

Forensic Accounting Competencies of External Auditors and their Impact on Company Performance

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ABSTRACT

This study examines how forensic accounting auditors affect corporate financial performance. This quantitative study uses linear regression to analyze 78 Jordanian non-banking financial enterprises. The findings show that forensic accounting-trained external auditors improve corporate financial performance. This study sought to solve a knowledge gap by educating auditors about forensic accounting's role in financial crime detection and prevention. Audit firms' performance and integrity have improved in Jordan's complex and dynamic financial system, including the Amman Stock Exchange. Analyzing the financial data of non-banking financial enterprises listed on the ASE from 2012 to 2023 will show if forensic accounting auditors improve performance. Fostering consumer trust and providing accurate financial information helps enhance financial reporting and decrease fraud. This study examines how forensic accounting-trained external auditors improve client financial performance.

Keywords: Forensic Accounting, Auditing, Non-banking financial companies, Financial performance, Financial misconduct

1. Introduction

In the aftermath of major financial scandals like Enron, WorldCom, and Wirecard, strong financial reporting standards are required to retain shareholder confidence. Financial misconduct within a company can have a significant influence on the economy as a whole, employees, clients, and suppliers. In recent years, there has been much disagreement concerning the usefulness of safeguards in avoiding or exposing unethical and exploitative economic practices. Cressey's well-known fraud triangle [1] identifies three conditions that might lead to corporate misconduct. Initially, incentives and pressures to commit misconduct must exist. The second criterion requires a worldview or reason for the misconduct. A situation must exist that actively encourages or allows misconduct to

occur. Complex organizational frameworks, insufficient supervision from higher management, or poor controls due to oversight flaws or control evasion may provide opportunities or incentives. According to agency theory, preventing CEOs from participating in financial misconduct requires the implementation of both internal and external governance structures.

Shleifer and Vishny [2] describe traditional corporate governance as "the mechanisms through which providers of capital to corporations secure a return on their investment." With the assumption that it will embrace a broader spectrum of stakeholder groups, we define "corporate governance" as "the combination of mechanisms that ensures management operates the firm for the benefit of one or several stakeholders." Al-Sartawi [4] states that the comprehensive definition of corporate governance is that a company's success hinges on its interactions with its owners and stakeholders, who provide non-financial resources. Traditional auditing and investigative approaches for financial crimes have proven ineffective due to the prevalence of fraud in big enterprises and organizations around the world. Bribery, insolvency, payroll fraud, insurance fraud, administrative theft, and staff theft are examples of crimes that can occur in both the public and private sectors. Unfortunately, these infractions are growing increasingly difficult to identify and avoid, as well as easier to conduct. According to Petra and Spieler [5], conflicts about accounting procedures and unlawful financial activities have increased in recent years. As a result, companies are more likely to engage in unethical and fraudulent behavior [6]. As a result of the growing frequency of corporate crises, forensic accounting emerged [7]. The involvement of forensic accountants, in addition to certified traditional auditors, is required due to the significant threat that financial fraud poses to global economic stability [8].

The government or a public accounting company may hire a trained forensic accountant. The term "forensic accounting" refers to all areas of financial fraud investigation and detection, including engagements resulting from financial crises [9]. The purpose of forensic accounting is to resolve financial issues in a legally compliant manner by utilizing investigative and analytical skills. Forensic accounting involves conducting a thorough investigation of financial records and statements in response to suspicions of fraud and pursuing a settlement for financial disputes through regulatory and judicial channels [10].

This study sought to fill a large gap in knowledge by providing empirical data on the function of forensic accounting in assisting auditors in detecting and mitigating financial crimes. Audit businesses working in Jordan's financial industry or the dynamic and complex Amman Stock Exchange have shown significant improvements in overall performance and integrity. Analyzing the financial results of the non-banking financial enterprises listed on the ASE from 2012 to 2023 will clarify whether the presence of auditors with forensic accounting expertise improves performance. Businesses can enhance the quality of financial reporting and reduce fraud by fostering client confidence and delivering precise financial information. This study aims to determine the extent to which external auditors with specific skills in forensic accounting improve their clients' financial outcomes.

2. Literature Review

2.1. Importance of Forensic Accounting in Business Environment

In today's corporate and financial environments, forensic accounting is critical for preventing unethical or unlawful behavior [11]. It combines auditing and accounting knowledge to identify and eliminate fraudulent activities. It addresses the increasing issue of occupational fraud in all economies, particularly during recessions. Empirical research demonstrates the importance of organizations protecting their assets and earnings [12]. Accountants often scrutinize a company's financial records to ascertain gains or losses and subsequently furnish reports that elucidate their findings. Nonetheless, forensic accountants dedicate themselves to investigating financial and accounting crimes, gathering evidence, and compiling reports to explain their conclusions [6]. The ASIC accountant is also in charge of compiling reports on financial crimes and determining who is responsible for their detection [13].

Audits should include extensive forensic accounting processes to reduce the audit expectation gap between auditors and financial statement users [14]. It is critical to have forensic accountants on staff in all departments because they protect the organization from potentially harmful activities and reduce errors, regardless of whether they are intentional [15]. To put it simply, forensic accounting is the use of data from finance, auditing, taxation, and accounting to establish the legitimacy of accountants' professional decisions [16]. Implementing effective forensic accounting and anti-corruption methods is critical for reducing the likelihood of financial misconduct and detecting fraud. Furthermore, forensic accounting services have a considerable impact on the incidence of dubious corporate practices [17, 18]. Forensic accountants improve fraud management and discovery. As a result, forensic accounting has attracted academics, policymakers, and researchers [19].

2.2. Role of Forensic Accounting in the Prevention of Financial Misrepresentation

Auditors and accountants must now be more attentive in checking for signs of fraud, inadequate management, neglect, and other wrongdoing as a result of company failures [20]. It is becoming increasingly critical for auditors and accountants at all levels to identify, detect, and gather evidence of any irregularity or fraud. As a result, combating fraud requires a more comprehensive approach that includes both prevention and detections[21]. Forensic accounting is an essential component of modern detection and prevention techniques. Forensic accounting is a fast-emerging discipline that offers a wide range of services, such as fraud detection, business evaluation, and financial dispute investigation. In Jordan, forensic accounting, a branch of accounting, is still in its early stages [22]. The extent to which academics, students, and professionals grasp this accounting subfield is unknown. A forensic accountant is responsible for determining the underlying reasons for corruption and fraud. As a result, it is critical to identify and investigate fraudulent actions [23, 24]. Moreover, forensic accountants need to possess the necessary qualifications to carry out comprehensive internal and external audits and generate comprehensive reports [25]. In addition to a solid foundation in business operations, auditing, and accounting, forensic accountants must possess a diversified skill set that includes analytical reasoning, creativity, and discernment [23]. It is also important to communicate

well with others. To resolve financial concerns, collecting and scrutinizing audited financial accounts necessitates an investigative technique that evaluates each item [26]. In addition to their ability to examine computerized financial statements, identify conflicts of interest, and investigate cases of financial wrongdoing, they must be extremely diligent and always seek the truth [25].

To evaluate financial documents and understand complex financial issues, forensic accountants must have excellent analytical skills. Computer skills are necessary for effective and timely access to electronic financial Field papers[27]. The ability to arbitrate is required in order to examine financial facts, resolve conflicts, and give legal counsel to [28]. Reports, charts, and maps require strong written communication abilities, whereas expert evidence in court requires outstanding verbal communication skills [29]. A prior study discovered that typical auditing processes were ineffective for identifying and resolving financial issues. Several studies, including those by [30, 31], have highlighted the problems that auditors face in a complex financial system. As demonstrated by Akinbowale and Klingelhöfer [26] forensic accounting and auditing processes in complex financial ecosystems, such as the Amman Stock Exchange or the Jordanian financial sector, may require regulation. Furthermore, studies by Honigsberg [25] demonstrate that forensic accounting enhances auditors' capacity to identify and avert financial crimes. When traditional auditing procedures fail to uncover underlying patterns of wrongdoing, forensic accountants use specialized tools such as financial modeling, data analytics, and investigative approaches [32].

2.3. Theoretical Grounds for Forensic Accounting

2.3.1 The Stewardship theory

According to stewardship theory, managers serve as agents who prioritize the interests of shareholders due to their pro-organizational and collectivistic impulses. Stewardship is critical to improving management, trust, and transparency [33]. For at least two decades, this theory has provided an alternative perspective on the principal-agent dynamic [34]. This theory recasts the government as the agent and society as the principal, with the goal of striking a balance between the two, with the agent's interests taking precedence [35]. The establishment of governmental structures, most notably the disclosure of financial reports by local governments, is the result of principal-agent alignment of interests, which results in wealth maximization [36]. This supports the idea that agents frequently behave as guardians of societal values [37]. Another idea is that stewardship theory provides an organizational perspective rather than an individual one. Responsible organizations can assist society by aligning their objectives and offering additional information to the principal [38-41].

2.3.2 Resources dependency theory

Pfeffer and Salancik [42] first published their resource dependence theory (RDT) in 1978. According to this theory, businesses can increase their profits by using additional inputs, such as staff with specialized talents [42]. RDT scholars have examined a variety of inter-organizational frameworks that can lessen dependence on outside resources. These collaborations can help firms expand their horizons and introduce new products to the market without having to invest a large sum of money in resources or hire specialist personnel [43]. The RDT investigates the impact of external control mechanisms on inter-organizational interactions, as well as leaders' management of authority

and dependency [44]. Organizational leaders use the least restrictive strategies to retain autonomy and stability while minimizing reliance and uncertainty [45]. The RDT manages relationships with business partners to help managers achieve these goals. Various accounting and business procedures make use of RDT. AndHillman, Withers [45] examined the decision-making processes of public organizations from the perspective of resource dependency theory. According to their findings, decision-making processes foster a resource-based worldview and reliance on resources.

Important persons and relationships, according to the Resource Dependency Theory (RDT), are critical for optimizing organizational operations and external communication, expanding access to resources, and boosting corporate performance [46]. As a result, providing personnel with training and growth opportunities in forensic accounting can considerably improve the accuracy of financial reports [47]. If done, this could improve the organization's overall performance by increasing the quality of its audits. Forensic accountants assist in the detection and prevention of financial irregularities, as well as reduce organizational dependence and enhance organizational openness [48-51]. Organizations can improve their economic performance by reducing financial risks, ensuring regulatory compliance, and protecting against financial fraud through the efficient use of forensic accounting capabilities [52]. As a result, this study applies resource dependence theory.

2.4. Role of Forensic Audit Competency of Auditor on the Performance of Firms Being Audited

External auditors are essential in evaluating the precision of a company's financial statements, records, and operations. The auditor fosters a culture of accountability by ensuring that management is responsible for their actions, especially in cases of data manipulation or falsification[53]. Furthermore, the auditor rigorously prohibits misleading accounting techniques and data inflation through the application of accounting standards. When auditors have a higher level of skill and experience, the outcomes for organizations improve significantly [54, 55]. According to studies, board characteristics such as the chairman's term, the frequency of meetings, and the ratio of external members may influence the likelihood of management misbehaviour [56]. This could lead to poor organizational performance and inadequate oversight of managerial operations. The WorldCom incident demonstrated the significance of establishing a clear distinction between management and ownership in an organization [5]. Substantial evidence supports the idea that poor internal controls facilitate fraud. Hegde and Zhou [57] claim that inadequate audit committees and internal controls encouraged criminal conduct. Al-Sartawi [58] They have connected asset theft to inadequate internal controls, defined as insufficient authority and poor departmentalization. KPMG (2013) notes that a lack of job rotation and an inadequate examination of internal controls exacerbate the situation. According to Chen, and Chou [59]the article, weak information technology controls contribute significantly to the occurrence of fraud.

Conventional auditors, who are tasked with providing an objective technical evaluation of an activity's legitimacy, differ significantly from forensic accountants in their roles [60, 61]. When called upon to testify as witnesses, experts, or legal advisors in a courtroom, forensic accountants meticulously explore evidence of wrongdoing and provide an objective assessment of financial concerns [62]. Lenders, shareholders, and investors rely on forensic accounting to provide accurate

and verifiable information, and it also supports regulatory bodies and financial tribunals in their quest for justice. [63, 64]

2.5 Hypothesis Development:

Based on the literature, the following research hypothesis is proposed:

H1: The Forensic accounting capabilities of external Auditors have a positive impact on the financial performance of the firm being audited.

3. Research Design

3.1. Research Model

Based upon the in-depth study of the literature and keeping in view our research hypothesis, the following research model is proposed:

$$ROA_{it} = \alpha + \beta_1 FACA_{it} + \beta_2 Size_{it} + \beta_3 Age_{it} + \beta_4 \frac{D}{E} Ratio_{it} + \epsilon_{it} \dots \dots \dots (1)$$

We gauged the forensic accounting competencies of the firm's external auditor by researching the core competencies of auditing firms and their senior staff and searching their official profiles on their official websites. The AGE variable indicates the company's age from its incorporation date, the market capitalization measure indicates its size, and the debt-to-equity ratio determines its leverage. To prove or disprove our research hypothesis, we examined the company's financial performance using linear regression analysis and the return on assets (ROA) metric.

3.2. Research Sample

For the present study, we unlisted a sample consisting of 78 non-banking financial companies listed on the Amman Stock Exchange (ASE); based on the annual financial results of these companies from 2012 to 2023, the final sample came to 921, observations for each of the variables considered for the present research. For two reasons, we decided against examining the non-banking financial sector. The sector stands out due to its unique regulatory and accounting standards. Furthermore, we shall deepen our understanding of the dynamics between auditors of auditee firms and external auditors possessing forensic accounting expertise by narrowing our research focus to the non-banking financial sector. In order to ascertain the reliability and caliber of the data collected from the industrial and service sectors, we undertook a thorough analysis. We analyzed characteristics including completeness, consistency, and availability throughout the study period spanning from 2012 to 2023.

3.3. Measurements of Selected Variable

One can assess an enterprise's financial viability using a variety of analytical methodologies. Ahmad, Masri [65] The return on assets (ROA) metric was developed in this study to determine the average yield on a corporation's assets. A competency level of 1 indicates that the external auditor has the fundamental knowledge and expertise, whereas a level of 0 indicates a lack of such qualifications. In accordance with prior research, this analysis accounts for the debt-to-equity ratio, company size, and tenure of the firm. Ren and Eisingerich [66] contend that the operational history and listing duration of a company are reliable indicators of its age. Pfeffer [67] proposed a method

for estimating the extent of a business by employing total assets as a metric. Abdulrahman [68] Suggests an alternative approach to determining the D/E ratio: divide the total debt by the total assets. For this purpose, we used STATA 17 software for statistical analysis.

4. Results and Discussion

4.1. Descriptive Statistics

Table 1 presents the descriptive statistics for the five variables contained within the dataset. It contains 921 observations pertaining to both dependent and independent variables of 78 non-banking financial companies listed on ASE. The average positive financial performance of firms in this dataset is approximately 0.183. This data demonstrates high variability, with a standard deviation of 0.877. The recorded data clearly indicates that the financial performance of specific enterprises is either above or below the average, ranging from -7.543 to 4.033.

Table 1. Results of Descriptive Statistics

Variable	Number of Observations	Mean of Sample	Standard Deviation of Sample	Min	Max
FinPer	921	0.183	0.877	-7.543	4.033
FACA	921	0.772	0.31	0	1
Size	921	21.574	1.343	11.313	18.518
Age	921	25.371	15.759	2.64	72.127
D/E-Ratio	921	30.791	20.356	0	0.905

Source: Present Research 1

The FACA, denoting the Forensic Accounting capabilities of the external auditors, demonstrates minimal variability within the dataset, presenting an average value of roughly 0.772 and a modest standard deviation of 0.310. This is a result of the binary structure. The standard deviation of 1.343 indicates a moderate level of variability, with an average firm size of approximately 21.574. The majority of organizations appear to have an average size that equals their total. The average age of the firm is 25.371 years, with a standard deviation of 15.759, indicating a high degree of age variability among enterprises. The dataset demonstrates high variability in D/E ratio levels, with a standard deviation of 20.356 and a mean of approximately 30.791.

4.2 Results of the Multicollinearity Tests.

Table 2 shows the five independent variables and their respective variance inflation factors (VIFs). The table provides further information about the dataset's multicollinearity, including the mean-variance inflation factor (VIF). Multicollinearity among independent variables might undermine the reliability and accuracy of regression results [69]. This study uses VIF in its regression analysis. Elevated VIF values indicate multicollinearity, while a value of one indicates the absence of a multicollinearity [69, 70]. Table 2's VIF values show that the independent variables do not exhibit considerable multicollinearity.

Table 2. Results of VIF

Independent variables	VIF
FACA	1.103
D/E-Ratio	1.897
Size	1.276
Age	1.089
Mean VIF	1.341

Source: Present Research

Table 3 contains the matrix that elucidates the correlations among the variables. By examining the interplay between two variables, one can evaluate both the direction and magnitude of any linear relationship. A zero value clearly indicates a lack of connection; one value indicates a complete negative correlation, and two values indicate a flawless positive correlation. Table 3 delineates a spectrum extending from -1 to 1.

Table 3. Correlation Matrix

Variables	FinPer	FACA	Size	Age	D/E-Ratio
FinPer	1				
FACA	0.213	1			
Size	0.331	0.301	1		
Age	0.009	-0.221	0.293	1	
D/E-Ratio	-1.678	0.31	0.411	0.211	1

Source: Present Research

After evaluating Tables 2 and 3, we discovered no evidence of collinearity among the variables under consideration. This allows for a more accurate assessment of the correlations between the variables, confirming the reliability and authenticity of our research.

4.3 Results of the Regression Analysis

Table 4 provides the results of the multiple linear regression. It is a standard approach for individuals to illustrate the connection between a dependent variable and various independent factors [71]. The multiple linear regression analysis of the dataset demonstrated that the combinations of parameters significantly affected the financial performance of the companies. There is a positive relationship between cumulative FACA, company size, firm age, and financial success. The negative coefficient of the debt-to-equity (D/E) ratio suggests that higher ratios are associated with poor financial performance. As businesses grow, the model may explain most of the variation in their financial results.

Table 4. Results of The Linear Regression Analysis

Firm Financial Performanc	Coef.	Standard Error	t-value	p-value	95 % C.I	Interval]	Sig
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e							
FACA	0.313	0.201	1.781	0.053	0.003	0.61	**
D/E ratio	-0.021	0.003	-8.663	0	−0.018	−0.023	***
Age	0.029	0.002	1.961	0.041	0	0.004	**
Size	0.301	0.029	8.036	0	0.231	0.306	***
Constant	-2.991	0.491	-5.964	0	−5.031	-3.015	***
Mean dependent variables		0.211		SD dependent var		0.891	
R-squared		0.317		Number of observations		928	
F-test		10.781		Prob > F		0	
Akaike crit. (AIC)		1921.234		Bayesian crit. (BIC)		1752.694	
***p < 0.01, **p < 0.05, *p < 0.1.							

Source: Present Research

Independent variables that influence financial performance include company size, age, FACA, and the debt-to-equity ratio (D/E ratio); they account for the variance in performance (R-squared = 0.317). This might explain around 31.7% of the variation. Powerful evidence implies that the model can explain a significant percentage of the temporal variation in corporate financial performance >>>>>>64]. We use the F test, as suggested by Greenland, Senn [72], to assess the regression model's overall significance. The regression model's likelihood (prob > F) is 0.000, with an F-statistic of 10.781. Statistics strongly support the full regression model, which has a p-value of less than 0.001. Including FACA, firm age, company size, and the D/E ratio as independent variables increases the model's ability to explain variations in corporate financial performance. The outcomes of the analysis establish whether the study's hypotheses are correct or not. We test the hypothesis in this study by examining the p-values associated with the independent variable coefficients. The study's FACA p-value of 0.053 shows that there is no statistical significance within the 95% confidence interval. All signs indicate that the investigation's working theory is correct. Several prior studies reached similar outcomes [73-75]. The size and age of a company positively correlate with ROA, while a high debt-to-equity ratio negatively correlates. Professional external auditors who specialize in forensic accounting can assist a company in increasing its ROI. The findings support the study's fundamental hypothesis, which claims that external auditors' forensic accounting skills improve clients' financial success.

5. Conclusions

Return on assets (ROA) correlated positively with business size and age while demonstrating a negative correlation with a high debt-to-equity ratio. Specialized external auditors in forensic accounting can enhance a company's return on investment. The findings corroborate the study's primary hypothesis that the forensic accounting expertise of external auditors enhances the financial

performance of client businesses.

This study found that using auditors with forensic accounting knowledge considerably enhanced a company's financial performance. If auditors have forensic accounting skills, they can help reduce the negative effects of financial statement fraud and manipulation on a company's profits. The report stresses the need to hire skilled forensic accounting auditors to reduce possible losses and increase asset returns. Furthermore, their presence may enhance the working environment, boost productivity, and address additional concerns. Because forensic accounting is a new discipline, few scholars have studied it. This study contributes to the existing research on forensic accounting skills, specifically focusing on Jordan. The authors of the study assert that its findings will influence forthcoming forensic accounting regulations. The survey underscores the imperative for forensic accountants to assist Jordanian clients in enhancing their financial situations. This article analyses the influence of forensic accountants on policy, practice, and philosophy. The study advocates for the integration of forensic accounting into business audits to enhance financial performance and mitigate fraud and mismanagement. These audits may signify improved financial management and transparency, thereby affecting stakeholders' and investors' investment decisions.

The study's findings are critical to the advancement of accountants and auditors. To preserve a competitive advantage and constantly supply crucial services to clients, they may want to concentrate on improving their forensic accounting skills. This study extends the theoretical understanding of forensic accounting and contributes to the present body of knowledge by illustrating how the discipline improves financial performance. The findings highlight the importance of enhancing future accountant training and education by incorporating forensic accounting principles into university accounting courses. The findings support the Resource Dependency Theory (RDT), which asserts that a company's expansion is impossible without external resources. Strategic debt-to-equity ratios improve financial performance, provide businesses with a competitive advantage, and build financial acumen and risk management expertise when they use external resources. The study supports the Resource Dependency Theory by providing specific data on how businesses manage their reliance on external resources, notably in terms of forensic accounting expertise.

5.1 Limitations of the Study

The study identifies several constraints that limit the generalizability of its findings. Cases requiring more complicated forensic accounting procedures may not benefit from the study's findings, as forensic accounting is clearly in its early stages in Jordan. The lack of relevant professional associations and experienced forensic accountants in Jordan may have hampered the study's use of forensic accounting. The study's focus on these firms may limit its applicability to corporations not listed on the Amman Stock Exchange or other economic sectors. It is critical to acknowledge the study's significant limitations. Because the profession was still in its early stages, several auditors in poor countries, such as Jordan, first misjudged forensic accounting's tremendous potential. Another issue is the scarcity of organizations dedicated to forensic accounting, such as ACFE and ACFA. The lack of forensic accountants with this degree is the fourth reason for the insufficiency of forensic accounting knowledge. Future research should look into the impact of the banking industry on

forensic accounting personnel's numbers. The impact of forensic accounting on Jordan's market economy is worth further examination. If Jordan views forensic accounting to be a genuine profession, future studies should focus on this area.

5.2 The Practical Implications

To fully realize the relevance of our study's findings, one must first understand Jordan's financial ecosystem, namely the Amman Stock Exchange. External auditors with forensic accounting knowledge are required in this case. Based on the results of the study, it is recommended that the auditors should have reasonable forensic accounting credentials. This would result in enhanced investor confidence and more severe financial reporting regulations. Legislative actions could help develop forensic accounting certification programs by standardizing the competencies expected of auditors in this field. Forensic accounting is becoming more popular among firms, accountants, and academic institutions, with certain government agencies supporting campaigns to raise understanding.

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