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Forensic Accounting – the Missing Link in Education and Practice

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Financial scams and fraud appear to be a global problem. Although research related to financial fraud and embezzlement varies slightly from region to region, fraud schemes and perpetrator characteristics are pretty similar. In Serbia in particular, forensic accounting is an underdeveloped area in education and practice, and is thus often replaced by and considered to be an audit, even in academic circles, whereas forensic accountants are viewed as auditors.

The correlation between auditing and forensic accounting is a dynamic process that changes over time due to political, social and cultural events, and the auditors themselves are expected to have, at least, adequate knowledge and skills to recognize a financial fraud. However, detailed disclosure of financial fraud and embezzlement is the matter forensic accountants are dealing with. These experts have the skill sets in many areas and are able to apply their skills and abilities in one area, while working in another. Forensic scientists need to be familiar with not only financial accounting, but also with tax and business law, criminology, psychology, etc.

The aim of this paper is to show the incidence of financial fraud and embezzlement, indicating the consequences they bear and to explore the extent to which forensic accounting is represented in academic institutions and practice in the Republic of Serbia. It also explains the general concepts of services in the field of forensic accounting. As a research method in this paper the content analysis method is applied.

With respect to the consequences of financial fraud and embezzlement it carries, and lessons learned from recent financial scandals in the world and in Serbia in particular, we can conclude that the development of forensic accounting in education and practice is of utmost importance. Although this process is neither easy nor cheap, the benefits it provides are invaluable.

The present research topic should be given more attention, given a large number of fraudulent acts in the financial statements that characterized the operations of a substantial number of Serbian companies. A higher education is being proposed in the area of forensic accounting, both at the academic level and in the accounting practice.

Keywords: financial fraud, forensic accounting, auditing, forensic accountants

1. Introduction

Requirements for accounting information, both within and without the company, have led to a gradual division of accounting into two subsystems, namely: financial accounting and management accounting. With regard to the accounting division, both subsystems can be said to represent the socio-professional activities.

Forensic accounting, as a set of socio-professional activities, is aimed at protecting companies, and thus represents the implementation of legal, economic, social and political functions. In this sense, forensic accounting is a discipline that combines accounting, auditing and law. The law reflects the government's ability to establish, manage and develop social, economic and political order. Forensic accounting, as a separate branch of accounting, deals with the control of legal and professional recordkeeping [12].

The present paper shall discuss important aspects of forensic accounting, in both theory and practice, and research opportunities and trends towards a wider inclusion of this discipline into academic and practical courses.

2. Definition of Forensic Accounting

The area that deals with the study of financial fraud and malfeasance is called forensic accounting. Certain forms of forensic accounting date back to 1817 and refer to court decisions, i.e. rulings on declaration of bankruptcy. Then the Scottish accountants pooled their knowledge and expertise in addressing this specific issue in the form of opinions in support of arbitration proceedings in 1820's, followed by articles examining expert testimonies and evidence on arbitration that began to appear in the late 1800's and early 1900's. Maurice E. Peloubet, a partner in the accounting firm in New York, is probably the first to publish the phrase "forensic accounting" in his article in 1946 [3].

In the accounting literature itself, there is no single definition of forensic accounting. Out of the vast array of definitions that can be found in the literature, the most acceptable one, according to ACFE (Association of Certified Fraud Examiners), is the one defining forensic accounting as a set of skills to use in potential or actual civil or criminal cases, including generally accepted accounting and auditing ones; determining loss of profits, revenue, property or damage, assessment of internal controls, fraud and everything else that leads to the applying of accounting knowledge to the legal system.

The concept of forensic accounting is a thorough and complex setting in which an accountant, in his professional independent judgement, forms a presentation at such a high level of reliability, that it can qualify as evidence in legal proceedings conducted [15].

In order to complete the required tasks, it is essential that forensic accountants demonstrate substantial knowledge of accounting and auditing, oral and written communication skills, strong detail-spotting skills and a good use of information and communication technology [6]. Forensic accounting, sometimes referred to as an investigative accounting, is an area that, in addition to accounting knowledge, requires a good use of information technology [16]. The complex structure of the knowledge forensic accountants are equipped with, in addition to the above knowledge, mostly relies on laws and regulations [12]. In his work, one must demonstrate sufficiently broad business and organizational know-how and experience, must be competent and morally reliable (no complaints), so that his professional opinion (judgement) on the operations and related fraud or other illegal acts is convincing enough [7]. Forensic accountants are expected to demonstrate a high degree of independence and objectivity, which is in accordance with the Code of Ethics for Professional Accountants. A forensic accountant shall be considered independent if he is intellectually honest and ready for impartial decisions. Independence is usually considered to be a prerequisite of objectivity. The key feature that a forensic accountant should possess is objectivity, which is difficult to achieve due to the many factors which might affect the assessment and expectations [5]. A forensic accountant, then, is the creator of independent and unbiased, objective information on the economic truth.

The task of a forensic accountant is to analyze, interpret and present interconnected business and financial positions, so that they can be properly understood and appropriately supported. In the course of their work, a forensic accountant often participates in the following activities:

- Research and analysis of evidence of fraud committed,
- Developing applications using information and communication technologies used in the analysis and presentation,
- Presentation of research results, and
- Participation in legal proceedings (usually as a witness in court, as an expert in forensic accounting) [10].

It is estimated that in the years to come, in developed market economies, a forensic accountant is likely to be one of the 20 most wanted professions.

3. Forensic Accounting and Related Services

Forensic Accounting is the application of accounting principles, theories and disciplines to facts or hypotheses in a legal dispute and encompasses every branch of accounting knowledge. Forensic accounting is comprised of two major components: (1) litigation support services in proceedings that recognize the role of forensic scientists as experts or consultants, and (2) investigative services that may or may not lead to testimony in court. Forensic Accounting may involve application of special skills in accounting, auditing, finance, quantitative methods, certain parts of the law and research, and investigative skills to collect, ana-

lyze and evaluate evidence, interpret them, and communicate findings within reports. Forensic Accounting is either based on certification services or on advisory services [8].

Fraud Examination or Forensic Investigation of Financial Frauds is a methodology for exposing financial frauds and involves obtaining evidence, interviewing people, writing reports and testimonies. *Certified Fraud Examiner* is a license added by the ACFE Association (*Association of Certified Fraud Examiners* based in the United States) [2]. Such an investigation is conducted on the basis of fraud indicators, such as cash shortage or other evidence being investigated, in order to determine the extent of loss, i.e. damage and the identity of the perpetrator.

Fraud Deterrence or Financial Fraud Deterrence is related to creating an environment where people are discouraged to commit fraud, although it can be done. Deterrence from financial fraud is usually achieved through a number of efforts related to internal controls and ethics programs that create integrity and stimulate employees to report potential abuse. Such actions increase the likelihood that the fraudulent act perceived will be detected and reported accordingly. Financial fraud deterrence can be achieved using software monitoring tools, triggered once the perception of detection is present and potential perpetrators become aware that they will certainly be punished if caught.

Financial Fraud Detection refers to the process of detecting the presence or existence of fraud. Financial fraud detection can be accomplished by means of well-designed internal control, supervision and monitoring systems, as well as by actively seeking evidence of potential fraud.

Fraud Remediation or Financial Fraud Remediation refers to rehabilitation, i.e. loss recovery through insurance, legal system or other means, modifications within operational processes and procedures, including internal control system modifications in order to reduce or prevent the recurrence of similar frauds in the future.

4. Interrelationship between Audit, Financial Fraud and Forensic Accounting

Effective stress management delivers direct obligations and responsibilities, which in turn also add certain cost [9]. Stress is a psychophysical condition a man falls into in difficult circumstances and situations [11]. Auditing companies and their employees are required to a much greater extent to invest time, financial resources and expertise in creating quality working environments that are seen as potential sources of stress. An auditor is responsible for forming and expressing his opinion on financial statements whereas the competent Audit Authority is in charge of their preparation and presentation (auditing does not diminish the responsibility of the Audit Authority).

Numerous financial frauds occurred in the past, as well as at the beginning of this century, had disrupted the trust of a large number of users of the financial information contained in financial statements. Financial reporting and accounting and auditing professions are often blamed for the occurrence of frauds and loss of confidence in the reliability of financial information by a number of users and decision-makers. There have always been some accounting frauds happening followed by financial collapses, to a much greater extent recently, and with more serious consequences to all of us.

Generally speaking, a fraud can be divided into four basic elements:

- Misrepresentation of Material Fact. (Materiality in the context of legal standards that vary from jurisdiction to jurisdiction),
- Awareness that interpretation is erroneous or a negligent disregard of the truth,
- Confidence - a person who receives an interpretation is reasonable and justified in relying on it.
- Damage - financial damage caused by all of the above mentioned [13].

There have been numerous scientific debates arguing that the two factors should be taken into account when analyzing psychology and personality of the fraud perpetrator:

- Biological characteristics of the individual, which vary widely and influence behavior, including social behavior and
- Social characteristics of the individual, which are derived from the way the individual behaves, i.e. interacts with other people.

Two basic types of financial fraud perpetrators have been identified on the basis of these psychology studies:

- Calculated criminals - who want to compete and prove themselves and
- Criminals depending on the situation - those who are willing to do anything to save themselves, their family or their company from disaster. [13]

Fraud detection (Figure 1) is an interactive process that includes:

- Corporate control system establishment,
- Investigation and problem solving,
- Process testing and transaction,
- Transaction control level.

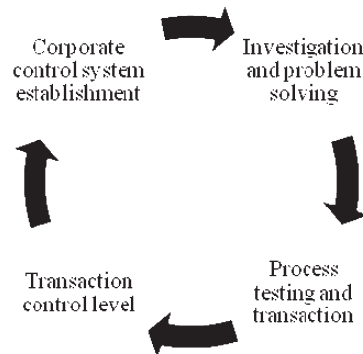


Figure 1: Fraud Detection Process [4]

Interrelationship between audit, fraud and forensic accounting is a dynamic process that changes over time due to political, social and cultural events. The work of external auditors is greatly influenced by the Sarbanes-Oxley Act, according to which an auditor is expected to demonstrate, at least, an adequate knowledge and skills in the area of forensic accounting and fraud in order to identify financial frauds [4].

However, auditors are not obliged to plan and perform audits to detect errors that are not material to the financial statements, regardless of whether the error is unintentional or related to financial fraud or malfeasance. However, if the auditor encounters evidence of financial fraud and embezzlement during the audit, he shall notify the competent body.

Organizations tend to rely too heavily on external audit as a quality control mechanism to detect financial fraud and embezzlement. Societies, subjects to external audits, are the most common victims of financial frauds. External audits are extremely important and can have a strong deterrent effect on the prevention of financial fraud, but are not solely relied upon to detect fraud.

Detecting financial fraud and embezzlement falls within the scope of activities dealt with by forensic accountants who demonstrate skill sets in different domains (financial accounting, tax and business law, criminology, psychology, etc.) and who are thus able to apply their skills and abilities in one area while working in another.

5. Facts and Statistics on Financial Fraud and Embezzlement

Financial fraud and embezzlement, although different in terms of patterns they follow, have many features in common. Monitoring and analyzing the resulting abuse and information associated with them have a major role in discovering the new ones. Therefore, it is useful to know the following facts.

Employees holding high-ranking positions generally cause the greatest damage to their organizations. Studies show that the fraud committed by owners or executives causes three times more damage than the fraud committed by ordinary managers, and more than nine times greater damage compared to the frauds committed by general staff. Frauds committed by managers or owners, take more time to be discovered.

More than 77% of financial frauds were committed by individuals in one of six departments: accounting, operations, sales, executive management, customer service and procurement departments. More than 87% of fraud perpetrators had never been charged or convicted of any fraudulent practices [14].

Fraud perpetrators often display warning signs that they are likely to engage in illegal activities. The most common signs imply living beyond their means (36% of cases) and experiencing financial difficulties (27% of cases) [14].

Small organizations are more often victims of financial fraud. In contrast to larger organizations, small organizations often lack control activities that combat and prevent financial fraud, making the scope for financial fraud and embezzlement larger.

It has been observed that most of the frauds are committed in banking and financial services, government and public administration and in the manufacturing sector. Also, according to research results, it may be concluded that nearly half of organizations, the fraud victims, never recover from losses caused by fraud.

ACFE published research findings covering 1388 fraud cases. The analysis of fraud types and changes in the median loss (Figure 2) indicates increased manifolds over the period from 2008 to 2012 in the median fraud loss, whereas financial statement frauds are the most common type of fraud in the U.S., entailing therefore the greatest average loss at the organizational level.

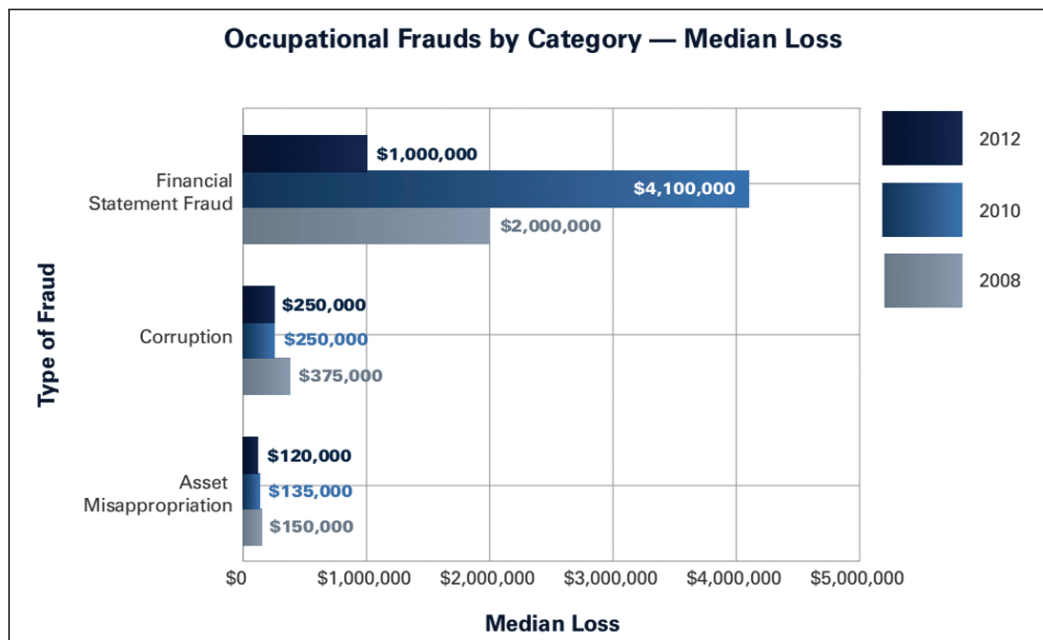


Figure 2: Occupational Frauds by Category in U.S. and Median Loss [14]

the analysis of changes in the losses resulting from fraudulent activities by number of employees in the United States (Figure 3) demonstrates the lowest average loss in organizations with 1000 to 9999 employees and also the lowest average loss incurred within organizations in 2012 compared to 2010 and 2008.

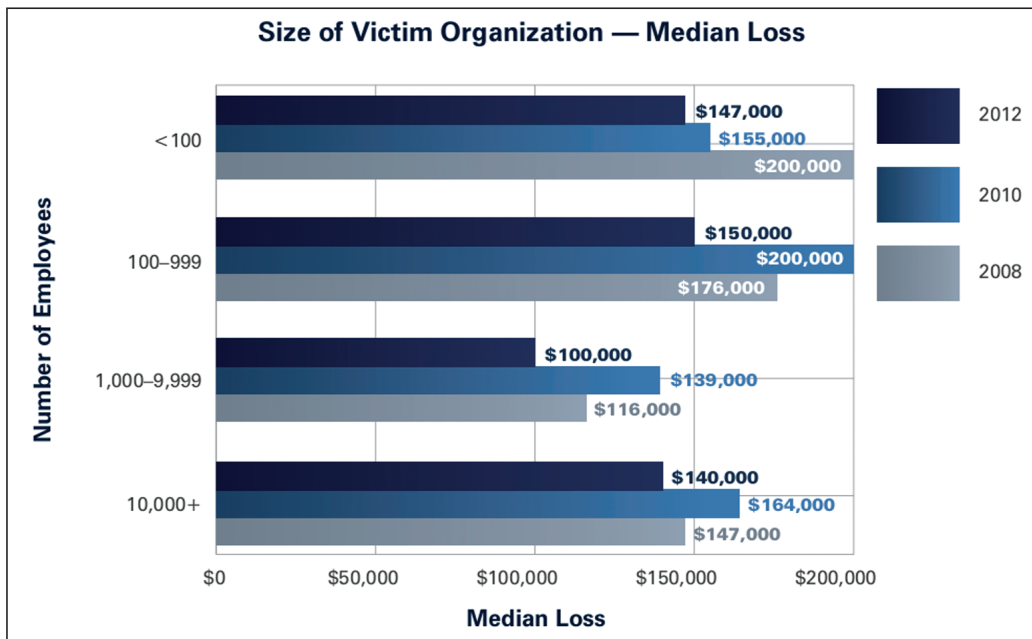


Figure 3: Size of Victim Organization Loss arisen from fraud by number of employees in U.S. [14]

ACFE research results show that tips are among the most common forms of fraud detection in the United States (Figure 4), followed by management review (management control), internal audit and random checks.

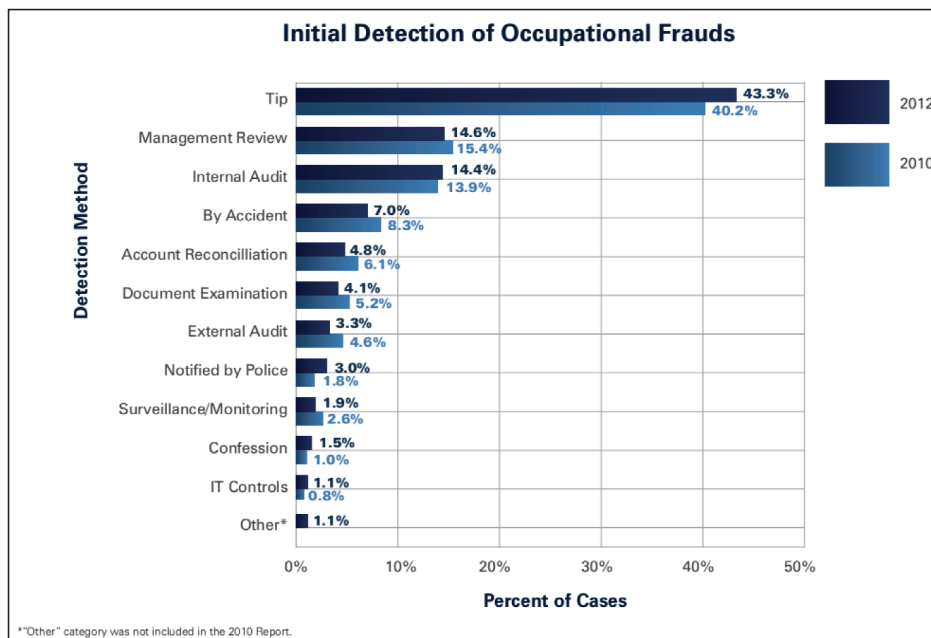


Figure 4: Methods of detecting fraud in U.S. [14]

Research findings also show that it usually takes 18 months on average before financial frauds get detected (Figure 5). Also, it is noteworthy that most fraud reports come from employees operating within the victim organizations.

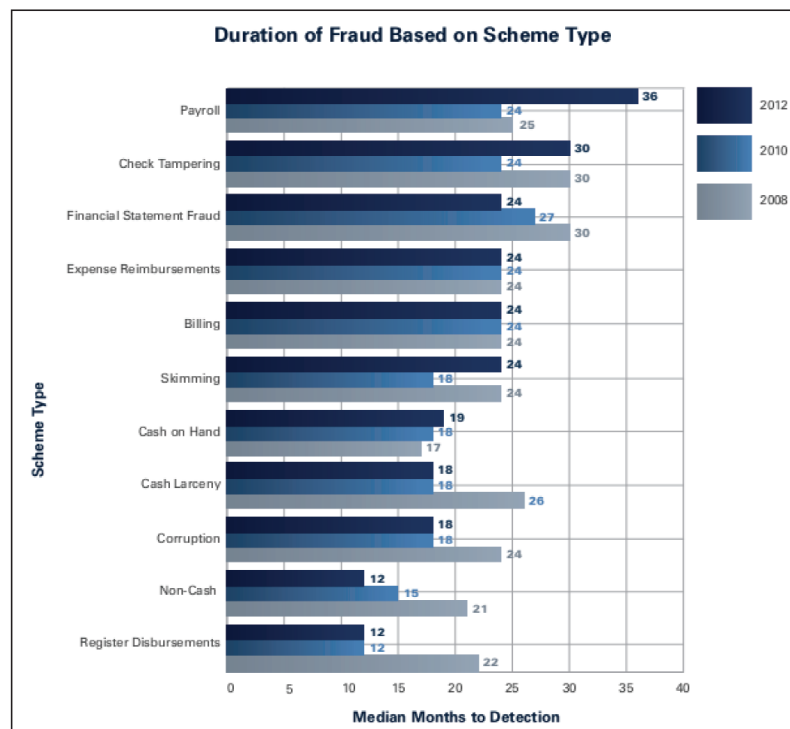


Figure 5: Duration of fraud on the basis of fraud type in the U.S. [14]

Financial frauds and scams make a global problem. Although research related to financial fraud and embezzlement varies slightly from region to region, most of the trends in fraud schemes, perpetrator characteristics, and controls to combat fraud are similar regardless of where the actual frauds occur.

Studies show that a typical organization loses 5% of its annual revenue due to fraud and financial irregularities. If this percentage is applied to the gross world product in 2011, we reach the potential global loss exceeding \$ 3.5 billion [1]. Nearly one-fifth of the financial frauds committed involve losses exceeding \$ 1 million.

Astonishing data are obtained from a survey conducted by the ACFE, indicating losses amounting to around \$ 994 billion in U.S. companies during 2008 due to fraud and abuse. The perpetrators were primarily employed in the accounting sector, 29% and 18% were related directly to the management [13].

The highest-profile financial frauds in recent history occurred in corporations with capital weighing billions of dollars, such as “Tyco International”, “WorldCom” and “Enron“. These financial frauds caused massive widespread damage, and their leading executives were convicted and sentenced to long prison terms. There are many privatizations in Serbia, conducted in the past decade brought into question.

6. Study and Application of Forensic Accounting Concept

In the United States business schools, forensic accounting exists as a subject at the undergraduate level, and is even mandatory as required in most of the cases. There are also a great number of academic institutions and interest organizations that provide education in the domain of forensic accounting and, faced with the questions regarding nature, scope and format of the curriculum to be introduced in undergraduate business education, they invest huge resources. Training in these areas is funded by the government, companies, audit firms and nonprofit organizations.

In Croatia, at the University of Split, there is a University Center for Forensic Sciences within which students, among the rest, can attend lectures at the Financial and Accounting Forensics Department which offers subjects called “Forensic Accounting I” and “Forensic Accounting II.”

In contrast, forensic accounting is new and insufficiently known in Serbia as a term and is still associated with audits exclusively. There are a great number of professional bodies dealing with education in this area¹, whereas this subject is not available in undergraduate programs. Academic achievements in this field are negligible.

Such shortcomings in education and practice leave ample room and opportunity for potential perpetrators of financial fraud and embezzlement. In this context, the Faculty of Organizational Sciences is quite recognizable owing to its Cyber Forensics and ‘Forensic Accounting’ available as a study subject within this Master’s Degree program.

7. Tips for Combating Financial Fraud

It cannot go unnoticed that many people are trying to understand how it is possible that there are so many frauds, who is responsible for them, and who is in charge of their detection and investigation; whether it is a question of the system, attitude, aggressive internal policies, stricter regulations or all of the above; which is the best system for their prevention, etc. There appear to be more questions than answers. Although forensic accounting investigation has gained its significance in large organizations and in public in general, there is still a lot to be learned about this relatively new discipline [13].

It is important not to rely on external audit as the only way of detecting fraud. Although it may play an important preventive role in potential fraud detection, its options are limited.

Employee education programs are the foundation of preventing and detecting financial frauds. Employees are an organization’s most effective method for financial fraud detection. Staff must be trained in these matters as to what constitutes fraud, in what way it concerns the entire society and how to report any suspicious activity. What available data show is that not only were most of the frauds discovered by the council, but also the losses organizations with training programs for managers and workers for combating financial frauds suffer due to misuse and fraud are considerably lower. [1]

Unannounced audits are an effective, but an underutilized tool in the fight against fraud. Although unannounced audits may be useful in financial fraud and malfeasance detection, their most important benefit lies in preventing fraud by creating the perception of fraud detection. Generally speaking, fraud perpetrators will make an abuse only if they believe that they will not be caught. The threat of unannounced audits increases the perception of fraud detection having thus a strong deterrent effect on potential fraudsters.

Improvement of the internal control system is useful, but internal controls alone are not sufficient to fully prevent financial fraud and embezzlement. While it is important for organizations to have the strategic plan to combat fraud through an internal control system, it will not always detect financial fraud in the making.

¹The exception is the Serbian Association of Accountants and Auditors, providing professional education and publishing a variety of publications in this field.

Conclusion

Fraud is a possible future for any company in the world, regardless of size, location or industry.

Forensic accounting and professional forensic accountants close the gap between accountants, auditors, inspectors and other government and court officials, which lack the specific knowledge and skills to prevent, detect and prove criminal and other illegal activities in establishment, operation and closure of companies.

On the global level, forensic accounting is one of the highest paid and most sought after business services, and the field full of challenges when it comes to science. In Serbia, forensic accounting is quite rare. Given the fact that we want to catch up with the world, and that financial fraud and embezzlement are not something we are not familiar with, we would have to work on the development of forensic accounting, both in education and in practice.

In Serbia, forensic accounting is often replaced by and considered to be an audit, even in academic circles, whereas forensic accountants are viewed as auditors, even though the two disciplines have quite different motives.

With regard to the consequences of financial fraud and embezzlement, based on the lessons learnt from recent financial scandals, throughout the world and in Serbia as well, we can conclude that it is extremely important to work on the development of forensic accounting, both in education and in practice. Even though this process is neither simple nor cheap, the benefits it provides are invaluable, for both business entities and the society as a whole.

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