Macrothink Institute™

International Journal of Accounting and Financial Reporting
ISSN 2162-3082
2021, Vol. 11, No. 4

Financial Fraud Detection and the Importance of Internal Control

Zgarni Amina

ORCID: 0000-0002-7071-4442

Faculty of Economics Sciences and Management of Tunis

International Finance Group. University of Tunis El Manar, Tunisia

E-mail: amina2302@yahoo.fr

Received: November 20, 2021 Accepted: December 20, 2021 Published: December 23, 2021

doi: 10.5296/ijafr.v11i4.19333 URL: https://doi.org/10.5296/ijafr.v11i4.19333

Abstract

In an environment that is becoming increasingly unstable due, primarily, to new international requirements and rapid changes, the problem of financial fraud detection has grown in importance. One of the main causes is the growing dependence on new technologies. This environment has required companies to adapt to face the new constraints. In fact, financial fraud is a problem that has a profound impact on the financial industry, government, businesses and ordinary consumers. The objective of this paper is double: the first one is to study the explanatory factors and the main variables developed in order to better detect the existence of financial fraud and we have emphasized the importance of taking into account non-accounting variables in the detection of financial fraud which remains little treated by empirical studies. The second objective of this research is to emphasize the importance of internal control, through a literature review, in the fight against financial fraud.

Keywords: Non-accounting variables, Scandals, Risk taking

1. Introduction

In an environment that is becoming increasingly unstable due, primarily, to new international requirements and rapid changes, the problem of financial fraud detection has grown in importance. One of the main causes is the growing dependence on new technologies. This environment has required companies to adapt to face the new constraints. In fact, financial fraud is a problem that has a profound impact on the financial industry, government, businesses and ordinary consumers. Wang et al. (2006) define financial fraud as “a deliberate act that is contrary to law, rule or policy with the intention of obtaining an unauthorized financial advantage”. In fact, financial fraud such as credit card fraud, corporate fraud and money laundering as well as financial statement fraud has caused many bankruptcies and business closures around the world (Enron , Lucent and WorldCom, etc.). This has garnered considerable attention from the public, media, investors, the financial community and regulators. The overall loss caused by financial fraud is immeasurable. Thus, financial fraud detection (FFD) is essential to prevent the devastating consequences of financial fraud. FFD aims to distinguish fraudulent financial data from real data, thereby revealing fraudulent behavior or activities, and enabling decision-makers to develop appropriate strategies to reduce the impact of fraud. Data mining plays an important role in FFD as it is often used to extract and discover the truth behind large amounts of data. Bose and Mahapatra (2001) define data mining as the process of identifying interesting patterns in a database, which can then be used for decision making. The aim of this study is double: the first one is to provide theoretical summary overviews of the main work on the processes of financial fraud detection while emphasized the importance of taking into account non-accounting variables in the detection of financial fraud. The second objective of this research emphasizing internal control as an important mechanism for combating financial fraud.

The article is organized into three sections. In the first section, we define fraud and its different types. We then examine the main variables developed to better detect the existence of fraud. Finally, we show the importance of internal control in the fight against financial fraud.

2. Definition and Typology of Financial Fraud

Financial fraud is a problem that has a profound impact on the financial sector. Interest in this subject is not recent. However, Scientific researches on this subject did not proliferate until the 1980s. In addition, it has grown in importance, particularly following recent financial scandals (Enron, Worldcom, etc.).

2.1 Definition of Financial Fraud

In fact, the definitions of fraud vary according to the authors and the context: private or public sector, or even academia. Fraud is defined by the Petit Robert dictionary as follows: “an action made in bad faith with the aim of deceiving”. According to the Association of Certified Fraud Examiners (ACFE) (2012), fraud is "the use by a person of his professional activity for personal enrichment through the willful misappropriation of his employer's resources or assets". According to Black's Legal Dictionary, fraud is "a deliberate distortion of the truth or with the concealment of an essential fact for the purpose of causing others to act against them." According to the International Standards on Auditing (ISA) fraud is defined as follows: “Fraud is an intentional act committed by one or more persons among members of management, those charged with governance employees or third parties, involving the use of deceptive maneuvers in order to obtain an undue or illegal advantage. "

According to the Panel of Auditors of the United Nations, Specialized Agencies and the International Atomic Energy Agency (1996), fraud can involve a wide range of behaviors that may include manipulation, forgery or alteration of account books or documents, misappropriation of assets, concealment or omission of the effects of transactions in account books or documents, the recording of transactions devoid of content and the incorrect application of accounting methods.

2.2 Typology of Financial Fraud

Financial fraud can be divided into three categories namely: internal fraud (accounting fraud, embezzlement, abuse of power); external fraud (cybercrime, use of false documents, etc.) and mixed fraud essentially based on cooperation between an internal member of the company and an external individual (Falsification of invoices in collaboration with a customer or a supplier; " a confidential document to a person external to the company (see Fig 1).

Another classification retained in the academic and professional literature is that proposed by Wells (2007) and ACFE (2012) which distinguish three groups of corporate fraud, namely the embezzlement of goods and services, corruption and the publication of falsified financial statements. Embezzlement can be defined as an act of theft or appropriation of an asset to the detriment of the business. At the same time, corruption is the abuse of power for private gain such as personal or third party enrichment in return for a gift, money or other benefit. Finally, fraud relating to financial statements (or managerial fraud) is non-compliant accounting manipulation deliberately committed by managers, with the aim of misleading the perception of users of financial statements (mainly creditors and shareholders).

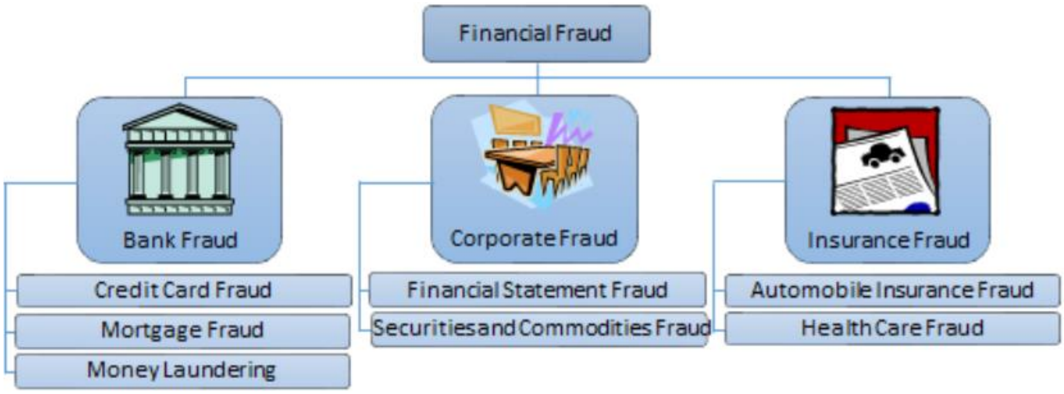

Figure 1. Common financial fraud categories

Jarrod West & Maumita Bhattacharya (2016)

2.3 Fraud Triangle

The fraud triangle is an analytical tool that reflects the favorable environment for acts of fraud. It was created by Donald R. Cressey in 1986. It brings together three interdependent elements namely: motivation (or pressure), desirability and justification, which can lead to an act of fraud in a company that has dysfunctions or flaws in its internal control system. These three elements are presented in the fraud triangle as shown in Figure 2.

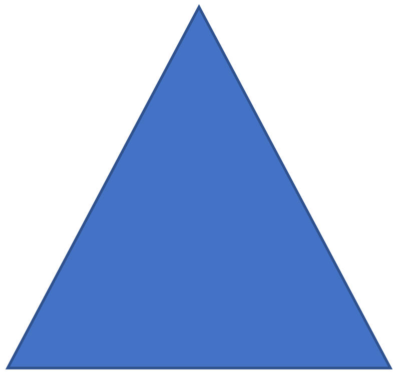

Figure 2. The fraud triangle

Donald R. Cressey, 1986

The fraudster's motivation manifests itself in taking an enormous risk for him. He is aware of it but a strong motivation or excessive pressure undergone by his environment pushes him to want to act. There are many reasons that motivate fraudsters to take action, including: their money problem or social pressure, pressure from the hierarchy on the performance of the company, the desire to enrich themselves, the desire to disseminate a good image to stakeholders.

The second component of the fraud triangle is opportunity. Which is none other than taking action and which is often relative depending on the person. In a company where the internal control system is unsuccessful or misused, the opportunity can present itself at any time for an employee. Yet not everyone takes this opportunity to take advantage of the flaws in the business. A person's integrity and ethics can prevent them from acting. Therefore, it is the lack of control or excessive complexity within the organization that somehow increases the risk of fraud and provides the opportunity for economic criminals to take action.

Finally, the last component of the fraud triangle, which is rationalization. This component stands out more than any other component because it is noticeable when an action is committed. This is because it is important to understand an individual's psychological function, as fraudsters may attempt to justify their behavior to some extent in order to maintain a positive self-image. This shows that scammers are always trying to rationalize their actions so that they don't feel guilty about illegal activities.

3. The Main Variables Developed to Better Detect the Existence of Fraud

In this section, we will present the main variables highlighted by the academic literature to assess the probability of the existence of a fraud. The literature review shows that accounting indicators are the main source for assessing the presence or absence of fraud. Indeed, accounting information is mandatory and public by definition and allows, among other things, comparison between companies. In this vein, Engels et al (2020) have shown that fraud tactics are increasingly complex and that it is more in-depth financial knowledge rather than basic money management skills that provides the degree of sophistication needed to detect fraud. fraud. Various studies have developed models integrating only data published in accounting documents and which effectively detect the existence of fraudulent practices. In this context, and with the objective of isolating the most relevant variables in the detection of fraud and a summary of the results, Feroz et al. (1991), showed from a review of 224 SEC investigations between 1982 and 1989, that the positions most affected by fraudulent manipulation were accounts receivable (50% of cases) and inventory (25% of cases). case). Subsequently, based on the discretionary accruals measured by the method of Dechow et al. (1995), Beneish (1997) continue the work of Feroz et al. (1991) by expanding the actor who detected the fraud: the stock market authority or the media. Their sample is made up of 363 SEC investigations into 49 fraudulent companies as well as 15 fraudulent firms that were detected by the media between 1987 and 1993. These authors conclude that fraud is negatively related to the level of discretionary accruals and to past stock market performance. On the other hand, the delay in paying customers is positively related to the probability of fraud. In this vein, based on a methodology inspired by the neuronal approach, Green and Choi (1997) developed a model made up of five variables to detect fraud, namely: level of bad debts / turnover, bad debts / total receivables, revenue on total receivables, gross margin / revenue and total receivables / book asset). Their sample is based on 86 cases of financial statement fraud in the United States between 1982 and 1990 compared to 86 non-fraudulent companies, the success rate of the predictive model is 74.03%.

As for Summers and Sweeney (1998), they proposed a more complete model integrating the participation of insiders from financial variables (Altman score, return on assets, growth rate of turnover over three years, ratio of receivables to stocks, change or not of auditor) and insider transactions (variation in the participation of insiders), the authors arrive at a correct prediction rate of 72.2% on 51 cases of fraud between 1980 and 1987 Likewise, from a sample of 74 American firms having manipulated their financial statements, Beneish (1999), isolated five significant financial variables in the detection of financial statement fraud, namely: the growth rate of the payment delay of customers, the rate of growth of gross margin, the rate of growth of the ratio of property, plant and equipment to the value of total assets, the rate of growth of sales and the change in revenue accruals. This model correctly predicts 76% of fraudulent companies. As for Defond and Jiambalvo (1991), they used variables linked in particular to profit growth, ownership structure, compliance with loan agreement clauses, and the control environment. Cecchini et al. (2010) develop a fraud detection model based on a statistical learning method when classifying a population into subpopulations. They used five variables with the most significant predictive power namely: the ratio between administrative and commercial expenses and investments, the ratio between sales and investments which have a negative relationship with the probability of fraud. Dechow et al. (2011) highlight a relationship between off-balance sheet items and the occurrence of fraud. They show that a large volume of operating leases is classic in fraudulent companies. In addition, in order to reduce the debt ratio, these companies engage significantly more in operating leases in the event of fraudulent manipulation. For their part, Grove and Cook (2004) evaluate the usefulness of risk factors, mainly quantitative, to detect the manipulation of results and / or fraud in four of the largest companies involved in the financial scandals of recent years: Enron, WorldCom, Global Crossing and Quest. The financial variables they use come from three sources. They concluded that two indices are good indicators: the gross margin index and the sales growth index. All profitability ratios (net margin, sales growth and profit growth) and manager efficiency (return on assets and return on equity) are relevant because they signal positive signals for all four companies.

The second stream of research on financial fraud detection focuses on non-accounting variables. Brazel et al. (2009) and Dechow et al. (2011), among others, have focused on non-accounting variables to detect financial fraud. This is a particularly useful measure in the detection of fraud: it reduces the number of employees. Indeed, if the hypothesis of complementarity between the level of assets and the number of employees is accepted, the decrease in the number of employees associated with the increase in book assets indicates that it is overestimated. Dechow et al (2011), based on a sample of 2,190 AAER (Accounting and Audit Enforcement Releases) investigations conducted by US stock market authorities between 1982 and 2005, identified 676 companies that published incorrect financial statements in at minus a quarterly or annual financial statement. The main non-financial variable associated with fraud is the decrease in employees. This variable is measured by the change in the ratio of the number of employees to the book value of assets from year N-1 to year N. This conclusion supports the results proposed by Brazel et al. (2009) supporting the interest of taking into account non-accounting indicators to detect accounting fraud.

Other researchers are interested in governance-related variables for the detection of financial fraud. In this context, Beasley (1996), using a sample of 75 companies whose financial statements contain fraud over the period 1982 to 1991, used governance variables to detect financial fraud. Likewise, Dechow et al (1996) looked for the possible relationship that may exist between profit management and governance mechanisms

4. The Importance of Internal Control in Preventing Financial Fraud

Businesses face multiple risks and threats in an increasingly changing environment. They must achieve a set of goals while being subject to many constraints. Success in anticipating risks and threats is therefore essential for the survival of the business and for being competitive. Thus, companies must set up a control system that guarantees their continuity. As such, in 1987 the Treadway Commission recommended the establishment of effective audit committees to limit fraud. It was on this date that the Report of the National Commission on Fraudulent Financial Reporting was published the establishment of internal control system. In addition, we note that the financial scandals and fraud of 2002 required, in addition to SOX, a series of normative texts relating to the audit committee (PwC, 2003; Deloitte, 2003; Deloitte, 2003, etc.) aiming to give it more importance in order to restore the confidence of the financial markets. They recommended and demanded the restructuring and the establishment of internal control systems to limit fraud. In fact, an internal control system will allow companies to better manage risks and face new challenges. Internal control is defined as the process that aims to ensure compliance and control risks. It is a system put in place by the managers of an entity to control the functioning of its activities. It aims to achieve general objectives. It is the continuity of the company insofar as it achieves the objectives pursued. To achieve this general purpose, permanent purposes are assigned to internal control. These objectives can be grouped into four headings: Security of assets, quality of information (reliability, verifiability, completeness, relevance, availability), compliance with directives and optimization of resources.

A review of the relevant literature shows the effectiveness of internal control in preventing financial fraud. In this context Beasley et al (1999), from a sample made up of 200 companies convicted of fraud over the period from 1987 to 1997, concluded that 25% of companies that committed fraud did not have an audit committee. They also found that the companies which commit fraud are generally small, their assets and income do not exceed 75 USD. As such, Abbott et al. (2000) claim that the independence of audit committee members is a factor in fraud prevention. Wolnizer (1995), on the other hand, believes that to face these agency problems, the audit committee must ensure reliable financial statements, reduce managerial accounting manipulations, errors and fraud. As such, Dechow, Sloan and Sweeney (1996) found a positive relationship between the existence of an audit committee and the reliability of financial statements as measured by results management. Noland and Flesher, (2003) state, in a sample of banks, that the presence of the internal control ensures fewer complaints for rectifications in reports, fewer regulatory violations and more likelihood of detecting employee fraud. In this sense, McMullen (1996) proves that the establishment of an audit committee helps to minimize errors and irregularities in financial statements, such as: fraud, illegal acts, SEC orders, change of auditor following a disagreement relating to certain accounting aspects. In this sense, in Hong Kong, where shareholding is concentrated and often family-owned, Jaggi and Leung (2007), for their part, prove that the presence of internal control system within a company makes it possible to limit bullish earnings management and prevent fraud.

5. Conclusion

At the end of this work, we have defined developed the different types of financial fraud as well as different variables of the detection of financial fraud through the review of the literature. This research aims to contribute to the literature dealing with the detection of financial fraud, which is fairly recent and still timid, especially those based on detection through non-accounting elements. We have also emphasized the importance of internal control in the prevention of financial fraud though citing principal empirical work on this subject. This internal control system will enable companies to better manage risks and face new challenges. However, our research is not without limits, an empirical analysis may be more adequate to better explain the most relevant variables for fraud detection as well as the importance of governance mechanisms including internal control in the detection of financial fraud. Future research may also focus on the importance of technology in detecting and detecting financial fraud, especially with the new challenges' businesses are facing including the COVID 19 pandemic.

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