

## **Analysis of the Perception of Students on Forensic Audit and Forensic Accounting Against Accounting Fraud**

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## **Análise da Percepção dos Discentes Sobre Perícia Contábil e Contabilidade Forense Contra Fraudes Financeiras**

### **Resumo**

**Objetivo(s):** Evidenciar e diferenciar os papéis exercidos por peritos contábeis e contadores forenses e avaliar a percepção dos discentes sobre contabilidade forense e perícia contábil como um instrumento auxiliar nas práticas investigativas desse delito econômico-financeiro. Esta pesquisa pretende evidenciar os conhecimentos dos estudantes, a fim de elucidar conceitos que muitas vezes não são compreendidos devido às similaridades apresentadas. **Método(s):** Por meio de uma pesquisa descritiva, buscou-se fazer uma análise geral do papel da perícia e da contabilidade forense para combater o crime e auxiliar a justiça com ajuda da coleta de evidências de fraude e de laudos técnicos. **Resultados:** A partir do questionário mostram que existe uma confusão entre o objetivo do perito contábil e contador forense e destacam a falta de cursos especializados sobre o tema em favor da disseminação da cultura nos campos educacionais no Brasil. **Contribuições:** Dada a importância de ambas as áreas, estudos comparativos entre as atuações dos contadores forenses e dos peritos contadores devem ser pertinentes para identificar técnicas mais eficientes a serem utilizadas no combate e/ou na investigação às manipulações contábeis.

**Palavras-chave:** Fraude. Contabilidade Forense. Perícia Contábil.

## **Analysis of the Perception of Students on Forensic Audit and Forensic Accounting Against Accounting Fraud**

### **Abstract**

**Purpose(s):** To highlight and differentiate the roles played by accounting expert witnesses and forensic accountants and to assess students' perceptions of forensic accounting and forensic audit as an auxiliary tool in investigative practices of this economic and financial crime. This research is aimed at highlighting students' knowledge in order to elucidate concepts that are often misunderstood due to the similarities they present. **Method(s):** Through descriptive research a general analysis of the role of forensic expertise and accounting in combating crime and assisting justice was conducted by collecting evidence of fraud and technical reports. **Results:** The answers showed there is confusion between the goals of accounting expert witnesses and forensic accountants and also highlighted the lack of specialized courses on the subject in favor of disseminating the culture in educational fields in Brazil. **Contributions:** Given the importance of both areas, comparative studies between the work of forensic accountants and accounting expert witnesses should be relevant in order to identify more efficient techniques to be used in combating and/or investigating accounting manipulations.

**Keywords:** Fraud. Forensic Accounting. Forensic Audit.

## **Análisis de la Percepción de los Estudiantes Sobre la Experiencia Contable y la Contabilidad Forense Frente al Fraude Contable**

### **Resumen**

**Objetivo(s):** Destacar y diferenciar los roles que desempeñan los peritos contables y los contadores forenses y evaluar la percepción de los estudiantes sobre la Contabilidad Forense y la Pericia Contable como instrumento auxiliar en las prácticas investigativas de este delito económico-financiero. La investigación logró el objetivo de resaltar los conocimientos de los



estudiantes sobre Contabilidad Forense y Pericia Contable, con el fin de dilucidar conceptos sobre estas áreas que muchas veces no son comprendidas debido a las similitudes que tienen. **Método(s):** Descriptivo y buscó hacer un análisis general del papel de la pericia forense y la contabilidad para combatir el crimen y asistir a la justicia a través de la recolección de pruebas de fraude e informes técnicos. **Resultados:** Del cuestionario muestran que existe una confusión entre el objetivo del perito contable y el contador forense y destacan la falta de cursos especializados sobre el tema en favor de la difusión de la cultura en los campos educativos en Brasil. **Contribuciones:** Dada la importancia de ambas áreas, los estudios comparativos entre las acciones de los contadores forenses y los contadores expertos deben ser relevantes para identificar técnicas más efectivas para ser utilizadas en el combate y/o investigación de manipulaciones contables.

**Palabras clave:** Fraude. Contabilidad Forense. Peritaje Contable.

## Introduction

Fraud is a term used to describe any intentional act or omission that results in financial damage to an organization, individual or group. In the accounting context, it includes activities such as accounting manipulation, misuse of confidential information, embezzlement and other fraudulent activities. Accounting fraud has serious consequences not only for companies that are victims, but also for accountants who do not verify it. Thus, prevention and control are fundamental to the financial health of organizations, which reinforces the importance of accountants having the necessary resources to monitor and detect possible fraudulent activities.

According to Silva (2012, p. 11), the "term fraud originates from the Latin *fraus* and indicates action practiced in bad faith, abuse of trust, smuggling, clandestinity or falsification and adulteration". The *Norma Brasileira de Contabilidade Interpretação Técnica* (Brazilian Accounting Standard Technical Interpretation) (NBC T 11-IT) defines fraud as: "an intentional act of omission or manipulation of transactions, adulteration of documents, records and accounting statements" (Conselho Federal de Contabilidade, 2020).

As a result of the evolution of frauds in companies from all sectors worldwide, which is causing substantial losses to their assets, a critical analysis of accounting performance from an ethical perspective is required. Fraud usually begins with an error and the cunning of the person who verified that such error has not been discovered, and the fraud continues.

This context has led to the development of the practice of forensic accounting, which focuses on fraud prevention and detection. In the view of Oyedokun (2016, p.4), it is "an accounting method used to uncover, solve and analyze fraud issues in an acceptable manner according to the Court of Justice".

As it is a new and little explored area in Brazil, forensic accounting is still often confused with forensic audit and, according to Ribeiro (2009, p. 117), the main objective of forensic accounting is "to produce evidence of the existence of fraud, bringing the real truth closer to the procedural truth. At this point, forensic accounting is very close to forensic audit. However, it focuses on fraud investigation".

By definition, forensic audit is the group of technical and scientific procedures that, based on various examinations and investigations, collects and evaluates evidence that will support reports or opinions presented to resolve a dispute in judicial or extrajudicial channels.

According to Vasconcellos (2016), the forensic audit fraud segment has seen triple-digit growth in the last three years in Brazil, driven by three interconnected factors: the Anti-Corruption Law, Operation Car Wash and the Petrolão scandal. In other words, the topic is current and extremely relevant.



Since these two areas present many points in common, it is necessary to compare them and distinguish between their professionals: accounting expert witnesses and the forensic accountants, as once their roles have been clarified it becomes feasible to propose specific and more profitable continuing education.

### **General objective**

To analyze students' perspectives on forensic accounting and forensic audit in the face of frauds.

### **Specific objectives**

Thus, the specific objectives of this study are:

- to distinguish the purposes and field of action between forensic accounting and forensic audit professionals;
- to measure how accounting fraud occurs in society and how much it harms everyone; and
- to analyze the contribution of forensic accounting and forensic audit to combat accounting fraud.

### **Research problem**

Thus, the following research question was established to guide these objectives: What is the perception of university students in relation to their understanding of forensic accounting and forensic audit?

### **Justification**

This study aims at contributing to the dissemination of the understanding of forensic accounting and forensic audit in Brazil, as these subjects are still little explored, but they play an important role in the current social context, in which cases of corruption and fraud grows and both concepts are responsible for combating the advance of such practices and restore the confidence of information users.

### **Literature review**

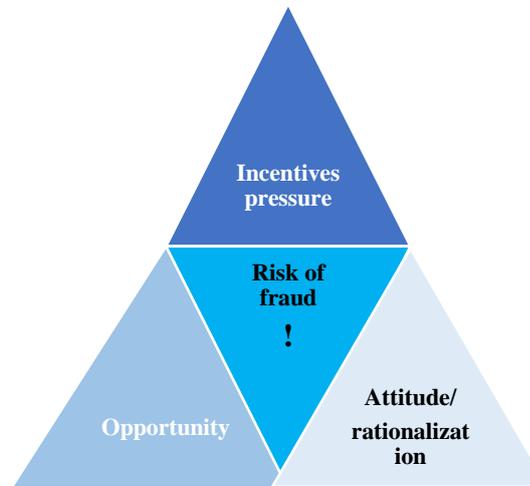
#### **Accounting fraud**

To understand the role and demands of professionals in combating fraud, first it is necessary to understand the concept of fraud itself, which has always been present in all kinds of corporations in many different forms. Although there are diverse types and methods of fraud, almost all of them have common characteristics. Generally, fraud tends to be committed by people in high positions within companies because they have the knowledge and skills necessary to look for opportunities to create a system that abuses these opportunities without being discovered. Because they are exploitative in nature, all types of fraud cause negative impacts, usually financial, on their victims.

In 1973, Cressey developed the fraud triangle, which **consists of three** components: opportunity, incentive and rationalization, i.e., factors that are normally present when fraud occurs and the process is defrauded. The first vertex of the triangle refers to the circumstances that allow the process to occur, the second represents the perceived opportunity (absence or ineffectiveness of controls, ability of managers to derogate from controls) and the third is a cognitive process in which the manager seeks to classify the fraudulent act as acceptable and justifiable.



**Figure 1**  
*Fraud Triangle*



Source: Gonçalves (2011).

Fraud is almost always carried out by people in authority, especially when they have multiple roles. When they involve larger volumes, they usually occur through collusion, which makes them more difficult to detect. Therefore, in these cases, they tend to persist if there are no adequate controls and audit independence. In addition, the absence and inadequacy of internal control makes errors and fraud more likely to occur.

The quarantine caused by the Covid-19 virus epidemic in 2020 has led many people to spend more time on digital systems, a favorite field of activity for scammers. The number of electronic scams has increased up to 70% and, according to the 2020 Banking Technology Survey of the Brazilian Federation of Banks (Febraban), banks and other financial institutions have reported losses of up to one billion Brazilian reais, which is equivalent to half of the annual spending on innovation in information security technology.

Indeed, fraud and scams are among society's most serious and common problems. Depending on the scale, the consequences can be catastrophic. The impact caused by fraud goes beyond the value of the asset itself, ranging to the cost of the company's image and that of the investigation. The Bernie Madoff case is a good example.

Bernie Madoff was an American investor and former chairman of NASDAQ. In 2008, he was identified as being responsible for the biggest ponzi scheme in world history.

Ponzi schemes are financial frauds in which high profits are promised to an investor who deposits money in an investment fund (known as a hedge fund). The investor believes that the source of this profit is real, such as an investment in shares or products, but the source is actually the investors' own money. When they realize that the fund is making a profit, new members come to invest in the fund and capitalize on part of the profit, increasing the fund's capital and consequently profits for its members, creating a cycle in which investors pay each other while the creator of the fraud makes money in an automatic and practically unlimited way (ACFE, 2012).

Madoff's Ponzi scheme went unnoticed for decades and generated a fund of 65 billion dollars, the largest hedge fund in the world at the time. The entire amount was lost when his fraudulent activities were discovered. A gap of 65 billion dollars sent the market into a panic and almost all shares in all sectors of the market went into a downtrend, bankrupting hundreds of companies and investors (those who invested and even those who did not invest in Madoff's fund) creating thousands of direct and indirect jobs all over the world.



Anyone who thinks that Brazil, due to its socio-economic problems, cannot have state-of-the-art technology and human intelligence to combat fraud is mistaken. As a country accustomed to the need for protection against various types of crime, Brazil has developed enough experience to build solid protection systems.

In fact, the country is among the most modern in the world in this regard, especially with customers. Chip cards and biometrics at ATMs, for example, are technologies in which Brazil is a pioneer.

However, Brazilians are still among the most affected by bank fraud worldwide, as the skill and creativity of criminals is impressive – the country is number one in phishing attacks to steal credit card data, for example.

This scenario means that Brazil needs more and more professionals focused on data security and anti-fraud solutions. Thus, having this type of intelligence is an investment that institutions have already realized has a practically guaranteed return.

The challenge of proving illicit acts demands time and experience from professionals who need accurate technical knowledge in order to identify possible “balance sheet or report makeup”. To meet this new complex demand for services, the figures of forensic accountants and the accounting expert witnesses have emerged.

### **Forensic accounting**

The purpose of traditional accounting is to offer financial information to help the company make strategic decisions. However, factors such as fraud and illicit acts jeopardize the authenticity of such information, generating erroneous financial data that causes various problems and is not limited to the financial sector. In this context, forensic accounting emerges, i.e. the application of forensic science to the world of accounting sciences.

Manning (2005, p. 5) defines forensic accounting as a “science of collecting and presenting information that can be used as evidence by a court in analyzing crimes of economic nature, bringing together accounting, financial, legal and administrative information”. It is a multidisciplinary area that combines accounting knowledge with psychology, law and finance (Huber & DiGabriele, 2014).

This branch of accounting relies on information from the most diverse areas of knowledge and is based on investigation. This gives rise to forensic accountants

Forensic accountants are seen as a combination of the professional auditor and the private investigator, with skills centered on investigation, research and data gathering, legal knowledge, quantitative methods, finance, auditing and accounting (Ribeiro et al., 2013, p. 7).

In other words, the goal of forensic accounting is to investigate and identify illegal activities that compromise the integrity of accounting information and organize its findings into evidence to be used in court against the entity (physical or legal) accused of committing such violations.

Golden, Skalak and Clayton stated the following:

The concern of forensic professionals is not to form a general opinion on the accounting reports, but to carry out an extremely detailed examination of the entity's financial situation in order to provide evidence and preventive actions to eliminate the recurrence of irregularities. (2011, p. 12).

When there are suspicions of financial fraud on a company and its internal audit fails to detect them, possibly on purpose to preserve the company's image, forensic accountants



are held responsible for conducting a process of investigation and evidence collection that confirms the veracity of the suspicions.

The general activities of forensic accountants include analysis of the financial situation, consideration of a lawsuit, preparation of a damage report based on evidence obtained from documents, testimony and specialized witnesses (Ahmed & Ali, 2019). Evidence answers questions such as who, what, when, where, how and for what reasons regarding suspected fraudsters.

To this end, the forensic accounting uses various areas of knowledge to combat fraud, whether preventively or detectively, such as computer science, psychology, criminology and criminal investigation. The Delphi technique and Benford's Law are approaches used by this field to detect suspicious financial activities. According to Giovinazzo (2001), the Delphi technique is “a qualitative research tool that seeks a consensus of opinions from a group of experts regarding future events”.

Thus, the most required knowledge and skills of forensic accountants are: knowledge of accounting, interpretation of financial statements, investigative skills and the ability to conduct interviews. This last skill is particularly important for the professional. In various surveys on the subject, KPMG has always listed information from employees or third parties obtained through interviews as one of the main reasons for detecting illegal activities within companies, showing the importance of knowing how to formulate questions to obtain relevant information and carefully choosing the right people to interview.

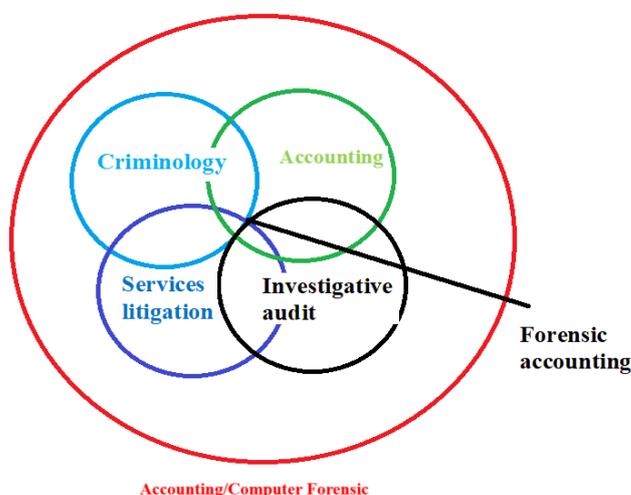
For example, in its 2016 article *Fraudster Profile*, KPMG Business Magazine states:

for fraudsters acting in collusion, the main methods of detection are whistleblowing, management review and anonymous tip-offs. Without a doubt, whistleblowing has had the highest incidence of uncovering groups of five and/or more colluders (2016).

It is also worth noting that due to the evolution of technology in electronic management systems and the media, it is necessary that forensic accountants be knowledgeable of information technology.

Figure 2 shows the specific areas of knowledge and their intersection in shaping the skills and training of professionals specializing in forensic accounting.

**Figure 2**  
*Skills of the Forensic Accountant*



Source: Crumbley and Smith (2009, p. 83).



According to the Association of Certified Fraud Examiners (2012), forensic accountant's responsibilities include: conducting forensic research to trace funds and identify assets for recovery; performing forensic analysis of financial data; preparing forensic accounting reports of financial results and preparing analytical data for litigation and witnesses as required.

This professional is also responsible for proactively implementing improvements to internal processes and controls so that fraudulent acts do not occur again.

According to Dahli Gray (2008), the areas in which forensic accountants work are vast. In his article, he mentions some U.S. institutions, such as the Federal Bureau of Investigation (FBI), the Central Intelligence Agency (CIA) and the Internal Revenue Service (IRS). However, in Brazil there are also institutions in which this professional can work, such as the Federal Police (PF), the Federal Audit Court (TCU) and the Federal Comptroller General (CGU).

### **Forensic audit**

Forensic audit is a branch of accounting that consists of a set of technical procedures applied with the aim of evaluating, investigating and validating financial and accounting issues. "Wherever patrimonial facts of people, companies and institutions are involved, and wherever the patrimonial director is, there is the forensic audit as a first-line auxiliary in judgments" (Hoog, 2010, p. 93).

Costa (2022) stated that the practice of forensic audit arose in ancient times, when the legislator acted as an expert, putting an end to conflicts between companies. Given the expansion of goods, the business world became more complex and confrontations over the division of revenue and assets were constant, which made the audit act fundamental in judicial and extrajudicial petitions, providing information to clarify doubts, with the aim of proving audit facts.

According to Junior Santos (2007), forensic audit provides the technical evidence needed to prove accounting facts related to assets and provides information that can help judges make procedural decisions.

As defined in the Brazilian Accounting Standard (NBC TP 01):

... forensic audit is the set of technical-scientific procedures aimed at bringing to the decision-making instance elements of evidence necessary to subsidize the fair resolution of litigation or the finding of a fact, by means of an accounting expert report and/or forensic accounting opinion, in accordance with legal and professional standards, and specific legislation insofar as it is pertinent (Conselho Federal de Contabilidade, 2020).

The importance of the intervention of an audit for the judge arises when there are discussions involving assets, in which their effects provoke calculations, calling on the accounting area to resolve disputes. "The term factual determination refers to the need for the production of expert evidence with technical and scientific basis" (Inacilma, 2021, p. 12), and the term technical-accounting opinion that justifies or disqualifies arguments, enabling the decision-making process, whether in a judicial or extrajudicial context.

The forensic audit, whether judicial, extrajudicial or arbitration, is the exclusive responsibility of the accountant, but for Miranda, Fernandes and Goulart (2015), in addition to academic training, it is necessary for the accountant to have solid technical-scientific knowledge of the subject, in order to delve into the interpretation of the fact and provide solutions to the proposed questions.



According to the Brazilian Accounting Standard – NBC PP 01 (R1), of March 19, 2020, an expert is an accountant with technical and scientific knowledge, regularly registered with the Regional Accounting Council and the National Register of Accounting Experts, who conducts expert activity personally or through a technical or scientific body, with the following designations:

- Court-appointed expert is the accountant appointed by the judiciary to exercise forensic audit;
- Arbitrator expert is the accountant appointed to provide forensic audit;
- Official expert is an accountant who has been appointed by law and belongs to a special state body;
- Technical assistant is the accountant or technical/scientific body appointed and hired by the party in forensic audits.

It should be noted that in order for accounting expert witnesses to be appointed by the court, they must be duly registered with the Certificate of Professional Regularity issued by the Regional Accounting Councils or the CFC's National Register of Accounting Experts.

When accepting the assignment, this professional must comply with the following rules governing the expert activities and performance of the accounting expert witness:

a. NBC TP 01 - Forensic audit - CFC (2020). This standard aims to guide the expert in the technical-scientific procedures for carrying out forensic audit in the judicial and extrajudicial spheres, to clarify the aspects and facts of litigation.

b. NBC PP 01 – Accountant expert witness – CFC (2020). This standard establishes criteria inherent to the accountant's work as an expert.

Forensic audit can be divided into two categories: judicial and extrajudicial.

Extrajudicial audit is not requested by a judge but by a company or individual seeking an answer to a particular accounting situation and can serve as the basis for a lawsuit. It can occur in cases of calculating compensation, sharing assets, liquidating assets, merging companies, among others. This category includes arbitral expertise, in which the Arbitration Act must be applied.

Arbitration is an alternative to the judicial branch for resolving disputes involving available property rights in which one or more arbitrators are chosen by the involved parties to solve the issue.

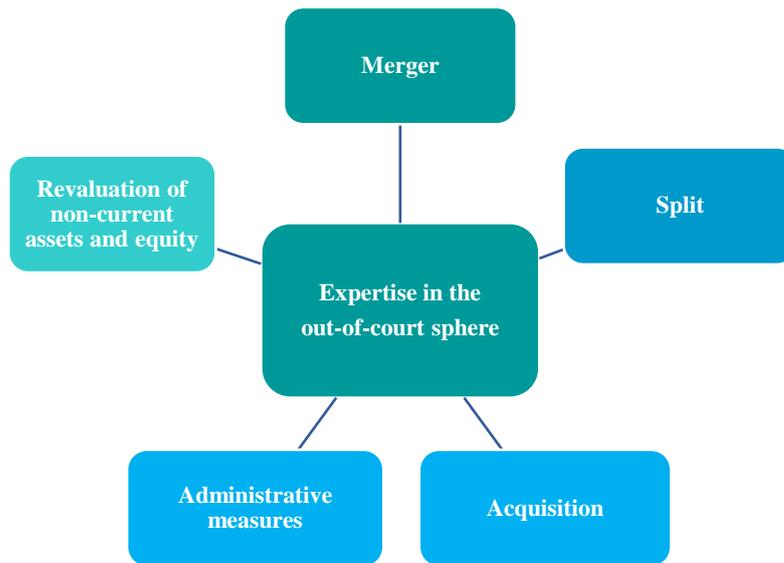
It is very common for out-of-court expertise to be carried out at the request of a tax lawyer in cases of tax assessments. This is because the internal Revenue Service most often imposes a fine that is higher than it should be because it does not take into account possible tax credits or due to a misinterpretation of the accounting books. Thus, forensic audit highlights this situation and the case is resolved quickly, already in the administrative sphere.

These are also examples:



**Figure 3**

*Area of Expertise in the Extrajudicial Sphere*



Source: adapted from Magalhães (2005).

The notes of accounting expert witnesses must be confidential and responsible according to professional ethics. These professionals must always seek the reality and truth of the facts they dealt with, providing evidence under very well-founded analysis criteria, as the reports may have undergone some kind of manipulation of the information. Therefore, such experts must be reliable, impartial, trustworthy and knowledgeable in the field.

Committed to these responsibilities, experts must provide all the necessary clarifications in their report in a clear and precise manner in order to build sound conclusions. According to Costa (2022, p. 3):

the forensic accounting report or technical accounting opinion used by the professional accountant serves to establish facts, clarify and eliminate doubts, aiding decision-making by judges or interested parties in litigation. The accounting opinion is used by an assistant accounting expert witness, who in turn analyzes the conclusions of the expert report, corroborating the grounds of the report in order to identify cases for the party that hired this professional.

The preparation of an expert opinion involves a number of expert accounting procedures, including, in whole or in part: examination, survey, inquiry, investigation, arbitration, measurement, valuation, certification and testability, depending on the nature and complexity of the matter. A good quality opinion is one that contains objectivity, technological rigor, conciseness, argumentation, accuracy and clarity.

According to Vasconcellos (2016), the segment of forensic audit frauds has increased by more than three digits between 2013 and 2016, driven by three interconnected factors: the Anti-Corruption Law, Operation Car Wash and the Petrolão scandal.

According to the National Association of Federal Criminal Experts (2020), in Brazil there are several examples of effective participation by accounting expert witnesses in Brazilian investigations such as Mensalão, Operation Car Wash, Pandora's Box, Sanguessuga, Zelotes, Greenfield and Bullish, among others, in which forensic audit-financial expertise has been present in high-profile operations (Rosa & Lima, 2019).



### Comparison between forensic audit and forensic accounting

According to previous texts, there are conceptual descriptions of research on the purpose and characteristics of professionals in forensic audit and forensic accounting, but as there are also some similarities between them, there could be some confusion for readers.

Thus, Lucas Caio Nadone sought to distinguish forensic accounting from forensic audit, areas that in theory are based on investigation to attest to the veracity of facts brought into question.

Chart 1 below clearly shows the difference between these professionals.

Chart 1- Difference between forensic audit and forensic accounting

Type	Forensic audit	Forensic accounting
Realization	Independent ad hoc experts	Company or self-employed professional
Focus	Issuing opinions	Investigating facts
Periodicity	Judicial and extrajudicial process	Lawsuit, specific action or executive demand
Demanders	Occasional / at any time	Eventual
Scope	Justice or parties involved	Defrauded (victims)
Timeframe	Questions	Complaint required (private prosecution)
Type	Historical	Historical/future
Training	Detective	Detective/Preventive
Regularization	Accountant	Accountant, Law, Economist, Business Administrator (Multidisciplinary)
Final output	NBC PP	No regulation
	Expert opinion	Report

Source: adapted from Nadone et al., (2017)

It can be noted that the two specialties have similarities, but forensic audit work is much broader, ranging from issues involving the determination of assets to search and seizure cases, i.e. the expert can be involved in valuation of assets and rights, calculation of compensation, sale and purchase of companies, division or liquidation of assets, divorce, while forensic accounting works specifically in situations in which there has been or is fraud, seeking financial information from public and private companies.

Forensic accounting is an action capable of highlighting financial data that has occurred or is occurring to resolve legal disputes. Thus, forensic accountants have the important role of preventing economic crimes (Crumbley et al. apud Izomara et al., 2019, p. 4). However, their work is focused on answering questions elaborated by judges and so they do not act proactively in prevention, but reactively in measuring fraudulent acts.

Other authors such as Aquino and Imoniana (2017) identified in their research that, although both are concerned with presenting evidence, accounting expert witnesses are focused on presenting before a judging body, whereas forensic accountants do not necessarily testify in court or before a judging authority. It is also worth highlighting the regulation in Brazil, in which the forensic audit is widely regulated and has a range of rules governing the profession, but forensic accounting does not.

Despite differences, it is worth noting that for both professionals, ethical behavior, honesty and responsibility are the main basis of professional achievement and they must always maintain independence, avoiding anything that could embarrass them in their work.

After conducting this analysis, it can be conceptualized that forensic accounting is a branch of forensic audit that allows financial or accounting information to be gathered and presented, to serve as a basis for debate, discussion and analysis, specifically in crimes involving economic and financial aspects, such as money laundering.



## Methodology

In terms of purpose, this research is descriptive, as its objective is to analyze the competencies and responsibilities of forensic audit and forensic accounting professionals, to distinguish the mishmash of concepts in these two areas. Both are important structures to help combat fraud, and were analyzed through a survey of articles in the field. In terms of procedures, this research aimed to carry out a bibliographical study of articles found on the subject of forensic accounting and forensic audit published in scientific events and journals.

The descriptive research was aimed at performing a general analysis of the role of forensic audit and forensic accounting in combating crime and assisting justice by collecting evidence of fraud and technical reports.

After the descriptive analyses, a field research was conducted using a closed question questionnaire to extract data and build information directly from the reality of the object of study. The level of knowledge of students on forensic accounting and forensic audit, was analyzed, as this subject is still little explored in the accounting world, but with a vast field of professional activity, so it is of vital importance for the academic training of students.

To conduct the field research, some steps were followed, which consisted of:

- developing of the questionnaire;
- choosing the population;
- sharing the questionnaire with other universities and
- data collection.

Regarding the approach, the study was quantitative and applied descriptive statistics to analyze the collected data and presented the results obtained in tables and graphs, showing university students' knowledge of forensic accounting and forensic audit.

## Field Research

### Profile of the interviewees

The questionnaire was distributed via email to academic centers at Mackenzie, the Federal University of São Paulo (Unifesp), the University of São Paulo (USP), etc. and was answered by 67 students over five months, from July to December 2021. This total was composed of 35 women and 32 men. In terms of academic background, the respondents were: 58 in accounting sciences; the others in economics; business administration and other areas.

Therefore, the highest concentration (86.6%) was in the Accounting Sciences course, a predictable result considering that it was a questionnaire focusing on forensic audit and forensic accounting, topics little explored even within the area itself. The majority were studying accounting sciences, so it was expected that they would work in this sector: 41 people (61.2%) worked in accounting and 26 people (38.8%) worked in another field.

### Analysis of results

The survey used a questionnaire designed with a focus on students' reflections on forensic audit and forensic accounting and was made up of eight questions identified below. The results of interviewees' answers follow each question. The evaluation metrics consist of numbers from one to four:

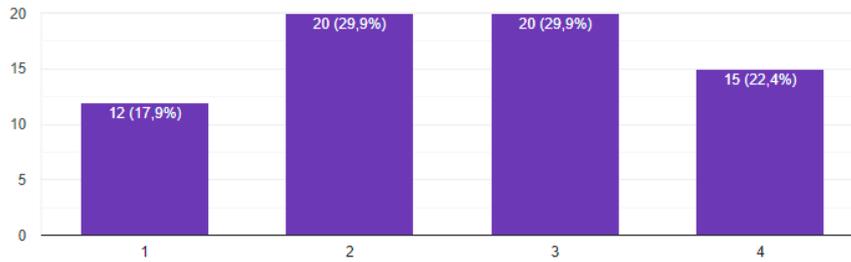
1. Strongly disagrees
2. Partially disagrees
3. Partially agrees
4. Strongly agrees

#### 4.2.1. Questionnaire

The answers to the questions applied follow.



Graph 1 – I recognize the difference in the objectives of the areas of forensic accounting and forensic audit areas.



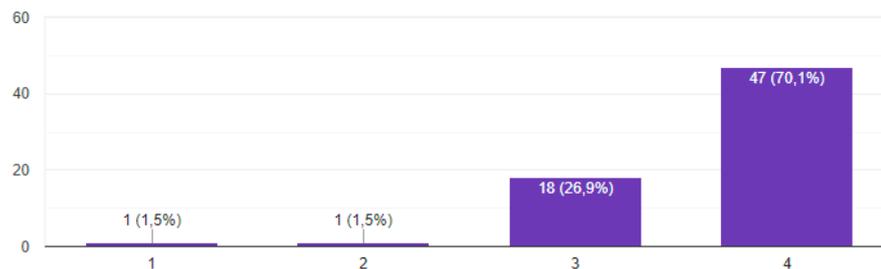
Source: prepared by the authors (2021).

The purpose of this question was to identify the student's ability to identify the expert activities of the forensic accountant.

The graph shows that approximately 47.8% of respondents said they were unsure about the subject and 52.2% said they understood the different goals of the two areas.

This question was also asked in 2012 in Robson Maciel Silva's survey, in which 71% of the eight respondents who worked in finance said they did not differentiate between forensic accounting and forensic audit. In contrast, less than half of the respondents to this survey said the same, which indicates an increase in the understanding of the subject.

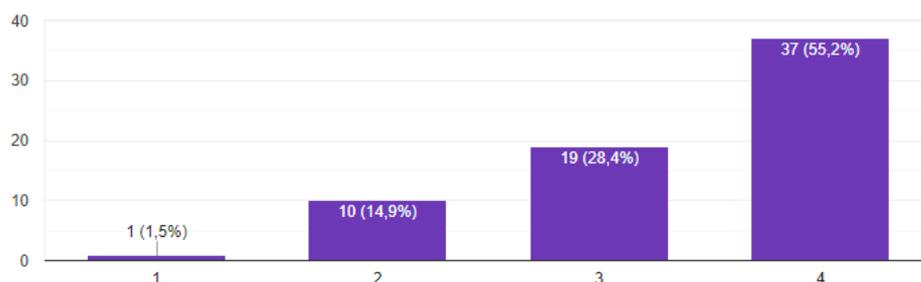
Graph 2 – Do you agree that forensic accounting is the science responsible for combating crimes of economic nature through investigations and the presentation of evidence that is suitable and admissible in court?



Source: prepared by the authors (2021).

There is little doubt on the purpose of forensic accounting. Up to 97% agree that the area is useful in combating financial crimes.

Graph 3 - Forensic audit has several aspects and applications and forensic accounting is one of them, in which its main issues are related to the prevention and detection of fraud, such as money laundering.



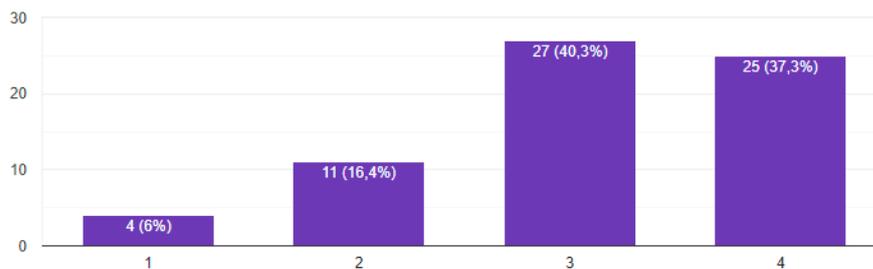
Source: prepared by the authors (2021).



This question sought to assess whether the interviewees were consistent with the answers given in the previous questions.

The vast majority (83.6%) believed that forensic accounting is a branch of forensic audit, which is more focused on preventing and investigating fraud. This result is in opposition to the percentage in the first question, in which more than half of the respondents said they did not know the difference between the functions of the areas under discussion.

Graph 4 - The accounting expert witness, unlike the forensic accountant, does not act proactively in prevention, but reactively in measuring fraudulent acts.



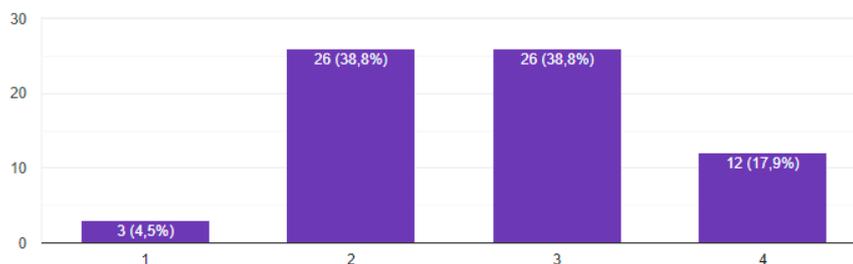
Source: prepared by the authors (2021).

The above statement reveals the point that distinguishes activities between forensic accountants and accounting expert witnesses who work to measure the extent of fraudulent cases in order to answer questions presented by the judge or the party that will decide a particular issue.

The results showed that most of the respondents (77.6%) believe that fraud prevention is not within the scope of the accounting expert witness's work.

In their article, Prates, Souza and Dutras (2018) discussed interviews with professionals in the field of forensic audit. According to one interviewee, the case that comes closest to his area of expertise would be the calculation of economic damages in both the extrajudicial and judicial phases. In other words, their job is to stipulate the extent of the damage caused by the illegal act of accounting fraud. Others also stated that they receive procedures and act only after the fact, in order to ascertain what has already gone wrong, thus verifying the occurrence of the irregularity. The interviewees made it clear that forensic audit is a reactive science, not a preventive one.

Graph 5 - Do you agree that the work of accounting expert witnesses in investigating and combating corruption is more efficient than that of forensic accountants?



Source: prepared by the authors (2021).

The percentages of respondents who disagree or agree with this question are very close: respectively 43.4% and 56.7%.

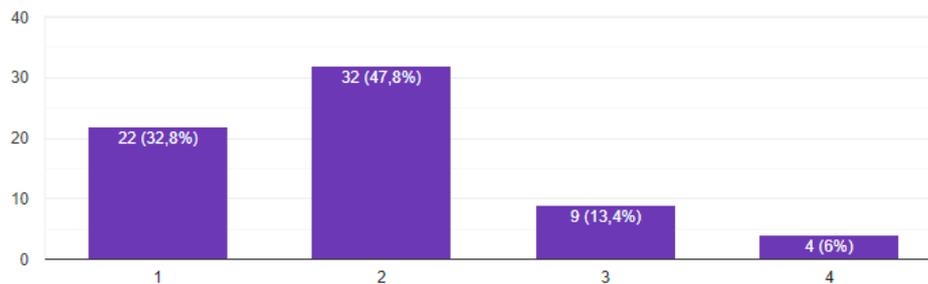
This question is strongly related to the third question, as although 83.6% of the students said they were aware of the forensic accountant's focus on combating and



investigating fraud, it was noted that their work is still not very visible in the Brazilian environment and that expert accountant witnesses replace their roles.

In a study by Luccas and Relvas (2013), a dynamic was carried out with a group of 17 people. Using a real scenario as a case study, over the course of two rounds, the group chose the professional best suited to provide the service of investigating and/or combating fraud within a company. During the first phase, without any prior definition of each profession, the majority opted for the independent auditor, followed by the accounting expert witness, the internal auditor, and finally, the forensic accountant. Before the second phase, two tables with goals and functions of each professional were shown to participants. By better understanding each professional, 31% changed their previous choice, in which forensic accountants became the new choice to be hired to investigate and combat fraud in the case. However, some still highlighted the timid role of forensic accountants and claimed that the closest parallel to this figure in Brazil would be the accounting expert witness.

Graph 6 - Currently, universities and academic institutions have made a lot of content available on forensic accounting and forensic audit.

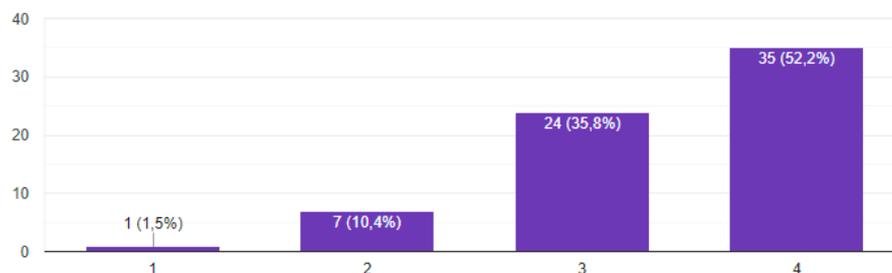


Source: prepared by the authors (2021).

Few students stated that they received education on forensic accounting and forensic audit. Thus, it can be inferred that universities and other accounting organizations are not fulfilling their role of encouraging the introduction and development of these professionals in Brazil.

In a survey conducted by Sena et al. (2020), students presented the main obstacles to integrating these areas into the undergraduate curriculum, especially forensic accounting, which are as follows: space in the undergraduate curriculum, lack of teachers specialized in the subject, lack of administrative or financial support and specific teaching materials.

Graph 7 – Bearing in mind that there is a growing demand in the areas of forensic audit and forensic accounting, their knowledge is essential for future accountants.



Source: prepared by the authors (2021).

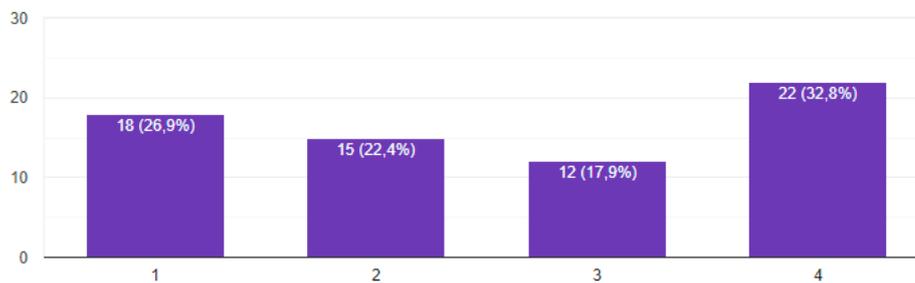


This question offered a good idea of the importance given by the respondents to the areas covered and it seems that the vast majority (88%) agree that their knowledge is essential for the training of future accountants.

Kramer, Seda and Bobashev's article (2016), which aimed at finding out views of educators and accounting professionals on forensic accounting education, concluded that the groups agreed that professional demand in the area will increase in the near future and that they prefer a separate course and diploma at graduate and postgraduate levels.

The services of accounting expert witnesses have also been gaining more prominence, especially with the increase in labor lawsuits. It was also said that, because they serve the whole country, there is a need to train more qualified professionals to meet all the demands.

Graph 8 - I am interested in working with forensic audit or forensic accounting.



Source: prepared by the authors (2021).

This question served as a gauge of the student's interest in pursuing a career as an expert or forensic accountant.

It can be seen that there is a significant percentage of students interested in the area. Such result was expected, considering the repercussions of the previous question.

### Overview

Summarizing the responses of the 67 interviewees, forensic accounting is undoubtedly a branch of forensic audit consisting in a set of techniques and knowledge to combat financial crimes. In addition, the vast majority of respondents are aware that the expert focuses on answering questions drawn up by the parties, not acting proactively to prevent fraud, but rather to measure the act after it has occurred (Silva, 2012).

However, the question that asked whether the division of responsibilities between forensic audit and forensic accounting was recognized revealed that half of the respondents considered this division was insignificant, which showed lack of cohesion among them regarding the professional roles.

In more than half of the respondents' view, accounting expert witnesses work more effectively in combating fraud than forensic accountants, which is a result of the lack of these professionals working on a large scale in the Brazilian environment. Often, their work is conducted by the accounting expert witnesses or big auditing firms, the so-called Big Four, which offer everything from prevention services to those related to fraud investigation. However, there is no association of audit priorities aligned with the fraud mitigation strategy, since the work is more focused on verifying compliance with standards.

In analyzing the demand for professionals in these areas, it was observed that students are very interested in the careers of accounting expert witnesses or forensic accountants, but there is misinformation on the subjects and low awareness and education in Brazilian educational institutions, leading to a lack of professionals in these areas.



Furthermore, there are some comments made by questionnaire respondents transcribed below.

*I think it's a very vast and important area for our training, but we realize that we don't cover it very much in our undergraduate course, as well as in other faculties. We could address these issues in more depth and in a better way (Respondent 49's Report).*

*Graduated accountants with a Certified Public Accountant (CPA) license simply submit supplementary obligations within deadlines without any analysis or necessary knowledge. I work with tax review, and every day I see fiscal SPED and EFD Contributions submitted with zero amounts, companies and accounting firms that have no control over incoming invoices, etc. Any expert can identify accounting fraud, as no company in Brazil pays taxes correctly. (Respondent 46's Report).*

*It seems to me that both Forensic audit and Forensic Accounting are very interesting areas in terms of the purpose of these sciences, which is to investigate fraud and other illicit activities, but society has paid little attention to these promising fields that contribute to the financial health of companies, as well as government institutions (Respondent 66's Report).*

## Conclusion

This research aimed at highlighting students' knowledge on forensic accounting and accounting audit, in order to clarify concepts about these areas that are often misunderstood due to their similarities.

The results obtained show that there is confusion between the purpose of the accounting expert witnesses and the forensic accountants and highlight the lack of specialized courses on these themes in favor of disseminating such knowledge in Brazilian education.

Based on the study, it can be seen that there are differences in their scopes of action, as forensic audit is more comprehensive than forensic accounting. Although both are concerned with presentation of evidence, the former does it before a judging body, while the latter performs it for both family and private cases.

The increase in the amount of corporate fraud has led to discussions on the accounting professional to be chosen by managers to combat this situation within companies. In view of this study, the conclusion is that forensic accountants are professionals whose role is related to this function. However, the timid role of forensic accountants in Brazil and its strong resemblance to accounting expert witnesses raise doubts on the ideal professional to be chosen.

Along with increased awareness of the level of performance and importance of these tools against due diligence and financial crimes, interest in pursuing a career in these areas is also growing.

Thus, training more professionals in forensic accounting and forensic audit is necessary, as fraud is an event requiring attention from companies and there is a lack of research on this subject. For Prabowo (2015), the inclusion of forensic accounting in training can be seen as an important attitude to take in our society to investigate, identify and reduce cases of corruption, which are a problem in the world economy.

Given the importance of both areas, comparative studies between the work of forensic accountants and accounting expert witnesses should be pertinent in order to identify more efficient techniques to combat and/or investigate accounting manipulations.



The great difficulty during the development of this work was to find publications on this subject, since it is little explored and known by civil society. For the same reason, it was even more difficult to obtain a reasonable number of people willing to answer the questionnaire.

Finally, suggestions for future research are to deepen this study by adding an analysis of auditing professionals, who in turn also have similar traits to the covered areas. In addition, it is recommended to study the application of forensic accounting in public environment and cybercrime of a financial nature.

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