

Abdalmuttaleb M. A. Musleh Al-Sartawi
Abdulnaser Ibrahim Nour *Editors*

Artificial Intelligence and Economic Sustainability in the Era of Industrial Revolution 5.0

Studies in Systems, Decision and Control

Volume 528

The series “Studies in Systems, Decision and Control” (SSDC) covers both new developments and advances, as well as the state of the art, in the various areas of broadly perceived systems, decision making and control—quickly, up to date and with a high quality. The intent is to cover the theory, applications, and perspectives on the state of the art and future developments relevant to systems, decision making, control, complex processes and related areas, as embedded in the fields of engineering, computer science, physics, economics, social and life sciences, as well as the paradigms and methodologies behind them. The series contains monographs, textbooks, lecture notes and edited volumes in systems, decision making and control spanning the areas of Cyber-Physical Systems, Autonomous Systems, Sensor Networks, Control Systems, Energy Systems, Automotive Systems, Biological Systems, Vehicular Networking and Connected Vehicles, Aerospace Systems, Automation, Manufacturing, Smart Grids, Nonlinear Systems, Power Systems, Robotics, Social Systems, Economic Systems and other. Of particular value to both the contributors and the readership are the short publication timeframe and the worldwide distribution and exposure which enable both a wide and rapid dissemination of research output.

Indexed by SCOPUS, DBLP, WTI Frankfurt eG, zbMATH, SCImago.

All books published in the series are submitted for consideration in Web of Science.

Abdalmuttaieb M. A. Musleh Al-Sartawi ·
Abdulnaser Ibrahim Nour
Editors

Artificial Intelligence and Economic Sustainability in the Era of Industrial Revolution 5.0

Editors

Abdalmuttaieb M. A. Musleh Al-Sartawi
College of Business and Finance
Ahlia University
Manama, Bahrain

Abdulnaser Ibrahim Nour
Department of Accounting, Faculty
of Business and Communication
An-Najah National University
Nablus, Palestine, State of

ISSN 2198-4182 ISSN 2198-4190 (electronic)
Studies in Systems, Decision and Control
ISBN 978-3-031-56585-4 ISBN 978-3-031-56586-1 (eBook)
<https://doi.org/10.1007/978-3-031-56586-1>

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature
Switzerland AG 2024

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Paper in this product is recyclable.

The Moderating Effect of Governance on the Impact of Forensic Accounting on the Quality of Accounting Information



The Industrial Public Shareholding Companies Listed at Palestine Exchange

Ghassan Daas and Shatha Zaid

Abstract The literature examining the impact of forensic accounting methods, which are (reactive audit and proactive audit) as independent variable on the quality of accounting information represented in (relevance, reliability, comparability, and understandability) as dependent variable, with the presence of corporate governance as moderating variable that affects the impact of the independent variable on the dependent variable. Governance was represented in (the size of the board, the presence of an audit committee, and the duality of the CEO) that were measured through the annual reports of the 13 Palestinian Industrial shareholding companies listed on the Palestine Exchange, and the data was also obtained from the electronic questionnaire that was distributed to certified auditors in Palestine 50 responses were received. The results indicate that there is an effect of the reactive audit on all variables of the quality of accounting information, but for the proactive audit, it affects only the comparability feature, and the corporate governance had no effect of impact of the forensic accounting methods on the quality of accounting information. A set of recommendations were developed, the most important of which is focusing on forensic accounting and its methods mainly the reactive audit, also, adopting forensic accounting as a new profession in the field of accounting that support with its methods and tools to governance concept and elements. And conducting more research and enhancing auditors' capacities to face the problems that companies are exposed to, such as fraud, misstatements and others.

Keywords Forensic accounting methods · Quality of accounting information · Corporate governance

G. Daas (✉)
An-Najah-National University, Nablus, Palestine
e-mail: Daas@najah.edu

S. Zaid
Accounting Master Program, An-Najah-National University, Nablus, Palestine

1 Introduction

The world has recently witnessed the reporting of many financial scandals such as Enron, Parmalat, WorldCom and others, which have led to a lack of confidence among investors and the public in financial reports. Also, modern corporate frauds were sophisticated, which led to the need to respond to this changing criminal threat, and to call for the presence of a forensic accountant.

Therefore, a new concept appeared in the field of accounting called “forensic accounting”, which is concerned with preparing qualified forensic accountants to work with their integrated knowledge of accounting, auditing and investigations based on legal rules and regulations [1].

With the passage of time, this field developed and played an important role in activating the concept of corporate governance, as the recurring financial crises due to the spread of financial corruption due to the lack of application of accounting principles and lack of disclosure led to the bankruptcy of many companies [2]. The concept of corporate governance is related to the ability of companies to abide by the relevant regulations in each sector, as it is considered a means of controlling and maintaining the company’s business and activities [3]. Corporate governance has become an effective tool to ensure the objectivity and accuracy of financial reports, and all this confirms the existence of a close relationship between the application of corporate governance principles and the quality of accounting information, as they are two sides of the same coin [2]. Corporate governance practices can be divided into two basic groups: The first group, which is: related to the characteristics of the board of directors. As for the second group, it relates to committees from a board council and its tasks [4].

On the other hand, the accounting information represented in the financial statements of corporate governance that is submitted to the board of directors and audit committees reveals many deviations that may cause the company to deteriorate [5]. Therefore, the accounting information provided to the beneficiaries through the general purpose financial statements must have specific characteristics, which make them meet the needs of these users and be of interest [6]. The important aspect of financial reporting is its focus on the information needed by the external users for decision-making and satisfying the information needs with the financial reporting practices carried out in organizations [7]. Therefore, both forensic accounting and corporate governance have become an effective tool to ensure the reliability of companies’ financial statements and reports, and all of this confirms the existence of a complementary relationship between them [8].

2 The Problem Statement

In view of the prevailing conditions in the business world and the resort of many managements of public shareholding companies to prepare their financial reports in a way that achieves the beautification of the financial statements. And to consider the quality of accounting information that will improve the financial situation and in a way that achieves their various interests [9]. Forensic accounting with its rules and methods of investigation, and the role of governance with the impacted results of Surbans-Oxley Act will add value to the credibility and quality of the accounting information [10]. Hence this study comes to answer the main question: What is the Moderating effect of Governance on the impact of Forensic Accounting on the Quality of Accounting Information for the Palestinian industrial companies listed at PEX. To get to the depth of this question, the following sub-questions were addressed:

1. What is the moderating effect of governance (Board size, CEO duality, audit committee) of the forensic accounting (reactive audit) impact on the accounting information quality (relevance, reliability, comparability, and understandability),
2. What is the moderating effect of governance (Board size, CEO duality, audit committee) of the forensic accounting (proactive audit) impact on the accounting information quality (relevance, reliability, comparability, and understandability).

3 Importance of the Research

The importance of the study stems from the fact that forensic accounting contributes to increase the efficiency of performance and reassuring the users of financial statements about the presence of misleading or fraud, and ensuring the safety of the financial situation of companies. And the importance of the accounting role in governance, which is related to raising the level of the quality of accounting information by activating the principles of corporate governance, which is reflected in the level of quality of accounting information provided to users of financial reports.

Accounting is also a social science that affects the rest of the other sciences, and through the link between accounting and law, forensic accounting emerged, as it includes many areas and disciplines through which its procedures can discover manipulation in financial statements and reports [8].

4 Research Objectives

This study aims to identify the concept, objectives and fields of work of forensic accounting, and discuss the methods followed by forensic accounting, and the role of these methods on the quality of accounting information represented in the (relevance, reliability, comparability and understanding), by adding the effect of the presence of governance mechanisms represented by (Board size, CEO duality, and audit committee).

5 Theoretical Framework and Hypothesis Development

Forensic Accounting: It is a field of accounting that uses the knowledge and skills of accounting, auditing and investigation in order to detect economic damages and prepare opinions in legal investigations to support litigation processes [11]. As defined by [12] is the comprehensive view of the investigation of fraud; It includes fraud prevention in addition to analyzing fraud-resistant internal controls, gathering evidence and information related to fraud, whether financial or non-financial, and writing a report to management or the court to support litigation. Forensic accounting is a specialty area related to providing information that is intended to be used as evidence for legal purposes. It is also a practice of collecting and analyzing data in the areas of litigation support advice, expert testimony, fraud examination and providing a result related to accounts, inventories or presentation, of the quality that would be taken in some disputed legal proceedings [13]. So, be consistent with the objectives of financial accounting is to verify the alleged allegations from related parties, investigate and detect fraud, and determine the amount of losses and economic damages [14].

Forensic accounting methods: Forensic accounting is based on a set of integrated skills in accounting, auditing, and investigative and evaluation skills, which look beyond the numbers, providing appropriate accounting analysis for the judiciary [15].

1. Reactive Audit: aims to conduct the necessary investigations into illegal activities, to ascertain the presence or absence of fraud in them. It also collects the appropriate evidence, and identifies the persons responsible on this [9].
2. Proactive Audit: It aims to study and evaluate internal control systems, ensure compliance with regulations, laws and legislation, identify risks resulting from fraud and conduct the necessary investigations about the complaints submitted [16].

Quality of accounting information: The useful accounting information is considered the most influential in making rational decisions, and accounting information is characterized by quality because of its useful characteristics [17]. According to [18] is all quantitative and non-quantitative information related to economic events, and

this information is processed and reported by accounting information systems in the financial statements. So, the Characteristics of the quality of accounting information are:

Relevance: relevant information is that information that must be compatible with the decisions that use that information, the appropriate information shall be in time and must be suitable with the needs and, information must have a value through which can be compared with the cost of obtaining it (evaluation), and finally the output of accounting information should help in future forecasting [19].

Reliability: Reliability is a term used in the natural sciences and refers to the amount of information that is free from error, as defined by the Financial Accounting Standards Board as the quality of information that confirms that information is free from error or bias, and that it honestly presents what it should display or present at a reasonable degree [20].

Comparability: Comparability is the provision of useful information that allows valid comparisons to be made between similar organizations in the same industry, and comparisons to be made in the same company over different time periods [21].

Understandability: It is not possible to benefit from the information if it is incomprehensible to its users, and this depends on the nature of the data contained in the financial statements, and the way it is presented, as well as on the capabilities of its users, so whoever sets accounting standards and whoever prepares the financial statements must be aware of the capabilities of its users [22].

Corporate governance: Governance has become one of the main pillars upon which economic units must be based, and not only that, but many organizations and bodies have confirmed the advantages of this concept, such as the Cadbury Committee, which was formed to develop a framework for corporate governance in the name of the best framework in 1992, and the Economic Cooperation Organization (Organization for Economic Cooperation and Development), Which set the principles of corporate governance in 1999, and there is also the Public Pension (Calpers) Fund in the United States of America, and the Turkish Institute in Turkey in 2002 [23]. A serious debate with regard to the relationship between corporate governance mechanisms and financial information quality exists in both developed and emerging markets [24]. The study will be based on introducing some of the variables of corporate governance as moderating variables, and testing the impact of their presence and absence:

- **Board size:** The board size represents the number-of-executive and non-executive members on the board of directors.
- **CEO duality:** The literature argues that the status of CEO has direct impact on governance of firms. CEO position should be independent of the chairperson of the board to enable balance and check on misuse of power by the same, it will also provide better incentives by linking the CEO's pay that will affect the performance of companies [3], CEO role-duality refers to the state when CEO simultaneously assumes the role of the board's chairperson. So, being the former CEO, the position holder may still influential for the board due to long-term personal relationships

with board members [25]. Also [26] found that CEO characteristics are associated with firm performance.

- **Audit committee:** High-profile corporate scams have heightened the need for an effective audit committee. One of the Board of Directors committees that undertakes some of the board's responsibilities, and the committee's mission is to assist the board of directors in performing its oversight duties, which are an essential part of the administrative process [27]. Frequent meetings and independence of audit committee can ensure credibility of corporate report.

6 Hypotheses Development

Information is considered reliable if it is free from material errors, that is, information that if omitted or incorrectly presented could influence the economic decisions of its users, and it must be free from bias [17], FASB indicated in Statement No. (2) That the information is free from error and bias to a reasonable degree, and that it honestly includes the characteristics intended to be highlighted on the subject being reported. References [6, 28] found that there is a direct correlation between forensic accounting methods as an independent variable, and the reliability of financial reports as a dependent variable. Reference [27] concluded that the effectiveness of audit committees increases the reliability of the financial statements, because of their important role in preventing fraud and manipulation of financial statements. The Audit Committee also plays an important role in controlling management behavior, and thus enhances the reliability of information and reports for companies. The establishment of an audit committee in joint stock companies is one of the most important factors that support audit quality [29]. The first hypothesis is formulated:

H1: There is an impact of forensic accounting methods (reactive audit, proactive audit) in the reliability of accounting information with the presence of the corporate governance (Board size, CEO duality, and audit committee) as a moderating variable.

Reference [30] concluded that there is a significant impact of forensic accounting methods on the relevance of accounting information, given the importance of judicial accounting methods and their role in the quality accounting information through the procedures and methods that they follow. FASB referred to relevance as that information capable of making a difference in a decision by helping users to make predictions of future outcomes or to reinforce or correct previous predictions [6]. It also means that accounting information has the ability to make a decision, so it must have predictive power in order to be appropriate, and the degree of appropriateness of accounting information is measured by the extent of its impact on decision makers [31]. Accounting information must be characterized by relevance, in order to increase its impact on controlling the present and absorbing the past in order to predict the future objectively. It will make it easier for users of that information to

make a decision-making process than if that information was more accurate and more efficient [7].

In order for the presented financial information to be appropriate, it must be relevant to the decision, and it must be characterized by predictive value, confirmatory value, or both [23]. Reference [32] pointed out that the quality of the available information increases with higher levels of corporate governance, the board of directors is responsible quality of financial reporting, there is no effect of the size of the board of directors on the quality of information, and this may be due to the lack of proportionality of the size of the board of directors with the size of the company, or the weak practice of board members.

Much of the literature indicates that there should be a CEO position independent of the chairman of the board, which enable balance and check that there is no abuse of power, and other studies have argued that CEO duplication will provide better incentives by linking the CEO's pay [3]. Reference [33] suggested three advantages for the role of CEO duality: timely decisions and more relevant quick actions, and powerful leadership. There are arguments in favor of CEO duplication, which means that CEO duplication has a positive impact on the company's performance, and there are arguments against CEO duplication, which is confirmed to have a negative impact on the company's performance, and these arguments support the agency theory [3].

The establishment of audit committees within the company leads to increased reliability and transparency in the accounting information and reports issued by the companies, which in turn leads to an increase in the confidence of investors and external parties in those reports [27]. The Corporate Governance Code indicated that it is preferable to form an audit committee to ensure the transparency of the company's accounts and to inform shareholders and other stakeholders of the size of the risks facing the company [34]. The second hypothesis is formulated:

H2: There is an impact of forensic accounting methods (reactive audit, proactive audit) in the relevance of accounting information with the presence of the corporate governance (Board size, CEO duality, and audit committee) as a moderating variable.

FASB explained in its statement no. (2) that the usefulness of accounting information greatly increases whenever it is presented in a way that enables users to compare a company with other companies or companies or compare the results of multiple years for the same company. Therefore, comparability is defined as an accounting feature that enables Users are able to identify essential aspects of agreement (similarity) or difference in economic phenomena as long as these aspects are not masked using asymmetric accounting methods [20]. Also, [35] found a relationship between forensic accounting and comparability.

The number of board members is an important factor in determining the effectiveness of this board. As a result, many studies have dealt with the issue of the optimal size of the board of directors, some studies have shown that the board, which consists of a large number of members, has a better performance, given that the large size allows it to carry out its duties more effectively, in addition to the large size

of the board of directors that gives the opportunity to provide the necessary expertise and skills to improve the quality of the decision-making process [36]. The their hypothesis is

H3: There is the impact of forensic accounting methods (reactive audit, proactive audit) in the comparability of accounting information with the presence of the corporate governance (Board size, CEO duality, and audit committee) as a moderating variable.

The information contained in the financial statements should be clear and easy to understand directly by users assuming that they have a reasonable level of knowledge in management and accounting [37]. Reference [38] found that the transparency of information and the quality of the financial statements are positively affected by the concept of forensic accounting [39]. Also indicated that the Audit Committee can play its role in improving the quality of financial reports. It is also concluded that audit committees, as a mechanism of corporate governance mechanisms, have a pivotal role in improving the quality of reports and financial statements.

H4: There is an impact of forensic accounting methods (reactive audit, proactive audit) in the Understandability of accounting information with the presence of the corporate governance (Board size, CEO duality, and audit committee) as a moderating variable.

7 Method and Procedures

7.1 Population and Sample

The industrial firms listed at PEX and external auditors were surveyed. 13 listed firms' annual reports 2012–2021 were surveyed through checklist, and by mail electronic questionnaire to 267 auditors, and 50 answers were obtained.

7.2 Variables

The study variable consists of three sets of variables:

1. Forensic Accounting method as independent variable consist of: (Reactive audit and Proactive audit) as independent variable measured through a questionnaire designee with Likert scale.
2. Accounting information quality as dependent variable consists of: (Reliability, Relevance, Comparability, and Understandability) as measured through a questionnaire designee with Likert scale.
3. Corporate governance as moderating variable consists of: (Audit committee, Board Size, CEO Duality) as moderating variable (1 if there is an audit committee

and 0 otherwise), (No. of members in the board), and (a value of 1 if the CEO duality, Dummy variable takes value of 1 if the CEO is a board chair, otherwise 0) [40].

7.3 Scale

Likert scale was used with the response scale of (1.0–1.8 very low response, 1.8–2.6 low response, 2.6–3.4 modest response, 3.4–4.2 high response, 4.2 * 5.0 very high response).

From Table 1 the sample characteristics indicates that significant qualification of Bachelor, Master, and PhD degrees, in addition to significant experience.

In order to test stability of responses, Alpha Cronbach scale was used, Table 2 indicates that the value of Cronbach's alpha correlation coefficient is high and ranges between 0.723 at its lowest level and 0.851 at its highest level, and this indicates that the answers are of a high degree of stability.

According to Table 2 the descriptive analysis indicate high response for all the sub-independent- dependent variables. 61% of audit committee availability, 30% of CEO duality, whereas according to [41] most of the Jordanian Industrial companies separate the chair responsibility of CEO from BoD membership, and 8.2 board size members.

Table 1 Frequencies, sample characteristics

Demographic	Categories	Auditors	
		Frequency	Ratio (%)
Gender	Male	44	88
	Female	6	12
Qualification	Bachelor	27	54
	Master	16	32
	PhD	7	14
Years' experience	1–5 year	8	16
	6–10 year	7	14
	11–16 year	6	12
	More than 16 years	29	58

Table 2 Descriptive and responses analysis, and alpha Cronbach

Variables	Descriptive and responses		Alpha Cronbach	
	Mean	Response	No. of phrases	Alpha Cronbach
Reactive audit	3.7928	High	3	0.751
Proactive audit	3.7664	High	6	0.851
Reliability	3.5266	High	6	0.799
Relevance	3.8550	High	4	0.731
Comparability	3.8440	High	5	0.781
Understandability	3.6736	High	3	0.723
Audit committee	0.61			
CEO duality	0.30			
Board size	8.2			

8 Testing Hypotheses

8.1 Forensic and Reliability

Results from Table 3 the forensic accounting impact was measured by its two main factors: the reactive and proactive factors. According to the reactive factor and its impact on the reliability of accounting information, the correlation coefficient was (0.507) at the level of ($05.0 \leq \alpha$) and the determination coefficient was (0.258), meaning that (0.258) of the change in the reliability results from the change in the reactive audit. In addition, the level of significance is equal to 0.000, which is less than (0.05). Accordingly, the impact of the reactive audit proposition was supported. But, through investigation the moderation impact of the governance, results indicate that there is no effect on the relationship between the independent variable (reactive audit) and the dependent variable (reliability). Accordingly, the impact and the relationship is not supported. But according to the proactive factor and its impact on the reliability of accounting information, the impact of the proactive audit proposition was not supported even with the governance as moderation variable.

Forensic and relevance: Results from Table 4 for the reactive factor of forensic accounting, and its impact on the relevance of accounting information, the correlation coefficient was (0.651) at the level of ($05.0 \leq \alpha$) and the determination coefficient was (0.424), meaning that (0.424) of the change in the relevance results from the change in the reactive audit. In addition, the level of significance is equal to 0.000, which is less than (0.05). Accordingly, the impact of the reactive audit proposition was supported. But, through investigation the moderation impact of the governance, results indicate that there is no effect on the relationship between the independent variable (reactive audit) and the dependent variable (relevance). Accordingly, the impact and the relationship is not supported. But, through investigation the moderation impact of the governance, results indicate that there is no effect on the relationship

Table 3 The impact of forensic accounting methods on the reliability of accounting information

	Variable	R	R2	B	Sig = 0.05
Reactive	Reliability	0.507	0.258	0.636	0.000
	Governance impact				
	Board size	0.515	0.265	0.03	0.494
	CEO duality	0.511	0.261	0.114	0.661
	Audit committee	0.512	0.262	– 0.117	0.605
Proactive	Reliability	0.052	0.003	– 0.088	0.718
	Governance impact				
	Board size	0.054	0.003	0.005	0.400
	CEO duality	0.091	0.008	– 0.148	0.611
	Audit committee	0.100	0.010	– 0.157	0.922

Table 4 The impact of forensic accounting methods on the relevance of accounting information

	Variable	R	R2	B	Sig = 0.05
Reactive	Relevance	0.651	0.424	0.699	0.000
	Governance impact				
	Board size	0.658a	0.433	0.028	0.400
	CEO duality	0.652a	0.424	– 0.038	0.848
	Audit committee	0.652a	0.426	– 0.060	0.726
Proactive	Relevance	0.068	0.005	0.098	0.637
	Governance impact				
	Board size	0.068	0.005	0.001	0.797
	CEO duality	0.202	0.041	– 0.324	0.191
	Audit committee	0.076	0.006	– 0.054	0.815

between the independent variable (reactive audit) and the dependent variable (relevance). Accordingly, the impact and the relationship is not supported. But according to the proactive factor and its impact on the relevance of accounting information, the impact of the proactive audit proposition was not supported even with the governance as moderation variable.

8.2 Forensic and Comparability

Results from Table 5 for the reactive factor of forensic accounting, and its impact on the comparability of accounting information, the correlation coefficient was (0.380) at the level of ($05.0 \leq \alpha$) and the determination coefficient was (0.144), meaning that (0.144) of the change in the comparability results from the change in the reactive

Table 5 The impact of forensic accounting methods on the comparability of accounting information

	Variable	R	R ²	B	Sig = 0.05
Reactive	Comparability	0.380	0.144	0.222	0.006
	Governance impact				
	Board size	0.393	0.154	0.016	0.468
	CEO duality	0.388	0.151	– 0.075	0.563
	Audit committee	0.416	0.173	– 0.142	0.208
Proactive	Comparability	0.324	0.105	0.253	0.022
	Governance impact				
	Board size	0.328	0.108	0.008	0.714
	CEO duality	0.373	0.139	– 0.171	0.179
	Audit committee	0.342	0.117	– 0.093	0.432

audit. In addition, the level of significance is equal to 0.006, which is less than (0.05). Accordingly, the impact of the comparability audit proposition was supported. But, through investigation the moderation impact of the governance, results indicate that there is no effect on the relationship between the independent variable (reactive audit) and the dependent variable (comparability). Accordingly, the impact and the relationship is not supported.

According to the proactive factor and its impact on the Comparability of accounting information, the correlation coefficient was (0.324) at the level of ($05.0 \leq \alpha$) and the determination coefficient was (0.108), meaning that (0.108) of the change in the comparability results from the change in the proactive audit. In addition, the level of significance is equal to 0.022, which is less than (0.05). Accordingly, the impact of the proactive audit proposition was supported. But, through investigation the moderation impact of the governance, results indicate that there is no effect on the relationship between the independent variable (proactive audit) and the dependent variable (Comparability). Accordingly, the impact and the relationship is not supported.

8.3 *Forensic and Understandability*

Results from Table 6 for the reactive factor of forensic accounting, and its impact on the understandability of accounting information, the correlation coefficient was (0.595) at the level of ($05.0 \leq \alpha$) and the determination coefficient was (0.354), meaning that (0.354) of the change in the understandability results from the change in the reactive audit. In addition, the level of significance is equal to 0.000, which is less than (0.05). Accordingly, the impact of the understandability audit proposition was supported. But, through investigation the moderation impact of the governance,

Table 6 The impact of forensic accounting methods on the understandability of accounting information

	Variable	R	R2	B	Sig = 0.05
Reactive	Understandability	0.595	0.354	0.630	0.000
	Governance impact				
	Board size	0.598	0.357	0.016	0.638
	CEO duality	0.597	0.357	0.086	0.674
	Audit committee	0.602	0.362	– 0.134	0.451
Proactive	Understandability	0.099	0.010	0.140	0.495
	Governance impact				
	Board size	0.102	0.010	– 0.007	0.862
	CEO duality	0.146	0.021	– 0.182	0.458
	Audit committee	0.126	0.016	– 0.120	0.594

results indicate that there is no effect on the relationship between the independent variable (reactive audit) and the dependent variable (understandability). Accordingly, the impact and the relationship is not supported. But, through investigation the moderation impact of the governance, results indicate that there is no effect on the relationship between the independent variable (reactive audit) and the dependent variable (understandability). Accordingly, the impact and the relationship is not supported. But according to the proactive factor and its impact on the understandability of accounting information, the impact of the proactive audit proposition was not supported even with the governance as moderation variable.

9 Results

1. There is an effect of reactive auditing on reliability, relevance, comparability, and understandability of the accounting information, but by introducing the governance moderation effect it indicates that there is no effect of the board size, CEO's duality, and audit committee on the impact of the reactive audit on the reliability, relevance, comparability, and understandability of the accounting information.
2. There is no effect of proactive auditing on reliability, relevance, comparability, and understandability of the accounting information, but by introducing the governance moderation effect it indicates, that there is no effect of the board size, CEO's duality, and audit committee on the impact of the proactive audit on the reliability, relevance, and understandability of the accounting information. But has an impact on comparability.

Through these results, it was concluded that there is an effect of the reactive audit on all the characteristics of the quality of the accounting information in this study

(reliability, relevance, comparability, and understandability), while for the variable of the proactive audit, it had an effect only on the comparability feature.

The variables were also measured by the presence of moderating variables (the size of the board, the duality of the CEO, the presence of the audit committee) so that there was no effect of these variables on the impact and the relationships between all the independent and dependent variables.

10 Recommendations

1. It should be noted that it is recommended to use the reactive audit method to provide reliability, relevance, understandability and comparability as to achieve the quality of accounting information.
2. Adopting forensic accounting as a new profession in the field of accounting that support with its methods and tools to governance concept and elements.
3. Increase awareness and knowledge of auditing practitioners through training courses and scientific seminars inside and outside Palestine to enhance the skills of forensic accounting and tools.
4. Encouraging and supporting research in the areas of forensic accounting to develop more accurate and appropriate solutions for the current era.

References

1. El-Sisi, N.A.: The role of forensic accounting in reducing the phenomenon of fraud in the financial statements. *Sci. J. Econ. Trade* 33–84 (2006)
2. Dawood, I.A.A.: Forensic accounting role in governance and its impact on the quality of accounting information. *J. Account. Financ. Stud.* **9**(28), 121–147 (2014)
3. Palaniappan, G.: Determinants of corporate financial performance relating to board characteristics of corporate governance in Indian manufacturing industry. *Corp. Financ. Perform.* (2017)
4. Abu Alia, M., Awwad, O.: The effect of corporate governance and disclosure quality on information asymmetry in the PEX. *An-Najah Univ. J. Res. B (Hum.)* **36**(3), 519–554 (2022)
5. Al Ghazzawi, H.A.J.: Corporate Governance and Its Impact on the Level of Disclosure of Accounting Information. The Arab Academy in Denmark (2010)
6. Qaratim, K.M., Aoun, M.A., Farhat, M.M.: The impact of the quality of the accounting information provided by the accounting system on decision-making in the Zliten cement factory. *J. Hum. Nat. Sci.* **4** (2022)
7. Shuaib, S., Bilal, R.: The Impact of the Accounting Information System on Improving the Quality of Accounting Information. Mohamed Boudiaf University, Al Masila (2018)
8. Abbas, B.K., Mezher, S.J., Hamid, A.M.: The possibility of achieving integration between forensic accounting and corporate governance to contribute to reducing creative accounting methods. *Al-Muthanna J. Admin. Econ. Sci.* **9**, 153–167 (2018)
9. Al Jabari, A.A.M.M.: The role of Forensic Accounting in Compared with Creative Accounting practices of Companies listed in Palestine stock exchange. Hebron University, Hebron (2018)

10. Daas, G.: Evaluating the extent to which forensic accounting is included in the accounting education curricula in universities. *Palestine Tech. Univ. J. Res.* **4**(2), 40–46 (2016)
11. Abu Bakr, A.A.J.A.-H.: The impact of applying judicial accountability mechanisms in Sudanese courts to limit financial corruption. *J. Econ. Admin. Sci.* **2** (2018)
12. Mohanna, M.F.: The relationship of the application of responsibility accounting between forensic accounting and financial performance control in companies listed on the Palestine Stock Exchange. *J. Econ. Admin. Legal Sci.* **6**, 27–52 (2022)
13. Jarallah, M.N., Alsayed, H.E.: Forensic accounting as a mechanism for controlling and detecting financial fraud. *J. Econ. Admin. Legal Sci.* **20**, 92–112 (2022)
14. Ahmed, G.A.S.: *Judicial Accounting and Its Role in Limiting the Practice of Creative Accounting Methods*, pp. 118–139. Marwa Technological University (2019)
15. Alkababji, M., Aljabari, A.: The use of forensic accounting techniques in reducing creative accounting practices of Palestinian shareholding industrial companies. *An-Najah Univ. J. Res.* **36**(10), 2213–2260 (2022)
16. Al-Ajab, A.M.A.R.A., Melhem, M.M.I.: The role of forensic accounting in enhancing confidence in financial statements. *Shendi Univ. J.* (2018)
17. Juhayna, J., Feryal, B.: *Internal Audit as a Mechanism for Improving the Quality of Accounting Information from the Point of View of a Sample of Professionals and Academics*. Mohamed Boudiaf University, Al Masila (2022)
18. Bilal, Z.O., Al-Omari, M.A.: The impact of the characteristics of accounting information on the quality of decision making: field study in industrial companies in Dhofar Governorate. *J. Islamic Univ. Econ. Admin. Stud.* 78–99 (2019)
19. Muhammad, M., Mohammed, B.: *The Impact of Internal Auditing on the Quality of Accounting Information*. Ahmad Derayah Adrar University, Bouda (2022)
20. Ismael, I.K., Naoum, R.: *Qualitative Characteristics of Accounting Information Between Theory and Practice*, pp. 281–308 (2012)
21. Obada, A.: *The Role of the Accounting Information System in Achieving the Comparability Feature*. University of Kasdi Merbah, Ouargla (2017)
22. Khalifa, B.M., Ali, H.: *The Quality of Accounting Information as a Mechanism for Improving the Financial Performance of the Organization*. University of Mohamed Boudiaf, M'sila (2019)
23. Othman, Q.A.: *The Impact of Corporate Governance on the Quality of Financial Reporting*. Tishreen University (2016)
24. Asmar, M., Alia, M., Ali, F.: The impact of corporate governance mechanisms on disclosure quality: evidence from companies listed in the Palestine exchange. *Int. J. Econ. Commerce Manag. U. K.* **6**(4), 400–417 (2018)
25. Nawaz, T., Ohlrogge, O.: *Clarifying the Impact of Corporate Governance and Intellectual Capital on Financial Performance: A Longitudinal Study of Deutsche Bank (1957–2019)* (2020)
26. Saleh, M., Shurafa, R., Shukeri, S., Nour, A., Maigosh, Z.: The effect of board multiple directorships and CEO characteristics on firm performance: evidence from Palestine. *J. Account. Emerg. Econ.* **10**(4) (2020)
27. Muhammad, A.M.: *Audit Committees and Their Role in Increasing the Effectiveness of Financial Statement Information*. Faculty of Administrative Sciences (2018)
28. Al-Sayegh, M.: *Role of Forensic Accounting in Detecting the Practices of Earning Management and Increasing the Reliability of Financial Reports*. Sudan University of Science and Technology, Sudan (2019)
29. Sisalem, R., Al-Ashi, M., Madi, H.: Effect of the characteristics of the audit committee on the auditor opinion. *Al-Azhar Univ. Mag.* **21**(2) (2019)
30. Idris, I.: *The Role of Forensic Accounting in Achieving the Quality of Accounting Information*. Sudan University of Science & Technology, Khartoum (2019)
31. Bilal, Z.O., Al-Omari, M.A.: The impact of the characteristics of accounting information on the quality of decision-making. *Islamic Univ. J. Econ. Admin. Stud.* **27**(3), 78–99 (2019)
32. Stuebs, M., Sun, L.: Corporate governance and social responsibility. *Int. J. Law Manag.* **1**(57), 38–52 (2015)

33. El-Deeb, M.S., Elsharkawy, L.M.: The impact of board characteristics on the disclosure of the forward looking information evidence from the Egyptian Stock Market. *Alexandria J. Account. Res.* **3**(3) (2019)
34. Awaad, O.: The Impact of Corporate Governance and Disclosure Quality on Information Asymmetry in the Palestine Stock Exchange. An-Najah National University, Nablus (2019)
35. Idris, I.A.: The Role of Forensic Accounting in Achieving the Quality of Accounting Information. Sudan University of Science and Technology (2019)
36. Al-Abedi, D.: Corporate Governance and Its Role in Achieving the Quality of Accounting Information: Case Study of the Algerian Alliance Insurance Company. Muhammad Kheidar University, Biskra (2016)
37. Zine, A., Draoussi, M.: The impact of the accounting information system's risk on the quality of accounting information. *Econ. Insights Mag.* **9**(2), 411–425 (2019)
38. Abd, F.A.: The role of the forensic accounting philosophy in the transparency and quality of financial statements: an applied study on a sample of workers at the Trade bank of Iraq and the Gulf Commercial Bank in Babylon. *JAFS* **16**(56) (2021)
39. Khater, I., Hassan, H., Kazar, M.: The impact of the development of the audit committee on the quality of financial reports in companies listed in the Iraqi stock market. *Sci. J. Res. Bus. Stud.* **4**(31) (2017)
40. Abdeljawad, S., Masri, M.: Board characteristics and corporate performance: evidence from Palestine. *An-Najah Univ. J. Res. (Hum.)* **34**(4), 746–770 (2020)
41. Nour, A.N., Bouqalieh, B., Okour, S.O.: The impact of institutional governance mechanisms on the dimensions of the efficiency of intellectual capital and the role of the size of the company in the Jordanian Shareholding industrial companies. *An-Najah Univ. J. Res. (Hum.)* **36**(10), 2081–2212 (2022)