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Role of Forensic Accounting in Curbing Creative Accounting Practices—An Empirical Study

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Abstract

Forensic accounting is one of the modern domains of accounting that incorporates special knowledge and a group of skills that are utilized to fight financial corruption and creative accounting, support legal action against such practices and tackle the resulting consequences. The research at hand investigates fundamental perceptions of forensic accounting and discusses methods that forensic accounting uses to detect and curb creative accounting. It also emphasizes the concept of creative accounting, discusses its types and outcomes, and illustrates the techniques of forensic accounting that are used to fight it. A well-structured, five-point Likert style questionnaire was constructed and distributed among a sample of 350 CPAs from the total population of Certified Public Accountants in Mount Lebanon and Beirut Governorates. The researchers used the Statistical Package for Social Sciences (SPSS) to make various statistical tests to analyze the outputs. The research yielded some important findings, mainly that both the integrated and the dimensional audit approaches, which are two forensic accounting methods, lead to curbing creative accounting practices. As a result, the researchers had some recommendations.

Keywords

corruption, creative accounting, financial statements, forensic accounting, fraud

1. Introduction

A number of large companies have collapsed at the beginning of 2002 such as WorldCom, Parmalat, Enron, Credit Swiss, and others. Besides, there was an increase in the number of bankruptcies and financial crises. Furthermore, the auditing firms were accused of manipulating the companies' accounts utilizing certain accounting methods and policies which misrepresent the accounting information. Considering the prevailing conditions in the business world, a lot of corporate managements try to "beautify" their financial statements to improve their financial situations whether it is in profits or financial positions. These managements usually resort to creative accounting practices taking advantage of the existence of varied accounting alternatives in preparing financial statements such as the International Accounting Standards and International Financial Reporting Standards, which negatively affects the credibility and reliability of these financial statements on one hand and causes an increase in the rate of law-suits on the other hand. From all this arises the urgent need for experts or accounting advisors who can use their expertise, skills and investigations to give their opinion about law-suits relative to fraud and misrepresentation of financial statements. This came to be known as forensic accounting, which is presently the center of interest of accountants, auditors in the legal domain in addition to all users of accounting information in financial statements of varied corporations.

2. Literature Review

In their study, (Ogutu & Ngahu, 2016) proposed that accounting firms, as well as internal auditors, train and implement forensic accounting proficiency in order to guarantee efficient improvement against fraud. The study concluded that areas that require forensic accounting include prevention and recognition of fraud, bankruptcy, distortion of financial statements, and family disagreements. The study also noted that a forensic accountant should possess vital traits including analytical skills, ethical traits and confidence. A forensic accountant should also be inquisitive and skeptical and is required to have auditing skills, investigative skills, as well as legal knowledge.

A Nigerian study done by (Ibidunni, et al., 2018) found that the failure of anti-corruption agencies and the various reforms and laws of civil service to battle corruption gave rise to the need for occupation with high proficiency levels to determine solutions to curb corruption in Nigeria. The study asserts that forensic accountants must be trained and constantly up-to-date with all necessary needs for them to perform their duties. It also suggested that government financial statements should be thoroughly studied by forensic auditors before being published to ensure reliability and transparency.

From the findings of the study by (Blessing, 2015), it was revealed that there is evidence on the efficacy of the procedures forensic accountants used in helping curb the predicament of creative accounting. The results of the

study also showed that there is evidence that forensic accountants have improved the efficiency of their practices overtime. Besides, it found that the manifestation of forensic accountants regained confidence in the reliability and transparency of reports issued by corporate firms. Thus, forensic accountants can help in courts and other regulatory organizations in investigating financial issues by applying their accounting and auditing knowledge, and their investigative skills in solving legal problems.

The study done by (Okoye & Ndah, 2019) showed that there is an association between fraud investigation and fraud deterrence in manufacturing companies. The study also showed that there exists a relation between fraud legal practices and the prevention of fraud in these companies. From the findings, the researchers concluded that fraud investigation practices are imperative to avoid fraud in manufacturing companies. Likewise, fraud legal performances are a significant aspect of preventing fraud. Consequently, the researchers recommended that manufacturing companies augment their forensic accounting practices in order to curb fraud. This can be accomplished by having regular forensic auditing of financial records. They also recommended that companies should make sure that all personnel suspected or involved in fraud should be investigated and prosecuted, and this should be done openly to serve as prevention to others in the future.

Forensic accountants can provide courts with accounting investigation that is considered a starting point for argument and decision-making; in addition, a forensic accountant can be the perfect witness for a court that seeks to interpret the truth. (Oyedokun, 2015) study concluded that the main practice of a forensic accountant is to solve intricate financial issues, and that forensic accounting is a deterrent career that presents a high perspective of trust in the diverse services offered to a customer. It additionally offers fundamental procedures that are employed in discovering and curbing all types of financial fraud. Oyedokun's study additionally recommends that forensic accountants, auditors, legal auditors, and investigative accountants should have full knowledge of forensic accounting methods in obtaining acceptable evidence suitable for legal causes since forensic accountants are at present greatly required, as the public needs transparency, integrity, equality and precision in reporting.

In a study done by (Gray, 2008), it was concluded that a forensic auditor and accountant have some parallel goals with a conventional auditor and accountant; however, they have diverse roles and knowledge and more high perspective skills. Investigations conducted by a forensic accountant comprise identifying fraud, which is different from investigations conducted by a Certified Public Accountant (CPA) who is not accountable for identifying fraud. Investigations that forensic accounting conduct should include legal services correlated with a variety of situations which include, but not restricted to the following: purchase of businesses, valuation of assets for divorce, profits that are lost because of fraud or other illegal acts, tax evasion, and laundering money.

In their study, (Imoniana, et al., 2013) reached many conclusions. To begin with, forensic accounting practice is recognized as separate from auditing, which makes it possible to be classified as a career that will gain more importance in time because fraud is progressing in most developing nations, in both the public and private sectors. Also, the main attributes of the practices of forensic accountants harmonize with the universal practices. These practices can support the management and stakeholders alike to make decisions about doubtful and fraudulent transactions. Weak internal controls and regulations in some corporations allow fraud to be committed. The study also noted that unless this issue is tackled, corporations may resume spending the meager resources they have to sustain frail approaches that can be easily prevented.

(Bhasin, 2013) found that forensic accountants are professionals who have a sixth sense and possess extraordinary skills that are urgently needed to oppose all the creativity of fraudulent people. Currently, some Universities are taking into consideration adding courses of forensic accounting to their programs. Forensic accountants can play a greater role in organizing a company's efforts to attain the code of ethics within the company since they can identify and deter fraud, and set up efficient communication.

Another study done by (Bhasin, 2015) showed that practicing creative accounting is almost always a premeditated endeavor to achieve unjustifiable benefits for accountants, administrators or organizations. Hence, tough disciplinary procedures should immediately be taken against anyone who is found responsible for the act of creative accounting. The study recommended that efficient regulations of auditing, accounting and corporate governance actions should be taken to prevent the harmful occurrence of creative accounting practices.

(Ozili, 2015) found it is noteworthy that forensic accounting is gaining considerable attention from academics, advancement in forensic accounting research relies on the extent to which fraudulent people leave hints of fraud supposing that any perpetrator of fraud does leave traces behind after committing fraud. In the future, legislators will be more apprehensive about fraudulent people who do not leave behind any trace of a kind. This will cause a predicament to industry legislators if fraudulent people have good knowledge of accounting and auditing techniques and investigative skills; such knowledge can help perpetrators to eradicate all traces of fraud. The study also concluded that progress in the literature of forensic accounting depends on the degree to which forensic accounting informs practice and policy.

In their study, (Oyedokun & Akinwumi, 2018) concluded that if investigators and those who tackle anti-corruption issues acquire forensic accounting skills, corruption can be reduced. The study recommended that accountants, auditors and investigators should provide themselves with forensic accounting skills in order to help eradicate corruption.

In this paper, the researchers examine the role of forensic accounting in curbing creative accounting practices from the point of view of Lebanese Certified Public Accountants.

2.1 Concept of Forensic Accounting

A good definition of forensic accounting is that which the American Institute of Certified Public Accountants (American Institute of Certified Public Accountants (AICPA), 2020) set forth. It states that forensic accounting entails the implementation of analytical skills and special knowledge which Certified Public Accountants have acquired to accumulate evidence, examine it and evaluate it, in addition to understanding and corresponding their findings in the court, boardroom, or other legal or administrative situation (par. 1). Forensic accounting is also defined as a scientific accounting method used to uncover, decode, analyze and present issues relating to fraudulent and deceitful actions in a procedure acceptable to courts (Okoye & Gbegi, 2013). Forensic accounting is considered as one of the modern-age accounting branches which integrate law, accounting, computer and Internet sciences, all of which will help the expert in searching and inquiry that lead to discovering fraud and financial crimes, in addition to presenting sufficient evidence to relative parties following specific methodologies and clear-cut evidence which can be used to convict suspects of fraud (Al-Khalidi, 2014). Based on the above, the researcher finds that these definitions of forensic accounting generate an explicit image of what it actually is, whereas all of them agree that forensic accounting is a modern domain of accounting which seeks facts beyond the numbers to be readily available in courts of law; it comprises implementing special skills in accounting, auditing, law and information technology, in addition to skills of investigation, inquiry and analysis of information to interpret the findings and communicate them to help the law in settling lawsuits.

2.2 Methods of Forensic Accounting

Two main methods of forensic accounting are presented as follows:

2.2.1. Reactive Auditing

This method utilizes detecting illegal or doubtful activities to ensure whether or not there exists any fraud and to determine the people responsible for it in addition to collecting appropriate evidence that supports a lawsuit (Alharbi, et al., 2011). It is the original approach of investigating a crime. This requires recognizing, protecting, gathering, examining, and generating the final survey. Two types of evidence are collected under this component:

- Active proof: which refers to collecting all live proof that is available after an occurrence.
- Reactive: recognizes gathering the stationary evidence remaining.

Reactive auditing includes the most procedures and methods used in forensic accounting which are necessary to detect fraud, which include the following:

- Genetic Chart: This is a presentation of personal relations among parties directly or indirectly related to the case under examination or investigation. There are also on-demand programs that are designed for genetic charts like Genopro 2007, which clarifies family relations. It clarifies a relation or presents evidence that is not directly related to the case or crime under investigation. The genetic chart is usually used in cases of inheritance or divorce (Crumbley, 2009).
- The tracking chart is used to show cash flow to and from the bank or from the stock of one company to stocks of another or from one person to another. It is considered an assistant in detecting money laundry (Crumbley, 2009).
- Data mining which utilizes a computer system to search for new or hidden data or unexpected data. This method requires a good knowledge of electronic information systems (Mehta & Mathur, 2007).
- Auditing financial operations that other people conduct through delegation to make sure entrusted people do not cross their authorities (Crumbley, 2009).
- Questioning the documents to make sure they are free of modifications, falsifications or other in case there are no details in the documents (Mehta & Mathur, 2007).
- Analyzing the time sequence which a forensic accountant uses to show the time of occurrences of the disputes or financial crimes to reach a clear image as to the relationships among parties and the time the conflict or crime occurred. It is also an important practice in presenting all details relevant to the case from the beginning of the event until the goal behind the investigation is attained. This method helps the forensic accountant summarize the investigation and is considered a reference for forensic accountants during the investigation especially when some related documents are found (Crumbley, 2009).

- Using computer-assisted programs: the forensic accountant might be required to use electronic programs to process some important financial data in the client's information system (Crumbley, 2009).
- Examining the jurisdictions through determining fruitless or inexplicable costs and divergences in expenditure procedures or transactions between one organization and another. This type of exploitation particularly occurs in the public sector where officials exploit their powers in expenditure (Davis & Farrell, 2009).

2.2.2 Proactive Auditing

This method enables gathering information, protecting it, identifying doubtful events, collecting facts, performing the research and building a case against any uncertain activities. It includes 'statutory auditing' to evaluate internal control systems and ensure the protection of assets, 'regulatory compliance' used in the case of government auditing to ensure abiding by the laws and regulations as to expenditure and proof of payment, a 'diagnostic tool' used to perform risk detection analyses resulting from fraud and focusing on analyzing the targeted areas and 'investigation of allegations' where proper investigations are made about allegations put forth.

Proactive Auditing also comprises keeping organized and reliable accounting records and ensuring the efficiency of the financial system framework through operating efficiency, policies and procedures that help maintaining work within the directions of the upper management. Regular control of the organization's diverse activities is one of the most essential Proactive Auditing techniques which aims at discovering the fault or the evidence of a crime (Nieto, 2018).

2.3 Forensic Accounting Techniques

Forensic Accounting techniques are required in detecting and curbing fraud and corruption. In his study, (Oyedokun, 2016) identified the following techniques used by forensic accountants in the course of their investigations to detect and curb fraud and corruption:

- I. Identifying anomalies: This method entails some techniques such as background reading, risk assessment, benchmarking, system analysis, ratio analysis, specialist software and exception reporting.
- II. Computer Assisted Reviews (CAR) and Document Review: This method utilizes computer software to search for and find evidence of fraud in a large data set. The four practices used in this method include hybrid multimodal, predictive coding, bottom line-driven proportional review, and review quality controls.
- III. Data mining: This is an essential tool for exploring large amounts of data and extracting the required and related information. Data mining processes data and identifies trends or patterns in the data so that the user can judge it. There are four data mining techniques which include regression, association rule discovery, classification and clustering.
- IV. Ratio Analysis: It is among the most trustworthy methods used in detecting fraud in financial statements. These ratios are utilized to detect fraud when it affects the numerator and denominator of fractions in an abnormal proportion. Ratio analysis allows users to trace inconsistencies within financial statements.
- V. Data Matching: It is the act of finding records referring to the same organization that comes from many data sets with no common identifiers or to detect duplicate records within one database. This method is also called Record Linkage, Object Identification and Entity Resolution.

2.4 Creative Accounting Practices

Creative accounting practices are evident in financial statements that managements of organizations prepare to achieve certain goals on entries of these statements to serve diverse purposes. Creative accounting practices are classified as follows (Remenarić, et al., 2019):

I. Practices in the income statement, which include:

- Recognition of sales returns before the transaction of service is complete, which would increase the recognized returns.
- Recording fallacious returns
- Increasing returns through a one-time return, where the organization increases its returns during a specific period through increasing it one time.
- Not recognizing returns and moving them to a later period.
- Manipulating returns classification through announcing the existence of high financial ability under "other returns", which would appear as if there is a higher level of profits for the unit.
- Moving current expenses to later or previous periods.
- Manipulating depreciation expenses on fixed assets.

II. Practices in the financial position statement, which include:

- Exaggeration in the valuation of intangible assets

- Not being committed to the principle of the historical cost of tangible assets when determining its value in the balance sheet, in addition to manipulating common depreciation ratios of fixed assets by decreasing them
- Manipulation of inventory valuation
- Manipulating values of securities and appropriations of the decrease in their prices
- Manipulating cash items through not disclosing restricted cash items and manipulating the exchange rate used in exchanging cash items available in foreign currencies
- Manipulating the accounts receivable items through not disclosing nonperforming debts to decrease the value of doubtful debts
- Manipulating stockholders' equity item

III. Manipulations in the cash flow statements, which include:

- Classifying operational costs as investment expenses or vice-versa
- Paying the cost of capital development and recording it as a cash outflow from investment activities and disregarding it in the operational cash outflow, which increases cash inflow
- Manipulating operational cash flows to evade taxes
- Manipulating income from continuing operations to remove items that are not repeated

There is no doubt that the flexibility provided through accounting intellect led some organizations to manipulate their financial reports and prepare them in a way to achieve certain goals in addition to other manipulation methods, which renders these reports unfair for their users. This came to be known as creative accounting, as discussed above. As a result of the many international financial scandals, there was a need for a branch of accounting to detect and curb such practices using suitable accounting and auditing methods. Thus, forensic accounting came to be.

3. Research Problem and Hypothesis

A lot of companies resort to falsifying their financial statements by manipulating the numbers using many legal practices, which poses a great threat to the interests of stockholders and others of interest. This calls for confronting that challenge in a legal way using Forensic Accounting. Based on the above, the researchers have the following question in mind:

Do forensic accounting methods lead to curbing creative accounting practices from the point of view of Lebanese Certified Public Accountants (CPAs)?

The following sub-questions derive from the above main question.

- Does the integrated audit approach lead to curbing creative accounting practices?
- Does the dimensional audit approach lead to curbing creative accounting practices?

Based on the above questions and the literature review, the researchers have the following hypothesis to prove or disprove:

Forensic accounting methods lead to curbing creative accounting practices at the significance level ($\alpha=0.05$) from the point of view of Lebanese Certified Public Accountants (CPAs).

From this hypothesis, two sub-hypotheses arise:

- The integrated audit approach, which is one forensic accounting method, leads to curbing creative accounting practices at significance level ($\alpha = 0.05$).
- The dimensional audit approach, which is one forensic accounting method, leads to curbing creative accounting practices at significance level ($\alpha = 0.05$).

4. Procedures and Methods

4.1 Population and Sample Selection

The population of the research at hand consists of all certified public accountants (CPAs) in Mount Lebanon and Beirut Governorates who are 1712 CPAs. The researchers chose a random sample of 350 CPAs and distributed the questionnaire among them, 314 of which responded and were valid for testing and analysis. The demographic data of the sample is shown in **Table 1**:

Table (1): The participants' distribution according to personal data

Variable	Category	Frequency	Percent
Education	Bachelor	202	64.3
	Master	105	33.4
	Ph.D.	7	2.2
Major	Accounting	253	80.6

	Business Administration	56	17.8
	Banking and Finance	3	1.0
	Economics	2	.6
Years of experience	0 – 5 years	8	2.5
	5 – 10 years	142	45.2
	10-15 years	82	26.1
	15 years and above	82	26.1
Certifications	CPA	91	29.0
	CMA	5	1.6
	CIA	2	.6
	Other	216	68.8
	Total	314	100.0

It is quite clear from **Table 1** that 64.3% of the participants have Bachelor's degrees, 35.6% have Masters' and Ph.D. degrees, most of whom (80.6%) have majored Accounting which is the appropriate major to understand the items of the questionnaire and have a professional and reliable response for the subject-matter of the study at hand. It is also evident that 97.5% of the sample has more than 5 years of experience in practicing the profession.

4.2 Instrumentation

Based on the previous studies, scientific discussions with university colleagues in accounting and interviews made with members of the Lebanese Association of Certified Public Accountants (LACPA) in addition to the researchers' personal experience, the researchers constructed a five-point Likert Style questionnaire with 25 items categorized in two domains.

The scale ranges as in **Table 2**:

Table (2): Correct Tool of the Study

Answer	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Degree	5	4	3	2	1

5. Data Analysis and Discussion

The researchers calculated the correlation coefficient among the items of the questionnaire, and the results came as in **Table 3**:

Table (3): Correlation coefficient between each item and total score of questionnaire (N=50)

First Domain			Second Domain					
N.	Corr. Coefficient	Sig	N.	Corr. Coefficient	Sig	N.	Corr. Coefficient	Sig
1	.481**	0.000	9	.815**	0.000	1	.771**	0.000
2	.544**	0.000	10	.674**	0.000	2	.768**	0.000
3	.636**	0.000	11	.676**	0.000	3	.592**	0.000
4	.610**	0.000	12	.808**	0.000	4	.773**	0.000
5	.701**	0.000	13	.791**	0.000	5	.803**	0.000
6	.738**	0.000	14	.809**	0.000	6	.916**	0.000
7	.808**	0.000	15	.749**	0.000	7	.823**	0.000
8	.805**	0.000	16	.694**	0.000	8	.731**	0.000
						9	.929**	0.000

Note: **Prob. <0.01.

From **Table 3**, it is evident that all items of the questionnaire are statistically significant at the level 0.01, where the correlation coefficient for the items ranged from 0.481 to 0.929, which denotes the internal consistency among the items of the study tool.

Findings of the current study also show Cronbach's Alpha and Guttman Split-Half Coefficient as in **Table 4**:

Table (4): Cronbach's Alpha and Guttman Split-Half Coefficient. (N=50)

Domain	Cronbach's Alpha	Split-Half
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	No. of Items	Cronbach's Alpha	Correlation Between Forms	Guttman Split-Half Coefficient
First Domain	16	.933	.926	.961
Second Domain	9	.919	.804	.887
All items	25	.959	.949	.971

It is evident from table 4 that Cronbach's Alpha for the items of the questionnaire as a whole is 0.959 and the Guttman Split-Half Coefficient is 0.971, which means that there is reliability in all items of the questionnaire.

5.1 Testing the Hypotheses

5.1.1 The first sub-hypothesis

To test the first sub-hypothesis, which states "The integrated audit approach, which is one forensic accounting approach, leads to curbing creative accounting practices at significance level $(\alpha = 0.05)$ " the researchers calculated the mean, standard deviation, relative weight and rank for each item in the first domain "**Integrated audit approach in forensic accounting**". In addition, the One-Sample T-Test was used to determine the relevance of the responses to the value (3) which reflects neutrality. The results are shown in table (5):

Table (5): Result Analysis of the first sub-hypothesis.

Items	Mean	Std. D	Relative weight	T-test	Sig.	Rank
1. Investigative methods help in discovering creative accounting practices through auditing documents.	4.25	0.70	85.0%	31.47	0.00**	4
2. Investigative methods help in discovering creative accounting practices through laboratory analysis.	4.33	0.79	86.6%	29.84	0.00**	3
3. Analyzing origin and usage of funds help in discovering creative accounting practices.	4.10	0.83	82.0%	23.46	0.00**	9
4. Using tracking maps to follow the money from its origin to its delivery or usage in order to detect money laundry.	3.71	0.84	74.2%	14.99	0.00**	16
5. Mining for new or hidden financial statements in the electronic information systems.	4.53	0.72	90.5%	37.77	0.00**	1
6. Auditing financial operations that other people conduct through delegation to make sure entrusted people do not cross their authorities.	4.15	0.75	83.0%	27.33	0.00**	6
7. Comprehensive Error Rate Testing (CERT) helps in discovering creative accounting practices.	3.94	0.76	78.9%	21.97	0.00**	15
8. Tracking small operations help in discovering creative accounting practices.	4.41	0.76	88.2%	32.73	0.00**	2
9. Questioning the documents to make sure they are free of modifications, falsifications or others in case there are no details in the documents.	4.15	0.69	83.0%	29.62	0.00**	6
10. Analyzing the time sequence to test details of a case from its occurrence till specifying the main cause to reach a clear image as to the relationship between each party and another, and the time the conflict or crime occurred.	4.01	0.75	80.2%	23.79	0.00**	11
11. Using the series of references and analysis of link methods help in discovering creative accounting practices.	4.07	0.84	81.4%	22.49	0.00**	10
12. Analyzing digital rates (highest value rate to lowest value rate, this year's rate to last year's rate, etc) helps in discovering creative	3.97	0.57	79.4%	30.34	0.00**	13

	accounting practices.						
13.	Liquidity index guide which helps in matching the cash accounts of a company and discovering creative accounting practices.	4.11	0.67	82.2%	29.54	0.00**	8
14.	Using computer-assisted programs to process some important financial statements in the client's information system.	3.95	0.78	79.0%	21.63	0.00**	14
15.	Examining the jurisdictions to determine deviations in expenditure and proof of cash help in discovering creative accounting practices.	4.20	0.68	84.0%	31.31	0.00**	5
16.	Auditing critical number and validity help in discovering creative accounting practices.	4.00	0.79	80.0%	22.38	0.00**	12
All items		4.12	0.50	82.3%	39.33	0.00**	

Note: **Prob. <0.00. T-tabular at degrees of freedom 313 is 1.96

Table (5) shows the following:

1. The item which states "Mining for new or hidden financial statements in the electronic information systems" came in the first place. The researchers think this is because a large sum of data should be mined to determine certain patterns and hidden information provided that the accuracy of the resulting information is investigated. The importance of data mining lies through using discovery, predictive models and discrepancy analysis.

2. The item which states "Tracking small operations helps in discovering creative accounting practices" came in second place. The researchers believe this is due to tracking small recurring operations involving small sums of money might lead to detecting a large operation that is broken up to several small operations to lure detecting eye away. This technique is usually used in tracking operations that involve intangible assets such as trademarks, patents, copyright, etc.

3. The item which states "Investigative methods help in discovering creative accounting practices through laboratory analysis" came in third place. The researchers think that this technique is essential as it comprises analysis of fingerprints, forged signatures, modified documents, retrieving deleted files or operations done using the organization's computers and decoding coded files.

4. The item which states "Investigative methods help in discovering creative accounting practices through auditing documents" came in fourth place. The researchers believe this technique is important since it comprises accessing the records of the organization, in addition to records of its branches (if any), civil registry records and stock trade records.

5. The item which states "Examining the jurisdictions to determine deviations in expenditure and proof of cash help in discovering creative accounting practices" came in fifth place. The researchers believe this is because the technique is used to detect manipulations relative to the returns, with confirmation in the records according to accounting standards and disclosure implemented locally.

6. The item which states "Questioning the documents to make sure they are free of modifications, falsifications or others in case there are no details in the documents" came in sixth place. The researchers believe if the forensic accountants found a document with no relevant details, they should doubt its validity and accuracy, which is one of the main requirements of forensic accounting.

7. The item which states "Auditing financial operations which other people conduct through delegation to make sure entrusted people do not cross their authorities" also came in sixth place. This might be due to that the technique can detect manipulations, deliberate and indeliberate mistakes in the financial statements. Continual auditing is usually done in the auditing department, branches, clients and delegations.

8. The item which states "Liquidity index guide helps in matching the cash accounts of a company and discovering creative accounting practices" came in eighth place. This might be due to that the technique can prove that the cash accounts of the organization conform to those of the bank.

9. The item which states "Analyzing origin and usage of funds help in discovering creative accounting practices" came in ninth place. The researchers think this might be due to that the technique tracks the origins of funds and how they were spent

10. The item which states “Using the series of references and analysis of link methods help in discovering creative accounting practices” came in tenth place. The researchers believe this might be due to that the series of references technique helps validate the source of acquired evidence and the relationship between the source and other documents at hand. Also, analysis of link enables conducting a web analysis that shows relationships among people and their relationship to the data or financial information available.

11. The item which states “Analyzing the time sequence to test details of a case from its occurrence till specifying the main cause helps reach a clear image as to the relationship between each party and another, and the time the conflict or crime occurred” came in eleventh place. The researchers believe this might be due to being an essential technique used in forensic accounting that demonstrates the times of financial discrepancies and analyzing them to reach a clearer picture of the relationship of each party with another relative to the timing of financial discrepancies.

12. The item which states “Auditing critical number and validity helps in discovering creative accounting practices” came in twelfth place. The researchers believe that using this technique help determine the causes of fraud in financial operations since it requires using records and financial statements to detect important financial operations, extraordinary debts, accounts payable or receivable, etc.

13. The item which states “Analyzing digital rates (highest value rate to lowest value rate, this year’s rate to last year’s rate, etc) helps in discovering creative accounting practices” came in thirteenth place. This might be due to that the technique analyzes rates of digital data and determine evidence of manipulations since it is used to estimate rates that can determine unusual entries anomaly in the data, which is considered as manipulation or fraud.

14. The item which states “Using computer-assisted programs helps process some important financial statements in the client’s information system” came in fourteenth place. This might be because this technique utilizes technology to perform audits which helps forensic accountants accomplish their duties better, faster and at a lower cost.

15. The item which states “Comprehensive Error Rate Testing (CERT) helps in discovering creative accounting practices” came in fifteenth place. This might be due to that the technique is used to determine the correct position for data being investigated so that correct data can be excluded.

16. The item which states “Using tracking maps to follow the money from its origin to its delivery or usage in order to detect money laundry” came in sixteenth place. This might be due to that the technique is used to depict cash flows to and from the bank, from one organization to another, or from one person to another, thus helps detect money laundering conducted through banks.

In general, the mean of the sample’s responses to all items of the first domain of the questionnaire relative to the study 4.12 and relative weight of 82.3%. Also, the value of the calculated ‘T’ test is 39.33, which is greater than the value of tabulated ‘T’ at the significance 0.05. This means that there is an increase of statistical significance to the neutral level in the average responses of the members of the sample; consequently, **the first sub-hypothesis of the study which states “The integrated audit approach, which is one forensic accounting approach, leads to curbing creative accounting practices at significance level $(\alpha = 0.05)$ ” is accepted.**

5.1.2 The second sub-hypothesis

The second sub-hypothesis states “The dimensional audit approach, which is one forensic accounting approach, leads to curbing creative accounting practices at significance level $(\alpha = 0.05)$ ”. The researchers used the same test used in testing the first sub-hypothesis and the results are shown in table (6):

Table (6): Result Analysis of the second hypothesis.

Items	Mean	Std. D	Relative weight	T-test	Sig.	Rank
1. Organized commitment that is based on making sure how far the companies abide by the rules, regulations and legislations.	4.11	0.53	82.2%	37.34	0.00**	5
2. Making sure the organization abides by the generally accepted accounting principles (GAAP) helps in discovering creative accounting practices.	4.42	0.71	88.5%	35.43	0.00**	3
3. Studying and examining internal control systems help in discovering creative accounting practices.	4.47	0.70	89.5%	37.21	0.00**	2
4. Using the diagnostic tool to determine the risks resulting from fraud and corruption within the system and focusing on examining the targeted areas.	3.99	0.80	79.9%	22.14	0.00**	8

5.	Monitoring the implementation of policies and procedures that help ensure the directions of the high management help in discovering creative accounting practices.	4.08	0.73	81.5%	26.02	0.00**	7
6.	Monitoring the operations used in assessing the performance quality of internal control over time helps in discovering creative accounting practices.	4.16	0.68	83.2%	30.28	0.00**	4
7.	Making sure to keep appropriate accounting records that contain reliable financial information help in discovering creative accounting practices.	4.59	0.76	91.7%	36.84	0.00**	1
8.	Making sure of the efficiency of the financial system regarding inclusiveness and operational efficiency helps in discovering creative accounting practices.	3.87	0.66	77.4%	23.23	0.00**	9
9.	Detecting allegations and making necessary investigations about filed lawsuits and allegations help in discovering creative accounting practices.	4.10	0.62	82.0%	31.44	0.00**	6
All items		4.20	0.49	84.0%	42.98	0.00**	

Note: **Prob. <0.00. T-tabular at degrees of freedom 313 is 1.96

Table (6) shows the following:

1. The item which states “Making sure to keep appropriate accounting records that contain reliable financial information help in discovering creative accounting practices” came in the first place. The researchers believe when the organization keeps accounting records along with documents proving the financial operations, a forensic accountant can detect creative accounting practices if any by tracking the documents of an operation to its entry in the records.

2. The item which states “Studying and examining internal control systems help in discovering creative accounting practices” came in second place. The researchers believe that the presence of a poor internal control system is a fertile ground for creative accounting practices.

3. The item which states “Making sure the organization abides by the generally accepted accounting principles (GAAP) helps in discovering creative accounting practices” came in third place. The researchers believe that some accountants exploit the presence of certain gaps in the generally accepted accounting principles to pass some creative accounting practices.

4. The item which states “Monitoring the operations used in assessing the performance quality of internal control over time helps in discovering creative accounting practices” came in fourth place. The researchers believe that periodic control over operations used in evaluating the quality of internal control gives a better chance to practice creative accounting. However, constant control limits this possibility.

5. The item which states “Organized commitment that is based on making sure how far the companies abide by the rules, regulations and legislation” came in fifth place. The researchers believe that creative accounting practices are less likely to occur as long as the organization abides by the rules, regulations and legislation.

6. The item which states “Detecting allegations and making necessary investigations about filed lawsuits and allegations help in discovering creative accounting practices” came in sixth place. The researchers believe that conducting necessary investigations following lawsuits or allegations help detect creative accounting practices as long as the suitable technique is chosen.

7. The item which states “Monitoring the implementation of policies and procedures that help ensure the directions of the high management helps in discovering creative accounting practices” came in seventh place. The researchers believe that creative accounting can be decreased if organizations enforced ethical standards and good governance using systematic techniques; otherwise, it will not be efficient in preventing creative accounting practices.

8. The item which states “Using the diagnostic tool to determine the risks resulting from fraud and corruption within the system and focusing on examining the targeted areas” came in eighth place. The researchers believe that determining risks resulting from fraud and focusing on examining the targeted areas decreases the possibility of creative accounting practices as there is a protective measure for each risk.

9. The item which states “Making sure of the efficiency of the financial system regarding inclusiveness and operational efficiency help in discovering creative accounting practices” came in ninth place. The researchers

believe that the presence of an efficient financial system decreases the occurrence of creative accounting practices as it incorporates all financial operations.

In general, the mean of the sample's responses to all items of the second domain of the questionnaire relative to the study 4.20 and relative weight of 84%. Also, the value of the calculated 'T' test is 42.98, which is greater than the value of tabulated 'T' at the significance 0.05. This means that there is an increase of statistical significance to the neutral level in the average responses of the members of the sample; consequently, **the second sub-hypothesis of the study which states "The dimensional audit approach, which is one forensic accounting approach, leads to curbing creative accounting practices at significance level ($\alpha=0.05$)" is accepted.**

6. Conclusions and Recommendations

The research concluded that the integrated audit approach, which is one forensic accounting method, leads to curbing creative accounting practices at significance level ($\alpha = 0.05$). The research also concluded that the dimensional audit approach, which is one forensic accounting method, leads to curbing creative accounting practices at significance level ($\alpha = 0.05$). **Therefore, forensic accounting methods lead to curbing creative accounting practices at the significance level ($\alpha=0.05$) from the point of view of Lebanese Certified Public Accountants (CPAs).**

The results of the current research concurred with the results of (Blessing, 2015), who found that there is strong evidence on the efficacy of the procedures forensic accountants use in helping curb the predicament of creative accounting and that there is evidence that the manifestation of forensic accountants regained confidence in the reliability and transparency of reports issued by corporate firms. The results of the current research also agreed with the results of (Ogutu & Ngahu, 2016) who found that a forensic accountant should be inquisitive and skeptical and is required to have auditing skills, investigative skills, as well as legal knowledge. The results also agreed with (Imoniana, et al., 2013) in that the main attributes of the practices of forensic accountants harmonize with the universal practices, and that weak internal controls and regulations in some corporations allow fraud to be committed.

Based on the results of the research, the researchers have some recommendations. First, forensic accounting should be introduced into university curricula by adding a new major under the title of "Forensic Accounting" within the Master's certificate at the faculty of Business Administration. Its courses should include Civil and Criminal laws, Advanced Statistical and Quantum Methods, Body Language, Criminology, and other studies related to behavioral patterns of criminals, money laundering, tracking illegal or banned funds, fraud and corruption. Second, practical training sessions and educational seminars should be conducted for practitioners of accounting and auditing to introduce the domain of forensic accounting, help them identify types of fraud committed in Lebanon, gather and present important evidence to the court and enhance the Lebanese auditors' performance to enable them to fight managerial and financial corruption that has spread all over the Lebanese community. Third, the relevant parties should work on adopting forensic accounting as a new profession in the accounting domain and establishing a local institute that organizes it and issues licenses and standards and regulations relative to the profession. Finally, it is important to spread awareness about creative accounting practices, accounts that are most vulnerable to creative accounting practices, besides spreading awareness about the nature and importance of forensic accounting among specialists, professionals and academics.

References

- Alharbi, S. A., Weber, J. H. & Traore, I., 2011. The Proactive and Reactive Digital Forensic Investigative Process: A Systematic Literature Review. *International Journal of Security and its Applications*, 5(4), pp. 59-72. DOI: 10.1007/978-3-642-23141-4_9
- Al-Khalidi, N., 2014. Role of Forensic Accounting in Facing Creative Accounting Practices and Curbing Their Impact on Financial Statements. *University of Palestine, Journal of Research and Studies*, Volume 6, pp. 9-50. Available at: <http://dspace.up.edu.ps/xmlui/handle/123456789/73>
- American Institute of Certified Public Accountants (AICPA), 2020. *Forensic Accounting*. [Online] Available at: <https://www.aicpa.org/interestareas/forensicandvaluation/resources/litigation.html>
- Bhasin, M., 2013. Survey Of Appropriate Skills Required by the Forensic Accountants: Evidence from a Developing Economy. *International Journal of Accounting and Economics Studies*, 1(2), pp. 53-73. DOI: 10.14419/ijaes.v1i2.1295
- Bhasin, M., 2015. Creative Accounting Practices in the Indian Corporate Sector: An Empirical Study. *International Journal of Management Sciences and Business Research*, 4(10), pp. 35-52. Available at: SSRN: <https://ssrn.com/abstract=2703643>

- Blessing, I. N., 2015. Empirical Analysis on the use of Forensic Accounting Techniques in Curbing Forensic Accounting. *International Journal of Economics, Commerce and Management*, 3(1), pp. 1-15. Available at: <http://ijecm.co.uk/wp-content/uploads/2015/01/3127.pdf>
- Crumbley, L., 2009. *Forensic Accounting: Strategies for Detecting and Controlling Fraud Intermediate*. Available at: <https://slideplayer.com/slide/14751974/>
- Davis, C. & Farrell, R., 2009. *Characteristics and Skills of the Forensic Accountant*. New York: FVS Section. Available at: <http://thefraudgroupllc.com/tools/library/documents/forensic.pdf>
- Gray, D., 2008. Forensic Accounting and Auditing: Compared and Contrasted to Traditional Accounting and Auditing. *American Journal of Business Education*, 1(2), pp. 115-126. DOI: 10.19030/ajbe.v1i2.4630
- Ibidunni, O. M., Ibidunni, A., Okere, W. & Aro, O., 2018. Effect of Forensic Accounting in Curbing Corruption in Nigeria Civil Service. *Journal of Banking and Finance Management*, 1(2), pp. 7-14. Available at: <https://www.sryahwapublications.com/journal-of-banking-and-finance-management/pdf/v1-i2/2.pdf>
- Imoniana, J. O., Antunes, M. T. P. & Formigoni, H., 2013. The Forensic Accounting and Corporate Fraud. *Journal of Information System and Technology Management*, 10(1), pp. 119-144. DOI: 10.4301/S1807-17752013000100007
- Mehta & Mathur, T., 2007. Preventing financial fraud through forensic accounting. *The Institute of Chartered Accountant of India*, 55(10), pp. 1576-1578.
- Nieto, A., 2018. An Overview of Proactive Forensic Solutions and its Applicability to 5G. *IEEE 5G World Forum (5GWF)*, pp. 191-196. DOI:10.1109/5GWF.2018.8516940
- Ogotu, G. O. & Ngahu, S., 2016. Application of Forensic Auditing Skills in Fraud Mitigation: A Survey of Accounting Firms in the County Government of Nakuru, Kenya. *Journal of Business and Management*, 18(4), pp. 73-79. Available at: <http://www.iosrjournals.org/iosr-jbm/papers/Vol18-issue4/Version-2/K1804027379.pdf>
- Okoye, E. & Gbegi, D. O., 2013. Forensic Accounting: A tool for Fraud Detection and Prevention in the Public Sector. (A Study Of Selected Ministries in Kogi State). *International Journal of Academic Research in Business and Social sciences*, 3(3), pp. 1-19. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3162992
- Okoye, E. & Ndah, E. N., 2019. Forensic Accounting and Fraud Prevention in Manufacturing Companies in Nigeria. *International Journal of Innovation Finance and Economics Research*, 7(1), pp. 107-116. Available at: <https://seahipaj.org/journals-ci/mar-2019/IJIFER/full/IJIFER-M-9-2019.pdf>
- Oyedokun, G. E., 2015. Forensic Investigation and Forensic Audit Methodology in a Computerized Work Environment. *The Chartered Institute of Taxation of Nigeria*, pp. 1-20. DOI:10.2139/ssrn.2593263
- Oyedokun, G. E., 2016. Forensic Accounting Investigation Techniques: Any Rationalization?. *SSRN Electronic Journal*, pp. 1-17. DOI: 10.2139/ssrn.2910318
- Oyedokun, G. E. & Akinwumi, O., 2018. Forensic Accounting Skills and Corruption Eradication in Nigeria. *Journal of African Interdisciplinary Studies*, 2(2), pp. 4-16.
- Ozili, P. K., 2015. Forensic Accounting and Fraud - A Review of Literature and Policy Implications. *International Journal of Accounting and Economics Studies*, 3(1), pp. 63-68. DOI: 10.14419/ijaes.v3i1.4541
- Remenarić, B., Kenfelja, I. & Mijoč, I., 2019. Creative accounting – Motives, techniques and possibilities of prevention. *Econews*, Volume 31, pp. 193-199. Available at: <https://hrcak.srce.hr/ojs/index.php/ekonomski-vjesnik/article/view/6046/4584>