

## **Forensic Accounting: An innovative tool for Corporate Fraud Risk Management**

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### **Abstract**

*“Forensic accounting is a dynamic and purposeful weapon that aids in the combat against corruption, fraud, and financial crimes. This paper discusses the role of forensic accounting as an innovative tool in corporate fraud risk management, describes the concept of corporate fraud and spells out the techniques and processes used while performing forensic accounting. Data from the secondary sources like reports, journals, books and web materials related to the forensic accounting and fraud has been reviewed and synthesized for this purpose”*

Key Words: Forensic Accounting, Fraud, Red Flags, Corporate Fraud.

### **Introduction**

With growing complexity in operations and magnified use of technology, corporate are exposed to various risks of fraud which not only penetrate the internal control system of the organization but also remain undetected during conventional audit application. Corporate Fraud is a dishonest activity that takes place in a corporate setting and has acute outcome for the country, corporations, and individuals. It is an opportunistic contamination that ruptures forth when greed meets the possibility of rationalization to commit fraud. Fire requires three basic elements i.e. oxygen, heat and fuel. A firefighter can extinguish the fire by removing any of these three basic elements. Similarly, fraud in the resultant of three basic factors namely motivation, rationalization and opportunity. Fraud will not happen if we succeed in cutting down any of these three factors. Fraud in any organization, not only causes financial loss to its stakeholders but also create an emotional and mental distress which may have long term effect. In the past decade, in India, we have seen various corporate frauds which involved huge quantum of money. A corporate fraud could take various forms such as invoice kickbacks, rigging of bids, improper disclosures, false revenues, understated revenues, inappropriate valuation

of assets, concealment of expenses and liabilities, shell- companies, non-accomplice vendor, altered payee, false sales and shipping, fraudulent disbursements, larceny, stealing of cash and many more.

At the broader level, occupational or corporate fraud could be classified into three categories; first is corruption, second is misappropriation of assets and third is fraud related to financial statement. As per reports to nations of AFCE 2020 Global study on occupational fraud and abuse<sup>1</sup> around 86% of occupational frauds are performed in form of misappropriation of assets which involves purloin by employee or embezzlement of the organization's assets. Also corporate fraud can be classified as fraud by the company and fraud against the company, in the case fraud is done by the company it means company through its management has committed the fraud to deceive regulator or lender especially banks and if fraud is done against the company it means company is being defrauded by its employees, creditors, customers.

Although a big corporate is subject to various audits and assurances such as internal audit, tax audit statutory audit, audits of stock, cost audit, secretarial audit, due diligence mechanism etc. in addition to this even the Companies Act 2013 mandates the auditors to report any matter of fraud which is identified in the normal course of audit to central government or board or audit committee depending upon the amount involved in fraud, but despite this fact, significant number of corporate frauds are committed. The quantum of these frauds could be gauged by the fact that in financial Year 2020-2021 only bank related fraud was of Rs. 1,38,422.00 Crore as reported by RBI in its annual report<sup>2</sup>. These frauds were majorly related to the advances, off balance sheet items, Foreign Exchange Transactions, Card/Internet, Deposits, cash, Cheque/Demand Drafts, Clearing Accounts.

So we need a specialty practice domain which keeps bird's eye view on risk prone segments and detect the fraud at early stage to minimize the damage.

To address this critical corporate illness companies, regulators, revenue authorities and lenders are looking forward to forensic accounting techniques to identify, examine and mitigate corporate frauds.

"The application of scientific knowledge to legal issues in a courtroom" is how the term forensic is defined.

In 1946 the term "Forensic Accounting" was first conceived by a CPA of New York, Maurice Peloubet, the source of its inspiration was responsibility to prove embezzlement and frauds while solving financial riddle.<sup>4</sup>

Forensic accounting is a pursuit which not only utilizes the knowledge of accounting and auditing but also employs investigative skills in corporate fraud risk management. Corporate fraud is a termite that slowly and

gradually eats up growth, development, and prosperity of a well-established business, and to mitigate these risks, forensic accounting is a potent exercise. As a matter of fact, forensic accounting is nothing extraordinary but the utilization of professional accounting expertise in any matter that involves risk of fraud in order to gather pertinent evidences which are admissible in legal proceedings. In the recent years forensic accounting has gained importance and has been widely used by various authorities such as SFIO (Serious Fraud Investigation Office) which works under the aegis of Ministry of Corporate Affairs, EOW (Economic Offence Wing), Securities and Exchange Board of India (SEBI), Reserve Bank of India (RBI) in the matters that involve any possibility of fraud. There are various red flags or early warning signs (EWS) that specify impending danger related to fraud and are considered as the trigger point to initiate forensic accounting.

In recent times forensic accounting and auditing is commissioned in various high profile corporate frauds cases such as Shri Lakshmi Cotsyn Limited a Kanpur, Uttar Pradesh based firm and its directors for apparently cheating 23 banks consortium to the tune of Rs. 6,833.82 crore,<sup>5</sup> VMC Systems Limited (VMCSL) in a bank-fraud case of Rs 3,316 crore<sup>6</sup>, Punjab & Maharashtra Co-operative (PMC) Bank Loan fraud by HDIL, IL&FS Engineering and Construction Company Limited (IECCCL) fraud, fake transactions of around Rs 14,000 crores in Dewan Housing Finance Corporation (DHFL).

In contrary to conventional audit where auditor is considered as watchdog and not bloodhound and his responsibility is limited to form an opinion that balance sheets and profit and loss statements are free from any material misstatement and provide true and fair view of the business, under forensic accounting exercise the forensic accountant or forensic auditor's specific duty is to detect and examine any act of deception, willful concealment, omission or perversion of truth which lead to fraud, he investigates to identify the actual fraudster and modus operandi of fraud.

Forensic accounting is an innovative tool to curb occupational frauds which looks beyond the inherent limitation of conventional accounting and audits. In India, however, forensic accounting is still in its infancy. There is a rising trend in demand of forensic accountants. Being forensic accountant means a professional who looks the financial information with detective vision.

Forensic accountant not only use basic audit procedures such as vouching, documentary checks, physical verification, ratio analysis, trend inference, third-party verification but also uses non-conventional techniques such as tiger team techniques, Psycho analysis, Luhn's algorithm, Advanced data mining , surprise repetition

test approach, test of inverse logic, Benford's Law, Barium Test, doctrine of triage, space time dimension techniques and even Birbal Tips and Traps for fraud risk management<sup>7</sup>.

### **Definitions:**

1. **Forensic:** related to, used in, or appropriate for judicial proceedings or public discussion and dispute management.<sup>8</sup>
2. **Forensic Accounting:** In instances involving the risk of fraud, forensic accounting is the application of professional accounting abilities to gather pertinent data and facts that could establish an expert opinion for possible or existing criminal or civil proceedings.<sup>9</sup>
3. **Innovation:** Innovation is the systematic application of thoughts that lead in the creation of new products and/or services, or an enhancement in the way those products and/or services are offered.<sup>10</sup>
4. **Fraud:** Fraud is a misleading conduct committed with the goal of gaining an illegal advantage for the offender or depriving a victim of a claim or right.<sup>11</sup>
5. **Corporate Fraud:** Corporate fraud refers to operations carried out by a person or a firm in an untrustworthy or unethical way with the intent of deriving benefits for the perpetrator.<sup>12</sup>

### **Objectives of the Study**

1. To study and evaluate the role of forensic accounting in detecting financial frauds
2. To study various innovative tools those are used while performing forensic accounting.
3. To access the scope of forensic accounting in business fraud risk management.

### **Literature Review**

**Report to the Nations 2020, Global study on occupational fraud and abuse by Association of Certified Fraud Examiners, 2020<sup>1</sup>:** It covers the data on occupational fraud from 125 countries considered to be one of the largest global study on occupational fraud where 2504 real cases of fraud were taken into account which explores the scheme, victim, perpetrator and cost of fraud. It was conducted from July 2019 to September 2019. Respondent were provided with 77 questions related to details of occupational fraud which includes data about the victim entity, techniques of fraud employed, information about the perpetrators and general trend on occupational fraud. Some of the major finding of this study was:

- a) As per the study it approximated that organizations lose around 5% of revenue to fraud on yearly basis where loss (median) is \$125,000 per case and loss (average) per case is \$1,509,000.

- b) Corruption was the most common fraud strategy in globally.
- c) Misappropriation of assets plans are most prevalent and the least expensive (86% cases) causing a loss (Median) of \$100,000
- d) Financial Statement Fraud is the least prevalent and most expensive type of fraud (10%), with a loss (median) of \$954,000.
- e) Tip uncovered 43 percent of occurrences of occupational fraud, with 50 percent of these tips coming from employees.
- f) E-mails and Telephones were used in 33% of cases by whistleblowers.
- g) Men commit 72% of all occupational frauds.
- h) Executives and owner perform only 20% of frauds but causes larger loss.
- i) More than 50% of occupational frauds come from 4 major areas i.e. Accounting, Sales, operation and Top management.
- j) 42% of occupational swindlers were living beyond their means.

**Association of Certified Fraud Examiners in association with SAS (Anti-Fraud Technology Benchmarking Report), 2019:** This study sent 19 questions to randomly selected around 41000 members of ACFE (Association of Certified Fraud Examiners). They were asked to provide details regarding use of technologies in their organizations as a part of anti-fraud inventiveness. They received 2255 responses out of which 1055 were usable for the purpose of reporting. This report highlighted that technology advancement provided opportunities for both, fraud committers and those who are striving to curb them. Some of the key findings of this study are:

- a. The use of artificial intelligence and machine learning is expected to be three times over the next two years for anti-fraud programs in organizations.
- b. Around two third organizations use anomaly detection techniques and exception reporting in their fraud mitigation strategies.
- c. More than half of the organizations employ automated monitoring of business rules violation.
- d. 64% of the organization stated that data analytics are very advantageous to their anti-fraud program with increased volume of transactions.
- e. Purchasing and disbursement are areas where organization often uses data analytics for monitoring of potential fraud.
- f. Only 39% of Organizations uses formal case management software.

- g. 26% of the entities are presently using biometric to counter fraud and 16% are expected to commission the same in next couple of years.
- h. 29% of the organizations currently put up data sharing consortium for fraud detection and prevention.
- i. 55% of organization expects to enlarge their spending for anti-fraud technology in next two years.

**DAkinbowale, O.E., Klingelhöfer, H.E. and Zerihun, M.F. (2020)**, the establishment of two simpler conceptual models is this study's originality. The first model dealt with forensic accounting's integration into an organization's composition, and the later model depicted the deep examination and sophisticated methods for analyzing the data involved in finding the fraud. The development of conceptual models for fraud mitigation with all of these features has not been widely described in the current literature as studied.

**Farrell, B R and Franco J R, (1999)** This study depicted that the cost of fraud in terms of revenue was 6% in 1996 also they explained that it is really astonishing to belief that a trustworthy employee is involved fraudulency, thus they highlighted that companies must build strategies to prevent and detect fraud. They also stressed in defining the roles and responsibilities of internal and external auditors along with the management with growing public expectation due to loan frauds.

**Mishra, S & Singh G, (2017)** this paper explains that these days, frauds are posing a threat to the corporate sector all around the world. Existing norms and regulations were insufficient to stop the fraud trend, so a new idea known as forensic accounting stepped in to address this lacuna. Few nations, such as the United States, have pioneered and implemented forensic accounting, while remaining, such as India is still to follow the trend. They pointed the significance of forensic auditing for a country like India and highlighted the need of forensic audit for Indian corporate. This paper was written using secondary data.

**Venkataraman R, & Kumar, M S, (2019)** They Explained that corporate fraud is a large business in and of itself, and one of the key difficulties for all sizes of businesses. Its consequences affect not only organizations but society as a whole, thus addressing it is critical and urgent. This study is an empirical investigation into certified accountant's point of view regarding forensic accounting in the context of corporate fraud management. This paper aims to determine the efficacy of forensic accounting as a powerful tool to avert corporate fraud, to assess forensic accounting as a component of an effective internal-control system, and to recommend forensic accounting for producing high-quality financial reports and as a mechanism for reducing corporate fraud.

**Bhasin, M L, (2016)**, He elaborated “how can we incorporate forensic accounting (FA) knowledge to enhance the all-inclusive corporate governance situation in India?” This study is exploratory in nature due to the paucity of research in this topic. This is a initial research into the required abilities, training, and education for forensic accountants in order to strengthen the Corporate Governance mechanism. In order to determine the professional community's perceptions, we conducted a poll of academics, practicing fraudsters, and forensic professionals.

**Chaturvedi , N, (2015)**The major goal of this study is to analyze white collar crime, financial fraud, and the intricacies of the corporate environment using forensic accounting tools and techniques. Forensic accounting is a study of a company's financial information that combines accounting, auditing, and investigative abilities. The purpose of this study is to see into the nature, meaning, validity, and future prospects of forensic accounting in India. Forensic accounting appears to be the missing link in the answer to the problem of corporate fraud and financial mismanagement. In this article, the concept of forensic accounting is addressed, as well as the need for it and its role in providing a solution to corporate fraud challenges is discussed.

### **Methodology:**

The data for this study was acquired from secondary sources, such as ACFE reports, Journals, Government Websites, Books and other authentic sources and previous studies. The research is a descriptive examination of forensic accounting and highlights the process and techniques used during forensic accounting for corporate fraud risk management. This research will be beneficial to the present business world.

### **Limitations of the Study:**

This research paper is descriptive in nature and is a collation of secondary data available on yet nascent domain of “Forensic Accounting”. The application of forensic accounting in corporate fraud detection has started in India just during the past few years. Though there is not an iota of doubt regarding the importance and scope of forensic accounting in corporate fraud detection but in absence of any mandate regarding its application, conventional audit and accounting are still being preferred widely over forensic accounting. This limits the availability of secondary data on the topic. The authors have tried their best to collate and bring out this paper within the given constraints.

### **Forensic Accounting Process:**

#### *Step 1 Initialization:*

- Understand the assignment's real intent, purpose, and utility.

- Work with the client to learn about the key facts, persons involved, and challenges at hand.
- Check for any potential conflicts.

*Step 2: Make a strategy*

- Create a strategy based on the information gleaned during the client encounter.
- Define the goals that must be fulfilled and the methods that will be used to accomplish them.

*Step 3: Gather relevant evidences*

- Recognize the precise type of fraud that was perpetrated and how it was perpetrated.
- Assemble evidence, which may include discovering documents, economic data, or proof of an incident occurring, depending on the case at hand.

*Step 4: Perform Analysis*

- Summarize a lot of information.
- Verify for data integrity.
- Conduct asset tracing.
- For data analytics, use computerized applications.
- Prepare graphs and visuals that include outliers.

*Step 5: Reporting*

- Report preparation must consider evidence gathered during the process, and should not be based on writer's personal judgment.
- Report should include the following sections: 1. Preface 2. Purpose 3. Methods 4. Scope Limitations 5. Findings 6. Synopsis of Evidence 7. Notice to Readers

*Step 6: Proceedings in the Courtroom*

- The suspect is likely to face legal action as a result of the investigation.
- Evidence acquired during the inquiry may be required to be handed over to enforcement agencies and/or tested in court.

**Some of the commonly used Technique in Forensic Accounting and fraud investigation:-**

1. **Generalized Audit Techniques (Validating the shield):** Most corporations and other entities have fraud prevention systems and shields in place. Attempting to defeat these barriers yourself is an excellent forensic audit strategy. The flaws you discover in the organization's safeguards will very certainly lead

you understand the road as used by the perpetrators during the course of fraud. The ability to spotlight on abnormalities is the essence of forensic audit

2. **Trend Analysis:** Businesses follow the same cycles and seasons as nature. It's worth looking into a company expense or occurrence that's comparable to a snowfall in the month of June in India. Auditor needs to do a thorough examination of his subject organization's historical standards to be able to spot the unusual occurrence if it occurs during his inquiry.
3. **Ratio Analysis:** Calculating data analysis ratios for important numeric variables is another useful fraud detection tool. Data analysis ratios, similar to financial ratios that indicate a company's financial performance, report on fraud health by recognizing suspected fraud symptoms.
4. **Computer Assisted Auditing Techniques (CAATs):** On the one hand, changing business practices, legal frameworks, and a lack of resources available to auditors, as well as huge volume of data, make auditing a challenging task. Thus to address these issues computer aided audit techniques and tools plays a significant role by filtering the relevant information from the subject's voluminous database, CAATs are used widely by forensic auditors throughout the globe.
5. **Generalized Software for Audit (GAS):** It's a type of CAAT which enables financial forensic examiners to perform retrieval, searching, modification, summarization, and analysis. GAS is perhaps one of the extensively used types of CAAT. These programs are software that includes basic space for reading current digitalized information and performing advanced data transformations to complete audit duties. They offer a convenient frontend that gathers audit requirement and converts those requirements in software language. This task is accomplished by examining the system file or databank of the auditee; thereafter the necessary procedures are conducted.
6. **Benford's Law:** Dr. Frank Benford, an engineer and Physicist from United States, proposed this innovative theorem. Benford's Law, often known as the first digit law, is a well-known law. The law is concerned with statistical data pertaining to numeric digits' frequency. Dr. Frank studied that the probability of appearance of smaller number as the first digit for the data in a voluminous database is higher and chances of larger numbers like 8 or 9 are very less to be the first digit. Putting it simple he argued that every digit doesn't have the equal change of appearing as the first digit. What does this mean for auditors? The solution is 'phenomenally' in a single word. When this law is used to auditing, it provide incredible breakthroughs in terms of identifying the manipulation of data it is also used to highlight fraudulent financial data. It is now feasible to validate and analyses data in a new dimension.

7. **Advanced Data mining Methods:** This is technology based approaches for mining enormous amounts of data for new, undiscovered, or unforeseen information or correlations. To gain meaningful results during any data analysis require use of imagination and validity of reasonableness, here comes the role of data mining which evaluate the meta-data for correlations, irregularities, and tendencies which predicts any accounting irregularities or ground for any potential fraud.

8. **Other Techniques:**

A. Computer Forensics:

- (i) search for deleted files
- (ii) Analysis of emails.
- (iii) Imaging of hard discs.
- (iv) Tracking log files

B. Evidence validation:

- (i) Analysis of fingerprint
- (ii) Chain of Custody of evidences
- (iii) Document dating
- (iv) Sampling of Ink

## **Conclusion**

The study's stated goal is to gain a deeper understanding of forensic accounting as an innovative technique for corporate fraud risk management. There are varieties of tools, such as General Audit Techniques, ratio analysis, CAAT, Trend Analysis, Benford's Law, Generalized Audit Software, benchmarking etc., that can be used in advance to prevent corporate wrongdoing. Because of the rising number of scams across the globe, it is critical to have forensic professionals on hand to deal with financial fraud and scam situations. Due to a lack of adequate monitoring and control measures, fraud has been rapidly increasing in India. Companies must follow the laws and regulations in order to avoid penalties and legal proceedings, as well as to establish themselves as decent corporate citizens. The surge in corporate frauds and white-collar offenses in India prospects well for forensic accounting. In a line, forensic accounting promotes the economy's inclusive growth while also assisting in the discovery of unethical corporate practices.

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