally, the diverse range of

observations supports generalizability, making it possible to extrapolate results to broader contexts and conduct meaningful subgroup analyses.

Stock Returns (RETURNS)

The table indicates that the average return on stock is 9.8 percent, a positive sign reflecting that Jordanian-listed companies generally provide returns to investors. However, the maximum and minimum values indicate variability in returns, with the highest return reaching 212 percent and the lowest return being -213 percent. This disparity illustrates that while some companies have generated substantial profits, others have incurred losses. The considerable variation is further emphasized by the high standard deviation of 0.359, indicating significant performance volatility among companies and suggesting an uncertain investment environment.

Moreover, the return distribution shows a slight positive skewness of 0.839, suggesting that most companies had low returns, with a few achieving high returns. The kurtosis value of 12.021 also indicates the existence of extreme observations and a sharper peak compared to a normal distribution.

Earnings Per Share (EPS)

The analysis of earnings per share (EPS) reveals that the mean is 0.092, which is relatively low, indicating a limited ability for companies to generate substantial profits. Again, a notable disparity in performance is evident, with the highest EPS reaching 7.216, while some companies recorded losses of -1.077. This significant variability points to fundamental differences in the companies' ability to generate profits, which may be linked to several factors, including the industry to which the companies belong and the efficiency of financial management. The standard deviation of 0.389 supports this hypothesis, suggesting considerable variability in profitability among companies. Furthermore, the skewness coefficient 8.912 and kurtosis 129.072 clearly indicate that only a few companies enjoy high profitability, while most are experiencing poor financial performance. This observation suggests a concentration of results among a limited number of successful companies.

Table 4.2: Descriptive statistics II

Jordan

Variable	Observations	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
RETURNS	1081	0.098	0.029	2.122	-2.133	0.359	0.839	12.021
EPS	1081	0.092	0.021	7.216	-1.077	0.389	8.912	129.072
DEPS	1081	0.002	0.000	4.615	-3.695	0.295	3.265	106.938
REP	1081	6.224	6.200	17.200	0.408	2.295	0.506	3.824
IND	1081	0.414	0.428	1.000	0.000	0.249	0.175	2.572
COMP	1081	0.717	0.704	0.980	0.560	0.085	0.179	1.863
BPAY	1081	0.002	0.001	0.198	0.000	0.007	24.432	712.427
BSIZE	1081	7.801	7.000	22.000	3.000	2.733	1.176	4.678
COSIZE	1081	16.908	17.124	21.310	11.828	1.518	-0.050	3.407
TDEBT	1081	0.285	0.229	1.002	0.000	0.226	1.017	3.438
AGE	1081	27.949	23.000	113.000	5.000	18.114	1.546	6.129
TOP1	1081	0.359	0.314	0.999	0.017	0.230	1.020	3.418
TOP5	1081	0.604	0.627	1.000	0.110	0.234	-0.262	2.048

Delta Earnings Per Share (DEPS or ΔEPS)

Regarding (ΔEPS), the mean is 0.002, reflecting an overall weakness in the performance growth of Jordanian companies. The maximum value of 4.615 compared to the minimum value of -3.695 indicates considerable variability in company profitability performance. Some companies are experiencing substantial improvements in their profitability, while others are facing declines. The skewness further supports this analysis is 3.265, which suggests that only a small number of companies achieve significant positive changes in their profitability. At the same time, the majority remain stable or exhibit only minor fluctuations in their earnings.

Board Reputation (REP)

The variable (REP) represents the ratio of board members' directorships to the total number of board members. The average value of this variable is 6.224, indicating that a significant proportion of board members possess a good reputation and hold multiple managerial positions, with considerable variability among companies, as indicated by the maximum and minimum values (17.200 and 0.408, respectively). The standard deviation of 2.295 suggests that some companies possess a strong and influential reputation, while others struggle with a weaker reputation. The skewness coefficient of 0.506 indicates that the distribution of reputation among companies follows a pattern closer to normal. The kurtosis of 3.824 indicates that it has a slightly sharper peak and heavier tails than a normal distribution.

Board Independence (IND)

The mean degree of the independence variable is 41.4 percent, indicating that many Jordanian listed companies have relatively independent boards of directors, aligning with best corporate governance practices. This is particularly important in the study's context, as board independence is often associated with increased transparency and efficiency in financial reporting. However, the standard deviation of 0.249 reveals variability among companies in their reliance on independent members.

Board Competence (COMP)

The mean competence score for boards in Jordanian companies is 71.7 percent, indicating that a significant majority possess high levels of efficiency. This score is calculated based on board members' educational qualifications, relevant industry experience, and management expertise, contributing to their overall competence. The standard deviation of 0.085 indicates that most companies show similar ratios of board efficiency, highlighting a degree of consistency in board competence across the Jordanian market.

Board Compensation (BPAY)

The findings reveal that the average board compensation as a percentage of total assets is 0.002, with a median of 0.001. This indicates that board pay constitutes a minimal fraction of overall company resources across most companies. This ratio may reflect conservative compensation policies or structures aligning board rewards with company performance, ensuring that financial resources are prudently managed.

However, the distribution of the compensation metric shows a high skew, with a skewness of 24.432, which indicates a highly right-skewed distribution, with the majority of data concentrated on the left and a very long tail extending to the right. The distribution also shows a high kurtosis of 712.427, suggesting a sharp peak distribution, with most data concentrated near the mean and some substantial deviations.

Board Size (BSIZE)

The descriptive statistics for board size reveal that, on average, companies have around eight board members, with a median of seven members. This indicates that most companies have moderately sized boards, with half having seven or fewer members and the other half having slightly larger boards. The range of board sizes is quite broad, from as few as three members to as many as 22, reflecting diverse governance structures across the companies.

The skewness value of 1.176 suggests a moderate positive skew, meaning that while most companies have smaller boards, a few companies with significantly larger boards increase the overall mean. The kurtosis value of 4.678 indicates the presence of extreme observations and a sharp peak.

Company Size (COSIZE)

The descriptive statistics for company size suggest a relatively balanced distribution across the companies studied. The mean size is 16.908 (the log of total assets), with a median of 17.124, indicating that the average company size is large and that the data is fairly evenly distributed around the central values. The similarity between the mean and median points to a balanced dataset, with no extreme deviations influencing the central tendency.

The range of company sizes varies from 11.828 to 21.310, reflecting the presence of both smaller and larger companies. The slight negative skewness of -0.050 indicates that there are slightly more large companies, but the distribution remains nearly symmetrical. Additionally, the kurtosis value of 3.407 suggests a sharp peak distribution.

Leverage (Total Debt to Assets-TDEBT)

The descriptive statistics for total debt to assets (TDEBT) provide insights into the leverage levels of the companies studied. On average, companies have a debt ratio of 28.5 percent, meaning that 28.5 percent of their assets are financed through debt. The median debt ratio is slightly lower at 22.9 percent, indicating that while some companies with higher debt levels pull the average up, most companies tend to have more conservative debt ratios.

The analysis reveals notable variations across the companies. The debt ratios range from zero to 100 percent, indicating significant diversity in financing strategies. Companies with a 100 percent debt ratio, such as Comprehensive Multiple Transportations Co. and Union Tobacco & Cigarette Industries, are either owned by holding companies or the government, suggesting that these companies rely entirely on debt for their financing needs, possibly due to strategic or ownership structures.

On the other end of the spectrum, companies like Jordan International Investment Co., Shira Real Estate Development & Investments, and Nopar for Trading and Investment report a zero percent debt ratio, indicating that they operate entirely without debt. These companies likely finance their operations through equity or other non-debt mechanisms, reflecting a more conservative approach to financial risk.

The range from zero percent to 100 percent debt ratios, combined with a mean of 28.5 percent and a slight positive skew, demonstrates a broad spectrum of debt usage. Most companies maintain moderate leverage, while a few companies at both extremes (either fully debt-financed or completely debt-free) influence the overall distribution.

The skewness value of 1.017 suggests a slight positive skew in the distribution, meaning that while most companies have relatively lower debt ratios, a few with higher debt levels push the mean upward. The kurtosis value 3.438 reflects a slightly sharper peak and heavier tails than a normal distribution.

Company Age (AGE)

The descriptive statistics for company age (AGE) reveal important insights into the age distribution of the companies studied. The mean company age is approximately 28 years, with a median of 23 years, indicating that half of the companies are younger than 23 years and the other half are older. The range of companies' ages extends from 5 to 113 years, demonstrating significant diversity in the sample, with both relatively new and well-established companies.

The positive skewness value of 1.546 indicates that the distribution is asymmetrical, with a longer tail on the right side. This suggests that while most companies are younger, a few much older companies in the dataset skew the average age upwards. Furthermore, the kurtosis value 6.129 means there are more older companies, which raises the overall mean.

Ownership Concentration (TOP1 & TOP5)

The descriptive statistics for ownership concentration (TOP1 & TOP5) provide insights into how concentrated ownership is in the companies studied. For TOP1, the largest shareholder owns, on average, 35.9 percent of the company, with a median of 31.4 percent. This suggests a moderate level of ownership concentration, where one shareholder holds a significant, but not dominant, portion of the company.

The top five shareholders together (TOP5) own a mean of 60.4 percent, with a median of 62.7 percent. This higher concentration indicates that, collectively, the major shareholders control a substantial portion of the company. The maximum value of 100 percent for TOP5 shows cases where the top five shareholders own the entire company.

In comparison, the minimum of 11 percent suggests that ownership is more widely distributed in some cases. These statistics reflect a range of ownership structures, from highly concentrated cases where a few shareholders hold almost all of the company to companies with more diversified ownership. This is mainly seen in the variation between the maximum and minimum values for both TOP1 and TOP5.

4.2.3. Descriptive Statistics: A Comparison between Palestine and Jordan

A comparative analysis of the research corporate governance factors and financial performance between PEX-listed and ASE-listed companies reveals significant differences and some commonalities. Table (4.3) compares the most important indicators.

Table 4.3: Descriptive statistics – A comparison between Palestine and Jordan

Variable	Mean		Median		Std. Dev.	
	Palestine	Jordan	Palestine	Jordan	Palestine	Jordan
RETURNS	-0.081	0.098	-0.092	0.029	0.511	0.359
EPS	0.213	0.092	0.082	0.021	0.485	0.389
DEPS*	0.000	0.002	0.000	0.000	0.246	0.295
REP	6.602	6.224	6.111	6.200	2.200	2.295
IND	0.118	0.414	0.111	0.428	0.091	0.249
COMP	0.723	0.717	0.718	0.704	0.074	0.085
BPAY	0.001	0.002	0.001	0.001	0.001	0.007
BSIZE	8.508	7.801	8.000	7.000	2.207	2.733
COSIZE	17.484	16.908	17.375	17.124	1.482	1.518
TDEBT	0.316	0.285	0.309	0.229	0.175	0.226
AGE	27.771	27.949	24.000	23.000	15.914	18.114
TOP1	0.426	0.359	0.338	0.314	0.263	0.230
TOP5	0.665	0.604	0.727	0.627	0.225	0.234

Table (4.3) shows a higher average in stock returns in Jordan, while negative average stock returns in Palestine, the Jordanian listed companies show positive average returns of 9.8%, suggesting favorable market conditions, investor confidence, or effective corporate performance. In contrast, Palestinian listed companies exhibit negative average returns of -8.1%, signaling potential challenges such as political instability, weaker

economic conditions, or company-specific issues. This disparity highlights significant differences in economic and market environments between the two regions.

The EPS average indicates that Palestine has performed better over the 11-year period. This suggests that, despite the political situation in Palestine, there are good investment opportunities, and companies are doing well financially. However, the average earnings growth in Jordan shows a greater improvement than in Palestine, indicating that Jordan has more potential for growth.

Despite these challenges, Palestinian companies have shown strength in areas such as management presence and reputation. The distribution of jobs in Palestine is fairly even, reflecting little variation across companies. However, lower board independence suggests opportunities for improved governance and strategic decision-making.

Jordan has demonstrated greater adherence to best practices in corporate governance, with a more independent and effective board of directors and higher board competence. This reflects the breadth of Jordan's governance and management strategies compared to the more uniform approach in Palestine.

The average debt ratio indicates that PEX-listed companies have a greater reliance on debt, regarding ownership concentration, Palestinian companies exhibit greater ownership concentration for both TOP1 and TOP5. Given the highly constrained market and substantial political limitations, the heightened emphasis on ownership concentration and debt strategy in Palestine may indicate a prioritization of stability over growth. Nevertheless, Jordan demonstrates extensive business behavior, with specific organizations more inclined to utilize debt for growth attainment. These disparities illustrate the distinct attributes of each market, influenced by their individual economic and regulatory structures.

4.3. Fixed Effect vs Random Effect Model

The nature of the data (panel data) for the study sample and the nature of the relationship between the independent and dependent variables is what governs the best model to represent this relationship. The fixed effect model and the random effect model are considered among the most famous models for modeling relationships in panel data.

In short, the fixed effects model addresses unobserved, time-invariant heterogeneity unique to each company via individual intercepts. The random effects model posits that individual effects are uncorrelated with the regressors and integrates them into the composite error term, therefore augmenting its variance.

The Hausman test is the statistical tool used to compare the static model with the random model, as it aims to determine the most appropriate model to represent the relationship between variables in panel data. The test is based on the null hypothesis that a random model is the most suitable, while the alternative hypothesis states that a static model is the most suitable. The importance of this test lies in its ability to assess the extent to which random variables are related to other factors within the model, which helps in choosing the one that produces the most accurate and effective estimates.

Table (4.4) displays the results of the Hausman test for the comparison between the fixed effect model and the random effect model. According to the value of p-probability, its values in all models are less than 0.05, therefore, we reject the null hypothesis and conclude that fixed effect models are preferred and confirm the superiority of the fixed effect model over the random effect model.

Table 4.4 Hausman Test

model	Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Palestine Models				
with EPS	Cross-section random	93.248049	10	0.0000
with ΔEPS	Cross-section random	81.219329	10	0.0000
Jordan Models				
with EPS	Cross-section random	42.058528	10	0.0000
with ΔEPS	Cross-section random	20.959044	10	0.0214

Upon the above test results, we employ the fixed effect models for the purpose of this study.

4.4. Normality Tests

In panel data, which combines cross-sectional and time-series aspects, normality testing is important. Panel data structures can deviate from normalcy due to unobserved variability, individual-specific effects, and time-related dynamics. Non-normal residuals

from omitted variables, model misspecifications, or measurement mistakes can affect statistical results.

Though the Central Limit Theorem reduces the importance of normality for large samples, departures from normality in small to moderate samples may indicate underlying concerns.

The Jarque-Bera (JB) test is utilized to evaluate the assumption of normality. This test integrates assessments of skewness and kurtosis to ascertain whether the residuals significantly deviate from a normal distribution. The null hypothesis of the JB test posits that the residuals follow a normal distribution. If the p-value linked to the JB statistic is below the designated significance level ($\alpha = 0.05$), the null hypothesis is rejected, indicating evidence of non-normality. If the p-value exceeds 0.05, we do not reject the null hypothesis, indicating sufficient statistical evidence to assert that the residuals are normally distributed.

Table 4.5: Jarque-Bera Normality Test

	Model	Value	P-value
Palestine Dataset	Basic Model (with EPS)	2.314	0.3145
	Differenced Model (with ΔEPS)	3.060	0.2164
Jordan Dataset	Basic Model (with EPS)	8728.103	0.000
	Differenced Model (with ΔEPS)	5895.920	0.000

As shown in Table (4.5), the p-values of Palestine model residuals are above the significance level (0.05). Therefore, we conclude that the datasets for Palestine are normally distributed. However, the p-values of the Jordan model residuals are greater than the significance level (0.05), which indicates the non-normality of the residuals for the Jordan dataset.

Jordan Dataset Residual Non-Normality Resolution

This research examined the normality of residuals from the Jordan panel data regression model. Despite the variables' transformation, the residuals continued to exhibit a non-normal distribution. However, we resolved this as follows :

1- **Central Limit Theorem- Large Sample:** The Jordan panel data comprises 1,081 observations (99 firms over 11 years), qualifying as a large sample (n>30). It is essential to recognize that the assumption of residual normality is not critical in large samples, as per the Central Limit Theorem, which asserts that the sampling distribution of the residuals approaches normality with an increasing sample size, regardless of the residuals' normality.

2- **Robust Standard Errors:** Furthermore, White Cross-Section (Period Cluster) robust standard errors were utilized to rectify any deviations from normality and heteroskedasticity. This method guarantees dependable t-statistics and p-values, even when residuals diverge from normality. This methodology is broadly endorsed in econometric practice, especially in panel data analyses with substantial sample sizes when the normality of residuals reduces inference.

4.5. Heteroskedasticity Tests

In panel data analysis, heteroskedasticity occurs when the variance of the residuals is not constant, which can lead to inefficient estimates and unreliable inference. Two key tests are commonly applied to detect heteroskedasticity: The Panel Cross-Section Heteroskedasticity LR Test and the Panel Period Heteroskedasticity LR Test**.** The first test examines whether the variance of residuals differs across cross-sections, such as firms, while the second assesses whether residual variances are inconsistent across periods. Together, these tests provide a comprehensive understanding of heteroskedasticity patterns in panel data, guiding the appropriate selection of methods to ensure robust and reliable regression results.

The null hypothesis of the two tests assumes that the cross-sections (for the first test) and the periods (for the second) are homoscedastic; we decide to accept or reject the null hypothesis depending on the probability of the test statistic of these tests (the likelihood ratio- LR). If the probability associated with the test statistic is less than the significance level (0.05), we reject the null hypothesis and conclude the existence of heteroskedasticity across cross-sections or periods. This suggests that the error variances are not constant and vary across different cross-sections in the panel data.

Table (4.6) below presents the heteroskedasticity test findings for the Palestine and Jordan datasets. The Panel Period Heteroskedasticity LR Test findings indicate a

probability value exceeding the significance threshold of 0.05 for both datasets. This indicates that error variances remain constant across time (period homoskedasticity), with no evidence of heteroskedasticity across periods, implying that time-based adjustments to rectify variance concerns are not required.

Table 4.6: Panel Heteroskedasticity LR Tests

Dataset	Heteroskedasticity LR Test	Value	df	Probability	Result
Palestine	Period	5.545	30	1.0000	Homoscedastic
	Cross-Section	60.337	30	0.0008	Heteroskedastic
Jordan	Period	77.937	99	0.9418	Homoscedastic
	Cross-Section	4728.14	99	0.0000	Heteroskedastic

The Panel Cross-Section Heteroskedasticity LR Test results reveal a probability value below the significance level of 0.05 for both datasets. This indicates the presence of heteroskedasticity across cross-sections, meaning that error variances are not constant across the PEX and ASE-listed companies. We will employ the following technique to resolve this heteroskedasticity.

Resolving Cross-Section Heteroskedasticity

White Cross-Section (Period Cluster) robust standard errors were utilized to resolve cross-sectional heteroskedasticity. This approach efficiently addresses heteroskedasticity among enterprises while preserving robustness against potential clustering effects within periods. The correction enhanced the reliability of standard errors, t-statistics, and p-values, hence ensuring acceptable statistical inferences. This method conforms to recognized econometric standards for panel data analysis and effectively mitigates the identified heteroskedasticity.

Accepting the null hypothesis ensures that the model used in this study correctly captures the relationship between the variables without serious problems of omission or misfit. This outcome strengthens the results and increases the model's reliability for making recommendations.

4.6. Assessing Models Specifications

The Ramsey RESET test is an essential diagnostic instrument employed to assess the specification of a regression model. It assesses if the model lacks of substantial estimate problems arising from omitted variables, erroneous functional forms, or correlation effects that may compromise its explanatory efficacy. This test is extensively utilized in research to verify the reliability of regression outcomes.

The null hypothesis of the Ramsey RESET test suggests that the model specification is accurate, indicating the absence of significant mistakes in the regression equation. The alternative hypothesis posits that the model is misspecified due to omitted variables or erroneous functional characteristics.

Table (4.7) displays the findings of the Ramsey RESET test for the datasets from Palestine and Jordan. The p-values for both datasets are above the 5% significance threshold, indicating substantial support for accepting the null hypothesis. The regression models for both countries are appropriately specified, effectively capturing the relationships between the variables without significant issues of omission or misfit. The results enhance the reliability of the models and establish a solid basis for conclusions and recommendations.

Table 4.7: Ramsey RESET test results

		Value	df	Probability
Palestine	t-statistic	0.519134	315	0.604
	F-statistic	0.2695	(1, 315)	0.604
	Likelihood ratio	0.279647	1	0.5969
Jordan	t-statistic	0.390587	1069	0.6962
	F-statistic	0.152558	(1, 1069)	0.6962
	Likelihood ratio	0.154259	1	0.6945

4.7. Variables Stationarity Tests

Stationarity maintains that the statistical features of variables, including mean, variance, and autocovariance, stay stable throughout time, hence averting spurious regression results. This research utilized the Levin, Lin, and Chu t-test (LLC), a reliable and extensively employed technique for assessing stationarity in panel data. Assessing the stationarity of control variables is typically not obligatory but recommended, as these variables are incorporated in regression models to address factors affecting the dependent variable that are not the primary focus of the study.

This research evaluated explanatory and control variables for stationarity to verify their fit for inclusion in the regression models. The control variable age, defined as the number of years since a firm's founding, automatically displays a deterministic trend, increasing linearly over time for each organization. It was omitted from stationarity criteria because the non-stationarity of such time-based variables is prevalent in panel data analysis and is regarded as a meaningful characteristic rather than a limitation since its deterministic trend corresponds with its economic interpretation. Moreover, as age is included as a control variable and not part of the primary hypothesis testing, its non-stationarity poses no risk of spurious relationships.

Table (4.8) shows the results of the unit root tests, which revealed that all variables (except the variable age as discussed above) are stationary at the 1% significance level ($p<0.01$), indicating that the null hypothesis of non-stationarity was rejected.

Table 4.8 Unit Root Test of Stationarity (Using Levin, Lin & Chu t-Test)

Variable	Palestine		Jordan	
	Statistic	P-value	Statistic	P-value
RETURNS	-8.853	0.000	-13.843	0.000
EPS	-11.151	0.000	-10.150	0.000
ΔEPS	-12.177	0.000	-18.339	0.000
REP	-2.909	0.002	-9.314	0.000
IND	-6.349	0.000	-4.965	0.000
COMP	-3.686	0.001	-12.305	0.000
BSIZE	-5.064	0.000	-10.081	0.000
BPAY	-8.122	0.000	-13.422	0.000
COSIZE	-5.470	0.000	-19.377	0.000
TDEBT	-5.494	0.000	-16.098	0.000
TOP1	-11.798	0.000	-1708.27	0.000
TOP5	-13.857	0.000	-65.030	0.000

4.8. Multicollinearity Tests

To assess any possible multicollinearity among the variables in this research, we build a correlation matrix coefficient of all research variables for PEX-listed and ASE-listed companies.

Understanding the degree of correlation between the various factors is crucial, as it can reveal potential redundancy and interdependencies that may affect the robustness of our statistical models. By examining these correlation coefficients, we aim to identify any significant relationships that could indicate multicollinearity, which is essential for ensuring the reliability of our conclusions regarding board characteristics and their influence on the informativeness of accounting earnings.

Tables (4.9) and (4.10) summarize the correlation between all variables for both Palestine and Jordan datasets; the tables clearly show that except for TOP1 and TOP5, there is no multicollinearity between the independent and the control variables since all the correlation coefficients are below 0.70.

The ownership concentration variables (TOP1 and TOP5) demonstrate significant multicollinearity, with correlation coefficients of 0.871 in Palestine and 0.793 in Jordan. This suggests that these variables measure similar dimensions of ownership structure and require modification through elimination or incorporation in regression analyses. To address this, we input only one of the two variables for each model throughout every execution of the model.

The correlation analysis highlights key relationships between the dependent variable (RETURNS) and the explanatory variables, offering preliminary insights into their relative importance.

In Palestine, the ΔEPS exhibited the strongest positive correlation compared to EPS, which showed a weak correlation; board reputation reported a stronger correlation than other factors (except ΔEPS), suggesting a potential impact of board reputation on stock returns. All other factors reported a weak correlation with stock returns.

In Jordan, the EPS exhibited the strongest positive correlation with stock returns (r=0.558), highlighting the potential significance of earnings per share in explaining stock returns. Similarly, COMP (r=0.507) showed moderate positive correlations, indicating the potential impact of board competence on returns. Other factors had a weaker correlation with stock returns.

Table 4.9 Correlation Coefficients I

Palestine													
Variable	RETURNS	EPS	DEPS	REP	IND	COMP	BPAY	COSIZE	TDEBT	AGE	TOP1	TOP5	BSIZE
RETURNS	1												
EPS	0.156	1											
DEPS	0.333	0.273	1										
REP	0.277	0.098	0.082	1									
IND	0.042	0.191	-0.001	0.231	1								
COMP	0.18	0.097	0.09	-0.108	0.192	1							
BPAY	0.045	0.064	0.019	0.097	0.167	-0.253	1						
COSIZE	0.025	0.168	-0.026	0.271	0.214	0.036	-0.192	1					
TDEBT	0.017	-0.205	-0.057	-0.121	-0.028	0.237	-0.031	0.158	1				
AGE	0.045	0.437	0.018	-0.05	0.105	0.042	0.102	0.022	-0.256	1			
TOP1	0.02	-0.166	0.004	0.003	-0.082	0.083	-0.092	-0.182	-0.05	-0.298	1		
TOP5	0.006	-0.088	0.007	0.042	-0.106	0.04	-0.145	-0.152	-0.044	-0.277	0.871	1	
BSIZE	-0.027	-0.07	0.005	0.158	-0.059	0.036	-0.091	0.448	0.051	-0.038	-0.074	-0.114	1

Table 4.10: Correlation Coefficients II

Jordan

Variable	RETURNS	EPS	DEPS	REP	IND	COMP	BPAY	COSIZE	TDEBT	AGE	TOP1	TOP5	BSIZE
RETURNS	1												
EPS	0.558	1											
DEPS	0.220	0.409	1										
REP	0.271	0.235	0.021	1									
IND	-0.085	-0.125	0.012	-0.042	1								
COMP	0.507	0.355	0.094	0.282	-0.174	1							
BPAY	-0.048	-0.049	-0.052	0.027	0.024	0.003	1						
COSIZE	0.202	0.005	0.000	0.199	-0.315	0.223	-0.186	1					
TDEBT	0.144	0.016	0.023	-0.149	-0.126	0.166	0.005	0.413	1				
AGE	0.221	0.259	0.005	0.015	0.016	0.195	-0.001	0.202	0.262	1			
TOP1	0.097	0.041	0.001	-0.020	-0.314	0.177	-0.025	0.136	0.237	-0.081	1		
TOP5	0.130	0.153	0.003	0.052	-0.367	0.199	-0.021	0.067	0.113	0.033	0.793	1	
BSIZE	0.225	0.294	0.003	0.182	-0.229	0.126	-0.019	0.349	0.062	0.307	-0.153	-0.041	1

4.9. Models Analysis and Hypotheses Testing

4.9.1. Analysis Models and Sub-Models

The following models show the results of the multiple regression tests, which were conducted to identify the moderating role that the board characteristics play in the relationship between earnings per share (EPS) and stock returns, as this relationship represents the informativeness of accounting earnings.

Recall the Basic and the Differenced Basic models from chapter three:

The Basic Model:

$$RETURNS_{jt} = b_0 + b_1 EPS_{jt} + b_2 REP_{jt} + b_3 IND_{jt} + b_4 COMP_{jt} + b_5 BPAY_{jt} + b_6 BSIZE_{jt} + b_7 COSIZE_{jt} + b_8 TDEBT_{jt} + b_9 AGE_{jt} + b_{10} TOP5_{jt} + b_{11} TOP1_{jt} + e_{jt} \quad \text{..... (1)}$$

The Differenced Basic Model:

$$RETURNS_{jt} = b_0 + b_1 \Delta EPS_{jt} + b_2 REP_{jt} + b_3 IND_{jt} + b_4 COMP_{jt} + b_5 BPAY_{jt} + b_6 BSIZE_{jt} + b_7 COSIZE_{jt} + b_8 TDEBT_{jt} + b_9 AGE_{jt} + b_{10} TOP5_{jt} + b_{11} TOP1_{jt} + e_{jt} \quad \text{..... (2)}$$

The Basic model (equation 1) specifies the main effect of the board characteristics and the control variables on the stock return using EPS, and the Differenced Basic model (equation 2) specifies the main effect of the board characteristics and the control variables on the stock return using ΔEPS.

Recall the Expanded Basic and the Expanded Differenced models from chapter three:

The Expanded Basic Model:

$$RETURNS_{jt} = b_0 + b_1 EPS_{jt} + b_2 REP_{jt} + b_3 IND_{jt} + b_4 COMP_{jt} + b_5 BPAY_{jt} + b_6 BSIZE_{jt} + b_7 COSIZE_{jt} + b_8 TDEBT_{jt} + b_9 AGE_{jt} + b_{10} TOP5_{jt} + b_{11} TOP1_{jt} + b_{12} (EPS_{jt} * REP_{jt}) + b_{13} (EPS_{jt} * IND_{jt}) + b_{14} (EPS_{jt} * COMP_{jt}) + b_{15} (EPS_{jt} * BPAY_{jt}) + b_{16} (EPS_{jt} * BSIZE_{jt}) + e_{jt} \quad \text{..... (3)}$$

The Expanded Differenced Model

$$RETURNS_{jt} = b_0 + b_1 \Delta EPS_{jt} + b_2 REP_{jt} + b_3 IND_{jt} + b_4 COMP_{jt} + b_5 BPAY_{jt} + b_6 BSIZE_{jt} + b_7 COSIZE_{jt} + b_8 TDEBT_{jt} + b_9 AGE_{jt} + b_{10} TOP5_{jt} + b_{11} TOP1_{jt} + b_{12} (\Delta EPS_{jt} * REP_{jt}) + b_{13} (\Delta EPS_{jt} * IND_{jt}) + b_{14} (\Delta EPS_{jt} * COMP_{jt}) + b_{15} (\Delta EPS_{jt} * BPAY_{jt}) + b_{16} (\Delta EPS_{jt} * BSIZE_{jt}) + e_{jt} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (4)$$

The Expanded Basic model (equation 3) specifies the interaction effect of the board characteristics using EPS, and the Expanded Differenced model (equation 4) specifies the interaction effect of the board characteristics using ΔEPS.

The informativeness of accounting earnings, either using EPS or ΔEPS, is tested by examining the moderating role of each one of the board characteristics on the relationship between EPS and stock returns (RETURNS); this is conducted by examining the interaction terms entered in the models.

It takes multiple sub-models for EPS and ΔEPS models to do all the necessary tests. Two causes motivate this action:

1- Evaluating the moderating effect of board characteristics involves incorporating interaction terms for each specific board characteristic and adding one interaction term to the model during each iteration. This approach is necessitated by the multicollinearity arising from the interaction terms; the multicollinearity is naturally generated as a result of multiplying the same factor (EPS) with each board characteristic; thus, only one interaction term is included per sub-model, resulting in five distinct sub-models.
2- As concluded in multicollinearity tests, the variables TOP1 and TOP5 exhibit a significant correlation since both measure the ownership concentration but in different percentages, necessitating the exclusion of one variable during each model execution, which resulted in the creation of two sub-models.

A total of 14 sub-models were generated, seven sub-models for EPS models and seven others for ΔEPS models; Table (4.11) describes the resulting sub-models. Model 1.1 and Model 1.2 are generated to overcome TOP1 and TOP5 collinearity, while Models 2.1 to 2.5 are generated for interaction terms.

Table 4.11: Research Sub-Models

Sub-model	EPS Models	ΔEPS Models
Model 1.1	Basic model using TOP1	Differenced model using TOP1
Model 1.2	Basic model using TOP5	Differenced model using TOP5
Model 2.1	Basic model and REP interaction	Differenced model and REP interaction
Model 2.2	Basic model and IND interaction	Differenced model and IND interaction
Model 2.3	Basic model and COMP interaction	Differenced model and COMP interaction
Model 2.4	Basic model and BSIZE interaction	Differenced model and BSIZE interaction
Model 2.5	Basic model and BPAY interaction	Differenced model and BPAY interaction

Regression Results Tables

The coming results tables present the outcomes of regression models. Two matrices are shown for each variable; the first is the variable coefficient, and the second is the t-statistic, which is presented directly under the coefficient value. The tables also indicate the significance of the coefficients detached directly after the coefficient value by employing three levels of significance: "***" for the 0.01 level, "**" for the 0.05 level, and "*" for the 0.10 level, respectively. The tests assess the main effect of board characteristics and control variables on stock returns via the coefficients of these variables; in addition, the tests examine the interaction effect, which measures the impact of the board characteristics on the informativeness of accounting earnings through the coefficients of the interaction terms.

4.9.2. Palestine Models Testing

4.9.2.1. Palestine Basic and Expanded Basic Models Testing

Table (4.12) evaluates the regression results of all EPS sub-models for examining the main effect of the research variables on stock returns and testing the relationship between board characteristics and the informativeness of accounting earnings (EPS) in explaining stock returns for companies listed on PEX.

The R-squared score, ranging from 42.6 percent to 44.5 percent, signifies the model's significant explanatory power—precisely, the degree to which variations in variables

indicating board qualities, ownership, and other control factors explain differences in stock returns.

All models exhibit p-values below 0.01, indicating a high level of overall significance and validity.

Specific characteristics of a board, such as its competency and reputation (REP), can provide important insights into how it is governed. Due to the concentration of ownership and the prevalence of small businesses in the Palestinian market, it is necessary to have strong governance frameworks in place. The findings emphasize the significance of governance in minimizing information asymmetry and enhancing the value of a company, which follows the resource dependence theory (Hillman & Dalziel, 2003) and agency theory (Fama & Jensen, 1983).

Earnings (EPS) – Returns Relationship for PEX-Listed Companies

Across multiple models, earnings per share (EPS) and stock returns are positively and significantly correlated, confirming earnings informativeness in financial markets. Prior research has shown that accounting earnings drive stock price movements, especially in emerging markets where financial statements are investors' main source of information (Ball & Brown, 1968; Collins et al., 1997).

The Palestine stock market has few alternative financial information sources, so investors rely heavily on earnings figures to predict firm performance and profitability. The earnings response coefficient (ERC) theory suggests that earnings announcements significantly affect stock returns, especially in markets with lower transparency and efficiency (Francis et al., 2004). All models show a positive coefficient of EPS.

Concentrated ownership structures in emerging economies allow dominant shareholders to monitor firm performance using financial reports (Ball, Kothari, & Robin, 2000), which increases earnings informativeness. EPS is important in Palestine, proving investors use earnings to value companies. These findings lay the groundwork for studying how board characteristics moderate the earnings-returns association.

Hypothesis Testing Using EPS Models

H1: The board's reputation positively and significantly affects the usefulness of accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Reputation (REP) consistently shows a positive and significant relationship with stock returns in all models. For instance, in Model 1.1, REP has a coefficient of 0.172 ($t = 4.877$, $p < 0.01$). This finding highlights the importance of board reputation in building investor confidence and governance credibility, corroborating Adams and Ferreira (2009).
- **Interaction Effect**: A negative and statistically significant interaction term, EPS x REP, is present in the Expanded Basic Model 2.1 (-0.078, $t = -1.924$, $p < 0.05$). This could be because people are getting complacent with their oversight or are putting too much stock in their reputational capital, both of which reduce the marginal returns to reputation as an earnings informativeness driver (Hermalin & Weisbach, 1991).
- **Conclusion**: H1 is supported, but in a converse direction, there is a significant impact, but the coefficient is negative. Although the board's reputation enhances governance effectiveness, it exhibits diminishing informativeness when overly relied upon.

Table 4.12 Palestine Basic and Expanded Models Testing (Using EPS)

Variable	Model 1.1	Model 1.2	Model 2.1	Model 2.2	Model 2.3	Model 2.4	Model 2.5
Constant	-6.704***	-6.574***	-6.652***	-6.719***	-6.562***	-6.345***	-7.594***
	-3.548	-3.476	-3.577	-3.577	-3.475	-3.234	-4.378
EPS	0.351***	0.320***	0.926**	0.794***	-0.153	-0.205	0.138
	3.527	3.200	2.695	3.929	-0.174	-0.627	1.490
REP	0.172***	0.178***	0.189***	0.186***	0.178***	0.179***	0.182***
	4.877	5.378	5.306	5.628	5.405	5.328	5.635
IND	-1.576	-1.647	-1.453	-1.23	-1.669	-1.527	-1.512
	-1.420	-1.466	-1.327	-1.035	-1.454	-1.358	-1.324
COMP	5.798***	5.781***	5.734***	5.698***	5.733***	5.648***	5.482***
	4.810	4.723	4.660	4.633	4.776	4.601	4.770
BSIZE	0.054	0.047	0.044	0.041	0.046	0.042	0.048
	1.444	1.300	1.206	1.096	1.279	1.119	1.457
BPAY	-26.675	-28.939	-34.593	-33.099	-30.307	-32.461	-47.517
	-0.621	-0.689	-0.834	-0.781	-0.726	-0.784	-1.127
COSIZE	0.041	0.051	0.055	0.069	0.055	0.05	0.115
	0.429	0.580	0.632	0.809	0.634	0.549	1.602
TDEBT	0.311	0.257	0.26	0.202	0.252	0.277	0.298
	0.951	0.799	0.826	0.623	0.781	0.869	1.029
AGE	0.008	0.012**	0.01	0.010**	0.012**	0.009	0.011**
	1.374	2.080	1.637	1.937	2.140	1.623	2.026
TOP1	-0.169						
	-0.706						
TOP5		-0.614**	-0.573**	-0.721***	-0.647**	-0.666***	-0.524**
		-3.126	-2.665	-3.320	-2.684	-3.438	-2.448

EPS*REP			-0.078**				
			-1.924				
EPS*IND				-3.367**			
				-2.690			
EPS*COMP					0.602		
					0.566		
EPS*BSIZE						0.070	
						1.581	
EPS*BPAY							249.695***
							6.122
R-squared	0.426	0.431	0.435	0.436	0.431	0.434	0.445
F-statistic	5.456	5.564	5.515	5.520	5.416	5.488	5.736
P-value	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***

The symbols ***, **, and * indicate that the statistic is significant at 0.01, 0.05, and 0.10, respectively.

Justification:

The above empirical results show a positive direct effect of board reputation (REP) on stock returns; the interaction term (EPS × REP) shows a notable negative coefficient. This implies that the informativeness of accounting earnings in justifying stock returns reduces as board reputation rises. This phenomenon corresponds with earlier studies in corporate governance and financial markets, which imply the following justifications:

- Companies with highly respected boards usually show stronger disclosure policies, improved governance structures, and less information asymmetry (Bushman et al., 2004; Healy & Palepu, 2001). As these companies already have access to better-quality, non-financial disclosures and forward-looking guidance, investors in these companies depend less on earnings announcements when creating expectations.
- High-reputation boards are more likely to follow conservative accounting rules and earnings smoothing to preserve long-term stability, thus lowering recorded earnings' variability and surprise element (Francis et al., 2008). This clarifies why a strong board reputation causes the link between earnings per share (EPS) and stock returns to become weak.
- These results support the case that in well-run companies, stock prices are driven by more general governance-related elements outside of financial statement performance alone, so lowering the relative weight of earnings informativeness in price formation (Dechow et al., 2010).

H2: Boards with more independent directors significantly increase the usefulness of accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Independence (IND) is consistently insignificant and negative across all models. For example, in Model 1.1, IND has a coefficient of -1.576 (t = -1.420). This aligns with findings in emerging markets where board independence may be less effective due to weaker enforcement mechanisms (Ramdani & Witteloostuijn, 2010). This could be interpreted that companies listed on the PEX may not necessarily see improved performance after increasing the proportion of independent directors, as the limited direct impact of IND suggests.

These findings corroborate previous research showing that institutional and regulatory contexts affect independent directors' effectiveness (Adams, Hermalin, & Weisbach, 2010). Independent directors may have little impact on managerial decisions in emerging markets with concentrated ownership structures since controlling shareholders control board dynamics (Young et al., 2008). Furthermore, independent directors in such surroundings sometimes lack firm-specific knowledge, which reduces monitoring and strategic decision-making efficacy (Dahya, Dimitrov, & McConnell, 2008).

- **Interaction Effect**: The interaction term EPS x IND in Model 2.2 is negative and significant (-3.367, $t = -2.690$, $p < 0.05$). This indicates that independence may dilute the informativeness of EPS under certain conditions, possibly due to insufficient integration of independent directors in decision-making processes.
- **Conclusion**: H2 is supported, but in a converse direction, there is a significant impact of board independence, but the coefficient is negative. Independence alone does not enhance earnings informativeness and may hinder it in specific contexts.

Interpretation:

According to the statistically significant negative interaction coefficient, there appears to be less of a correlation between EPS and stock returns as board independence grows. This means that independent directors lessen the importance of earnings in determining a company's value. This finding is supported by multiple possible explanations:

- Inadequate Regulatory and Institutional Structures

Appointing independent directors may be more of a formality than a measure of how well a market monitors corporate governance in places like PEX, where rules are likely to change (Klein, 2002). The presence of independent directors does not necessarily mean that earnings information will have a greater impact if they are not actively involved in financial oversight.

- Relying Too Much on Performance Metrics That Are Not Financial

According to García Lara, García Osma, and Penalva (2009), independent boards are not limited to concentrating only on accounting earnings. However, they may also give more weight to non-financial performance indicators like sustainability metrics, compliance with corporate governance standards, and strategic growth.

Because of this change, the correlation between earnings per share and stock price performance may weaken.

-Conservative Reporting and Earnings Management

Research by Francis, Lafond, Olsson, and Schipper (2004) suggests that companies with more independent directors tend to use more conservative accounting practices, reducing earnings volatility. The correlation between earnings per share (EPS) and stock returns may be diminished if investors perceive earnings as less instructive as a result.

H3: The board's competence positively and significantly affects the usefulness of accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Competence (COMP) consistently demonstrates a significant strong positive effect. For instance, in Model 1.1, COMP has a coefficient of 5.798 ($t = 4.810$, $p < 0.01$). These results highlight the critical role of director expertise in improving governance outcomes, consistent with Anderson et al. (2004).
- **Interaction Effect**: The interaction term EPS x COMP in Model 2.3 is insignificant (0.602, $t = 0.566$) with a positive coefficient, suggesting incremental benefits of competence in enhancing earnings informativeness.
- **Conclusion**: H3 is not supported. While board competence improves governance and performance, it has minimal interaction effects on EPS informativeness.

Insight

Although board competency (COMP) positively affects stock returns, its interaction with EPS (EPS × COMP) is insignificant, implying that although competent boards improve returns, they do not always boost the informativeness of earnings; the positive main effect fits the resource-based view, in which competent boards promote improved decision-making, governance, and risk management, so increasing market valuation (Hillman & Dalziel, 2003; Adams & Ferreira, 2009). In developing countries like PEX, competent boards help to reduce risks connected to inadequate investor protection (Klapper & Love, 2004). The little interaction implies that EPS is already priced in companies with good governance, therefore lowering their added value to investors (DeFond, Hann, & Hu, 2005). Competent boards might also stress more general performance

measures, lessening stock price sensitivity to earnings announcements (Francis, Khurana, & Pereira, 2005).

H4: The total board annual cash compensation significantly impacts the usefulness of accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Compensation (BPAY) is negative and insignificant in the Basic Models. For example, in Model 1.1, BPAY has a coefficient of -26.675 (t = -0.621). This reflects the limited governance influence of fixed compensation structures (Brick et al., 2006). This insignificant direct impact of BPAY shows that stock performance is not affected by board compensation. This is consistent with prior studies showing that (Core et al., 1999). In developing countries like the Palestine Exchange (PEX), governance arrangements sometimes feature substantial ownership concentration, in which case board compensation is sometimes decided by controlling shareholders rather than performance criteria (Young et al., 2008). This helps to explain why compensation has no statistically significant solo impact on stock performance.
- **Interaction Effect**: The interaction term EPS x BPAY in Model 2.5 is highly significant and positive (249.695, $t = 6.122$, $p < 0.01$). This underscores the role of performance-based pay in enhancing earnings informativeness, as noted by Ryan and Wiggins (2004).
- **Conclusion**: H4 is supported; board compensation has a significant positive impact on the earnings informativeness, showing a positive coefficient.

Insight

The significant and positive interaction effect implies that the association between (EPS) and stock returns gets stronger as board compensation rises. We justify this through the following channels:

- **Pay-for-Performance Alignment**

The effective structure of board compensation encourages directors to guarantee high-quality financial reporting and enhance financial control. More consistent earnings results follow this; hence, EPS is a better indicator of stock returns (Jensen & Murphy, 1990).

- **Higher Compensation Attracts More Skilled Directors**

Well-compensated boards often draw highly skilled, experienced directors who improve corporate governance and financial openness (Gabaix & Landier, 2008). These directors help improve earnings quality, hence raising investor faith in the accuracy of EPS numbers.

- **Compensation as a Signal of Good Government**

Higher board compensation could indicate that companies respect governance quality, thereby strengthening investor confidence in financial statements (Brick, Palmon, & Wald, 2006). Earnings releases thus become more useful in understanding the strong EPS-Returns association shown in the data.

H5: The board size significantly affects the usefulness of accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Board size (BSIZE) has negligible, positive, and insignificant effects. For example, in Model 1.1, BSIZE has a coefficient of 0.054 (t = 1.444). The small and meaningless coefficient of BSIZE implies that firm value is not much influenced by board size. According to the board size-performance trade-off theory, larger boards offer more knowledge and monitoring but may also suffer from coordination inefficiencies and slower decision-making (Jensen, 1993). Previous studies indicate that the impact of board size on company performance differs depending on the situation and produces varied findings in several governance structures (Guest, 2009).

Board size might not be a major determinant of corporate value in developing markets like PEX because of other prominent governance elements such as ownership concentration and regulatory systems (Coles et al., 2008). The importance of board size in governance effectiveness may be lessened when major shareholders show significant influence.

- **Interaction Effect**: The interaction term EPS x BSIZE in Model 2.4 is insignificant (0.070, t = 1.581) with a positive coefficient, indicating a limited influence of board size on the informativeness of accounting earnings.
- **Conclusion**: H5 is not supported. Larger boards do not significantly enhance informativeness despite the positive coefficient, but it is insignificant.

Insight

This insignificant interaction term (EPS × BSIZE) implies that board size slightly affects the relationship between earnings and stock returns. Several elements can help to explain this result:

-Reduced Control Effectiveness on Larger Boards

Although larger boards have more experience, they could lack cohesiveness, resulting in poorer financial control and fewer changes in earnings informativeness (Anderson, Mansi, & Reeb, 2004). In addition, earnings reports lose their value for investors, which helps explain the interaction's limited impact.

- Alternative Governance Mechanisms Matter More

In PEX-listed companies, board size might not be as important in financial reporting quality as ownership structure and regulatory quality (Yermack, 1996). Should companies already have robust audit committees or efficient regulatory control, board size differences could have little effect on the informativeness of results.

-Reduced Decision-Making Efficiency in Large Boards

Large boards may have difficulties coordinating high-quality earnings reporting policies (Boone et al., 2007). These inefficiencies can lower the possible advantage of board size in terms of profits' informativeness.

Control Variables Analysis

Firm Size (COSIZE):

The positive but insignificant coefficient implies that larger companies do not always produce better stock returns in PEX. This outcome aligns with the size impact theory, which states that larger companies gain from economies of scale and market stability. However, the market could already value these benefits (Fama & French, 1992).

In developing economies, business size does not always ensure improved performance since political risk, weak investor protection, and ineffective capital markets may counteract scale advantages (Beck et al., 2005). The insignificance of COSIZE implies that maybe because of the predominance of other governance elements, PEX investors do not evaluate stock performance just based on firm size.

Leverage (TDEBT)

The positive but insignificant coefficient of leverage (TDEBT) implies that increasing debt levels do not affect stock returns much.

Though it may also raise financial risk, theoretically, greater leverage might boost business value because of tax benefits (Modigliani & Miller, 1958).

Limited access to credit markets, poor investor trust, and underdeveloped financial institutions in PEX-listed companies mean that leverage may not be a key factor determining stock performance (Booth et al., 2001). the insignificance of TDEBT suggests that capital structure decisions do not strongly influence stock price movements in PEX.

Corporate Age (AGE)

The significant positive influence of company age in most models (four out of seven) indicates that older companies generally achieve superior stock returns. This corresponds with the notion that mature enterprises exhibit enhanced stability, possess established reputations, and enjoy heightened investor trust (Loderer & Waelchli, 2010).

Established organizations tend to possess superior governance structures, more consistent earnings, and reduced risk, resulting in increased investor confidence and elevated market valuation (Coad et al., 2013).

Nevertheless, the insignificance in specific models indicates that although age influences company performance, its effect is contingent upon other governance elements, including ownership structure and board efficacy.

Largest Shareholder Ownership (TOP1)

The insignificant and negative coefficient for TOP1 suggests that the ownership concentration of the largest shareholder does not contribute to firm value in PEX; this runs counter to the conventional wisdom that says increasing ownership concentration results in better monitoring and lower agency costs.

Large shareholders may expropriate minority investors in emerging markets, hence lowering stock returns even with limited interest control (La Porta, Lopez-de-Silanes, & Shleifer, 1999). The negative but small coefficient suggests that maybe due to

entrenchment and self-serving behavior, concentrated ownership by the largest shareholder may not always be advantageous.

Largest Five Shareholder Ownership (TOP5)

The negative and significant correlation for TOP5 (significant and negative in all models) implies that increasing ownership concentration among several big holders lowers stock returns. This helps to explain the main principal agency issue, in which several controlling owners fight for power and might be self-dealing instead of optimizing company value (Young et al., 2008).

High ownership concentration in PEX-listed companies could deter minority investors, therefore lowering market confidence and lowering stock returns (Claessens et al., 2000).

4.9.2.2. Palestine Differenced and Expanded Differenced Models Testing

The regression results presented in Table (4.13) examine the relationship between changes in accounting earnings (ΔEPS) and stock returns, highlighting the effects of governance dynamics over time. The R-squared values vary from 0.454 to 0.467 across models, demonstrating significant explanatory capability. F-statistics exhibit significance at the 0.01 level in all models, indicating the statistical robustness of these models.

Table (4.13) also presents the interaction terms that clarify the relationship between variations in earnings and board characteristics in their effect on stock returns. The market characteristics of the Palestine Exchange, characterized by smaller firm sizes and concentrated ownership structures, underscore the necessity for adaptive governance mechanisms to enhance transparency and bolster investor trust.

Changes in Earnings (ΔEPS) – Returns Relationship for PEX-Listed Companies

In Models 1.1, 1.2, and 2.5, the link between changes in earnings (ΔEPS) and stock returns is positive and significant; in others, it is negligible. This implies that while they might not always be a good indicator of stock returns, earnings changes include significant information for investors. Particularly in emerging countries where earnings trends are a leading indicator of business success, the positive and substantial coefficients

help to support the theory that investors react to earnings shocks (Dechow, Ge, & Schrand, 2010).

Nonetheless, the insignificance of ΔEPS in some expanded models implies that governance elements could help to control the market reaction to changes in earnings. Previous research shows that companies with significant board control sometimes participate in earnings smoothing, hence lowering the informativeness of ΔEPS (Francis, Lafond, Olsson, & Schipper, 2004). Due to reduced financial transparency and market efficiency (García Lara, García Osma, & Penalva, 2009), investors may also focus more on absolute earnings levels (EPS) than earnings volatility (ΔEPS) in developing markets like Palestine.

Table 4.13 Palestine Differenced and Expanded Differenced Models Testing (Using ΔEPS)

Variable	Model 1.1	Model 1.2	Model 2.1	Model 2.2	Model 2.3	Model 2.4	Model 2.5
Constant	-7.362***	-7.109***	-7.166***	-7.117***	-7.098***	-6.916***	-7.067***
	-4.506	-4.202	-4.276	-4.267	-4.215	-4.220	-4.129
ΔEPS	0.446***	0.435***	0.611	0.453	0.221	-0.34	0.292**
	4.459	4.552	1.066	1.529	0.552	-1.080	2.184
REP	0.169***	0.174***	0.175***	0.174***	0.174***	0.172***	0.172***
	4.801	5.215	5.233	5.200	5.205	5.107	5.122
IND	-1.274	-1.359	-1.356	-1.356	-1.355	-1.553	-1.447
	-1.017	-1.087	-1.088	-1.083	-1.083	-1.197	-1.151
COMP	5.358***	5.338***	5.330***	5.341***	5.332***	5.165***	5.202***
	4.627	4.566	4.565	4.599	4.557	4.470	4.561
BSIZE	0.046	0.039	0.039	0.039	0.039	0.036	0.037
	1.346	1.155	1.135	1.165	1.149	1.062	1.108
BPAY	-35.125	-37.49	-37.498	-37.489	-37.571	-35.511	-34.67
	-0.850	-0.931	-0.929	-0.927	-0.933	-0.870	-0.802
COSIZE	0.104	0.107	0.111	0.107	0.107	0.108	0.111
	1.512	1.649	1.698	1.655	1.654	1.753	1.739
TDEBT	0.256	0.209	0.202	0.209	0.207	0.208	0.215
	0.839	0.692	0.657	0.687	0.681	0.697	0.720
AGE	0.012**	0.015**	0.015**	0.015**	0.015**	0.015**	0.015**
	1.920	2.580	2.596	2.561	2.521	2.356	2.476
TOP1	-0.374						
	-1.407						
TOP5		-0.696***	-0.703***	-0.697***	-0.701***	-0.731***	-0.668***
		-3.695	-3.656	-3.579	-3.770	-3.332	-3.387

ΔEPS*REP			-0.027				
			-0.299				
ΔEPS*IND				-0.135			
				-0.064			
ΔEPS*COMP					0.280		
					0.564		
ΔEPS*BSIZE						0.101***	
						2.762	
ΔEPS*BPAY							174.692
							1.644
R-squared	0.454	0.459	0.459	0.459	0.459	0.467	0.462
F-statistic	6.111	6.237	6.067	6.060	6.062	6.257	6.147
P-value	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***

The symbols ***, **, and * indicate that the statistic is significant at 0.01, 0.05, and 0.10, respectively.

Hypothesis Testing Using ΔEPS Models

H1: The board's reputation positively and significantly affects the usefulness of changes in accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Reputation (REP) remains consistently positive and significant (as in EPS models). For instance, in Model 1.1, REP has a coefficient of 0.169 ($t = 4.801$, $p < 0.01$), underscoring its stabilizing impact on governance outcomes.
- **Interaction Effect**: The interaction term ΔEPS x REP in Model 2.1 is insignificant (-0.027, $t = -0.299$) with a negative coefficient, indicating that while reputation has a strong main effect, its incremental impact on ΔEPS informativeness is limited.

- **Conclusion**: H1 is changed to not supported, and the moderating role of REP is insignificant in ΔEPS–Returns association. Although board reputation's direct effect enhances returns, it exhibits diminishing informativeness of ΔEPS when overly relied upon. This result is different from the one in EPS models, which indicates that board reputation (REP) has a significant but negative impact on the informativeness of earnings (measured by EPS), while its impact on the informativeness of changes in earnings (ΔEPS) is insignificant. This implies that although respectable boards affect the view of earnings in the market, they could help lessen reliance on accounting results as a main factor affecting stock returns.

In EPS models, a negative coefficient indicates that companies with highly regarded boards have less earnings informativeness, presumably because investors in such companies value governance quality and strategic clarity more than basic financial measurements (Bushman & Smith, 2001). Well-reputed boards can concentrate on long-term stability, strategic disclosures, and non-financial success metrics, which might help to explain market reactions to accounting earnings numbers (Healy & Palepu, 2001).

The insignificance of REP in ΔEPS models implies that earnings variations do not contribute much value to investors in cases with high board reputations.

This is consistent with research showing that high-reputation boards typically smooth earnings, reducing the variance in earnings releases and, hence, the investor reaction to earnings changes (Francis, Lafond, Olsson, & Schipper, 2004). Furthermore, in companies with high reputational capital, earnings patterns may already be priced in, therefore lessening the incremental effect of changes in profits on stock returns (García Lara, García Osma, & Penalva, 2009).

H2: Boards with more independent directors significantly increase the usefulness of changes in accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Independence (IND) remains negative and insignificant in models. For instance, IND has a coefficient of -1.274 (t = -1.017) in Model 1.1.
- **Interaction Effect**: The interaction term ΔEPS x IND in Model 2.2 is insignificant (-0.135, t = -0.064) with a negative coefficient, indicating limited incremental effects of independence on ΔEPS informativeness.
- **Conclusion**: H2 changed to not supported. Board independence does not enhance the informativeness of ΔEPS and may dilute its usefulness under certain conditions. The results show that while its effect on changes in earnings (ΔEPS) is insignificant, board independence (IND) greatly lowers the informativeness of earnings (measured by EPS). This implies that even if independent directors are supposed to improve financial control, their presence could instead reduce the market's reliance on accounting results in stock valuation.

The negative coefficient in EPS models suggests that companies with more independent directors should stress long-term strategic decision-making and non-financial disclosures, reducing the weight of accounting results when evaluating company value (Klein, 2002). Furthermore, independent boards are linked with conservative financial reporting and reduced earnings volatility, which can help influence the market's response to earnings results (Beasley, 1996).

The insignificance of IND in ΔEPS models further suggests that changes in earnings do not provide additional informational value when board independence is high. This is maybe because companies with strong independent oversight tend

to smooth earnings, reducing earnings volatility and making ΔEPS a weaker signal of firm performance (Garcia et al., 2009).

H3: The board's competence positively and significantly affects the usefulness of changes in accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Competence (COMP) continues to show significant positive effects. For instance, COMP has a coefficient of 5.358 ($t = 4.627$, $p < 0.01$) in Model 1.1, highlighting its critical role in governance (Anderson et al., 2004).

- **Interaction Effect**: The interaction term ΔEPS x COMP in Model 2.3 remains positive but insignificant (0.280, $t = 0.564$), suggesting that while competence improves governance overall, it does not significantly enhance the informativeness of ΔEPS.
- **Conclusion**: H3 remains not supported. Competence has insignificant interaction effects on the informativeness of ΔEPS, though its direct effect improves stock returns.

H4: The total board annual cash compensation significantly impacts the usefulness of changes in accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Compensation (BPAY) remains negative and insignificant. For instance, BPAY has a coefficient of -35.125 ($t = -0.850$) in Model 1.1.
- **Interaction Effect**: The interaction term ΔEPS x BPAY in Model 2.5 is changed to insignificant (174.692, $t = 1.644$) with a positive coefficient, suggesting weaker performance-based effects on ΔEPS compared to EPS.
- **Conclusion**: H4 is changed to not supported. Fixed compensation has insignificant effects, and performance-linked pay shows weaker impacts in ΔEPS models than in EPS models. The results show that board compensation (BPAY) has a negligible impact on the informativeness of earnings changes (ΔEPS), although it greatly increases the informativeness of earnings assessed by EPS. This implies that more board compensation increases the market's dependence on absolute earnings levels instead of stock valuation variations.

The pay-for-performance theory explains why the positive and substantial coefficient in EPS models corresponds with well-compensated boards being motivated to increase financial transparency and improve earnings quality, therefore rendering reported earnings more useful for investors (Jensen & Murphy, 1990). Higher board compensation also draws more seasoned directors, who might impose improved financial reporting policies, hence boosting investor confidence in earnings results (Core, Holthausen, & Larcker, 1999).

Nevertheless, the negligible impact of BPAY on ΔEPS implies that although compensation increases general earnings informativeness, it does not always improve the market's reaction to earnings changes. This could result from companies with well-compensated boards engaging in earnings smoothing, thus less volatility in earnings fluctuations and so less incremental informativeness of ΔEPS (Francis, Lafond, Olsson, & Schipper, 2004).

H5: The board size significantly affects the usefulness of changes in accounting earnings in explaining stock returns for PEX-listed companies.

- **Main Effect**: Board size (BSIZE) remains positive but insignificant, with coefficients like 0.046 ($t = 1.346$) in Model 1.1.
- **Interaction Effect**: The interaction term ΔEPS x BSIZE in Model 2.4 changed to significant and positive (0.101, $t = 2.762$, $p < 0.01$), indicating a significant effect of board size on changes in earnings informativeness.
- **Conclusion**: H5 is changed to be supported having a positive direction. Board size interaction with ΔEPS exhibits a significant positive impact on ΔEPS informativeness and enhances governance outcomes. This result deviates from the EPS model's outcome, which demonstrated that board size (BSIZE) does not have a significant effect on the informativeness of earnings, as measured by EPS. This indicates that although board size may not directly improve the market's response to absolute earnings levels, it influences investors' interpretations of earnings changes over time.

A potential explanation for this outcome is that larger boards enhance monitoring and strategic oversight, thereby improving the credibility of earnings trends rather than individual earnings figures (Coles et al., 2008). Changes in

earnings may be perceived as more informative by investors in firms with larger boards, as these changes indicate management efficiency, enhanced governance, and superior decision-making processes (Anderson et al., 2004).

Furthermore, previous research indicates that larger boards can enhance transparency and diminish information asymmetry, thereby rendering earnings volatility (ΔEPS) a more dependable indicator of firm performance (Boone et al., 2007). This supports the stakeholder signaling hypothesis, which posits that firms with effective governance mechanisms exhibit more pronounced market reactions to earnings surprises and changes (DeFond & Park, 1999).

Control Variables Analysis

- **Firm Size (COSIZE)**: Remains positive but insignificant in all models (the same as in EPS models).
- **Leverage (TDEBT)**: Remains positive but insignificant across all models (the same as in EPS models), suggesting a limited influence on dynamic earnings measures.
- **Corporate Age (AGE)**: Remains positive and significant (the same as in EPS models), emphasizing its role in enhancing governance stability.
- **Largest Shareholder Ownership (TOP1):** Insignificant negative coefficient (the same as in EPS models).
- **Largest Five Shareholder Ownership (TOP5):** Significant negative coefficient in all models (the same as in EPS models).

Table (4.14) summarizes EPS and ΔEPS models and hypotheses testing for PEX-listed companies.

Table 4.14 Summary of Palestine Models Results (EPS and ΔEPS)

Hypothesis/ Variable	EPS Models (Basic and Expanded Basic)			ΔEPS Models (Differenced and Expanded Diff.)		
	Main Effect on Returns	Interaction Effect on Informativeness	Hyp. Result	Main Effect on Returns	Interaction Effect on Informativeness	Hyp. Result
H1: Reputation	Significant/ Positive	Significant /Negative	Supported in a converse direction	Significant/ Positive	Insignificant /Negative	Not Supported
H2: Independence	Insignificant/ Negative	Significant/ Negative	Supported in a converse direction	Insignificant/ Negative	Insignificant /Negative	Not Supported
H3: Competence	Significant/ Positive	Insignificant/ Positive	Not Supported	Significant/ Positive	Insignificant/ Positive	Not Supported
H4: Compensation	Insignificant/ Negative	Significant/ Positive	Supported	Insignificant/ Negative	Insignificant/ Positive	Not Supported
H5: Board Size	Insignificant/ Positive	Insignificant/ Positive	Not Supported	Insignificant/ Positive	Significant/ Positive	Supported
Control Variables						
COSIZE	Insignificant / Positive			Insignificant / Positive		
TDEBT	Insignificant / Positive			Insignificant / Positive		
AGE	Significant / Positive			Significant / Positive		
TOP1	Insignificant / Negative			Insignificant / Negative		
TOP5	Significant / Negative			Significant / Negative		

4.9.3. Jordan Models Testing

4.9.3.1. Jordan Basic and Expanded Models Testing (With EPS)

Table (4.15) shows board characteristics and accounting earnings (EPS) in explaining stock returns for companies listed on the Amman Stock Exchange (ASE). The Basic Models (1.1 and 1.2) examine the primary impacts of essential components, whereas the Expanded Basic Models (2.1 to 2.5) incorporate interaction terms to elucidate the intricate implications of governance attributes .

R-squared values range from 0.588 in Model 1.1 to 0.708 in Model 2.1, signifying that the models account for a substantial portion of stock return variance. All models exhibited significant F-statistics ($p < 0.01$), demonstrating the robustness of the findings.

These findings underscore the significance of board attributes in financial decision-making. The efficiency of governance is anticipated by reputation (REP), competency (COMP), and compensation (BPAY). The interaction terms of all five board characteristics are significant, indicating that these factors influence the informativeness of accounting returns.

Al-Odat et al. (2022) discovered that concentrated ownership structures and a regulatory focus on board oversight mark Jordanian governance. The ownership % of Top1 was significant, exhibiting a positive coefficient in the fundamental model. This indicates that stock returns increase with this variable. Model 2.3 indicates a positive association between firm size (COSIZE) and stock returns, implying that firm size influences governance. Consistent with the research of Adams and Mehran (2012) and Fama and Jensen (1983), the results align with international studies highlighting the significance of board attributes and financial performance in emerging markets.

Table 4.15 Jordan Basic and Expanded Models Testing (Using EPS)

Variable	Model 1.1	Model 1.2	Model 2.1	Model 2.2	Model 2.3	Model 2.4	Model 2.5
Constant	-1.273***	-1.232***	-0.831**	-1.038***	-1.400***	-0.985***	-1.212***
	-4.476	-4.251	-3.009	-3.815	-6.475	-4.680	-3.667
EPS	0.271**	0.271**	2.370***	-0.061	7.081***	1.288***	0.254**
	2.461	2.454	14.482	-0.433	9.244	8.950	2.455
REP	0.037***	0.037***	0.041***	0.036***	0.009	0.032***	0.038***
	5.340	5.288	10.216	6.067	1.194	5.149	5.435
IND	0.084	0.09	0.035	0.039	0.026	0.083	0.086
	1.402	1.479	0.554	0.495	0.412	1.365	1.365
COMP	1.166***	1.176***	0.632***	1.072***	1.244***	0.825***	1.150***
	9.636	9.736	4.998	6.666	12.877	8.397	9.838
BSIZE	0.007	0.006	-0.005	0.001	-0.001	0.017	0.007
	0.786	0.705	-0.537	0.132	-0.233	1.724	0.790
BPAY	-2.024**	-2.042**	0.809	-1.743**	1.679**	-0.218	5.516**
	-2.272	-2.304	1.284	-2.506	2.140	-0.316	2.125
COSIZE	0.011	0.011	0.017	0.009	0.033**	0.005	0.009
	0.585	0.607	1.127	0.645	2.267	0.327	0.448
TDEBT	0.083	0.067	0.106	0.054	0.07	0.149	0.102
	0.690	0.564	0.940	0.506	0.586	1.264	0.873
AGE	-0.002	-0.002	-0.002	-0.003	0	-0.001	-0.002
	-0.815	-0.606	-0.760	-1.154	0.049	-0.362	-0.609
TOP1	0.121**						
	2.728						
TOP5		-0.024	-0.056	0.002	0.00002	-0.020	-0.020
		-0.474	-1.192	0.049	0.005	-0.473	-0.379

EPS*REP			-0.257***				
			-14.590				
EPS*IND				1.300***			
				4.017			
EPS*COMP					-8.763***		
					-8.821		
EPS*BSIZE						-0.079***	
						-9.535	
EPS*BPAY							13.033***
							4.063
R-squared	0.588	0.587	0.708	0.614	0.686	0.643	0.593
F-statistic	12.832	12.800	-21.579	-14.177	-19.438	-16.039	-12.967
P-value	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***

The symbols ***, **, and * indicate that the statistic is significant at 0.01, 0.05, and 0.10, respectively.

Earnings (EPS) – Returns Relationship for ASE-Listed Companies

In most ASE-listed companies, models show a positive and strong correlation between EPS and stock returns, demonstrating the informativeness of earnings in financial markets. Ball & Brown (1968) and Collins et al. (1997) found that accounting earnings affect stock prices, especially in emerging economies where financial statements are investors' major source of information.

Hypothesis Testing Using EPS Models

In this section, we test the research hypotheses in light of the results of Basic and Expanded Models that use EPS for ASE-listed companies. We analyze two effects for each board characteristic variable; the first is the main effect, which indicates the effect of the variable on stock returns (the dependent variable); this is measured by the coefficient of the variable in the regression equation, the second is the interaction effect which indicates the effect of the variable on the informativeness of accounting earnings (earnings-returns association), this is measured by the coefficient of the interaction term variable in the regression equation to show the moderating role of that variable in the model.

H1: The board's reputation positively and significantly affects the usefulness of accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Reputation (REP) consistently demonstrates a positive and significant effect across all models. For instance, in Model 1.1, the coefficient is 0.037 ($t = 5.340$, $p < 0.01$). The significant positive coefficient indicates that boards with stronger reputations contribute to higher stock returns; this could be a result of enhanced credibility and investor confidence, corroborating findings by Adams and Ferreira (2009).
- **Interaction Effect**: The interaction term EPS x REP in Model 2.1 is negative and significant (coefficient = -0.257, $t = -14.590$, $p < 0.01$). This suggests that while reputation boosts overall performance, it may reduce the marginal informativeness of EPS. Such diminishing returns align with Hermalin and Weisbach's (1991) observations on reputational effects in governance.

- **Conclusion**: H1 is supported but in a converse direction. While board reputation positively influences stock returns, it exhibits complex dynamics when interacting with earnings informativeness and significantly negatively affects earnings informativeness.

Insight

The above result reveals a positive impact of board reputation on stock returns, with a negative interaction term. This suggests that the informativeness of accounting earnings in justifying stock returns decreases as board reputation increases. This is due to stronger disclosure policies, improved governance structures, and less information asymmetry in highly respected companies (Bushman et al., 2004; Healy & Palepu, 2001). Additionally, conservative accounting rules and earnings smoothing in highly reputable boards reduce variability and surprise in recorded earnings (Francis et al., 2008).

H2: Boards with more independent directors significantly increase the usefulness of accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Independence (IND) shows a generally positive but statistically insignificant direct effect on stock returns (e.g., Model 1.1: coefficient = 0.084, t = 1.402). This finding aligns with Fama and Jensen's (1983) argument that independence may have conditional impacts depending on firm-specific contexts.
- **Interaction Effect**: In Model 2.2, the interaction term EPS x IND is positive and significant (coefficient = 1.300, t = 4.017, $p < 0.01$), indicating that independence significantly enhances the informativeness of accounting earnings. Klai and Omri (2013) observed similar dynamics in emerging markets.
- **Conclusion**: H2 is supported. Independent directors in ASE-listed companies significantly and positively affect EPS informativeness, while they exhibit limited direct effects on stock returns.

H3: The board's competence positively and significantly affects the usefulness of accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Competence (COMP) has a significant positive relationship with stock returns (e.g., Model 1.1: coefficient = 1.166, t = 9.636, $p < 0.01$),

emphasizing the importance of expertise in governance. Anderson et al. (2004) similarly highlighted the role of competence in enhancing financial oversight.

- **Interaction Effect**: The interaction term EPS x COMP in Model 2.3 is negative and significant (coefficient = -8.763, t = -8.821, $p < 0.01$). This suggests that while competent boards improve overall returns, their ability to enhance earnings informativeness is context-sensitive.
- **Conclusion**: H3 is supported but in a converse direction. While board competence directly and positively impacts stock returns, it significantly negatively impacts the informativeness of EPS, indicating complex interactions with EPS.

Justifications:

Results indicate that board competence (COMP) positively impacts stock returns, while the interaction term (EPS × COMP) has a significant negative coefficient. This suggests that while firms with more competent boards have higher stock returns, EPS becomes less informative in explaining returns.

This outcome is common and explained by several theoretical and empirical perspectives:

Stronger boards reduce earnings surprises

Competent boards enforce better governance and oversight (Fama & Jensen, 1983). Thus, these firms are more likely to use conservative accounting and improve financial management and internal controls to lower earnings volatility (Bushman et al., 2004). Since earnings reports are more predictable, investors find them less informative.

Alternative Information Sources

Competent boards provide better voluntary disclosures, guidance, and non-financial performance indicators (Healy & Palepu, 2001). Investors in these firms may prioritize strategic outlooks, industry positioning, and corporate governance over earnings. This reduces EPS's impact on stock returns, causing the negative interaction effect.

Market View: Strong Boards Indicate Stability

Strong strategic decision-making and risk management by competent boards boost investor confidence (DeFond & Francis, 2005). Since investors view these

firms as less prone to financial misreporting or mismanagement, they may react less strongly to earnings fluctuations, reducing the impact of EPS on stock prices.

Less Information Asymmetry

Better board competence increases corporate transparency and reduces information asymmetry (García Lara et al., 2017). When information asymmetry is low, earnings announcements give the market less new information, lowering earnings response coefficients. Thus, EPS explains stock returns less.

H4: The total board annual cash compensation significantly impacts the usefulness of accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Compensation (BPAY) shows a negative and significant effect in Basic Models (e.g., Model 1.1: coefficient = -2.024, t = -2.272, $p < 0.05$), reflecting concerns about misaligned incentives, as noted by Brick et al. (2006).
- **Interaction Effect**: In Model 2.5, the interaction term EPS x BPAY is positive and significant (coefficient = 13.033, t = 4.063, $p < 0.01$), suggesting that performance-linked pay enhances earnings informativeness. Ryan and Wiggins (2004) similarly emphasized the motivational role of aligning pay with performance.
- **Conclusion**: H4 is supported with a positive direction. The interaction term (EPS × BPAY) shows a notable positive coefficient. However, the direct effect of board compensation (BPAY) on stock returns has a negative impact. This implies that even if high board compensation is usually linked with reduced stock returns, it simultaneously improves the informativeness of earnings in explaining stock prices. Corporate governance books abound in well-documented examples of this relationship.

Agency theory helps first to explain the negative direct effect of BPAY by suggesting that rather than a real pay-for-performance structure, excessive board compensation may reflect managerial entrenchment and rent-seeking behavior (Jensen & Meckling, 1976). If not commensurate with company performance, high board compensation can erode shareholder value and indicate ineffective resource allocation, thus erasing investor confidence (Core et al., 1999).

However, the positive interaction effect (EPS × BPAY) indicates that earnings per share (EPS) becomes a more accurate indicator of stock returns as board compensation rises. This is consistent with the pay-for-performance theory, which states that better compensation motivates directors to improve financial reporting quality and monitoring systems, thus reducing earnings manipulation and raising investor reliance on earnings figures (Fama & Jensen, 1983). Moreover, well-compensated boards draw better-quality directors, who are more likely to enforce open financial disclosures, so enhancing EPS (Gabaix & Landier, 2008).

H5: The board size significantly affects the usefulness of accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Board size (BSIZE) exhibits weak and insignificant effects across models (e.g., Model 1.1: coefficient = 0.007, t = 0.786) with a positive coefficient. Yermack (1996) highlighted similar inefficiencies in larger boards.
- **Interaction Effect**: The interaction term EPS x BSIZE in Model 2.4 is negative and significant (coefficient = -0.079, t = -9.535, $p < 0.01$), indicating that larger boards dilute the informativeness of earnings.
- **Conclusion**: H5 is supported with negative direction. Board size had a significant negative impact on earnings informativeness. Larger boards hinder EPS informativeness, reflecting governance inefficiencies. This outcome corresponds with the trade-off theory regarding board size, which posits that larger boards provide varied expertise yet experience coordination inefficiencies (Jensen, 1993; Guest, 2009). The adverse interaction effect indicates that larger boards depend more on non-financial disclosures and bureaucratic decision-making, thereby diminishing the influence of EPS on stock price fluctuations (Coles et al., 2008; Anderson et al., 2004). Previous studies indicate that smaller boards are more efficient in financial oversight, thereby improving earnings informativeness (Yermack, 1996).

Control Variables Analysis

Control variables provide important insights into additional drivers of stock returns:

- **Firm Size (COSIZE)**: It shows an insignificant effect on stock returns, though it indicates a consistent positive coefficient (e.g., Model 2.3: coefficient = 0.033, t

= 2.267, $p < 0.05$). Larger firms benefit from economies of scale and market stability, aligning with Donnelly and Lynch (2002).

- **Leverage (TDEBT)**: Insignificant results for TDEBT suggest the limited influence of debt ratios on stock returns, differing from Anderson et al.'s (2004) findings in developed markets. Despite showing a consistent positive coefficient in all models,
- **Firm Age (AGE)**: AGE consistently exhibits insignificant effects, suggesting a minimal negative influence on return dynamics, unlike Bianchini et al. (2015).
- **Largest Shareholder Ownership (TOP1):** It positively affects stock returns in the basic model, reflecting stabilization effects in Jordan's concentrated ownership environment (Alodat et al., 2022).
- **Largest Five Shareholder Ownership (TOP5):** It shows an insignificant impact on returns in all models.

4.9.3.2. Jordan Differenced and Expanded Differenced Models Testing

Table (4.16) presents a regression analysis that assesses the dynamic associations between earnings (ΔEPS) changes and stock returns for ASE-listed companies. The models evolve from Differenced Models (1.1 and 1.2), which capture direct effects, to Expanded Differenced Models (2.1 through 2.5), which include interaction terms to evaluate how board features influence the relationship between ΔEPS and stock returns.

Table 4.16 Jordan Differenced and Expanded Differenced Models Testing (Using ΔEPS)

Variable	Model 1.1	Model 1.2	Model 2.1	Model 2.2	Model 2.3	Model 2.4	Model 2.5
Constant	-1.959***	-1.907***	-1.792***	-1.832***	-1.920***	-2.065***	-1.899***
	-5.368	-5.241	-4.867	-4.992	-5.362	-6.245	-4.809
ΔEPS	0.212**	0.211**	1.127***	-0.027	1.293	0.672***	0.191**
	2.461	2.453	3.303	-0.247	1.577	3.427	2.457
REP	0.040***	0.040***	0.040***	0.041***	0.038***	0.038***	0.040***
	5.532	5.531	10.490	6.692	5.095	5.396	5.640
IND	0.064	0.070	0.062	0.058	0.071	0.065	0.068
	0.903	0.984	0.858	0.740	0.976	0.906	0.933
COMP	1.280***	1.292***	1.135***	1.236***	1.254***	1.190***	1.270***
	9.093	9.183	6.574	7.669	8.680	6.914	8.865
BSIZE	0.001	0.000	0.004	0.001	0.000	-0.001	0.001
	0.081	-0.005	0.496	0.084	0.003	-0.110	0.086
BPAY	-1.533	-1.553	-0.579	-1.559**	-0.961	-0.497	6.236**
	-1.713	-1.769	-0.679	-2.130	-0.922	-0.679	2.649
COSIZE	0.051**	0.051**	0.050**	0.049**	0.054**	0.066**	0.050**
	2.165	2.204	2.384	2.293	2.419	3.000	2.049
TDEBT	-0.015	-0.033	-0.042	-0.036	-0.041	-0.064	-0.003
	-0.127	-0.284	-0.345	-0.305	-0.349	-0.566	-0.024
AGE	-0.001	-0.001	-0.001	-0.001	-0.001	0.000	-0.001
	-0.428	-0.238	-0.448	-0.478	-0.292	-0.127	-0.303
TOP1	0.130**						
	2.383						
TOP5		-0.041	-0.030	-0.028	-0.037	-0.052	-0.033
		-0.741	-0.649	-0.567	-0.642	-0.863	-0.593

ΔEPS*REP			-0.115**				
			-2.665				
ΔEPS*IND				0.832***			
				3.739			
ΔEPS*COMP					-1.409		
					-1.333		
ΔEPS*BSIZE						-0.038***	
						-2.750	
ΔEPS*BPAY							16.300***
							4.606
R-squared	0.578	0.577	0.614	0.591	0.583	0.592	0.584
F-statistic	12.333	12.300	14.176	12.891	12.456	12.916	12.524
P-value	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***

The symbols ***, **, and * indicate that the statistic is significant at 0.01, 0.05, and 0.10, respectively.

The R-squared values vary from 0.578 in Model 1.1 to 0.614 in Model 2.1, demonstrating substantial explanatory power; furthermore, all models exhibited significant F-statistics ($p < 0.01$), affirming their significance and robustness.

These findings highlight the essential function of governance in fluctuating financial environments, where changes in performance indicators like ΔEPS possess time-sensitive implications. Competence (COMP) and reputation (REP) persist in positively affecting stock returns; however, they interact with ΔEPS in distinct manners, indicating sophisticated governance impacts. The findings correspond with research in emerging economies, like Alodat et al. (2022), highlighting Jordan's distinctive regulatory and ownership landscape, wherein boards significantly influence investor perceptions and decision-making.

Changes in Earnings (ΔEPS) – Returns Relationship for ASE-Listed Companies

Models reveal a positive and robust relationship between ΔEPS and stock returns for most ASE-listed companies, proving that changes in earnings provide useful information for financial market analysis. Both Ball and Brown (1968) and Collins, Maydew, and Weiss (1997) discovered that accounting earnings affect stock prices. This is particularly true in developing economies where investors rely heavily on financial statements.

Hypothesis Testing Using ΔEPS Models.

H1: The board's reputation positively and significantly affects the usefulness of changes in accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Reputation (REP) is consistently positive and significant across models. For instance, in Model 1.1, the coefficient is 0.040 ($t = 5.532$, $p < 0.01$), reaffirming its importance in governance and financial outcomes (Clifford et al., 2018).
- **Interaction Effect**: In Model 2.1, the interaction term ΔEPS x REP is negative and significant (coefficient = -0.115, $t = -2.665$, $p < 0.05$). This suggests that a high reputation moderates the informativeness of ΔEPS, with diminishing marginal returns.

- **Conclusion**: H1 is supported but in a converse direction. Board reputation significantly affects the informativeness of changes in earnings, but in a negative direction, which indicates that the reputation exhibits complex dynamics when interacting with ΔEPS. However, reputation has a significant positive direct effect on stock returns. As explained earlier, this suggests that the informativeness of accounting earnings in justifying stock returns decreases as board reputation increases. This is due to stronger disclosure policies, improved governance structures, and less information asymmetry in highly respected companies. Additionally, conservative accounting rules and earnings smoothing reduce variability and surprise in recorded earnings.

H2: Boards with more independent directors significantly increase the usefulness of changes in accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Independence (IND) has a generally positive but statistically insignificant direct effect (e.g., Model 1.1: coefficient = 0.064, t = 0.903).
- **Interaction Effect**: The interaction term ΔEPS x IND in Model 2.2 is significant and positive (coefficient = 0.832, t = 3.739, $p < 0.01$). This indicates that independent directors enhance the informativeness of ΔEPS, aligning with Klai and Omri (2013).
- **Conclusion**: H2 is supported. Board independence significantly strengthens ΔEPS informativeness, even if direct impact of board independence is insignificant (Kanakriyah, 2021); Shahrier et al., 2020; Bekiaris, 2021). This result corresponds with earlier research stressing the governance advantages of independent directors in enhancing financial transparency and the decision-usefulness of earnings data (Klai & Omri, 2013). Furthermore, it supports the case that independent boards enable better financial reporting, boosting investor trust and lowering information asymmetry (Kanakriyah, 2021; Shahrier et al., 2020). The findings extend earlier studies by proving that the influence of independent directors is more evident in their capacity to increase the informativeness of earnings rather than directly affecting earnings quality (Bekiaris, 2021). These observations highlight the need for robust corporate governance systems to

guarantee that financial disclosures remain relevant and trustworthy for market players.

H3: The board's competence positively and significantly affects the usefulness of changes in accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Competence (COMP) consistently exhibits significant positive relationships with returns (e.g., Model 1.1: coefficient = 1.280, t = 9.093, $p < 0.01$). (Jin and Mamatzakis, 2018; Sidki et al., 2023)
- **Interaction Effect**: In Model 2.3, ΔEPS x COMP shows a negative coefficient, which is insignificant ($p > 0.05$), suggesting limited moderating effects.
- **Conclusion**: H3 is not supported. Competence enhances returns but shows insignificant interactions with ΔEPS. As explained earlier the insignificant interaction suggests that ΔEPS is already priced in companies with good governance, thereby reducing their added value to investors (DeFond et al., 2005). Competent boards may also emphasize broader performance criteria, reducing stock price vulnerability to earnings announcements (Francis et al., 2005).

H4: The total board annual cash compensation negatively impacts the usefulness of changes in accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Board compensation (BPAY) is negatively insignificant in most models, negatively significant in model 2.2, and becomes positively significant in model 2.5; overall, we can conclude that the direct effect of board compensation is negatively associated with stock returns.

- **Interaction Effect:** The interaction term ΔEPS x PBAY in Model 2.5 is significant and positive (coefficient = 16.300, t = 4.606, $p < 0.01$). This indicates that board compensation enhances informativeness when interacting with earnings changes.

- **Conclusion**: H4 is supported with a positive direction. The board compensation moderating role positively enhances informativeness when aligned with ΔEPS, while its direct effect is negatively associated with stock returns (Almarayeh,

2023). As indicated earlier, the pay-for-performance idea holds that improved compensation stimulates directors to enhance financial reporting and monitoring systems, minimizing earnings manipulation and increasing investor reliance on earnings data (Fama & Jensen, 1983). Well-compensated boards attract better directors, who are more likely to implement open financial disclosures, increasing EPS (Gabaix & Landier, 2008).

H5: The board size positively and significantly affects the usefulness of changes in accounting earnings in explaining stock returns for ASE-listed companies.

- **Main Effect**: Board size (BSIZE) exhibits positive insignificant direct effects.
- **Interaction Effect**: ΔEPS*BSIZE is significant and negative in Model 2.4 (coefficient = -0.038, t = -2.750, $p < 0.01$).
- **Conclusion**: H5 is supported with negative direction. Board size exhibits a significant impact on changes in earnings informativeness but in a negative direction; larger boards limit ΔEPS informativeness. Board size has no direct significant effect on stock returns. These findings are consistent with prior studies (Ahmed et al.,2006; Rodriguez-Fernandez et al., 2014; Pathan & Faff, 2013).

Control Variables Analysis

Control variables in Table 4.16 demonstrate the following:

• **Firm Size (COSIZE):** Firm size exhibited a consistently positive and strong association with stock returns. Large enterprises benefit from economies of scale, resulting in increased returns (Bekiaris, 2021).

• **Leverage (TDEBT):** Leverage exhibited a negative coefficient across all models, suggesting a potential adverse effect of increased debt on returns (Ahmed et al., 2006); nonetheless, the impact of leverage remains insignificant in all models.

Firm Age (AGE): It consistently demonstrates insignificant negative effects across all models, indicating a modest impact on stock return dynamics. This outcome is consistent with prior research, such as Loderer & Waelchli (2010), who found that publicly traded companies with a history of more than 15 years often perform worse than their younger counterparts due to an inability to adapt to changing market conditions.

Largest Shareholder Ownership (TOP1): It demonstrated a significant positive influence on stock returns in the basic model, underscoring the pivotal role of the largest shareholder in augmenting stock returns within Jordan's concentrated ownership context (Alodat et al., 2022).

Largest Five Shareholder Ownership (TOP5): It showed an insignificant adverse effect on returns across all models (Dzanic, 2012). This indicates that market concentration depends more on the largest shareholder than other major shareholders.

Table (4.17) summarizes both ΔEPS and EPS models and hypotheses testing for ASE-listed companies.

Table 4.17 Summary of Jordan Models Results (EPS and ΔEPS)

Hypothesis/ Variable	EPS Models (Basic and Expanded Basic)			ΔEPS Models (Differenced and Expanded Diff.)		
	Main Effect on Returns	Interaction Effect on Informativeness	Hyp. Result	Main Effect on Returns	Interaction Effect on Informativeness	Hyp. Result
H1: Reputation	Significant/ Positive	Significant /Negative	Supported in a converse direction	Significant/ Positive	Significant /Negative	Supported in a converse direction
H2: Independence	Insignificant/ Positive	Significant/ Positive	Supported	Insignificant/ Positive	Significant/ Positive	Supported
H3: Competence	Significant/ Positive	Significant /Negative	Supported in a converse direction	Significant/ Positive	Insignificant/ Negative	Not Supported
H4: Compensation	Significant/ Negative	Significant/ Positive	Supported	Insignificant/ Negative	Significant/ Positive	Supported
H5: Board Size	Insignificant/ Positive	Significant /Negative	Supported	Insignificant/ Positive	Significant /Negative	Supported
Control Variables						
COSIZE	Insignificant / Positive			Significant / Positive		
TDEBT	Insignificant / Positive			Insignificant / Negative		
AGE	Insignificant / Negative			Insignificant / Negative		
TOP1	Significant / Positive			Significant / Positive		
TOP5	Insignificant / Negative			Insignificant / Negative		

4.9.4. Comparative Analysis of EPS Models vs. ΔEPS Models

The empirical findings reveal notable differences between the basic EPS models and the differenced ΔEPS models in both (PEX) and (ASE). EPS models exhibit more substantial explanatory power for stock returns in both PEX and ASE markets. The R-squared values of EPS models are consistently higher than those of ΔEPS models especially in ASE-Listed companies, suggesting that investors rely more on the absolute level of earnings per share rather than changes in earnings (Ball & Brown, 1968; Collins et al., 1997). The comparative analysis between EPS and ΔEPS models is exhibited in Table (4.18) below.

Table 4.18 Comparative Analysis of EPS vs. ΔEPS Models

Market	EPS Models Findings	ΔEPS Models Findings	Conclusion
PEX	EPS significantly correlates with stock returns in four sub-models (four out of seven), demonstrating strong explanatory power. Governance variables like board reputation and competence moderately enhance informativeness. R-squared values remain considerable.	ΔEPS shows a significant association with stock returns in three of seven sub-models, indicating that earnings changes are less informative for investors. Governance interactions are insignificant. R-squared values are within the range of EPS models.	Investors in PEX rely more on absolute earnings than earnings changes. Governance interaction with ΔEPS weakens informativeness.
ASE	EPS exhibits a strong relationship with stock returns in six models out of seven sub-models, and governance factors like independence and compensation significantly improve earnings informativeness. Higher R-squared values suggest a more structured market.	ΔEPS demonstrates a strong significance in five out of seven sub-models. Showed less significance than EPS models when interacted with governance characteristics. Using ΔEPS did not enhance earnings informativeness.	ASE exhibits stronger financial market efficiency using EPS, allowing ΔEPS to provide limited incremental value. Investors incorporate both earnings levels and earnings changes but rely more on EPS.

4.9.5. Comparative Analysis of Results Between (PEX) and (ASE)

Table (4.19) analyses model outcomes between PEX and ASE-listed companies, highlighting notable governance-related differences in the informativeness of accounting earnings between the two markets. The results indicate:

- ASE exhibits more substantial financial market efficiency, with higher R-squared values in governance-based models, which implies that investors depend on a mix of earnings values and earnings changes.
- PEX relies more on absolute earnings figures, with governance playing a lesser role in modifying earnings informativeness. Investors in Palestine are less reactive to earnings changes, making ΔEPS less useful.
- Governance factors such as independence and compensation significantly improve informativeness in ASE, indicating a more mature regulatory framework. In PEX, governance characteristics show weaker effects, suggesting a need for stronger corporate governance enforcement.
- EPS is more reliable than ΔEPS in both markets, but ΔEPS provides incremental value in ASE, where corporate governance structures enhance its informativeness.

PEX-listed firms should improve corporate governance enforcement to increase the dependability of earnings releases. Regulatory authorities should concentrate on raising investor trust in earnings changes rather than providing absolute numbers. ASE-listed companies should increase board size and governance efficiency to prevent possible bureaucratic inefficiencies that weaken earnings informativeness. Transparency in governance will help strengthen investors' reliance on earnings even further. Promoting a balanced strategy for both markets, including changes in earnings and absolute earnings numbers, is advisable. Refined governance structures will help to maximize the function of performance-based incentives and independent directors in earnings informativeness.

Table 4.19 Results Comparison Summary between PEX and ASE Models

Hypothesis	PEX	ASE	Conclusion
H1: Board Reputation	Significant negative interaction with EPS. At the same time, there is a significant positive main effect. Investors rely less on earnings when boards have high reputations.	Significant negative interaction with EPS and with ΔEPS, significant positive main effect on returns. Reputation enhances governance but reduces reliance on earnings.	In both markets, the reputation interaction effect reduces earnings informativeness while the direct effect enhances governance. ASE has slightly stronger R-squared values, making its governance structure more practical.
H2: Board Independence	Significant negative interaction with EPS. Insignificant main effect. A weak regulatory framework limits its role.	Significant positive interaction effect, insignificant main effect. Independent boards enhance informativeness when earnings and changes are analyzed.	The independent boards are more effective in improving earnings informativeness in ASE. ASE benefits more from independent boards due to more vigorous governance enforcement.
H3: Board Competence	Insignificant interaction with EPS or ΔEPS. Significant positive direct effect on stock returns. Competence improves governance but does not impact informativeness.	Positive direct effect on stock returns but negatively moderates EPS informativeness. Investors focus more on strategic insights.	ASE demonstrates a more structured market where competent boards contribute to governance but reduce reliance on accounting figures alone.
H4: Board Compensation	Significant positive interaction with EPS, insignificant direct effect. Pay-for-performance improves informativeness.	Significant positive interaction with EPS and with ΔEPS, negative direct effect on stock returns. Compensation enhances informativeness in a structured way.	In both markets, compensation impacts earnings informativeness, and ASE governance benefits more from compensation as a regulatory tool. Performance-based compensation significantly enhances ΔEPS informativeness in ASE.
H5: Board Size	Significant positive interaction with ΔEPS, no direct impact on stock returns. Larger boards enhance oversight of earnings changes.	Negative moderation of EPS and ΔEPS informativeness. Larger boards may introduce inefficiencies.	PEX benefits from larger boards improving ΔEPS analysis, whereas ASE shows governance inefficiencies from larger board sizes.

4.9.6. Comparative Analysis of Control Variables Results

Control variables research results also show differences between PEX and ASE models when examining both EPS and ΔEPS. Table (4.20) exhibits a comparison of control variables testing results between the two markets, including the sets of models (EPS and ΔEPS models):

Table 4.20 Comparative Results of Control Variables Tests

Control Variable	PEX Models	ASE Models
COSIZE	Insignificant / Positive (EPS), Insignificant / Positive (ΔEPS)	Insignificant / Positive (EPS), Significant / Positive (ΔEPS)
TDEBT	Insignificant / Positive (EPS), Insignificant / Positive (ΔEPS)	Insignificant / Positive (EPS), Insignificant / Negative (ΔEPS)
AGE	Significant / Positive (EPS), Significant / Positive (ΔEPS)	Insignificant / Negative (EPS), Insignificant / Negative (ΔEPS)
TOP1	Insignificant / Negative (EPS), Insignificant / Negative (ΔEPS)	Significant / Positive (EPS), Significant / Positive (ΔEPS)
TOP5	Significant / Negative (EPS), Significant / Negative (ΔEPS)	Insignificant / Negative (EPS), Insignificant / Negative (ΔEPS)

Firm Size (COSIZE): The insignificance coefficient of firm size in EPS models for both PEX and ASE points to larger companies not consistently producing higher stock returns. Nonetheless, the relevance of COSIZE in ΔEPS model for ASE only suggests that variations in earnings could have a more effect on stock performance in larger ASE companies (Fama & French, 1992).

Leverage (TDEBT): Both PEX and ASE models show that leverages (TDEBT) are insignificant, implying that the capital structure does not much influence stock returns in either market. On the other hand, the insignificant negative coefficient in ΔEPS models for ASE implies that more debt can generate financial risk, lowering the stock returns in ASE companies (Modigliani & Miller, 1958).

Firm Age (AGE): AGE is significant and positive in PEX but negligible in ASE, suggesting that older companies in PEX provide higher stock returns, maybe due to

investor confidence (Loderer & Waelchli, 2010). Corporate age does not seem to be a factor influencing stock performance in ASE.

Largest Shareholder Ownership (TOP1): TOP1 is considerable and positive in ASE but insignificant in PEX, indicating that the largest owners in ASE help increase stock performance (Claessens et al., 2002) while having an insignificant effect on returns in PEX. However, the negative, insignificant coefficient indicates that TOP1 weakens stock performance in PEX.

Largest Five Shareholder Ownership (TOP5): TOP5 is significantly negative in PEX but negligible in ASE, implying that increasing ownership concentration among several shareholders lowers stock returns in PEX, likely due to governance conflicts and principal-principal agency difficulties (Claessens et al., 2002; Young et al., 2008).

Chapter 5: Conclusions and Recommendations

5.1. Introduction

This chapter synthesizes the study's key findings, discussing their theoretical and practical implications within the context of corporate governance and financial reporting quality. The primary objective was to examine the relationship between board characteristics and the informativeness of accounting earnings in explaining stock returns for companies listed on the Palestine Exchange (PEX) and Amman Stock Exchange (ASE). The study contributes to the corporate governance literature by integrating empirical evidence from emerging markets and assessing how board reputation, independence, competence, compensation, and size affect earnings informativeness. The findings have important implications for corporate governance practices and financial decision-making in Palestine and Jordan.

Furthermore, the chapter highlights the study's limitations, presents recommendations for future research, and offers guidance for regulatory bodies and investors seeking to enhance financial transparency and governance effectiveness in these markets. The conclusions and recommendations aim to bridge the gap between theory and practice, ensuring that both scholars and practitioners can benefit from the insights derived from this study.

5.2. Key Findings and Their Implications

5.2.1. Summary of Variables Key Findings

The empirical results confirm that some board characteristics significantly impact the informativeness of accounting earnings, supporting multiple governance theories. The primary findings include:

Earnings Per Share (EPS) and Changes in Earnings Per Share ΔEPS

Both earnings indicators considerably explain stock returns, which is in line with the earnings response coefficient (ERC) theory (Francis et al., 2004; Ball & Shivakumar, 2005). This outcome shows that earnings are a significant factor driving stock prices in both PEX and ASE, reflecting investor reliance on financial disclosures. This result

conforms with earlier studies implying that earnings announcements have predictive power in financial markets (Easton & Harris, 1991).

Board Reputation

Board reputation negatively moderates the link between earnings and stock returns in both markets; this is consistent with some prior studies like Hermalin & Weisbach (1991), who proposed that highly reputable boards could concentrate on protecting their standing rather than improving earnings informativeness. Likewise, Gong et al. (2018) discovered that sometimes well-reputed boards prioritize conservative financial tactics over openness, perhaps lowering the profit's informativeness. The decrease in the informativeness of accounting earnings as board reputation increases can be interpreted as a result of enhanced disclosure practices, improved governance frameworks, and reduced information asymmetry in reputable organizations (Bushman et al., 2004; Healy & Palepu, 2001). Moreover, conservative accounting principles and earnings smoothing within reputable boards diminish uncertainty and unpredictability in reported results (Francis et al., 2008).

Nonetheless, across all models, the direct effect of board reputation on stock returns reveals a favorable significant impact; this result is consistent with Brammer et al. (2009), who found that companies with high corporate performance, indicative of strong reputations, often experience superior stock returns.

Board Independence

Board Independence enhances earnings informativeness in ASE-listed companies, supporting the conclusions of Klein (2002) and Dimitropoulos & Asteriou (2010), while it shows a negative impact on earnings informativeness for PEX-listed companies which is consistent with Firth et al. (2007) who found that increased board independence is associated with reduced earnings informativeness, suggesting that a higher proportion of independent directors may negatively impact the quality of financial reporting. In PEX, board independence reduces the link between EPS and stock returns, suggesting less earnings-based value. Independent directors may improve governance only symbolically in PEX markets (Klein, 2002). EPS impact on stock performance may be reduced by prioritizing non-financial measures like sustainability and governance compliance over profitability (García et al., 2009).

Board Competence

In PEX, board competence enhances stock returns but does not enhance earnings informativeness; this result is consistent with the findings of Dimitropoulos & Asteriou (2010) study who found that board composition, including factors related to competence, had an insignificant effect on the informativeness of annual earnings for Greek firms. It is interpreted as earnings may already be priced in well-governed, highly competent boards (Hillman & Dalziel, 2003; Adams & Ferreira, 2009). In markets like PEX, competent boards reduce investor protection risks and emphasize broader performance metrics, lowering stock price sensitivity to earnings (Klapper & Love, 2004; DeFond, Hann, & Hu, 2005). In ASE, the research shows that whereas board competence increases stock returns, it also reduces the informativeness of earnings. Several theoretical points of view justify this result. Competent boards, by ensuring tighter governance and supervision (Fama & Jensen, 1983), tend to promote conservative accounting and minimize earnings volatility (Bushman et al., 2004), generating more predictable results and reducing informativeness. Moreover, these boards may offer richer voluntary disclosures and non-financial data, distorting investor attention from EPS. Furthermore, less reliance on earnings announcements results from investor confidence in companies with competent boards due to perceived stability and lower risk (DeFond & Francis, 2005). At last, better transparency from competent boards lowers information asymmetry (García Lara et al., 2017), lowering earnings releases' information content.

Board Compensation

Across both the Palestine Exchange (PEX) and the Amman Stock Exchange (ASE), board compensation board compensation significantly influences the informativeness of earnings, indicating. This suggests that increased board compensation improves the explanatory power of earnings for stock returns on both exchanges (Ryan & Wiggins, 2004). The increased informativeness can be attributed to multiple interrelated factors: the pay-for-performance alignment, promoting superior financial reporting (Jensen & Murphy, 1990); the recruitment of more proficient and seasoned directors, resulting in enhanced governance and transparency (Gabaix & Landier, 2008); and the signaling effect of elevated compensation, indicating a dedication to effective governance and augmenting investor confidence (Brick et al., 2006). Consequently, although the direct

effects vary, board compensation uniformly enhances the relationship between earnings and stock returns in the PEX and ASE.

The direct influence of compensation on stock returns varies between the two exchanges. It shows an insignificant impact on the PEX, which is consistent with Bhagat and Black (2002), who found weak or insignificant links between board characteristics, including compensation and returns in some contexts, suggesting that market-specific factors can weaken this link. Compensation exhibited a negative impact on stock returns on the ASE, possibly attributable to concentrated ownership (Young et al., 2008; Core et al., 1999) and agency issues (Jensen & Meckling, 1976; Core et al., 1999; Brick et al., 2006), the outcome is consistent with Bebchuk et al (2002) study which suggested that high pay decoupled from performance can lead to negative returns due to agency problems. In addition, a study by Asmar et al. (2024) found that board compensation negatively affects firm performance in Palestine.

Board Size

Board size affects earnings informativeness differently on the Palestine Exchange (PEX) and the Amman Stock Exchange (ASE). A significant positive impact of board size on earnings informativeness exists in PEX, concluding that larger boards improve earnings informativeness in the Palestine context. This conclusion is supported by Almutairi and Quttainah (2020). Although board size does not directly affect stock returns in PEX, it does alter how investors understand earnings movements over time. Larger boards improve monitoring and strategic oversight, which boosts earnings trend believability (Coles et al., 2008) and implies managerial efficiency and better decision-making. To support the stakeholder signaling hypothesis (DeFond & Park, 1999), larger boards can promote openness and reduce information asymmetry, making earnings volatility a more reliable performance indicator (Boone et al., 2007).

The ASE shows a negative interaction between EPS and board size, showing that larger boards make earnings less meaningful, consistent with Ahmad et al.'s study (2006). According to the trade-off theory of board size, larger boards have more knowledge but less coordination (Jensen, 1993; Guest, 2009). This negative interaction effect shows that larger boards on the ASE may rely more on non-financial information and bureaucratic processes, reducing the impact of EPS on stock prices. According to studies, smaller

boards are better at financial monitoring, boosting earnings informativeness (Yermack, 1996).

In summary, larger boards on the PEX make earnings changes more informative. However, larger boards on the ASE make earnings generally less informative, demonstrating the complex and context-dependent link between board size and earnings informativeness.

Control Variables

Firm Size

The results imply that firm size has an insignificant effect on stock returns in either PEX or ASE, suggesting that larger companies do not produce higher returns. The finding is consistent with Liew and Voon (2018), which provided evidence from an emerging market (Malaysia) that firm size is not associated with stock returns. However, firm size showed a positive association with returns for ASE-listed companies only when employing ΔEPS models; this suggests that in the Jordan market, stock performance in larger companies is more affected by variations in earnings rather than earnings. This is consistent with Fama and French (1992), who showed that market reactions in larger companies can be driven by earnings changes even if business size alone does not determine stock returns.

Leverage

Based on its insignificance across models, the results demonstrate that leverage does not significantly affect stock returns in both markets. This conclusion is supported by Dang et al. (2021), who found that in certain contexts, the direct effect of leverage on firm value/returns can be insignificant. In addition, Al-Najjar and Hussainey (2018) examined firm performance in the UK. They found that the direct effect of leverage on firm performance is not consistently significant across different governance settings.

Corporate Age

Corporate age exhibited different results between PEX and ASE contexts. Evidence shows that older PEX enterprises often provide better stock returns. This implies that older companies may be seen by PEX investors as more dependable and financially solid,

hence increasing market trust. This result is supported by Matemilola et al. (2017), who concluded that firm age directly affects stock returns. Furthermore, Khan et al. (2021) included firm age as a control variable. They found a positive and significant relationship between firm age and firm value, supporting the idea that older firms tend to perform better in the stock market.

However, in ASE, firm age is found to be insignificant and has no evident impact on stock returns. This could be justified because the corporate age may result in a lack of organizational agility, resistance to innovation, and obsolete business strategies. The opposing pressures may contradict one another, leading to a negligible correlation between age and returns (Hannan & Freeman, 1984). Moreover, factors such as industry dynamics, management quality, and market conditions may significantly influence stock performance, hiding any direct impact of age (Rumelt, 1991). This finding coincides with the extensive study of Fama and French (2015), which suggested that firm age is not a robust predictor of stock returns in a global context. Furthermore, Ali et al. (2021) used firm age as a control variable and found it statistically insignificant in explaining firm performance.

Largest Shareholder Ownership

It produces mixed findings between PEX and ASE. In PEX, TOP1 has an insignificant impact on stock returns, suggesting that dominating shareholders do not affect firm value. Claessens et al. (2002) support this result since they found that although concentrated ownership can improve governance, its impacts differ depending on the market. In addition, Boubakri et al. (2016) studied the relationship between ownership structure and firm performance in emerging markets; they supported the idea that the relationship between concentrated ownership and firm performance is not universal and can be insignificant depending on market conditions and other factors. This outcome can be explained as the correlation between the ownership of the largest shareholder (TOP1) and stock results is complicated. A significant shareholder can enhance oversight, but excessive concentration may result in entrenchment and expropriation. The opposing pressures may counterbalance, leading to a negligible direct relationship. Moreover, contextual factors such as legislation, governance processes, and shareholder characteristics may conceal any direct TOP1 effect (La Porta et al., 1998).

By contrast, TOP1 improves governance in ASE and helps match managerial incentives with shareholder interests, influencing stock performance. The alignment of interests hypothesis explains this. A significant shareholder's holding encourages adequate supervision, eliminating agency problems and boosting corporate performance, increasing returns. In cases of poor minority shareholder protection, a major stakeholder operates as a de facto shareholder rights protector. Shleifer and Vishny (1997) noted that significant shareholders monitor agency concerns, while La Porta et al. (1998) indicated that concentrated ownership could benefit poor investor protection settings. This conclusion is supported by Maury (2006), who examined the relationship between ownership structure and firm performance in Western European firms. The study found evidence of a positive relationship between the presence of a large shareholder and firm value.

Largest Five Shareholder Ownership

The results show a negative coefficient of TOP5 for both markets, but significant in PEX while insignificant in ASE; this implies that as the proportion of the largest five shareholders increases, the stock returns decrease in PEX and are little impacted in ASE. This result is consistent with the study by Nguyen et al. (2020), which found a negative relationship between ownership concentration and stock returns in the context of the Vietnamese stock market. Furthermore, Javid and Iqbal (2021) focused on the Pakistan Stock Exchange and provided evidence of a negative association between ownership concentration and stock returns.

The negative significant impact of TOP5 on stock returns in PEX can be attributed to several linked reasons. According to the entrenchment theory, large shareholders might put personal gains above shareholder value, resulting in less-than-ideal performance (Shleifer & Vishny, 1997). This can lead to less management monitoring and worsening agency difficulties (Jensen & Meckling, 1976; Fama & Jensen, 1983). Moreover, concentrated ownership fosters tunneling, wherein controlling shareholders exploit business resources for personal gain (Johnson et al., 2000). Lastly, a smaller float of publicly traded shares might lower market liquidity and affect asset pricing and returns (Amihud & Mendelson, 1986). These theoretical angles, taken together, account for the noted negative correlation between TOP5 ownership and stock returns.

5.2.2. EPS vs ΔEPS Models Conclusion

For stock returns in both the Palestine Exchange (PX) and the Amman Stock Exchange (ASE), the empirical study demonstrates a clear difference in explanatory power between basic Earnings Per Share (EPS) models and differenced change-in-EPS (ΔEPS) models. Specifically, EPS models show better explaining ability in both markets than ΔEPS models. Consistently higher R-squared values for EPS models—especially for ASE-listed companies—suggest that investors value the absolute level of EPS more highly than changes in earnings when valuing equities, in line with past studies stressing the significance of earnings levels (Ball & Brown, 1968; Collins et al., 1997).

5.2.3. PEX vs ASE Models Conclusions

The descriptive mean comparison highlights more substantial stock returns, greater board independence, and lower ownership concentration in Jordan, suggesting better governance practices and investor confidence. In contrast, Palestinian firms report higher earnings but weaker returns, larger boards, and greater ownership concentration, which could impact financial transparency and market efficiency. These differences suggest institutional, regulatory, and market factors are crucial in shaping corporate governance and financial performance across the two economies.

The model comparison outcomes between PEX and ASE demonstrate notable governance-related differences in the informativeness of accounting earnings across the two markets. The results demonstrate a higher level of financial market efficiency in the ASE, as indicated by elevated R-squared values in governance-based models, implying that ASE investors incorporate both earnings levels and variations in their investment choices. In contrast, the PEX demonstrates a greater dependence on absolute earnings metrics, whereas governance considerations have less impact on earnings informativeness. This indicates that Palestinian investors exhibit reduced sensitivity to fluctuations in earnings, therefore decreasing the efficacy of ΔEPS as a valuation measure. Moreover, governance mechanisms like board independence and compensation exhibit a statistically significant positive effect on earnings informativeness inside the ASE, suggesting a more advanced and resilient regulatory environment. The influence of governance features on earnings informativeness is less pronounced in the PEX, underscoring the potential advantages of improved corporate governance enforcement in

this market. EPS is a more dependable measure than ΔEPS throughout both exchanges; nonetheless, ΔEPS offers additional explanatory value, particularly within the ASE, where robust corporate governance frameworks enhance its informativeness.

5.3. Research Limitations

As with any research, the empirical tests conducted in this research may be subject to the problem of omitted variables. We investigate specific characteristics of the board while acknowledging that the inclusion of other attributes in the models may impact the outcomes. Economic conditions, regulation changes, earnings management, and market speculations could be other omitted variables. For instance, market speculations can positively influence stock returns despite unsatisfactory EPS.

Other limitations may arise from potential inaccuracies in data measurement, such as using proxies for board characteristics that may introduce noise in the models, potentially reducing the statistical strength of the tests. For instance, the number of outside directorships held by a board member may be influenced by social networking or political factors rather than their professional background. The disclosure of independence for certain board directors may be only nominal, as they may not possess independence in practice.

This research explicitly excludes the financial sector. Hence, the findings cannot be extrapolated to that particular industry. Furthermore, the research data is limited to publicly traded companies on the stock exchanges in Palestine and Jordan. As a result, the findings of this study cannot be extrapolated to encompass a wide range of unlisted, privately owned family businesses in these two countries.

The inefficiency of the Palestinian and Jordanian financial markets, as noted in previous studies (Alkhatib & Harasheh, 2014; Abushammala, 2011; Almujamed et al., 2016; Ananzeh, 2015), poses a significant challenge, as stock prices do not promptly reflect accounting information, and profits are often achieved through technical analysis rather than fundamental data. This inefficiency complicates the relationship between accounting metrics, such as earnings per share (EPS), and stock returns, making it difficult to draw clear conclusions. Additionally, the delayed reflection of accounting data and news in stock prices further weakens the informativeness of financial statements. Despite meeting the assumptions of the OLS regression model and applying

necessary statistical treatments, these market-specific issues create obstacles in accurately interpreting the results, limiting the applicability of the findings and raising questions about the reliability of accounting information for investment decisions in the Palestinian context.

Palestine and Jordan's unique cultural and regulatory environment may influence corporate governance practices. The findings may not be directly applicable to other markets with different contexts.

Finally, measuring certain variables, such as board reputation and competence, may be subjective and could affect the reliability of the results.

5.4. Recommendations for Future Research

This research provides valuable insights into the relationship between board characteristics, earnings informativeness, and stock returns in Palestine and Jordan. However, there are several areas where future research could further enhance our understanding of these dynamics:

Further studies should explore the impact of market efficiency on the relationship between accounting earnings and stock returns. The Palestinian and Jordanian market inefficiency may limit the informativeness of accounting data, and understanding this dynamic could provide deeper insights.

Palestine and Jordan's unique cultural and regulatory environment may influence corporate governance practices. For example, Differences in corporate regulations, legal frameworks, investor protection mechanisms, and enforcement of governance standards may lead to variations in board decision-making, monitoring effectiveness, and financial transparency. Future research should examine how these factors affect board effectiveness and financial performance.

While this research focused on earnings per share as a performance measure, future research could explore other metrics, such as return on assets (ROA), return on equity (ROE), or Tobin's Q, to provide a more comprehensive understanding of performance.

Comparative studies between Palestine, Jordan, and other emerging or developed markets could highlight differences in governance practices and their impact on financial

performance. This could provide valuable lessons for improving corporate governance in Palestine and Jordan.

As technology and innovation become increasingly important in business, future studies could explore how board characteristics influence a company's ability to innovate and adapt to technological changes.

With growing interest in environmental, social, and governance (ESG) factors, future research could investigate how board characteristics impact a company's sustainability practices and ESG performance.

This research was applied to non-financial companies in Palestine and Jordan. Future research could expand the scope by including financial and non-financial companies to provide a more comprehensive understanding of the relationship between board characteristics, earnings informativeness, and stock returns. Alternatively, future studies could focus exclusively on financial companies to explore whether the findings differ in this specific sector, given financial institutions' unique regulatory and operational nature.

5.5. Research Implications

5.5.1. Academic Implications

By filling in several important gaps in the body of current knowledge, this study adds much to the scholarly literature. First, especially in light of recent governance changes, there is a clear lack of empirical research examining the connection between board characteristics and the informativeness of accounting earnings inside the Palestinian and Jordanian markets. Second, whereas earlier studies have focused mainly on the influence of board size and independence, less attention has been devoted to other vital board traits, including experience, educational background, and reputation, particularly in emerging countries like Palestine and Jordan. Especially in these markets, the impact of these under-explored characteristics on the informativeness of accounting earnings remains mainly unknown. Third, in models evaluating the informativeness of accounting earnings in explaining stock returns, the addition of control elements, including ownership concentration and corporate age, offers a unique contribution within the Palestinian and Jordanian context. Ultimately, this study provides insightful cross-

market analysis by comparing the effects of board traits on earnings informativeness between Palestine and Jordan, therefore improving our knowledge of these links in different economic settings.

5.5.2. Practical Implications

This study has significant practical consequences by looking at the particular characteristics of the board that improve the informativeness of financial reporting for decision-making in the different economic settings of Palestine and Jordan. First, the research reveals board traits linked with more accurate financial informativeness, enhancing financial reporting standards in developing countries. Second, especially for officials and regulators in Palestine, Jordan, and similar countries, the results offer insightful direction for policy creation meant to improve the relevance and dependability of accounting earnings. Thirdly, the study adds to the general conversation on corporate governance in developing markets by looking at the link between board traits and financial reporting informativeness. Fourthly, having direct significance for enhancing investment decisions and market efficiency in the PEX, ASE, and comparable market environments, the insights produced give actionable knowledge for investors, companies, and legislators. Ultimately, the study goes beyond these main players to offer practical insights for a larger spectrum of participants negotiating the complexity of developing marketplaces, therefore generating real advantages across several interests.

5.6. Final Reflections and Contributions

This study contributes to the growing body of literature on corporate governance and financial performance by providing empirical evidence from the Palestinian and Jordanian contexts. The findings highlight the importance of board characteristics, such as reputation and competence, in influencing stock returns and the informativeness of accounting earnings. The study also underscores the need for companies to carefully consider the composition and structure of their boards to enhance governance and financial performance.

The study's limitations, such as market inefficiency and data availability, suggest that there is still much to be explored in this area. Future research should build on these

findings to provide a more comprehensive understanding of the factors influencing corporate governance and financial performance in Jordan and similar contexts.

The conclusions of this research provide valuable insights for policymakers, regulators, and corporate leaders in Palestine and Jordan, offering practical recommendations for improving governance practices and enhancing shareholder value. By addressing the limitations and exploring the recommended areas for future research, we can continue to advance our understanding of corporate governance and its impact on performance and returns.

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Appendices

Appendix 1 : Descriptive Statistics EViews Output

Descriptive Statistics I – Palestine

	AGE	BPAY	BSIZE	COMP	COSIZE	DEPS	EPS	IND	REP	RETURNS	TDEBT	TOP1	TOP5
Mean	27.771	0.001	8.508	0.723	17.484	0.000	0.213	0.118	6.602	-0.081	0.316	0.426	0.665
Median	24.000	0.001	8.000	0.718	17.375	0.000	0.082	0.111	6.111	-0.092	0.309	0.338	0.727
Maximum	78.000	0.006	15.000	0.952	21.088	2.219	4.407	0.500	13.818	0.963	0.716	0.936	0.990
Minimum	0.000	0.000	4.000	0.488	13.886	-2.197	-0.385	0.000	3.143	-1.241	0.004	0.043	0.176
Std. Dev.	15.914	0.001	2.207	0.074	1.482	0.246	0.485	0.091	2.200	0.511	0.175	0.263	0.225
Skewness	1.301	1.354	0.454	0.451	0.282	0.001	4.018	1.567	0.937	0.010	0.110	0.164	-0.499
Kurtosis	4.232	5.248	2.739	3.704	2.993	42.895	25.226	7.834	3.501	2.337	2.107	1.604	2.087
Observations	327	327	327	327	327	327	327	327	327	327	327	327	327

Descriptive Statistics II – Jordan

	AGE	BPAY	BSIZE	COMP	COSIZE	DEPS	EPS	IND	REP	RETURNS	TDEBT	TOP1	TOP5
Mean	27.949	0.002	7.801	0.717	16.908	0.002	0.092	0.414	6.224	0.098	0.285	0.359	0.604
Median	23.000	0.001	7.000	0.704	17.124	0.000	0.021	0.428	6.200	0.029	0.229	0.314	0.627
Maximum	113.000	0.198	22.000	0.980	21.310	4.615	7.216	1.000	17.200	2.122	1.002	0.999	1.000
Minimum	5.000	0.000	3.000	0.560	11.828	-3.695	-1.077	0.000	0.408	-2.133	0.000	0.017	0.110
Std. Dev.	18.114	0.007	2.733	0.085	1.518	0.295	0.389	0.249	2.295	0.359	0.226	0.230	0.234
Skewness	1.546	24.432	1.176	0.179	-0.050	3.265	8.912	0.175	0.506	0.839	1.017	1.020	-0.262
Kurtosis	6.129	712.427	4.678	1.863	3.407	106.938	129.072	2.572	3.824	12.021	3.438	3.418	2.048
Observations	1081	1081	1081	1081	1081	1081	1081	1081	1081	1081	1081	1081	1081

Appendix 2 : Hausman Test EViews Output

Fixed Effect vs Random Effect Model/Palestine

Palestine Basic Model (With EPS) Hausman Test

Correlated Random Effects - Hausman Test
Equation: BASIC_MODEL_PEX_2
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	93.248049	10	0.0000

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
EPS	0.351116	0.155850	0.012206	0.0772
REP	0.172138	0.094225	0.000390	0.0001
IND	-1.575614	-0.824022	2.753882	0.6506
COMP	5.798106	2.028866	0.600989	0.0000
BSIZE	0.053786	-0.013750	0.000857	0.0211
BPAY	-26.674694	31.339278	652.003430	0.0231
COSIZE	0.041493	-0.016596	0.009099	0.5425
TDEBT	0.311183	0.123923	0.058679	0.4395
AGE	0.008025	0.000456	0.000081	0.4003
TOP1	-0.168667	0.008942	0.149882	0.6464

Palestine Differenced Model (With ΔEPS) / Hausman Test

Correlated Random Effects - Hausman Test
Equation: BASIC_MODEL_PEX_WITHDEPS
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	81.219329	10	0.0000

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
DEPS	0.445759	0.580091	0.000331	0.0000
REP	0.168618	0.087021	0.000371	0.0000
IND	-1.273962	-0.672799	2.611332	0.7099
COMP	5.358017	1.799814	0.587151	0.0000
BSIZE	0.046148	-0.019058	0.000826	0.0232
BPAY	-35.125391	28.493645	629.416484	0.0112
COSIZE	0.104384	-0.001229	0.008283	0.2459
TDEBT	0.256283	0.123579	0.055790	0.5742
AGE	0.012260	0.002253	0.000076	0.2502
TOP1	-0.374100	0.011665	0.136530	0.2965

Appendix 2 : Hausman Test EViews Output

Jordan Basic Model (With EPS) / Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	42.058528	10	0.0000

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
EPS	0.271328	0.328917	0.000167	0.0000
REP	0.037156	0.018994	0.000043	0.0055
IND	0.084307	0.095818	0.002645	0.8229
COMP	1.166086	1.286139	0.005460	0.1042
BSIZE	0.006975	0.005600	0.000032	0.8078
BPAY	-2.023753	-1.563355	0.263489	0.3698
COSIZE	0.010846	0.017848	0.000765	0.8002
TDEBT	0.082692	0.095291	0.003042	0.8193
AGE	-0.002043	0.000318	0.000006	0.3159
TOP1	0.121062	0.067174	0.007049	0.5210

Jordan Differenced Model (With ΔEPS) / Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

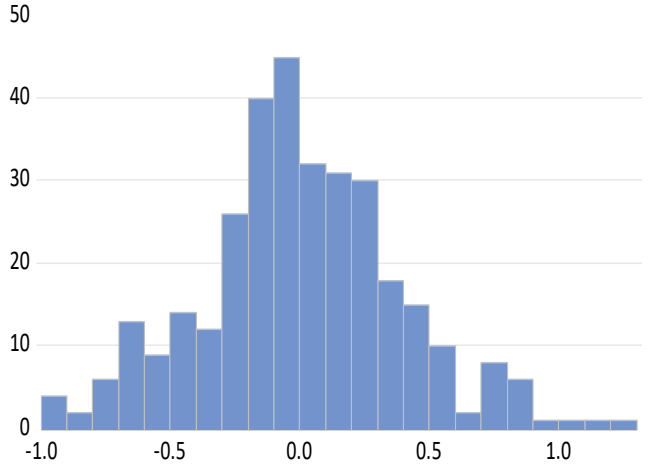
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	20.959044	10	0.0214

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
DEPS	0.211585	0.209017	0.000004	0.1929
REP	0.039657	0.032405	0.000033	0.2090
IND	0.063688	0.049580	0.002008	0.7529
COMP	1.280136	1.449930	0.003703	0.0053
BSIZE	0.000817	0.009013	0.000025	0.0984
BPAY	-1.532523	-2.153898	0.198953	0.1636
COSIZE	0.050805	0.010675	0.000703	0.1301
TDEBT	-0.014914	0.058332	0.002195	0.1180
AGE	-0.001392	0.001830	0.000005	0.1608
TOP1	0.130317	0.102382	0.005888	0.7158

Appendix 3 : Jaeque-Bera Test EViews Output -Normality Test

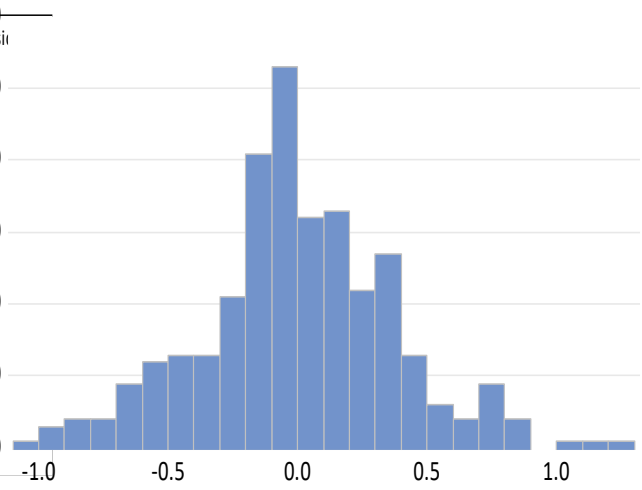
Palestine Basic Model (With EPS)



Series: Standardized Resi
Sample 2013 2023
Observations 327

Mean	8.83e-18
Median	-0.021731
Maximum	1.232278
Minimum	-0.989064
Std. Dev.	0.387004
Skewness	0.137484
Kurtosis	3.306933
Jarque-Bera	2.313732
Probability	0.314470

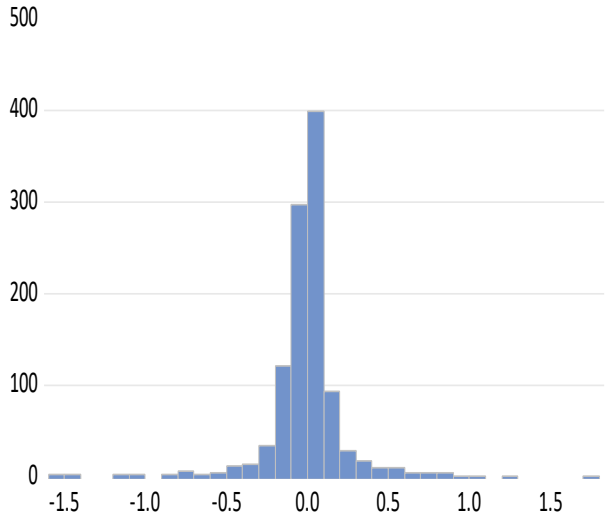
Palestine Differenced Model (With DEPS)



Series: Standardized Residuals
Sample 2013 2023
Observations 327

Mean	-2.04e-18
Median	-0.020567
Maximum	1.201024
Minimum	-1.027170
Std. Dev.	0.377484
Skewness	0.054300
Kurtosis	3.461348
Jarque-Bera	3.060667
Probability	0.216463

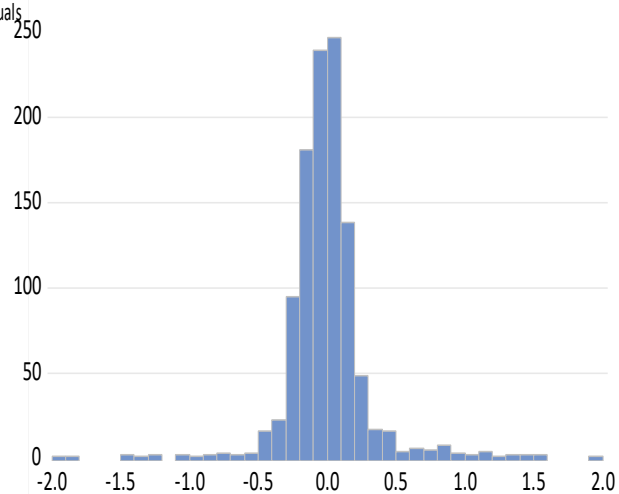
Jordan Basic Model (With EPS)



Series: Standardized Residuals
Sample 2013 2023
Observations 1081

Mean	2.88e-18
Median	0.010367
Maximum	1.728412
Minimum	-1.546402
Std. Dev.	0.230364
Skewness	-0.652837
Kurtosis	16.85906
Jarque-Bera	8728.103
Probability	0.000000

Jordan Differenced Model (With DEPS)



Series: Standardized Residuals
Sample 2013 2023
Observations 1081

Mean	-0.001853
Median	-0.016080
Maximum	1.953286
Minimum	-1.989461
Std. Dev.	0.293193
Skewness	0.523027
Kurtosis	14.39320
Jarque-Bera	5895.920
Probability	0.000000

Appendix 4 : Heteroskedasticity Tests EViews Output

Palestine

Panel Cross-section Heteroskedasticity LR Test
Equation: BASIC
Specification: RETURNS C EPS REP IND COMP BSIZE BPAY COSIZE TDEBT AGE TOP1
Null hypothesis: Residuals are homoskedastic

	Value	df	Probability
Likelihood ratio	60.33749	30	0.0008

LR test summary:

	Value	df
Restricted LogL	-216.1738	316
Unrestricted LogL	-186.0050	316

Unrestricted Test Equation:
Dependent Variable: RETURNS
Method: Panel EGLS (Cross-section weights)
Date: 01/15/25 Time: 14:13
Sample: 2013 2023
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
Iterate weights to convergence
Convergence achieved after 16 weight iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.459374	0.414885	-3.517542	0.0005
EPS	0.093707	0.044502	2.105694	0.0360
REP	0.082795	0.012024	6.885637	0.0000
IND	-0.998796	0.295614	-3.378723	0.0008
COMP	2.538390	0.395985	6.410319	0.0000
BSIZE	-0.002805	0.012702	-0.220822	0.8254
BPAY	36.48025	26.64391	1.369178	0.1719
COSIZE	-0.045640	0.020536	-2.222399	0.0270
TDEBT	0.073131	0.155258	0.471028	0.6379
AGE	-0.000728	0.001559	-0.467170	0.6407
TOP1	-0.176954	0.106766	-1.657407	0.0984

Weighted Statistics

R-squared	0.226133	Mean dependent var	-0.075815
Adjusted R-squared	0.201644	S.D. dependent var	0.545976
S.E. of regression	0.488653	Akaike info criterion	1.204924
Sum squared resid	75.45496	Schwarz criterion	1.332415
Log likelihood	-186.0050	Hannan-Quinn criter.	1.255794
F-statistic	9.233888	Durbin-Watson stat	2.047521
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.112575	Mean dependent var	-0.081335
Sum squared resid	75.45543	Durbin-Watson stat	1.825190

Appendix 4 : Heteroskedasticity Tests EViews Output

Palestine

Panel Period Heteroskedasticity LR Test
Equation: BASIC
Specification: RETURNS C EPS REP IND COMP BSIZE BPAY COSIZE TDEBT AGE TOP1
Null hypothesis: Residuals are homoskedastic

	Value	df	Probability
Likelihood ratio	5.545630	30	1.0000

LR test summary:

	Value	df
Restricted LogL	-216.1738	316
Unrestricted LogL	-213.4009	316

Unrestricted Test Equation:
Dependent Variable: RETURNS
Method: Panel EGLS (Period weights)
Date: 01/15/25 Time: 14:13
Sample: 2013 2023
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
Iterate weights to convergence
Convergence achieved after 5 weight iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.575267	0.474547	-3.319518	0.0010
EPS	0.123874	0.063283	1.957460	0.0512
REP	0.075012	0.013013	5.764252	0.0000
IND	-0.701563	0.322068	-2.178308	0.0301
COMP	1.662627	0.399450	4.162286	0.0000
BSIZE	-0.019573	0.013647	-1.434247	0.1525
BPAY	40.14801	29.60794	1.355988	0.1761
COSIZE	-0.004825	0.022786	-0.211729	0.8325
TDEBT	0.099204	0.169502	0.585267	0.5588
AGE	0.000432	0.001947	0.221875	0.8246
TOP1	0.048460	0.107410	0.451169	0.6522

Weighted Statistics

R-squared	0.158868	Mean dependent var	-0.081827
Adjusted R-squared	0.132250	S.D. dependent var	0.512006
S.E. of regression	0.476941	Akaike info criterion	1.372483
Sum squared resid	71.88138	Schwarz criterion	1.499974
Log likelihood	-213.4009	Hannan-Quinn criter.	1.423354
F-statistic	5.968442	Durbin-Watson stat	1.988959
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.154608	Mean dependent var	-0.081335
Sum squared resid	71.88139	Durbin-Watson stat	2.002577

Appendix 4 : Heteroskedasticity Tests EViews Output

Jordan

Panel Cross-section Heteroskedasticity LR Test
Equation: UNTITLED
Specification: RETURNS C EPS REP IND COMP BSIZE BPAY COSIZE TDEBT AGE TOP1
Null hypothesis: Residuals are homoskedastic

	Value	df	Probability
Likelihood ratio	4728.141	99	0.0000

LR test summary:

	Value	df
Restricted LogL	-105.4563	1070
Unrestricted LogL	2258.614	1070

Unrestricted Test Equation:
Dependent Variable: RETURNS
Method: Panel EGLS (Cross-section weights)
Date: 01/15/25 Time: 15:18
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
Iterate weights to convergence
Convergence achieved after 42 weight iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008614	0.003687	2.336418	0.0197
EPS	1.158320	0.003769	307.3649	0.0000
REP	-0.000232	5.38E-05	-4.318069	0.0000
IND	0.002369	0.000659	3.597348	0.0003
COMP	-0.004749	0.002084	-2.278627	0.0229
BSIZE	-0.000119	9.06E-05	-1.312194	0.1897
BPAY	-0.024765	0.068456	-0.361762	0.7176
COSIZE	-0.000307	0.000229	-1.340819	0.1803
TDEBT	0.013141	0.002276	5.773487	0.0000
AGE	-3.41E-05	1.24E-05	-2.745021	0.0062
TOP1	0.002182	0.000630	3.464247	0.0006

Weighted Statistics

R-squared	0.992666	Mean dependent var	0.775767
Adjusted R-squared	0.992597	S.D. dependent var	4.488847
S.E. of regression	0.390647	Akaike info criterion	-4.158398
Sum squared resid	163.2877	Schwarz criterion	-4.107665
Log likelihood	2258.614	Hannan-Quinn criter.	-4.139189
F-statistic	14481.71	Durbin-Watson stat	1.216898
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	-0.174496	Mean dependent var	0.098247
Sum squared resid	163.2872	Durbin-Watson stat	0.779688

Appendix 4 : Heteroskedasticity Tests EViews Output

Jordan

Panel Period Heteroskedasticity LR Test
Equation: UNTITLED
Specification: RETURNS C EPS REP IND COMP BSIZE BPAY COSIZE TDEBT AGE TOP1
Null hypothesis: Residuals are homoskedastic

	Value	df	Probability
Likelihood ratio	77.93794	99	0.9418

LR test summary:

	Value	df
Restricted LogL	-105.4563	1070
Unrestricted LogL	-66.48730	1070

Unrestricted Test Equation:
Dependent Variable: RETURNS
Method: Panel EGLS (Period weights)
Date: 01/15/25 Time: 15:18
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
Iterate weights to convergence
Convergence achieved after 14 weight iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.278110	0.117789	-10.85089	0.0000
EPS	0.470700	0.025799	18.24509	0.0000
REP	0.011975	0.003697	3.238947	0.0012
IND	0.101231	0.034212	2.958907	0.0032
COMP	1.182987	0.104417	11.32949	0.0000
BSIZE	0.003026	0.003349	0.903602	0.3664
BPAY	-0.735540	1.236963	-0.594634	0.5522
COSIZE	0.017927	0.006500	2.758014	0.0059
TDEBT	0.109054	0.040073	2.721367	0.0066
AGE	0.000195	0.000471	0.414386	0.6787
TOP1	0.030739	0.037211	0.826070	0.4089

Weighted Statistics

R-squared	0.491372	Mean dependent var	0.106780
Adjusted R-squared	0.486619	S.D. dependent var	0.377842
S.E. of regression	0.269815	Akaike info criterion	0.143362
Sum squared resid	77.89632	Schwarz criterion	0.194095
Log likelihood	-66.48730	Hannan-Quinn criter.	0.162571
F-statistic	103.3700	Durbin-Watson stat	1.041144
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.439702	Mean dependent var	0.098247
Sum squared resid	77.89682	Durbin-Watson stat	1.027381

Appendix 5 : Ramsey RESET Test EViews Output- Assessing Models Specifications

Ramsey RESET Test

Palestine

Ramsey RESET Test

Equation: UNTITLED

Omitted Variables: Squares of fitted values

Specification: RETURN_JT C EPS_T REP IND COMP BPAY SIZE TDEBT AGE TOP1 BOARD_SIZE

	Value	df	Probability
t-statistic	0.519134	315	0.604
F-statistic	0.2695	(1, 315)	0.604
Likelihood ratio	0.279647	1	0.5969

Jordan

Ramsey RESET Test

Equation: UNTITLED

Omitted Variables: Squares of fitted values

Specification: RETURN_JT C EPS_T REP IND COMP BPAY SIZE TDEBT AGE TOP1 BOARD_SIZE

	Value	df	Probability
t-statistic	0.390587	1069	0.6962
F-statistic	0.152558	(1, 1069)	0.6962
Likelihood ratio	0.154259	1	0.6945

Appendix 6: Variables Unit Root Test EViews Output- Stationarity Tests - Palestine

Stationarity Tests (Unit Root Tests) / Palestine

Panel unit root test: Summary
Series: **BPAY**
Date: 01/15/25 Time: 12:48
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-8.12158	0.0000	27	240
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.91883	0.0018	27	240
ADF - Fisher Chi-square	95.0161	0.0005	27	240
PP - Fisher Chi-square	81.8992	0.0085	27	267

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **BSIZE**
Date: 01/15/25 Time: 12:58
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-5.06409	0.0000	17	150
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-0.89854	0.1844	15	132
ADF - Fisher Chi-square	35.9522	0.2096	15	132
PP - Fisher Chi-square	30.4496	0.4428	15	147

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **COMP**
Date: 01/15/25 Time: 13:17
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-3.68568	0.0001	29	258
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1.83243	0.0334	29	258
ADF - Fisher Chi-square	84.9769	0.0120	29	258
PP - Fisher Chi-square	189.940	0.0000	29	287

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **COSIZE**
Date: 01/15/25 Time: 13:18
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-5.47034	0.0000	30	267
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	1.55765	0.9403	30	267
ADF - Fisher Chi-square	54.3658	0.6808	30	267
PP - Fisher Chi-square	75.0431	0.0913	30	297

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Appendix 6: Variables Unit Root Test EViews Output- Stationarity Tests - Palestine

Panel unit root test: Summary
Series: **DEPS**
Date: 01/15/25 Time: 13:19
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-12.1768	0.0000	30	267
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-8.74518	0.0000	30	267
ADF - Fisher Chi-square	197.420	0.0000	30	267
PP - Fisher Chi-square	443.422	0.0000	30	297

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **IND**
Date: 01/15/25 Time: 13:20
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-6.34904	0.0000	14	123
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1.63481	0.0510	13	114
ADF - Fisher Chi-square	41.0226	0.0309	13	114
PP - Fisher Chi-square	34.2476	0.1289	13	127

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **EPS**
Date: 01/15/25 Time: 13:20
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-11.1505	0.0000	30	267
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.36778	0.0089	30	267
ADF - Fisher Chi-square	88.3777	0.0100	30	267
PP - Fisher Chi-square	104.138	0.0004	30	297

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **REP**
Date: 01/15/25 Time: 13:21
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-2.90921	0.0018	30	267
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1.22292	0.1107	30	267
ADF - Fisher Chi-square	74.3814	0.1002	30	267
PP - Fisher Chi-square	168.907	0.0000	30	297

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Appendix 6: Variables Unit Root Test EViews Output- Stationarity Tests - Palestine

Panel unit root test: Summary
Series: **RETURNS**
Date: 01/15/25 Time: 13:21
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-8.85262	0.0000	30	267
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-5.86332	0.0000	30	267
ADF - Fisher Chi-square	144.307	0.0000	30	267
PP - Fisher Chi-square	355.252	0.0000	30	297

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Series: **TOP1**
Date: 01/15/25 Time: 13:22
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel
Balanced observations for each test

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-11.7977	0.0000	22	198
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1.11069	0.1334	21	189
ADF - Fisher Chi-square	39.6605	0.5742	21	189
PP - Fisher Chi-square	114.082	0.0000	21	210

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **TDEBT**
Date: 01/15/25 Time: 13:22
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-5.49424	0.0000	30	267
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-0.63422	0.2630	30	267
ADF - Fisher Chi-square	70.7305	0.1619	30	267
PP - Fisher Chi-square	52.9542	0.7286	30	297

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **TOP5**
Date: 01/15/25 Time: 13:23
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel
Balanced observations for each test

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-13.8574	0.0000	26	234
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1.83616	0.0332	25	225
ADF - Fisher Chi-square	54.4126	0.3102	25	225
PP - Fisher Chi-square	86.0419	0.0012	25	250

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary

Appendix 6: Variables Unit Root Test EViews Output- Stationarity Tests - Jordan

Panel unit root test: Summary
Series: **BPAY**
Date: 01/15/25 Time: 13:26
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-13.4220	0.0000	75	671
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.70893	0.0034	74	662
ADF - Fisher Chi-square	204.647	0.0014	74	662
PP - Fisher Chi-square	280.313	0.0000	74	737

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **COMP**
Date: 01/15/25 Time: 13:27
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-12.3049	0.0000	98	874
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-3.90728	0.0000	98	874
ADF - Fisher Chi-square	272.072	0.0003	98	874
PP - Fisher Chi-square	472.159	0.0000	98	974

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **BSIZE**
Date: 01/15/25 Time: 13:27
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-10.0807	0.0000	52	464
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-3.35360	0.0004	50	446
ADF - Fisher Chi-square	158.803	0.0002	50	446
PP - Fisher Chi-square	183.109	0.0000	50	497

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **COSIZE**
Date: 01/15/25 Time: 13:28
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-19.3769	0.0000	98	874
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-3.03816	0.0012	98	874
ADF - Fisher Chi-square	282.448	0.0001	98	874
PP - Fisher Chi-square	414.593	0.0000	98	974

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Appendix 6: Variables Unit Root Test EViews Output- Stationarity Tests - Jordan

Panel unit root test: Summary
Series: **DEPS**
Date: 01/15/25 Time: 13:28
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-18.3390	0.0000	98	874
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-11.3109	0.0000	98	874
ADF - Fisher Chi-square	505.955	0.0000	98	874
PP - Fisher Chi-square	1099.26	0.0000	98	974

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **IND**
Date: 01/15/25 Time: 13:29
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-4.96546	0.0000	69	617
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	0.40521	0.6573	69	617
ADF - Fisher Chi-square	127.509	0.7283	69	617
PP - Fisher Chi-square	125.834	0.7626	69	687

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **EPS**
Date: 01/15/25 Time: 13:29
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-10.1501	0.0000	98	874
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-4.17195	0.0000	98	874
ADF - Fisher Chi-square	300.747	0.0000	98	874
PP - Fisher Chi-square	469.980	0.0000	98	974

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **REP**
Date: 01/15/25 Time: 13:30
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-9.31344	0.0000	90	802
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.93323	0.0017	90	802
ADF - Fisher Chi-square	236.268	0.0031	90	802
PP - Fisher Chi-square	415.444	0.0000	90	894

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Appendix 6: Variables Unit Root Test EViews Output- Stationarity Tests - Jordan

Panel unit root test: Summary
Series: **RETURNS**
Date: 01/15/25 Time: 13:31
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-13.8425	0.0000	98	874
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-4.63269	0.0000	98	874
ADF - Fisher Chi-square	305.238	0.0000	98	874
PP - Fisher Chi-square	460.118	0.0000	98	974

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **TOP1**
Date: 01/15/25 Time: 13:32
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-1708.27	0.0000	82	730
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-635.794	0.0000	82	730
ADF - Fisher Chi-square	280.545	0.0000	82	730
PP - Fisher Chi-square	368.042	0.0000	82	814

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **TDEBT**
Date: 01/15/25 Time: 13:31
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-16.0986	0.0000	98	874
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.66337	0.0039	98	874
ADF - Fisher Chi-square	255.440	0.0028	98	874
PP - Fisher Chi-square	293.617	0.0000	98	974

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary
Series: **TOP5**
Date: 01/15/25 Time: 13:33
Sample: 2013 2023
Exogenous variables: Individual effects
User-specified lags: 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-65.0303	0.0000	94	838
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-17.3814	0.0000	94	838
ADF - Fisher Chi-square	391.672	0.0000	94	838
PP - Fisher Chi-square	443.057	0.0000	94	934

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Appendix 7 : Multicollinearity Tests- Correlation Matrix EViews Output

Palestine

	RETURNS	EPS	DEPS	REP	IND	COMP	BPAY	COSIZE	TDEBT	AGE	TOP1	TOP5	BSIZE
RETURNS	1.000	0.156	0.333	0.277	0.042	0.180	0.045	0.025	0.017	0.045	0.020	0.006	-0.027
EPS	0.156	1.000	0.273	0.098	0.191	0.097	0.064	0.168	-0.205	0.437	-0.166	-0.088	-0.070
DEPS	0.333	0.273	1.000	0.082	-0.001	0.090	0.019	-0.026	-0.057	0.018	0.004	0.007	0.005
REP	0.277	0.098	0.082	1.000	0.231	-0.108	0.097	0.271	-0.121	-0.050	0.003	0.042	0.158
IND	0.042	0.191	-0.001	0.231	1.000	0.192	0.167	0.214	-0.028	0.105	-0.082	-0.106	-0.059
COMP	0.180	0.097	0.090	-0.108	0.192	1.000	-0.253	0.036	0.237	0.042	0.083	0.040	0.036
BPAY	0.045	0.064	0.019	0.097	0.167	-0.253	1.000	-0.192	-0.031	0.102	-0.092	-0.145	-0.091
COSIZE	0.025	0.168	-0.026	0.271	0.214	0.036	-0.192	1.000	0.158	0.022	-0.182	-0.152	0.448
TDEBT	0.017	-0.205	-0.057	-0.121	-0.028	0.237	-0.031	0.158	1.000	-0.256	-0.050	-0.044	0.051
AGE	0.045	0.437	0.018	-0.050	0.105	0.042	0.102	0.022	-0.256	1.000	-0.298	-0.277	-0.038
TOP1	0.020	-0.166	0.004	0.003	-0.082	0.083	-0.092	-0.182	-0.050	-0.298	1.000	0.871	-0.074
TOP5	0.006	-0.088	0.007	0.042	-0.106	0.040	-0.145	-0.152	-0.044	-0.277	0.871	1.000	-0.114
BSIZE	-0.027	-0.070	0.005	0.158	-0.059	0.036	-0.091	0.448	0.051	-0.038	-0.074	-0.114	1.000

Jordan

	RETURNS	EPS	DEPS	REP	IND	COMP	BPAY	COSIZE	TDEBT	AGE	TOP1	TOP5	BSIZE
RETURNS	1.000	0.558	0.220	0.271	-0.085	0.507	-0.048	0.202	0.144	0.221	0.097	0.130	0.225
EPS	0.558	1.000	0.409	0.235	-0.125	0.355	-0.049	0.005	0.016	0.259	0.041	0.153	0.294
DEPS	0.220	0.409	1.000	0.021	0.012	0.094	-0.052	0.000	0.023	0.005	0.001	0.003	0.003
REP	0.271	0.235	0.021	1.000	-0.042	0.282	0.027	0.199	-0.149	0.015	-0.020	0.052	0.182
IND	-0.085	-0.125	0.012	-0.042	1.000	-0.174	0.024	-0.315	-0.126	0.016	-0.314	-0.367	-0.229
COMP	0.507	0.355	0.094	0.282	-0.174	1.000	0.003	0.223	0.166	0.195	0.177	0.199	0.126
BPAY	-0.048	-0.049	-0.052	0.027	0.024	0.003	1.000	-0.186	0.005	-0.001	-0.025	-0.021	-0.019
COSIZE	0.202	0.005	0.000	0.199	-0.315	0.223	-0.186	1.000	0.413	0.202	0.136	0.067	0.349
TDEBT	0.144	0.016	0.023	-0.149	-0.126	0.166	0.005	0.413	1.000	0.262	0.237	0.113	0.062
AGE	0.221	0.259	0.005	0.015	0.016	0.195	-0.001	0.202	0.262	1.000	-0.081	0.033	0.307
TOP1	0.097	0.041	0.001	-0.020	-0.314	0.177	-0.025	0.136	0.237	-0.081	1.000	0.793	-0.153
TOP5	0.130	0.153	0.003	0.052	-0.367	0.199	-0.021	0.067	0.113	0.033	0.793	1.000	-0.041
BSIZE	0.225	0.294	0.003	0.182	-0.229	0.126	-0.019	0.349	0.062	0.307	-0.153	-0.041	1.000

Appendix 8 : Regression EViews Output -Palestine Basic and Expanded Models (With EPS)

Palestine Model 1.1

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 21:46
Sample: 2013 2023
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.703811	1.889510	-3.547909	0.0053
EPS	0.351116	0.099540	3.527406	0.0055
REP	0.172138	0.035296	4.877044	0.0006
IND	-1.575614	1.109942	-1.419547	0.1862
COMP	5.798106	1.205310	4.810471	0.0007
BSIZE	0.053786	0.037257	1.443644	0.1794
BPAY	-26.67469	42.97632	-0.620684	0.5487
COSIZE	0.041493	0.096631	0.429401	0.6767
TDEBT	0.311183	0.327263	0.950864	0.3641
AGE	0.008025	0.005840	1.374221	0.1994
TOP1	-0.168667	0.239030	-0.705630	0.4965

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.425765	Mean dependent var	-0.081335
Adjusted R-squared	0.347734	S.D. dependent var	0.510705
S.E. of regression	0.412461	Akaike info criterion	1.180821
Sum squared resid	48.82563	Schwarz criterion	1.644424
Log likelihood	-153.0642	Hannan-Quinn criter.	1.365806
F-statistic	5.456302	Durbin-Watson stat	2.064469
Prob(F-statistic)	0.000000		

Palestine Model 1.2

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 21:49
Sample: 2013 2023
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.573858	1.891128	-3.476158	0.0060
EPS	0.320305	0.100098	3.199901	0.0095
REP	0.177882	0.033076	5.378027	0.0003
IND	-1.646996	1.123519	-1.465927	0.1734
COMP	5.781086	1.224055	4.722897	0.0008
BSIZE	0.046779	0.035975	1.300325	0.2227
BPAY	-28.93856	42.02256	-0.688644	0.5067
COSIZE	0.051477	0.088682	0.580463	0.5744
TDEBT	0.257448	0.322125	0.799219	0.4427
AGE	0.011635	0.005594	2.080045	0.0642
TOP5	-0.614344	0.196531	-3.125940	0.0108

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.430558	Mean dependent var	-0.081335
Adjusted R-squared	0.353178	S.D. dependent var	0.510705
S.E. of regression	0.410736	Akaike info criterion	1.172439
Sum squared resid	48.41812	Schwarz criterion	1.636043
Log likelihood	-151.6938	Hannan-Quinn criter.	1.357424
F-statistic	5.564163	Durbin-Watson stat	2.073235
Prob(F-statistic)	0.000000		

Appendix 8 : Regression EViews Output -Palestine Basic and Expanded Models (With EPS)

Model 2.1

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 21:51
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.652212	1.859693	-3.577049	0.0050
EPS	0.925692	0.343434	2.695401	0.0225
REP	0.188565	0.035541	5.305629	0.0003
IND	-1.453480	1.095339	-1.326968	0.2140
COMP	5.734133	1.230376	4.660473	0.0009
BSIZE	0.043918	0.036421	1.205859	0.2556
BPAY	-34.59285	41.47986	-0.833967	0.4238
COSIZE	0.055263	0.087476	0.631752	0.5417
TDEBT	0.259686	0.314401	0.825971	0.4281
AGE	0.009609	0.005872	1.636568	0.1328
TOP5	-0.572878	0.214995	-2.664609	0.0237
EPS*REP	-0.078149	0.040619	-1.923945	0.0833

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.435442	Mean dependent var	-0.081335
Adjusted R-squared	0.356483	S.D. dependent var	0.510705
S.E. of regression	0.409686	Akaike info criterion	1.169942
Sum squared resid	48.00288	Schwarz criterion	1.645136
Log likelihood	-150.2856	Hannan-Quinn criter.	1.359552
F-statistic	5.514770	Durbin-Watson stat	2.061605
Prob(F-statistic)	0.000000		

Model 2.2

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 21:52
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.719191	1.878638	-3.576630	0.0050
EPS	0.794125	0.202143	3.928531	0.0028
REP	0.185825	0.033019	5.627777	0.0002
IND	-1.229987	1.188746	-1.034692	0.3252
COMP	5.697966	1.229977	4.632578	0.0009
BSIZE	0.040608	0.037052	1.095950	0.2988
BPAY	-33.09898	42.36891	-0.781209	0.4528
COSIZE	0.069145	0.085469	0.808999	0.4373
TDEBT	0.201971	0.323963	0.623439	0.5470
AGE	0.009898	0.005109	1.937438	0.0814
TOP5	-0.720516	0.217004	-3.320292	0.0077
EPS*IND	-3.367456	1.251672	-2.690366	0.0227

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.435656	Mean dependent var	-0.081335
Adjusted R-squared	0.356727	S.D. dependent var	0.510705
S.E. of regression	0.409608	Akaike info criterion	1.169562
Sum squared resid	47.98463	Schwarz criterion	1.644756
Log likelihood	-150.2234	Hannan-Quinn criter.	1.359172
F-statistic	5.519587	Durbin-Watson stat	2.062011
Prob(F-statistic)	0.000000		

Appendix 8 : Regression EViews Output -Palestine Basic and Expanded Models (With EPS)

Model 2.3

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 21:53
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.562333	1.888489	-3.474911	0.0060
EPS	-0.152890	0.876926	-0.174347	0.8651
REP	0.177992	0.032928	5.405483	0.0003
IND	-1.668538	1.147500	-1.454064	0.1766
COMP	5.733024	1.200320	4.776245	0.0007
BSIZE	0.045525	0.035606	1.278599	0.2299
BPAY	-30.30746	41.77395	-0.725511	0.4848
COSIZE	0.055017	0.086801	0.633827	0.5404
TDEBT	0.252214	0.322775	0.781392	0.4527
AGE	0.011812	0.005520	2.140004	0.0580
TOP5	-0.647486	0.241199	-2.684448	0.0229
EPS*COMP	0.601824	1.062881	0.566220	0.5837

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.431009	Mean dependent var	-0.081335
Adjusted R-squared	0.351430	S.D. dependent var	0.510705
S.E. of regression	0.411291	Akaike info criterion	1.177763
Sum squared resid	48.37977	Schwarz criterion	1.652957
Log likelihood	-151.5643	Hannan-Quinn criter.	1.367373
F-statistic	5.416109	Durbin-Watson stat	2.079346
Prob(F-statistic)	0.000000		

Model 2.4

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 21:55
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.344588	1.961633	-3.234340	0.0090
EPS	-0.205201	0.327042	-0.627445	0.5444
REP	0.178826	0.033562	5.328231	0.0003
IND	-1.526886	1.124307	-1.358068	0.2043
COMP	5.647706	1.227578	4.600691	0.0010
BSIZE	0.041654	0.037216	1.119260	0.2892
BPAY	-32.46125	41.37990	-0.784469	0.4509
COSIZE	0.050234	0.091487	0.549083	0.5950
TDEBT	0.277305	0.319273	0.868553	0.4055
AGE	0.009249	0.005697	1.623366	0.1356
TOP5	-0.665663	0.193596	-3.438418	0.0063
EPS*BSIZE	0.070078	0.044326	1.580980	0.1450

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.434231	Mean dependent var	-0.081335
Adjusted R-squared	0.355103	S.D. dependent var	0.510705
S.E. of regression	0.410125	Akaike info criterion	1.172084
Sum squared resid	48.10581	Schwarz criterion	1.647278
Log likelihood	-150.6358	Hannan-Quinn criter.	1.361694
F-statistic	5.487674	Durbin-Watson stat	2.061487
Prob(F-statistic)	0.000000		

Appendix 8 : Regression EViews Output -Palestine Basic and Expanded Models (With EPS)

Model 2.5

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 21:57
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.593640	1.734675	-4.377558	0.0014
EPS	0.137576	0.092354	1.489664	0.1672
REP	0.182240	0.032338	5.635440	0.0002
IND	-1.512159	1.142406	-1.323661	0.2151
COMP	5.482409	1.149251	4.770420	0.0008
BSIZE	0.048189	0.033073	1.457075	0.1758
BPAY	-47.51694	42.16146	-1.127023	0.2860
COSIZE	0.115352	0.071983	1.602483	0.1401
TDEBT	0.297814	0.289353	1.029241	0.3276
AGE	0.011094	0.005476	2.025936	0.0703
TOP5	-0.523621	0.213935	-2.447574	0.0344
EPS*BPAY	249.6948	40.78928	6.121579	0.0001

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.445113	Mean dependent var	-0.081335
Adjusted R-squared	0.367506	S.D. dependent var	0.510705
S.E. of regression	0.406161	Akaike info criterion	1.152664
Sum squared resid	47.18058	Schwarz criterion	1.627858
Log likelihood	-147.4605	Hannan-Quinn criter.	1.342273
F-statistic	5.735502	Durbin-Watson stat	2.111860
Prob(F-statistic)	0.000000		

Appendix 8 : Regression EViews Output -Palestine Differenced and expanded Differenced Models (ΔEPS Models)

Palestine Differenced Model 1.1

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 01:50
Sample: 2013 2023
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.361759	1.633821	-4.505854	0.0011
DEPS	0.445759	0.099966	4.459110	0.0012
REP	0.168618	0.035124	4.800593	0.0007
IND	-1.273962	1.252248	-1.017340	0.3330
COMP	5.358017	1.157996	4.626972	0.0009
BSIZE	0.046148	0.034280	1.346227	0.2080
BPAY	-35.12539	41.31838	-0.850115	0.4152
COSIZE	0.104384	0.069017	1.512436	0.1614
TDEBT	0.256283	0.305404	0.839159	0.4210
AGE	0.012260	0.006386	1.919798	0.0838
TOP1	-0.374100	0.265845	-1.407209	0.1897

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.453668	Mean dependent var	-0.081335
Adjusted R-squared	0.379428	S.D. dependent var	0.510705
S.E. of regression	0.402315	Akaike info criterion	1.131010
Sum squared resid	46.45317	Schwarz criterion	1.594614
Log likelihood	-144.9201	Hannan-Quinn criter.	1.315995
F-statistic	6.110805	Durbin-Watson stat	2.118620
Prob(F-statistic)	0.000000		

Palestine Differenced Model 1.2

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 01:51
Sample: 2013 2023
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.109113	1.691960	-4.201702	0.0018
DEPS	0.434794	0.095509	4.552377	0.0011
REP	0.173906	0.033350	5.214633	0.0004
IND	-1.358713	1.249987	-1.086982	0.3026
COMP	5.337968	1.169105	4.565860	0.0010
BSIZE	0.039050	0.033819	1.154685	0.2751
BPAY	-37.48973	40.27962	-0.930737	0.3739
COSIZE	0.106821	0.064778	1.649047	0.1302
TDEBT	0.209182	0.302429	0.691674	0.5049
AGE	0.014966	0.005800	2.580301	0.0274
TOP5	-0.695674	0.188295	-3.694600	0.0041

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.458720	Mean dependent var	-0.081335
Adjusted R-squared	0.385167	S.D. dependent var	0.510705
S.E. of regression	0.400451	Akaike info criterion	1.121719
Sum squared resid	46.02357	Schwarz criterion	1.585322
Log likelihood	-143.4010	Hannan-Quinn criter.	1.306704
F-statistic	6.236539	Durbin-Watson stat	2.125762
Prob(F-statistic)	0.000000		

Appendix 8 : Regression EViews Output -Palestine Differenced and expanded Differenced Models (ΔEPS Models)

Palestine Expanded Differenced Model 2.1

Dependent Variable: RETURNS
Method: Panel Least Squares
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.165571	1.675744	-4.276054	0.0016
DEPS	0.610858	0.572834	1.066377	0.3113
REP	0.174665	0.033380	5.232581	0.0004
IND	-1.355648	1.246113	-1.087902	0.3022
COMP	5.329621	1.167438	4.565229	0.0010
BSIZE	0.038778	0.034159	1.135221	0.2828
BPAY	-37.49765	40.36724	-0.928913	0.3748
COSIZE	0.110578	0.065112	1.698286	0.1203
TDEBT	0.201606	0.306633	0.657484	0.5257
AGE	0.015054	0.005798	2.596441	0.0267
TOP5	-0.703376	0.192404	-3.655731	0.0044
DEPS*REP	-0.026557	0.088753	-0.299227	0.7709

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.459016	Mean dependent var	-0.081335
Adjusted R-squared	0.383353	S.D. dependent var	0.510705
S.E. of regression	0.401041	Akaike info criterion	1.127290
Sum squared resid	45.99847	Schwarz criterion	1.602483
Log likelihood	-143.3118	Hannan-Quinn criter.	1.316899
F-statistic	6.066646	Durbin-Watson stat	2.120957
Prob(F-statistic)	0.000000		

Palestine Expanded Differenced Model 2.2

Dependent Variable: RETURNS
Method: Panel Least Squares
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.117034	1.667996	-4.266817	0.0016
DEPS	0.453340	0.296451	1.529222	0.1572
REP	0.174004	0.033464	5.199697	0.0004
IND	-1.356475	1.252109	-1.083352	0.3041
COMP	5.340855	1.161218	4.599355	0.0010
BSIZE	0.039103	0.033577	1.164598	0.2712
BPAY	-37.48869	40.43098	-0.927227	0.3756
COSIZE	0.107153	0.064744	1.655038	0.1289
TDEBT	0.208771	0.303803	0.687191	0.5076
AGE	0.014952	0.005838	2.560934	0.0283
TOP5	-0.696878	0.194688	-3.579450	0.0050
DEPS*IND	-0.135388	2.130102	-0.063559	0.9506

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.458728	Mean dependent var	-0.081335
Adjusted R-squared	0.383025	S.D. dependent var	0.510705
S.E. of regression	0.401148	Akaike info criterion	1.127821
Sum squared resid	46.02294	Schwarz criterion	1.603015
Log likelihood	-143.3988	Hannan-Quinn criter.	1.317431
F-statistic	6.059619	Durbin-Watson stat	2.125260
Prob(F-statistic)	0.000000		

Appendix8: Palestine Expanded Differenced Model 2.3

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 01:53
Sample: 2013 2023
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.098146	1.683922	-4.215247	0.0018
DEPS	0.221161	0.400637	0.552025	0.5931
REP	0.174258	0.033477	5.205213	0.0004
IND	-1.355216	1.251289	-1.083056	0.3042
COMP	5.332371	1.170158	4.556967	0.0010
BSIZE	0.038770	0.033728	1.149478	0.2771
BPAY	-37.57101	40.26325	-0.933134	0.3727
COSIZE	0.106801	0.064564	1.654194	0.1291
TDEBT	0.207409	0.304457	0.681245	0.5112
AGE	0.014861	0.005896	2.520584	0.0304
TOP5	-0.701427	0.186057	-3.769954	0.0037
DEPS*COMP	0.280119	0.496532	0.564150	0.5851

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.458821	Mean dependent var	-0.081335
Adjusted R-squared	0.383132	S.D. dependent var	0.510705
S.E. of regression	0.401113	Akaike info criterion	1.127649
Sum squared resid	46.01499	Schwarz criterion	1.602842
Log likelihood	-143.3706	Hannan-Quinn criter.	1.317258
F-statistic	6.061900	Durbin-Watson stat	2.126624
Prob(F-statistic)	0.000000		

Appendix8: Palestine Expanded Differenced Model 2.4

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 01:54
Sample: 2013 2023
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.916195	1.638903	-4.220014	0.0018
DEPS	-0.340295	0.315117	-1.079901	0.3055
REP	0.172122	0.033705	5.106718	0.0005
IND	-1.553350	1.297184	-1.197478	0.2587
COMP	5.164975	1.155419	4.470217	0.0012
BSIZE	0.036466	0.034339	1.061937	0.3132
BPAY	-35.51125	40.81874	-0.869974	0.4047
COSIZE	0.107735	0.061450	1.753211	0.1101
TDEBT	0.208209	0.298652	0.697163	0.5016
AGE	0.014768	0.006269	2.355823	0.0402
TOP5	-0.731202	0.219429	-3.332296	0.0076
DEPS*BSIZE	0.101418	0.036713	2.762445	0.0200

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.466697	Mean dependent var	-0.081335
Adjusted R-squared	0.392109	S.D. dependent var	0.510705
S.E. of regression	0.398184	Akaike info criterion	1.112989
Sum squared resid	45.34536	Schwarz criterion	1.588183
Log likelihood	-140.9738	Hannan-Quinn criter.	1.302599
F-statistic	6.257005	Durbin-Watson stat	2.124625
Prob(F-statistic)	0.000000		

Appendix 8 : Regression EViews Output -Palestine Differenced and expanded Differenced Models (ΔEPS Models)

Palestine Expanded Differenced Model 2.5

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 01:55
Sample: 2013 2023
Periods included: 11
Cross-sections included: 30
Total panel (unbalanced) observations: 327
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.067218	1.711505	-4.129241	0.0020
DEPS	0.292060	0.133726	2.184020	0.0539
REP	0.172317	0.033645	5.121658	0.0004
IND	-1.446638	1.256358	-1.151453	0.2763
COMP	5.202172	1.140608	4.560874	0.0010
BSIZE	0.036602	0.033020	1.108464	0.2936
BPAY	-34.66980	43.24086	-0.801783	0.4413
COSIZE	0.111474	0.064090	1.739341	0.1126
TDEBT	0.214770	0.298094	0.720478	0.4877
AGE	0.014703	0.005939	2.475795	0.0328
TOP5	-0.667906	0.197222	-3.386559	0.0069
DEPS*BPAY	174.6924	106.2361	1.644378	0.1311

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.462294	Mean dependent var	-0.081335
Adjusted R-squared	0.387090	S.D. dependent var	0.510705
S.E. of regression	0.399824	Akaike info criterion	1.121211
Sum squared resid	45.71972	Schwarz criterion	1.596405
Log likelihood	-142.3180	Hannan-Quinn criter.	1.310821
F-statistic	6.147227	Durbin-Watson stat	2.146602
Prob(F-statistic)	0.000000		

Appendix 9 : Regression EViews Output -Jordan Basic and Expanded Models (With EPS)

Jordan Basic Model 1.1

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:15
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.273189	0.284467	-4.475706	0.0012
EPS	0.271328	0.110265	2.460677	0.0336
REP	0.037156	0.006958	5.340102	0.0003
IND	0.084307	0.060126	1.402174	0.1911
COMP	1.166086	0.121009	9.636346	0.0000
BSIZE	0.006975	0.008878	0.785642	0.4503
BPAY	-2.023753	0.890674	-2.272158	0.0464
COSIZE	0.010846	0.018554	0.584569	0.5718
TDEBT	0.082692	0.119856	0.689928	0.5059
AGE	-0.002043	0.002507	-0.814676	0.4342
TOP1	0.121062	0.044371	2.728433	0.0213

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.587758	Mean dependent var	0.098247
Adjusted R-squared	0.541954	S.D. dependent var	0.358788
S.E. of regression	0.242825	Akaike info criterion	0.102426
Sum squared resid	57.31292	Schwarz criterion	0.605141
Log likelihood	53.63851	Hannan-Quinn criter.	0.292769
F-statistic	12.83186	Durbin-Watson stat	1.444535
Prob(F-statistic)	0.000000		

Jordan Basic Model 1.2

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:16
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.231593	0.289702	-4.251240	0.0017
EPS	0.271242	0.110546	2.453651	0.0340
REP	0.037172	0.007029	5.288245	0.0004
IND	0.089512	0.060527	1.478865	0.1700
COMP	1.175646	0.120753	9.735985	0.0000
BSIZE	0.006229	0.008839	0.704644	0.4971
BPAY	-2.041997	0.886345	-2.303839	0.0440
COSIZE	0.011048	0.018216	0.606520	0.5577
TDEBT	0.067262	0.119171	0.564418	0.5849
AGE	-0.001535	0.002535	-0.605684	0.5582
TOP5	-0.024071	0.050775	-0.474080	0.6456

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.587151	Mean dependent var	0.098247
Adjusted R-squared	0.541278	S.D. dependent var	0.358788
S.E. of regression	0.243004	Akaike info criterion	0.103900
Sum squared resid	57.39743	Schwarz criterion	0.606615
Log likelihood	52.84211	Hannan-Quinn criter.	0.294243
F-statistic	12.79971	Durbin-Watson stat	1.441512
Prob(F-statistic)	0.000000		

Appendix 9 : Regression EViews Output -Jordan Basic and Expanded Models (With EPS)

Jordan Expanded Model 2.1

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:17
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.831042	0.276208	-3.008755	0.0131
EPS	2.370432	0.163677	14.48236	0.0000
REP	0.040529	0.003967	10.21639	0.0000
IND	0.035336	0.063833	0.553579	0.5920
COMP	0.632393	0.126532	4.997883	0.0005
BSIZE	-0.004603	0.008576	-0.536728	0.6032
BPAY	0.809480	0.630570	1.283726	0.2282
COSIZE	0.016535	0.014670	1.127186	0.2860
TDEBT	0.106496	0.113335	0.939659	0.3695
AGE	-0.001774	0.002336	-0.759518	0.4651
TOP5	-0.056119	0.047071	-1.192212	0.2607
EPS*REP	-0.257498	0.017649	-14.59021	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.707801	Mean dependent var	0.098247
Adjusted R-squared	0.675001	S.D. dependent var	0.358788
S.E. of regression	0.204541	Akaike info criterion	-0.239900
Sum squared resid	40.62363	Schwarz criterion	0.267427
Log likelihood	239.6658	Hannan-Quinn criter.	-0.047810
F-statistic	21.57875	Durbin-Watson stat	1.403744
Prob(F-statistic)	0.000000		

Jordan Expanded Model 2.2

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:18
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.037741	0.272002	-3.815195	0.0034
EPS	-0.061173	0.141220	-0.433177	0.6741
REP	0.036478	0.006012	6.067203	0.0001
IND	0.039492	0.079735	0.495294	0.6311
COMP	1.071798	0.160780	6.666233	0.0001
BSIZE	0.001174	0.008915	0.131726	0.8978
BPAY	-1.742645	0.695421	-2.505887	0.0311
COSIZE	0.008791	0.013620	0.645463	0.5332
TDEBT	0.054473	0.107634	0.506095	0.6238
AGE	-0.002711	0.002350	-1.153673	0.2755
TOP5	0.002213	0.045448	0.048699	0.9621
EPS*IND	1.300311	0.323664	4.017465	0.0024

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.614116	Mean dependent var	0.098247
Adjusted R-squared	0.570799	S.D. dependent var	0.358788
S.E. of regression	0.235055	Akaike info criterion	0.038203
Sum squared resid	53.64846	Schwarz criterion	0.545530
Log likelihood	89.35110	Hannan-Quinn criter.	0.230293
F-statistic	14.17708	Durbin-Watson stat	1.445761
Prob(F-statistic)	0.000000		

Appendix 9 : Regression EViews Output -Jordan Basic and Expanded Models (With EPS)

Jordan Expanded Model 2.3

Dependent Variable: RETURNS
Method: Panel Least Squares
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.400028	0.216204	-6.475489	0.0001
EPS	7.080601	0.766006	9.243538	0.0000
REP	0.009333	0.007814	1.194302	0.2599
IND	0.025900	0.062831	0.412217	0.6889
COMP	1.243578	0.096571	12.87738	0.0000
BSIZE	-0.001376	0.005894	-0.233359	0.8202
BPAY	1.679135	0.784524	2.140323	0.0580
COSIZE	0.032660	0.014405	2.267206	0.0468
TDEBT	0.070115	0.119601	0.586235	0.5707
AGE	8.43E-05	0.001729	0.048741	0.9621
TOP5	0.000243	0.048174	0.005047	0.9961
EPS*COMP	-8.763131	0.993444	-8.820961	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.685737	Mean dependent var	0.098247
Adjusted R-squared	0.650459	S.D. dependent var	0.358788
S.E. of regression	0.212123	Akaike info criterion	-0.167102
Sum squared resid	43.69124	Schwarz criterion	0.340225
Log likelihood	200.3186	Hannan-Quinn criter.	0.024987
F-statistic	19.43822	Durbin-Watson stat	1.541279
Prob(F-statistic)	0.000000		

Jordan Expanded Model 2.4

Dependent Variable: RETURNS
Method: Panel Least Squares
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.984556	0.210369	-4.680137	0.0009
EPS	1.287763	0.143892	8.949517	0.0000
REP	0.031573	0.006132	5.148524	0.0004
IND	0.083323	0.061034	1.365206	0.2021
COMP	0.825479	0.098305	8.397104	0.0000
BSIZE	0.017453	0.010125	1.723783	0.1155
BPAY	-0.218496	0.692409	-0.315558	0.7588
COSIZE	0.004572	0.013992	0.326737	0.7506
TDEBT	0.149110	0.117997	1.263682	0.2350
AGE	-0.000744	0.002052	-0.362370	0.7246
TOP5	-0.020469	0.043249	-0.473278	0.6462
EPS*BSIZE	-0.078886	0.008273	-9.534862	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.642914	Mean dependent var	0.098247
Adjusted R-squared	0.602830	S.D. dependent var	0.358788
S.E. of regression	0.226114	Akaike info criterion	-0.039357
Sum squared resid	49.64473	Schwarz criterion	0.467970
Log likelihood	131.2726	Hannan-Quinn criter.	0.152732
F-statistic	16.03886	Durbin-Watson stat	1.512328
Prob(F-statistic)	0.000000		

Appendix 9: Regression EViews Output -Jordan Basic and Expanded Models (With EPS)

Jordan Expanded Model 2.5

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:19
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.212133	0.330593	-3.666539	0.0043
EPS	0.253641	0.103322	2.454854	0.0340
REP	0.038193	0.007027	5.434881	0.0003
IND	0.085514	0.062645	1.365054	0.2022
COMP	1.149711	0.116862	9.838200	0.0000
BSIZE	0.006757	0.008558	0.789509	0.4481
BPAY	5.516087	2.595531	2.125224	0.0595
COSIZE	0.009000	0.020068	0.448455	0.6634
TDEBT	0.102153	0.116975	0.873291	0.4030
AGE	-0.001558	0.002556	-0.609303	0.5559
TOP5	-0.019743	0.052118	-0.378803	0.7128
EPS*BPAY	13.03339	3.207763	4.063078	0.0023

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.592770	Mean dependent var	0.098247
Adjusted R-squared	0.547056	S.D. dependent var	0.358788
S.E. of regression	0.241469	Akaike info criterion	0.092046
Sum squared resid	56.61623	Schwarz criterion	0.599373
Log likelihood	60.24906	Hannan-Quinn criter.	0.284135
F-statistic	12.96697	Durbin-Watson stat	1.436087
Prob(F-statistic)	0.000000		

Appendix 9 : Regression EViews Output -Jordan Differenced and Expanded Differenced Models (With ΔEPS)

Jordan Differenced Model 1.1

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:20
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.959492	0.365001	-5.368454	0.0003
DEPS	0.211585	0.085991	2.460566	0.0336
REP	0.039657	0.007169	5.531907	0.0003
IND	0.063688	0.070496	0.903427	0.3875
COMP	1.280136	0.140788	9.092639	0.0000
BSIZE	0.000817	0.010142	0.080510	0.9374
BPAY	-1.532523	0.894659	-1.712969	0.1175
COSIZE	0.050805	0.023468	2.164857	0.0557
TDEBT	-0.014914	0.117069	-0.127398	0.9012
AGE	-0.001392	0.003255	-0.427745	0.6779
TOP1	0.130317	0.054675	2.383460	0.0384

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.578116	Mean dependent var	0.098247
Adjusted R-squared	0.531240	S.D. dependent var	0.358788
S.E. of regression	0.245648	Akaike info criterion	0.125548
Sum squared resid	58.65352	Schwarz criterion	0.628263
Log likelihood	41.14134	Hannan-Quinn criter.	0.315891
F-statistic	12.33286	Durbin-Watson stat	1.434334
Prob(F-statistic)	0.000000		

Jordan Differenced Model 1.2

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:21
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.907252	0.363911	-5.240982	0.0004
DEPS	0.211209	0.086115	2.452650	0.0341
REP	0.039743	0.007185	5.531176	0.0003
IND	0.069764	0.070865	0.984471	0.3481
COMP	1.291595	0.140646	9.183275	0.0000
BSIZE	-5.13E-05	0.010072	-0.005092	0.9960
BPAY	-1.553085	0.878144	-1.768600	0.1074
COSIZE	0.050994	0.023132	2.204448	0.0520
TDEBT	-0.032849	0.115708	-0.283895	0.7823
AGE	-0.000784	0.003296	-0.237941	0.8167
TOP5	-0.041328	0.055809	-0.740520	0.4760

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.577457	Mean dependent var	0.098247
Adjusted R-squared	0.530508	S.D. dependent var	0.358788
S.E. of regression	0.245840	Akaike info criterion	0.127107
Sum squared resid	58.74504	Schwarz criterion	0.629822
Log likelihood	40.29866	Hannan-Quinn criter.	0.317450
F-statistic	12.29963	Durbin-Watson stat	1.431795
Prob(F-statistic)	0.000000		

Appendix 9 : Regression EViews Output -Jordan Differenced and Expanded Differenced Models (With ΔEPS)

Jordan Expanded Differenced Model 2.1

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:21
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.791661	0.368087	-4.867491	0.0007
DEPS	1.126894	0.341147	3.303252	0.0080
REP	0.040359	0.003847	10.49011	0.0000
IND	0.062043	0.072335	0.857719	0.4111
COMP	1.134936	0.172636	6.574137	0.0001
BSIZE	0.003612	0.007283	0.495977	0.6306
BPAY	-0.579196	0.852857	-0.679124	0.5125
COSIZE	0.049694	0.020842	2.384306	0.0383
TDEBT	-0.041927	0.121425	-0.345288	0.7370
AGE	-0.001325	0.002956	-0.448202	0.6636
TOP5	-0.030283	0.046662	-0.648987	0.5310
DEPS*REP	-0.115021	0.043158	-2.665114	0.0237

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.614105	Mean dependent var	0.098247
Adjusted R-squared	0.570787	S.D. dependent var	0.358788
S.E. of regression	0.235058	Akaike info criterion	0.038231
Sum squared resid	53.64997	Schwarz criterion	0.545558
Log likelihood	89.33597	Hannan-Quinn criter.	0.230321
F-statistic	14.17643	Durbin-Watson stat	1.283713
Prob(F-statistic)	0.000000		

Jordan Expanded Differenced Model 2.2

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:22
Sample: 2013 2023
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.831805	0.366977	-4.991603	0.0005
DEPS	-0.026939	0.108934	-0.247300	0.8097
REP	0.041425	0.006190	6.692314	0.0001
IND	0.058092	0.078480	0.740220	0.4762
COMP	1.235688	0.161126	7.669102	0.0000
BSIZE	0.000869	0.010378	0.083754	0.9349
BPAY	-1.558933	0.731852	-2.130121	0.0590
COSIZE	0.048688	0.021235	2.292776	0.0448
TDEBT	-0.035944	0.118022	-0.304556	0.7669
AGE	-0.001396	0.002918	-0.478384	0.6427
TOP5	-0.028300	0.049936	-0.566712	0.5834
DEPS*IND	0.831610	0.222415	3.738998	0.0039

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.591356	Mean dependent var	0.098247
Adjusted R-squared	0.545483	S.D. dependent var	0.358788
S.E. of regression	0.241887	Akaike info criterion	0.095511
Sum squared resid	56.81275	Schwarz criterion	0.602838
Log likelihood	58.37612	Hannan-Quinn criter.	0.287601
F-statistic	12.89130	Durbin-Watson stat	1.373242
Prob(F-statistic)	0.000000		

Appendix 9 : Regression EViews Output -Jordan Differenced and Expanded Differenced Models (With ΔEPS)

Jordan Expanded Differenced Model 2.3

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:22
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.919607	0.358011	-5.361861	0.0003
DEPS	1.293041	0.819957	1.576962	0.1459
REP	0.037774	0.007414	5.094962	0.0005
IND	0.071156	0.072919	0.975824	0.3522
COMP	1.253772	0.144449	8.679699	0.0000
BSIZE	3.07E-05	0.009787	0.003137	0.9976
BPAY	-0.961386	1.043203	-0.921571	0.3784
COSIZE	0.054404	0.022486	2.419437	0.0361
TDEBT	-0.041198	0.117896	-0.349441	0.7340
AGE	-0.000978	0.003354	-0.291596	0.7766
TOP5	-0.036781	0.057318	-0.641691	0.5355
DEPS*COMP	-1.408938	1.056840	-1.333161	0.2121

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.583025	Mean dependent var	0.098247
Adjusted R-squared	0.536217	S.D. dependent var	0.358788
S.E. of regression	0.244341	Akaike info criterion	0.115693
Sum squared resid	57.97097	Schwarz criterion	0.623020
Log likelihood	47.46795	Hannan-Quinn criter.	0.307782
F-statistic	12.45575	Durbin-Watson stat	1.392266
Prob(F-statistic)	0.000000		

Jordan Expanded Differenced Model 2.4

Dependent Variable: RETURNS
Method: Panel Least Squares
Date: 01/13/25 Time: 02:23
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.064732	0.330611	-6.245209	0.0001
DEPS	0.671835	0.196070	3.426508	0.0065
REP	0.038031	0.007048	5.395883	0.0003
IND	0.064718	0.071435	0.905981	0.3863
COMP	1.189891	0.172092	6.914272	0.0000
BSIZE	-0.001240	0.011304	-0.109693	0.9148
BPAY	-0.497063	0.732298	-0.678772	0.5127
COSIZE	0.066076	0.022022	3.000498	0.0133
TDEBT	-0.064384	0.113793	-0.565794	0.5840
AGE	-0.000408	0.003223	-0.126730	0.9017
TOP5	-0.051696	0.059900	-0.863044	0.4083
DEPS*BSIZE	-0.037579	0.013664	-2.750283	0.0205

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.591824	Mean dependent var	0.098247
Adjusted R-squared	0.546004	S.D. dependent var	0.358788
S.E. of regression	0.241749	Akaike info criterion	0.094366
Sum squared resid	56.74774	Schwarz criterion	0.601693
Log likelihood	58.99502	Hannan-Quinn criter.	0.286456
F-statistic	12.91627	Durbin-Watson stat	1.391585
Prob(F-statistic)	0.000000		

Appendix 9 : Regression EViews Output -Jordan Differenced and Expanded Differenced Models (With ΔEPS)

Jordan Expanded Differenced Model 2.5

Dependent Variable: RETURNS
Method: Panel Least Squares
Periods included: 11
Cross-sections included: 99
Total panel (unbalanced) observations: 1081
White cross-section (period cluster) standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank
Warning: estimated covariance matrix is singular (number of coefficients exceeds number of clusters)
Standard error and t-statistic probabilities adjusted for clustering

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.898938	0.394888	-4.808808	0.0007
DEPS	0.191410	0.077912	2.456750	0.0339
REP	0.040407	0.007165	5.639756	0.0002
IND	0.067838	0.072730	0.932737	0.3729
COMP	1.269601	0.143218	8.864787	0.0000
BSIZE	0.000834	0.009683	0.086133	0.9331
BPAY	6.236205	2.354318	2.648837	0.0244
COSIZE	0.049593	0.024204	2.048998	0.0676
TDEBT	-0.002713	0.111789	-0.024266	0.9811
AGE	-0.000984	0.003245	-0.303294	0.7679
TOP5	-0.032949	0.055580	-0.592822	0.5665
DEPS*BPAY	16.30037	3.539015	4.605906	0.0010

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.584349	Mean dependent var	0.098247
Adjusted R-squared	0.537689	S.D. dependent var	0.358788
S.E. of regression	0.243953	Akaike info criterion	0.112514
Sum squared resid	57.78697	Schwarz criterion	0.619841
Log likelihood	49.18625	Hannan-Quinn criter.	0.304603
F-statistic	12.52378	Durbin-Watson stat	1.424936
Prob(F-statistic)	0.000000		

خصائص مجلس الادارة ومعلوماتية الارباح المحاسبية: أدلة تجريبية من بورصة فلسطين وبورصة عمان

سميح محمد يوسف يوسف

أعضاء لجنة الاشراف:

الأستاذة الدكتورة فيرونيكا باز

الأستاذ الدكتور سونيل مهيشواري

الدكتور محمد أبو شربة

ملخص

تتناول هذه الدراسة العلاقة بين خصائص مجلس الإدارة ومدى قدرة الأرباح المحاسبية على تفسير عوائد الأسهم في الشركات المدرجة في كل من بورصة فلسطين (PEX) وبورصة عمان (ASE). وتهدف الدراسة إلى تقييم أثر مجموعة من خصائص المجلس، والتي تشمل سمعة المجلس، واستقلالية أعضائه، وكفاءتهم، وهيكل مكافآتهم، بالإضافة إلى حجم المجلس، على مستوى الإفصاح الذي توفره الأرباح المحاسبية في تفسير تحركات أسعار الأسهم في هذين السوقين الناشئين.

اعتمدت الدراسة على بيانات بانل لعينة من الشركات غير المالية المدرجة في البورصتين، خلال الفترة الممتدة من عام 2013 وحتى عام 2023. وقد بلغت عدد المشاهدات 327 لبورصة فلسطين و1081 لبورصة عمان. وتم إجراء اختبارات تشخيصية للتأكد من ملاءمة النماذج الإحصائية ومتانتها، كما تم استخدام نماذج الانحدار ذات التأثيرات الثابتة لتحليل البيانات.

أظهرت النتائج أن كلًّا من ربحية السهم والتغير في ربحية السهم تفسر بشكل معنوي عوائد الأسهم في كل من بورصة فلسطين وبورصة عمان، بما يتماشى مع نظرية معامل استجابة الأرباح. إلا أن تأثير خصائص مجلس الإدارة كان أكثر تعقيدًا وتفاوتًا بين السوقين. فقد تبين أن سمعة المجلس تؤثر إيجابًا على العوائد، لكنها تقلل من العلاقة بين الأرباح والعوائد، ربما بسبب سعي المجالس للحفاظ على استقرار السمعة على حساب شفافية المعلومات. كما عززت استقلالية المجلس من إفصاح الأرباح في بورصة عمان، بينما أضعفته في بورصة فلسطين، في إشارة إلى احتمالية الحوكمة الشكلية. وأظهرت كفاءة المجلس انخفاضًا في الإفصاح في بورصة عمان، ما يعكس تركيز المجالس الكفؤة على مقاييس أداء أوسع وممارسات محاسبية أكثر تحفظًا، في حين لم يكن لهذا المتغير أثر معنوي في بورصة فلسطين. أما مكافآت المجلس فقد عززت الإفصاح في السوقين، وهو ما يدعم فرضية توافق الحوافز. وأخيرًا، أدى كبر حجم المجلس إلى زيادة الإفصاح

في بورصة فلسطين وتحسين الرقابة، في مقابل تأثير سلبي في بورصة عمان بسبب مشاكل التنسيق.

تُسهم هذه الدراسة في إثراء الأدبيات المتعلقة بحوكمة الشركات في الأسواق الناشئة، وتؤكد على أهمية الحوكمة الجيدة في تعزيز شفافية المعلومات المالية لصالح صناع السياسات، المستثمرين، والمديرين التنفيذيين في الدول النامية.

الكلمات المقتاحية: خصائص مجلس الادارة، معلوماتية الارباح المحاسبية، بوصة فلسطين، بورصة عمان، ربحية السهم.