

## Forensic Accounting - Another feather in the Hat of Accounting



Maurice E. Peloubet coined the term 'Forensic Accounting' in 1946. Kautilya was the first economist to articulate the need of forensic accountants. The growing arena of business and surging number of white-collar crimes that have led to the development of Forensic Accounting. Forensic Accounting borrows knowledge from Accounting, Finance, Law, Computerisation, Ethics, Criminology, etc. While Forensic Accounting developed as early as 1995 in USA, it put its first step in India just few years back. It is desired that in near future an accounting standard will be formulated on Forensic Accounting. This article aims at throwing light on Forensic Accounting. It encompasses the terminology, a brief note on its origin, role of Forensic Accountants, the techniques involved in their work and the present scenario of Forensic Accounting in India.

### Introduction

Necessity is the mother of all inventions. Yes, it is the growing arena of business and surging number of white-collar crimes that have paved the way for the development of Forensic Accounting. According to AICPA, "Forensic Accounting is the application of accounting principles, theories and discipline to facts or hypothesis at issues in a legal dispute and encompasses every branch of accounting knowledge." According to The Accountant's Handbook on Fraud and Commercial Crime, Forensic Accounting is the application of financial skills and an investigative mentality to unresolved issues,

conducted within the context of the rules of evidence. Forensic Accounting borrows knowledge from Accounting, Finance, Law, Computerisation, Ethics, Criminology, etc. Investigation plays a pivotal role in Forensic Accounting. It is the flavour of investigation that demarcates it from the conventional accounting practices. In wide sense, it can be identified as integrity of accounting, auditing and investigative skills to secure a particular result.

Maurice E. Peloubet coined the term 'Forensic Accounting' in 1946. Kautilya was the first economist to articulate the need of forensic accountants. Centuries ago he inked his book, *Arthashastra* (Science

Dr. Indrani Ghosh and  
Dr. Kamal Kishore Banerjee

(The authors can be reached at  
eboard@icai.org)

of Material Wealth) containing 40 ways of embezzlement. He also stressed on checks, accounting and auditing. He also stated that detecting an appointed official's dishonesty is as difficult as detecting the amount of water drunk by a swimming fish. Another noteworthy person in this context is Birbal, one of the famous Navaratnas of the Moghul Emperor Akbar, who used various tricks to investigate various crimes.

### Role of a Forensic Accountant

Earlier, we were of the belief that detection and prevention of frauds or white-collar crimes is a part of conventional accounting function. But the recognition of Forensic Accounting has changed this notion of ours that "Auditor is a watchdog and not a bloodhound". They only check for the compliance of a company's books to GAAPs, auditing standards and company policies. Hence, the need for a bloodhound was apprehended. Like, a bloodhound, they are to sniff out fraud, criminal transactions out of the financial records of corporate entities, banks or any other organisation. Thus, a forensic accountant is a financial detective with a suspicious mind who can pull out the latent truth and assist in dispute resolution. His duty is to analyse, interpret, and summarise complex financial and business related issues. They are to look beyond the numbers and concentrate on substance over form. This new and groundbreaking accounting has two main spheres:

- (i) Litigation support and investigation
- (ii) Dispute resolution.

The former represents factual representation of economic issues encompassing existing litigation. If the dispute reaches the courtroom, he may testify as an expert witness. Whereas in latter case, he quantifies the damages sustained by parties involved in legal disputes and can

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assist in resolving disputes, even before those reach the courtroom. A Forensic Accountant is supposed to have a three fold approach:

- (a) Base layer – Accounting knowledge
- (b) Middle layer- Knowledge of auditing, internal controls, risk assessment and fraud detection
- (c) Top layer- Knowledge of the legal environment and strong communication skills.

According to a Forensic Accounting expert, the traits of a forensic accountant could be compared to a well baked pizza. The base of Forensic Accounting is accounting knowledge. Size and the extent of baking decide the qualities of the pizza. A middle layer is a dispersed knowledge of auditing, internal control, risk

assessment and fraud detection. It is like the spread of the cheese on the pizza. The toppings of this pizza are the basic understanding of the legal environment. The legal environment is essential in order to support the litigations. The cherry on the toppings of the pizza is a strong set of communication skills, both written and oral. It is just the beautification part. As perfect that combination of the pizza base, cheese spread and good toppings makes the pizza delicious similarly the perfect knowledge of accounting, auditing, legal environment and good communication skills make a Forensic Accountant perfect.

A well-equipped forensic accountant can provide the following services:

1. Investigate the financial evidence.
2. Analysis and presentation of the financial evidence in a computerised form.
3. Communicate their findings in the form of reports, exhibits and collection of documents.
4. Assist in legal proceedings, including testifying in court as an expert witness and preparing visual aids to support trial evidence.

These services of forensic accountants can be utilised in various fields. The sphere of their activities is quite large. They take up various types of assignments. While they can be of help in business related fraud investigation, they can also handle matrimonial dispute cases. A list of such cases taken up by a Forensic Accountant is given below.

**Criminal Investigations:** A Forensic Accountant is normally called for in case of a criminal investigation, if it entails financial and other related frauds. The Investigative Agencies (EOW, CID, SFIO, etc), regulatory bodies (SEBI, TRAI, etc) and other stake-holders seek for these services from them as and when required.

**Stakeholders and ownership disputes:** These assignments often involve a detailed analysis of financial records over a period for quantifying the issues in a dispute. For example, amount payable to a deceased partner or legal heirs of a deceased partner.

**Insurance and other related claims:** Insurance policies differ significantly as to their terms and conditions. Accordingly, these assignments involve an in-depth review of the policy to investigate coverage issues and the appropriate method of quantifying the economic losses resulting from an event. These assignments demand great knowledge of the forensic accountant in the local laws and regulations in place. For example, motor accidents, loss on account of fire, natural calamities, business discontinuance, etc.

**Business related Fraud investigation:** Business investigations involve asset identification and recovery, tracing funds, forensic intelligence gathering and due diligence reviews. These investigations are carried out with

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the objective of determining the existence, nature, and extent of fraud and may concern the identification of perpetrator. These investigations often involve interviews of personnel who had access to the funds and a detailed review of the documentary evidence.

**Dispute settlement:** Business firms engage forensic accountants to handle contract disputes, construction claims, product liability claims, infringement of patent and trade marks cases, liability arising from breach of contracts and so on.

**Matrimonial dispute cases:** Forensic accountants entertain cases pertaining to matrimonial disputes wherein their role is merely confined to tracing, locating and evaluating any form of asset involved.

Thus, we see how forensic accountants help the organisations or individuals and society at large. They are an indispensable part of today's legal team.

### Tools Used in Forensic Accounting Assignment

Besides the various techniques of auditing, forensic accountants adopt some special techniques which are as follows:

#### *Benford's Law*

It is a mathematical tool used in determining whether a variable under study is a case of mistake or fraud. The steps underlying this law are very simple. Once the variable is decided, the left most digit of the variable is extracted and summarised for entire population. The summarisation is done by classifying the first digit field and calculating its observed count percentage. Then Benford's set is applied. A parametric test called Z-test is carried out to measure the significance of variance between the two populations, i.e. Benford's percentage of first digit for a particular level of confidence. If the

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**auditors. Forensic Accounting software comes in two different varieties – data extraction software and financial analysis software. Data extraction software is designed to conduct spreadsheet analysis on all the company's computer database records, such as billings, accounts receivable, payroll, purchasing, etc. This helps in detecting anomalies and calls for investigation. Financial analysis software uses monthly, quarterly or annual financial statements and benchmarks the ratios between different accounts such as billings by revenues or supply costs as a percentage of revenue.** ☺

data conforms to the percentage of Benford's law, it means that the data is Benford's set i.e. there is 68% (almost 2/3<sup>rd</sup>) chance of no error or fraud. The 1<sup>st</sup> digit may not always be the only relevant field. Benford has given separate sets for 2<sup>nd</sup>, 3<sup>rd</sup> ...and for last digit as well.

#### *Theory of Relative Size Factor (RSF)*

RSF is measured as the ratio of the largest number to the second largest number of the given set of data. This technique is used to identify the highest number in the data but in some relation with the second highest data in the number. In this method the records that fall outside the prescribed range are taken into the books of doubt and it calls for further investigation. It is very helpful in highlighting all unusual fluctuations which may be generated from fraud or genuine errors.

### Computer Assisted Auditing Tools (CAATs)

CAATs are computer programs developed for assisting auditors. Forensic Accounting software comes in two different varieties – data extraction software and financial analysis software. Data extraction software is designed to conduct spreadsheet analysis on all the company's computer database records, such as billings, accounts receivable, payroll, purchasing, etc. This helps in detecting anomalies and calls for investigation. Financial analysis software uses monthly, quarterly or annual financial statements and benchmarks the ratios between different accounts such as billings by revenues or supply costs as a percentage of revenue.

### Data Mining Techniques

It is a set of computer-assisted technique designed to automatically mine large volumes of data for new, hidden, or unexpected information or patterns. Data mining techniques are categorised in three ways: Discovery, Predictive modeling, Deviation and Link analysis. It discovers the usual knowledge or pattern in data, without a predefined idea or hypothesis about what the pattern may be, i.e. without any prior knowledge of fraud. In predictive modeling, patterns discovered from database are used to predict the outcome and to guess data for new value items. In deviation analysis the norm is found first and then those items are detected that deviate from the normal. Link discovery has emerged of late for detecting a suspicious pattern. It mostly uses deterministic graphical techniques, Bayesian probabilistic casual networks. This method involves "pattern matching" algorithm to extract any rare or suspicious case.

### Ratio Analysis

Data analysis ratios are used for

detecting fraud. These ratios help in tracing the possible symptoms of fraud. Such commonly employed ratios are –

- (i) the ratio of the highest value to the lowest value (max/min)
- (ii) the ratio of the highest value to the second highest value (max1 /max2)

Besides the above-mentioned ratios, the financial ratios also help a forensic accountant. Ratios help in estimating costs, identifying deviations, etc.

### Forensic Accounting in India

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**accompanied by some evils as well. India has also been experiencing white-collar crimes and scams for the past few years. Thus, the need of Forensic Accountants was realised. Forensic Accountants played a major role in letting the cat out of the bag in the 2008 Satyam scam. Of late, the CWG and 2G scams are in limelight in India. They are having a major role in these scams as well. While Forensic Accounting developed as early as 1995 in USA, it put its first step in India just few years back. Forensic Research Foundation has been established in India for the investigation of fraud. Another international investigation organisation has also put its feet on the Indian land. Serious Fraud Investigation Office (SFIO) is another noteworthy organisation set up in India for serving the same purpose.**

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We are looking forward to Forensic Accounting gaining a great momentum in India. We have a great expectation from ICAI in this respect. We expect that in near future an accounting standard will be formulated on Forensic Accounting. This will strengthen the walk of Forensic Accounting from infancy to maturity. This new weapon of Forensic Accounting will be an immense help to law enforcement agencies and regulatory bodies in curbing white-collar crimes and scams.

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