



The impact of digital fraud on financial performance in Egyptian commercial banks

By

Dr. Rania Sultan Mohamed Abd El-Hamid

Assistant professor of Accounting, College of Business Administration,

Taif University, Saudi Arabia.

Lecturer of Accounting and Auditing at M.E.T ACADEMY, Mansoura

rania.s@tu.edu.sa

Scientific Journal for Financial and Commercial Studies and Research (SJFCSR)

Faculty of Commerce – Damietta University Vol.7, No.1, Part 1., January 2026

APA Citation

Abd El-Hamid, R. S. M. (2026). The impact of digital fraud on financial performance in Egyptian commercial banks, *Scientific Journal for Financial and Commercial Studies and Research*, Faculty of Commerce, Damietta University, 7(1)1, 381-404.

Website: https://cfdj.journals.ekb.eg/

The impact of digital fraud on financial performance in Egyptian commercial banks

Dr. Rania Sultan Mohamed Abd El-Hamid

Abstract

The study aimed to identify the impact of digital fraud on financial performance in Egyptian commercial banks. The study relied on the descriptive approach and used the simple random sampling method in collecting study data. The size of the study sample individuals was 450 individuals working in Egyptian commercial banks. The study reached a set of results, including the high level of financial fraud occurring in Egyptian commercial banks, as well as the high level of financial performance in Egyptian commercial banks and the presence of a statistically significant reverse effect of financial fraud on financial performance in Egyptian commercial banks. It was found that there were differences in the level of response of the study sample individuals towards the impact of financial fraud on financial performance attributed to demographic variables

Keywords: digital fraud - financial performance - Egyptian commercial banks

Introduction:

Fraud is one of the most advanced crimes and is in line with the progress of human societies, which is usually accompanied by many successive changes in various political, social and economic fields, and which greatly influence the behaviour of members of society. Technological development, the information revolution, and technical progress have made the world a single global village. Globalization, with its various trends, ideas, and theories, has linked the countries of the world within a single economic and financial framework, which has consequently affected their political, social, and cultural situations. This was evident in the global financial crisis that struck all banks and global financial markets with its forces and affected all parts of the world. All of this was fertile ground for the emergence of new types of crimes and criminals, who exploit the fruits of scientific progress, benefit from the collapse of banks, the turmoil of financial markets, and seize the opportunity of individuals' natural fear of depositing their money in banks for fear of their bankruptcy, and their hesitation to invest in stock markets to avoid the losses of their collapse (Karpoff, 2021).

Banks play an important role in the economic development of every country, as they control a large part of the money supply in circulation. Commercial banks are one of the most important financial intermediaries in the economy. They are an intermediary between the owners of the deficit and the financial surplus. When conducting these transactions, they try to achieve the maximum return within an acceptable level of risk, as their activity is based mainly on accepting deposits and granting credit. Bank financial performance evaluation processes are of great importance in most economic systems, due to the scarcity of resources compared to needs. Therefore, one of the most prominent challenges that bank managers may face is how to optimally use the available financial resources (Adeusi et al, 2014). The methodology of evaluating financial performance is evident in providing financial information to all relevant parties in order to try to identify the most prominent strengths and weaknesses. Financial indicators are one of the most prominent analytical tools used and commonly used in the processes of evaluating the overall and partial performance of all organizations. This is done through a temporal comparison of the financial indicators of the same economic unit during a specific period of time, or through comparison with the industry standard for similar or similar economic units in the type of activity. The steady increase in banking development has led to the inevitability of the availability of a comprehensive evaluation system for the banking sector (Uwuigbe & Fakile, 2012).

Digital fraud can cause significant financial losses to Egyptian banks as a result of fraud and forgery and may lead to a deterioration in the confidence of customers and other financial institutions in banks, which negatively affects their reputation and ability to attract deposits. Detecting and addressing fraud cases requires significant efforts and financial costs for banks, which affects their financial performance, and may affect the stability of Egyptian banks and increase their financial risks, which may affect their overall performance. Banks' failure to combat digital fraud may affect their ability to comply with financial control laws and regulations. To prevent fraud, Egyptian banks may require additional costs to secure their activities, which affects the cost of operations and financial performance. In the face of these challenges, commercial banks in Egypt need to take effective preventive measures such as improving security systems, enhancing cybersecurity awareness among employees and customers, and investing in modern anti-fraud technologies. Therefore, understanding the

dimensions of digital fraud and its impact on the financial performance of commercial banks in Egypt is vital to maintaining the stability of the banking sector and the integrity of financial transactions. Therefore, this study came to identify the impact of digital fraud on financial performance with application to commercial banks in Egypt (Hegazy, 2014).

Problem statement:

Studying the impact of digital fraud on the financial performance of commercial banks in Egypt is a complex, important and complicated topic. Therefore, the problem of the study is represented in the main question: What is the impact of digital fraud on the financial performance of commercial banks in Egypt?

Study Questions:

The study questions are as follows:

- 1. What is the level of digital fraud in Egyptian commercial banks?
- 2. What is the level of financial performance of Egyptian commercial banks?
- 3. What is the impact of digital fraud on financial performance in Egyptian commercial banks?
- 4. Are there statistically significant differences between the response of the study sample members towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to demographic variables?

Objectives of the study:

The objectives of the study are the following:

- 1. Identifying the level of digital fraud in Egyptian commercial banks
- 2. Identifying the level of financial performance of Egyptian commercial banks
- 3. Identifying the impact of digital fraud on financial performance in Egyptian commercial banks
- 4. Studying the statistically significant differences between the response of the study sample members towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to demographic variables.

Study hypotheses

- 1. There is a statistically significant impact of digital fraud on financial performance in Egyptian commercial banks
- 2. There are statistically significant differences between the response of the study sample members towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to demographic variables

Research importance and justification:

1.1 Scientific importance:

- Research on the impact of digital fraud contributes to understanding how technology has evolved and the methods used by fraudsters to carry out their fraudulent activities.
- Scientific research can contribute to improving banks' security and protection strategies to prevent digital fraud.
- Scientific research can contribute to developing technological and innovative solutions to combat digital fraud more effectively.

1.2. Practical importance:

- Understanding the impact of digital fraud can help banks improve their financial performance and provide safer services to customers.
- Teaching banks about the negative effects of digital fraud can help protect customers and banks from financial losses.
- Understanding the impact of digital fraud may help banks comply with financial legislation and enhance their reputation in the market.

study concepts:

Digital fraud concept:

Digital fraud is a type of fraud carried out using digital technology, such as the Internet, smartphones, and email, to obtain sensitive personal information or to access money illegally. Digital fraud relies on exploiting weaknesses in electronic security systems or deceiving individuals to reach its fraudulent goals (Mondal & Ghosh, 2012).

The concept of financial performance:

Financial performance is defined as: the extent to which the economic unit is able to achieve its financial goal or goals using the least possible resources and costs. Financial performance is represented in the extent to which the economic unit is able to control and achieve the desired financial balance, as well as trying to provide the necessary liquidity to pay obligations, and finally working to achieve return rates at relatively low costs (Surroca et al, 2010).

The concept of commercial banks:

Commercial banks are defined as: monetary institutions that accept deposits from individuals or institutions and are at the disposal of the depositor at any time he wishes, according to the agreed period. Due to this feature, they are called deposit banks and these banks come in second place after the central bank. These two types of banks form the backbone of the banking system of any country (Qin & Pastory, 2012),

Study Limits:

- Objective Limits: This study will be conducted to show the impact of digital fraud on the financial performance of commercial banks in Egypt,
- Human Limits: This study will be applied to a sample of commercial banks in Egypt.
- Spatial Limits: The study will be conducted on commercial banks in Egypt.
- Temporal Limits: This study will be conducted in 2024

THEORETICAL FRAMEWORK

First topic: Digital fraud

Digital fraud concept

Leukfeldt et al (2013) defined it as a general term for all forms of crime in which information and communication technology plays a major role, and within this definition they provided a list of 28 crimes ranging from hacking digital systems, installing spyware to fraud using online banking services and virtual stalking (Al-Ramamanah, 2020).

Digital fraud is defined as fraud that is the act of seizing money belonging to another person by deceiving him and getting him to hand over that money through the use of deceptive means (Akinwale et al, 2022).

Digital fraud is defined as the seizure or possession of someone else's money through deceptive means that results in receiving that money via computers (Abdul Wahab, 2020).

Second: Causes and types of digital fraud

Digital fraud can be caused by a variety of factors, including the chances that the digital age gives for fraudsters to obtain sensitive information and money. Here are some common causes of digital fraud (Lertsatitpirote & Kanyajit, 2023):

- 1. Desire for financial gain: The primary purpose of many digital frauds is to fraudulently obtain funds from individuals or institutions.
- 2. Easy access to technology: Technological advancements and broad Internet use have made digital fraud easier and more accessible to fraudsters.
- 3. Lack of security awareness: Individuals and institutions may be more exposed to fraud if they are unaware of the risks of digital fraud and how to prevent it.
- 4. Financial and economic pressure: In some circumstances, financial pressure can drive someone to engage in fraudulent acts in order to obtain money.
- 5. Rapid technological development: Rapid technological advancements can open up new opportunities for fraudsters to exploit.

The following are some common forms of digital fraud (Sadeghpour & Vlajic, 2021):

- 1. Phishing is the use of bogus emails to deceive people into disclosing critical information.
- 2. Malware: This category includes dangerous programs like viruses and spyware that are designed to steal information or damage computer systems.
- 3. Smashing is a sort of fraud that occurs through text messages on smartphones.
- 4. Social media fraud refers to the exploitation of social media to influence people and steal their information.
- 5. Spoofing: Falsifying websites or email addresses to appear to be an authentic identity.

The impact of digital fraud on individuals and institutions

Digital fraud is a huge concern to enterprises in the digital era since it may result in significant financial losses and harm a company's brand. Some examples of digital fraud and its impact on organizations include (Donning et al, 2019):

- 1. Data breach and cyber-attack: Attackers can gain access to an organization's networks and steal sensitive data such as customer or employee information, resulting in a loss of confidence and affecting consumer relationships.
- 2. Email phishing: This is the use of bogus emails to trick employees and consumers into disclosing sensitive information or leaking financial data.
- 3. Online financial fraud comprises defrauding online payment systems and altering financial information in order to get money illegally.
 - 4. Identity theft and cyber fraud: Attackers can use the internet to fake their identities in order to carry out fraudulent operations against the organization or its members.
 - 5. The impact of digital fraud on reputation and trust: Digital fraud can lead to a decline in the organization's reputation and loss of trust from customers and business partners (Offiong, 2023).

Second topic: Financial Performance

First: Concept of financial performance of banks

Financial performance refers to the bank's ability to optimally utilize its financial resources at the lowest possible cost and generate profits by providing various banking services and invested funds, and to provide the necessary liquidity to pay its obligations (Adam, 2014).

Financial performance refers to a practical process through which a set of quantitative and qualitative criteria or indicators are derived about the activity of any economic project that contributes to determining the importance of the operational and financial activities of the project through information extracted from financial statements and reports and other sources in order to use these indicators in evaluating the financial performance of establishments. Financial performance depends on studying the past and financial analysis to predict the possibility of the bank achieving the goals it seeks in the future (Uwuigbe & Fakile, 2012).

Second: The importance of evaluating the financial performance of banks:

The importance of evaluating the financial performance of banks is as follows (Mahmoudabadi & Emrouznejad, 2019):

- 1. Profitability assessment: The goal of profitability assessment is to maximize the value of the facility and maximize shareholders' wealth.
- 2. Liquidity assessment: Liquidity assessment helps identify the facility's position and improve the facility's ability to meet its obligations and pay them on time.
- 3. Activity development assessment: The goal of activity assessment is to identify how the facility distributes its financial resources and how to invest them.
- 4. Financial leverage assessment: This aims to identify the size of the debt and the extent to which the facility relies on external sources of financing to obtain funds.
- 5. Establishment size development assessment: The establishment's size development is assessed in order to achieve advantages with different economic dimensions and improve the overall capacity of the facilities.
- 6. Dividend distribution assessment: It enables stakeholders to know the policy followed by the facility in distributing its profits.

Third: Stages of evaluating bank financial performance:

The stages of evaluating the financial performance of banks are as follows (Zaidi, 2015):

1. Collecting the necessary information. Information is a basic resource in the management process at all levels. There can be no planning without information, no decision-making without information, and no control without information. Information is essential in management. However, the availability of information is not enough. Rather, the institution must obtain it with high quality and at the appropriate times. Information, in addition to its importance in evaluating performance, is one of the various types of means that the institution resorts to in order to improve its economic performance, obtain competitive advantages, and achieve sustainable competitiveness for the institution.

- 2. Measuring actual performance: This is the second stage of the evaluation process, through which the institution can measure its efficiency and effectiveness. The obstacle that can be faced at this stage is: What are the standards and indicators that are resorted to? The institution faces the problem of choosing the standards and indicators that are compatible with the nature of the performance to be measured. Performance measurement is the process that provides the institution's officials with numerical values regarding its performance based on the standards of effectiveness and efficiency (Rao & Kumar, 2013).
- 3. Comparing actual performance with desired performance levels: After the institution has completed the actual performance measurement stage, it proceeds to the next stage, which is comparing its achieved performance with the desired performance. The obstacle facing the institution at this stage is the reference on which it relies in the comparison process. In general, the following elements are determined as references for performance comparison: time, performance of other units, goals, standards. 4. Studying the deviation and issuing a judgment. The comparison process reveals three points: positive deviation, negative deviation, and zero deviation. The first is in favor of the institution, such as increased profits, increased market share, and decreased costs... The second deviation is against the institution. The third deviation has no effect on the institution's results. In fact, the analysis process enables the institution to know the source of its performance, whether it is internal or external performance. A good judgment on performance must be based on analyzing the performance or phenomenon until reaching its effects (Sharma et al, 2016).

Applied framework

Study Approach:

This study uses the descriptive approach as an appropriate approach for the phenomenon under study, and analyzes the impact of digital fraud on financial performance by applying it to commercial banks in Egypt, in addition to collecting the data and information required from the current study using the questionnaire tool, the tool also includes a set of questions and measures as a translation of the study objectives.

Data Analysis

The research used the SPSS statistical program to analyse the study data through the following statistical methods:

- Alpha Cronbach coefficient to calculate the level of stability of the study tool
- Pearson correlation coefficient to determine the level of internal consistency and validity of the study tool and to identify the relationship between the study variables
- Ratios and frequencies to describe the characteristics of the study sample
- mean and standard deviation to describe the level of response of the study sample individuals to the study tool statements
- Simple linear regression equation to measure the effect between the study variables
- t-test and ANOVA test to test the differences attributed to demographic variables

Study population and sample:

The study population consists of Employees in Egyptian commercial banks and as a result of the difficulty of conducting a comprehensive inventory of all members of the study community; the study used the sampling method by selecting a simple random sample of these workers and the study distributed the link on social networking sites, e-mail and the means of communication used by Employees in Egyptian commercial banks and the answered the questionnaire was £0. individuals

Study tool

The research will use the electronic questionnaire form as a tool for the field study by preparing the questionnaire and its axes and phrases by using the theoretical framework of the study, previous studies related to the subject of the study. The five-degree Likert scale was used in answering the questions of the study tool

Table (1) Likert scale correction method

Scaling	Strongly	Agree	Neutral	Disagree	Strongly
	agree				disagree
Weight	5	4	3	2	1
mean value	4.20-5	3.4-4.19	2.6-3.39	1.8-2.59	1-179
Level of impact degree	Very High	High	Medium	Low	Very Low

Validate the study tool

The validity of the questionnaire was verified by calculating the correlation coefficients to determine the extent of the internal homogeneity of the study tool:

The digital fraud axes:

Table (2) Correlation phrase digital fraud

Phrases	Correlation coefficient	P-value
Digital fraud contributes to the loss of a lot of money and exposes individuals and companies to great losses	0.591**	0.000
Digital fraud is considered one of the negatives of digital transformation and information technology	0.511**	0.000
Technological development has contributed to increasing the rates of digital fraud	0.580**	0.000
The images and forms of digital fraud on individuals and companies have increased During the past period	0.560**	0.000
Banks and financial institutions suffer from the spread of digital fraud images	0.591**	0.000
Banks and financial institutions are interested in taking the necessary precautions to confront digital fraud	0.584**	0.000
Digital fraud works to use advanced tools to encrypt sensitive data and breach security systems	0.534**	0.000
Digital fraud hacks networks and collects and encrypts data through modern technological techniques	0.615**	0.000
Digital fraud works to use sensing programs to obtain individuals' data and their bank accounts	0.657**	0.000
Banks and financial institutions work to educate individuals and employees about the images and forms of digital fraud through media and advertising	0.712**	0.000
Banks and financial institutions are interested in providing programs and training courses for employees to increase their ability to confront digital fraud	0.642**	0.000
Banks and financial institutions work to provide modern technological devices and equipment to confront digital fraud	0.618**	0.000

^{**.} Correlation is significant at the 0.01 level (2-tailed).

It is clear from the previous table No. (2) that all values of Pearson's correlation coefficients between the score of each statement and the total score to digital fraud axes were statistically significant at the level (0.01), which means that the high level of validity of the statement's digital fraud axes, indicates that the statements digital fraud axes are valid for application to achieve the objectives of the study.

The financial performance axes:

Table (3) Correlation phrase financial performance

Phrases	Correlation	P-value
	coefficient	
Financial performance contributes to making executive and	0.770**	0.000
operational decisions within the bank		
Financial performance contributes to raising the efficiency of	0.829**	0.000
the bank's performance		
Financial performance helps develop the bank's business	0.769**	0.000
Financial performance helps develop the bank's capabilities for	0.764**	0.000
sound planning that helps achieve the highest possible		
productivity rates		
Financial performance contributes to setting clear goals that	0.770**	0.000
can be implemented within a specific period of time		
Financial performance increases the bank's ability to adapt	0.758**	0.000
with all the local and global economic and financial changes		
The quality of financial performance helps reduce the risks to	0.744**	0.000
which the bank is exposed		

**. Correlation is significant at the 0.01 level (2-tailed).

It is clear from the previous table No. ($^{\circ}$) that all values of Pearson's correlation coefficients between the score of each statement and the total score to financial performance axes were statistically significant at the level (0.01), which means that the high level of validity of the statement's financial performance axes, indicates that the statements financial performance axes are valid for application to achieve the objectives of the study.

Reliability study tool

Table (4) Reliability questionnaire

dimension	Alpha	number of
	Cronbach	elements
digital fraud	0.833	12
financial performance	0.884	7
Total questionnaire	0.896	19

Table (\$\dark{\psi}\$) shows the results on the reliability of the study tool used. A reliability analysis was conducted to ensure that the survey tool consistently measures the intended constructions. The results include Cronbach's alpha values for each variable. These values indicate the internal consistency of the variables, with higher values indicating greater reliability and showing a higher level of reliability of the tool used in the study and confirming its validity to achieve the purposes and objectives of the study.

Demographic variables:

Gender: The individuals of the study sample were divided into male 74.7 % and female 25.3% of the study sample, which shows that most of the study sample members are male

Table (5) sample according to gender

Categories	N	%
Male	336	74.7
female	114	25.3
Total	450	100

Age: The individuals of the study sample were divided into Less than 30 years old 20%, From 30 to less than 40 years old 40%, From 40 to less than 50 years old 23.3 % and 50 and over 16.7% which shows that most of the study sample members are from 30 to less than 40 years old

Table (6) sample according to age

Categories	N	%
Less than 30 years old	90	20
From 30 to less than 40 years old	180	40
From 40 to less than 50 years old	105	23.3
50 and over	75	16.7
Total	450	100

Academic qualification: The individuals of the study sample were divided into High school 8 %, Bachelor 43.3 %, Master 26.8 %, and PhD 22 % which shows that most of the study sample members are Bachelor

Table (V) sample according to Academic qualification

Categories	N	%
High school	36	8.0
Bachelor	195	43.3
Master	120	26.7
PhD	99	22.0
Total	450	100

Duration of work experience: The individuals of the study sample were divided into Less than 5 year 22.7 %, From 5 years to less than 10 years 48%, From 10 years to less than 15 years 17.3%, and 15 years and over 12% which shows that most of the study sample members are from 5 years to less than 10 years

Table (8) sample according to Duration of work experience

Categories	N	%
Less than 5 years	102	22.7
From 5 years to less than 10 years	216	48.0
From 10 years to less than 15 years	78	17.3
15 years and over	54	12.0
Total	450	100

The variables of study

The digital fraud axes:

Table (9) Phrases of the digital fraud axes

N.	Phrase	Mean	S. D	Degree	Arrangement
1	Digital fraud contributes to the loss of a lot of money and exposes individuals and companies to great losses	4.387	0.715	High	3
2	Digital fraud is considered one of the negatives of digital transformation and information technology	4.440	0.702	High	2
3	Technological development has contributed to increasing the rates of digital fraud	3.773	0.953	High	10
4	The images and forms of digital fraud on individuals and companies have increased During the past period	3.853	0.940	High	9
5	Banks and financial institutions suffer from the spread of digital fraud images	4.600	0.545	High	1
6	Banks and financial institutions are interested in taking the necessary precautions to confront digital fraud	4.400	0.637	High	2
7	Digital fraud works to use advanced tools to encrypt sensitive data and breach security systems	4.267	0.684	High	5
8	Digital fraud hacks networks and collects and encrypts data through modern technological techniques	4.347	0.893	High	4
9	Digital fraud works to use sensing programs to obtain individuals' data and their bank accounts	4.147	0.896	High	8
10	Banks and financial institutions work to educate individuals and employees about the images and forms of digital fraud through media and advertising	4.227	0.798	High	6
11	Banks and financial institutions are interested in providing programs and training courses for employees to increase their ability to confront digital fraud	4.160	0.717	High	7
12	Banks and financial institutions work to provide modern technological devices and equipment to confront digital fraud	4.147	0.748	High	8

The phrases of the digital fraud were arranged in terms of the degree of relative importance. It was found that the phrase (Banks and financial institutions suffer from the spread of digital fraud images) is the most important phrase with a value of 4.600 and a standard deviation of 0.545 and a high degree of agreement, While the phrase (Technological development has contributed to increasing the rates of digital fraud) was the least important phrase with a value of 3.773 and a standard deviation of 0.953 and a high degree of agreement

When studying the phrases of the digital fraud, it was found all expression were the high degree of agreement, and it shows the high level of the digital fraud in Egyptian commercial banks where mean is 4.229 and S.D 0.769

The financial performance axes:

Table (1.) Phrases of the financial performance axes

				Τ	
N.	Phrase	Mean	S. D	Degree	Arrangement
1	Financial performance contributes to making executive and operational decisions within the bank	4.173	0.795	High	2
2	Financial performance contributes to raising the efficiency of the bank's performance	4.253	0.639	High	1
3	Financial performance helps develop the bank's business	4.120	0.788	High	3
4	Financial performance helps develop the bank's capabilities for sound planning that helps achieve the highest possible productivity rates	4.000	0.753	High	5
5	Financial performance contributes to setting clear goals that can be implemented within a specific period of time	3.987	0.814	High	6
6	Financial performance increases the bank's ability to adapt with all the local and global economic and financial changes	4.040	0.761	High	4
7	The quality of financial performance helps reduce the risks to which the bank is exposed	3.947	0.787	High	7

The phrases of the financial performance were arranged in terms of the degree of relative importance. It was found that the phrase (Financial performance contributes to raising the efficiency of the bank's performance) is the most important phrase with a value of 4.253 and a standard deviation of 0.639 and a high degree of agreement, While the phrase (The quality of financial performance helps reduce the risks to which the bank is exposed) was the least important phrase with a value of 3.947 and a standard deviation of 0.787 and a high degree of agreement

When studying the phrases of the financial performance, it was found all expression were the high degree of agreement, and it shows the high level of the financial performance in Egyptian commercial banks where mean is 4.074 and $8.D\ 0.762$

Test Research Hypotheses:

The first hypothesis: There is a statistically significant impact of digital fraud on financial performance in Egyptian commercial banks

Table (11) the impact of the digital fraud on financial performance in Egyptian commercial banks

В	R ²	r	T	F	P-VALUE
- 0.450	0.369	0.607	6.529**	42.623**	0.000

In table (11) negative correlation between digital fraud on financial performance and Egyptian commercial banks at 0.01, the simple regression equation was significant at the level of 0.01, It was found that the independent variable (digital fraud) explains 36.9% of the changes that occur in the dependent variable (financial performance) and There is a statistically significant negative impact of the digital fraud on financial performance in Egyptian commercial banks, it is correct the first hypothesis it turned out that the more it increased digital fraud level 1% is the financial performance in Egyptian commercial banks level has decreased 0.450%

The second hypothesis There are statistically significant differences between the response of the study sample members towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to demographic variables

Table (\ \ \ \) Test of differences attributable to the gender variable

Categories	N	mean	T	Sig
Male	336	128.707	6.239	0.000
female	114	122.773		

There were statistically significant differences in the response of the study sample individuals towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to the gender variable at a significance level of 0.05, and the differences were in Favor of males, which indicates that they are the most aware category of the impact of digital fraud on financial performance in Egyptian commercial banks

Table (13) Test of differences attributable to the (age, educational qualification, number of years of experience) variables

Variables	Categories	N	mean	F	Sig
Age	Less than 30 years old	90	128.750	6.393	0.000
	From 30 to less than 40 years old	180	125.704		
	From 40 to less than 50 years old	105	122.500		
	50 and over	75	124.667		
educational	High school	36	124.483	7.369	0.000
qualification	Bachelor	195	127.385		
	Master	120	129.333		
	PhD	99	132.091		
number of	Less than 5 years	102	125.444	8.269	0.000
years of	From 5 years to less than 10 years	216	123.125		
experience	From 10 years to less than 15 years	78	126.546		
	15 years and over	54	129.750		

There were statistically significant differences in the response of the study sample individuals towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to the age variable at a significance level of 0.05, and the differences were in Favor of Less than 30 years old, which indicates that they are the most aware category of the impact of digital fraud on financial performance in Egyptian commercial banks

There were statistically significant differences in the response of the study sample individuals towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to the educational qualification variable at a significance level of 0.05, and the differences were in Favor of PhD, which indicates that they are the most aware category of the impact of digital fraud on financial performance in Egyptian commercial banks

There were statistically significant differences in the response of the study sample individuals towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to the number of years of experience variable at a significance level of 0.05, and the differences were in Favor of 15 years and over, which indicates that they are the most aware category of the impact of digital fraud on financial performance in Egyptian commercial banks

The above shows the correct of the second hypothesis of the study, as it showed the presence of statistically significant differences in the response of the study sample members towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to demographic variables (gender, age, educational qualification, number of years of experience)

Conclusion

- ✓ The high level of the digital fraud in Egyptian commercial banks where mean is 4.229 and S.D 0.769 Which answers the first question of the study
- ✓ The high level of the financial performance in Egyptian commercial banks where mean is 4.074 and S.D 0.762 Which answers the second question of the study
- ✓ There is a statistically significant negative impact of the digital fraud on financial performance in Egyptian commercial banks, and negative correlation between digital fraud on financial performance and Egyptian commercial banks at 0.01 it is correct the first hypothesis it turned out that the more it increased digital fraud level 1% is the financial performance in Egyptian commercial banks level has decreased 0.450% Which answers the third question of the study
- ✓ There were statistically significant differences in the response of the study sample individuals towards the impact of digital fraud on financial performance in Egyptian commercial banks attributed to (gender, age,

educational qualification, number of years of experience) variables and the correct of the second hypothesis of the study and the differences were in Favor of (male, less than 30 years old, PhD, 15 years and over) Which answers the four questions of the study

Recommendations

- ✓ Work to maintain the distinguished level of use of digital marketing by Palestinian higher education institutions by providing programs and training courses for workers on the use of modern technological methods and means.
- ✓ Work to provide an appropriate, supportive and stimulating technological environment to apply modern technological methods in the marketing process within Palestinian higher education institutions.
- ✓ Focusing on finding solutions to the problems and constraints that reduce the ability of Palestinian higher education institutions to apply digital technology and benefit from available technological resources.
- ✓ Working to provide the capabilities and needs that contribute to increasing the ability of Palestinian higher education institutions to apply digital technology.
- ✓ Focusing on providing methods and means that contribute to increasing the ability of Palestinian higher education institutions to achieve the best possible benefit from all available resources.

List of reference:

- 1. Adam, M. H. M. (2014). Evaluating the Financial Performance of Banks using financial ratios-A case study of Erbil Bank for Investment and Finance. European Journal of Accounting Auditing and Finance Research, 2(6), 162-177.
- 2. Adeusi, S. O., Akeke, N. I., Adebisi, O. S., & Oladunjoye, O. (2014). Risk management and financial performance of banks in Nigeria. *Risk Management*, 6(31), 123-129.
- 3. Adeusi, S. O., Akeke, N. I., Adebisi, O. S., & Oladunjoye, O. (2014). Risk management and financial performance of banks in Nigeria. *Risk Management*, 6(31), 123-129.
- 4. Amjad, R. M., Rafay, A., Arshed, N., Munir, M., & Amjad, M. M. (2022). Non-linear impact of globalization on financial crimes: a case of developing economies. *Journal of Money Laundering Control*, 25(2), 358-375.
- 5. Ben Bouaziz, Asia. Milad, Ben Abdel Aziz. (2022). The crime of financial fraud in the light of information technology, Journal of Financial, Accounting and Administrative Studies, 9 (1).
- 6. DeLiema, M., Deevy, M., Lusardi, A., & Mitchell, O. S. (2020). Financial fraud among older Americans: Evidence and implications. *The Journals of Gerontology: Series B*, 75(4), 861-868.
- 7. Hashim, H. A., Salleh, Z., Shuhaimi, I., & Ismail, N. A. N. (2020). The risk of financial fraud: a management perspective. *Journal of Financial Crime*, 27(4), 1143-1159.
- 8. Hegazy, W. (2014). The Role Of Effective Internal Control On The Detection and Prevention Of Fraud in Egyptian Commercial Banks. التجارة , 34(2), 1-52.
- 9. Hilal, W., Gadsden, S. A., & Yawney, J. (2022). Financial fraud: a review of anomaly detection techniques and recent advances. *Expert systems With applications*, 193, 116429.
- 10. Karpoff, J. M. (2021). The future of financial fraud. *Journal of Corporate Finance*, 66, 101694.
- 11. Karpoff, J. M. (2021). The future of financial fraud. *Journal of Corporate Finance*, 66, 101694.
- 12. Kulmie, D. A., Hilif, M. D., & Hussein, M. S. (2023). Socioeconomic Consequences of Corruption and Financial Crimes. *International Journal of Economics and Financial Issues*, 13(5), 88-95.
- 13. Lokanan, M. E., & Aujla, I. (2021). Mapping the individual and structural theories of financial crimes. Journal of Financial Crime, 28(2), 420-432.

- 14. Mahmoudabadi, M. Z., & Emrouznejad, A. (2019). Comprehensive performance evaluation of banking branches: A three-stage slacks-based measure (SBM) data envelopment analysis. *International Review of Economics & Finance*, 64, 359-376.
- 15. Mondal, A., & Ghosh, S. K. (2012). Intellectual capital and financial performance of Indian banks. *Journal of intellectual capital*, 13(4), 515-530.
- 16. Qin, X., & Pastory, D. (2012). Commercial banks profitability position: The case of Tanzania.
- 17. Rao, S. D., & Kumar, R. P. (2013). Financial performance evaluation of Indian commercial banks during before and after mergers. *Sumedha Journal of Management*, 2(1), 117-129.
- 18. Reurink, A. (2018). Financial fraud: A literature review. *Journal of Economic Surveys*, 32(5), 1292-1325.
- 19. Reurink, A. (2018). Financial fraud: A literature review. *Journal of Economic Surveys*, 32(5), 1292-1325.
- 20. Saddiq, S. A., & Abu Bakar, A. S. (2019). Impact of economic and financial crimes on economic growth in emerging and developing countries: A systematic review. *Journal of Financial Crime*, 26(3), 910-920.
- 21. Sharma, S., Shebalkov, M., & Yukhanaev, A. (2016). Evaluating banks performance using key financial indicators—A quantitative modeling of Russian banks. *The Journal of Developing Areas*, 425-453.
- 22. Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic management journal*, 31(5), 463-490.
- 23. Suwaih, Dhia Zadeh. Boulahit, Shahira. (2019). Electronic Fraud, Journal of Economic and Legal Studies, (4).
- 24. Uwuigbe, O. R., & Fakile, A. S. (2012). The effects of board size on financial performance of banks: A study of listed banks in Nigeria. *International Journal of Economics and Finance*, 4(2), 260-267.
- 25. Uwuigbe, O. R., & Fakile, A. S. (2012). The effects of board size on financial performance of banks: A study of listed banks in Nigeria. *International Journal of Economics and Finance*, 4(2), 260-267.
- 26. Zaidi, Namarian. (2015). Evaluation of the financial performance of commercial banks, a comparative study between the National Bank of Algeria and the Gulf Bank of Algeria (2009-2014), Master's thesis, University of Kasdi Merbah Ouargla Faculty of Economics, Commerce and Management Sciences.

أثر الاحتيال الرقمي على الأداء المالي في البنوك التجارية المصرية

الملخص

هدفت الدراسة إلى تحديد أثر الاحتيال الرقمي على الأداء المالي في البنوك التجارية المصرية، واعتمدت الدراسة على المنهج الوصفي، واستخدمت أسلوب العينة العشوائية البسيطة في جمع بيانات الدراسة، بلغ حجم عينة الدراسة ٥٠ فردًا من العاملين في البنوك التجارية المصرية. توصلت الدراسة إلى مجموعة من النتائج، منها ارتفاع مستوى الاحتيال المالي في البنوك التجارية المصرية، وارتفاع مستوى الأداء المالي فيها، ووجود أثر عكسي ذي دلالة إحصائية للاحتيال المالي على الأداء المالي في البنوك التجارية المصرية. كما تبين وجود فروق في مستوى استجابة أفراد عينة الدراسة تجاه أثر الاحتيال المالي على الأداء المالي ترجع إلى المتغيرات الديموغرافية.

الكلمات الدلالية: الاحتيال الرقمي - الأداء المالي - البنوك التجارية المصرية