



A review on identification and exposure of dishonesty in accounting and marketing

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Abstract

Part of the problem in detecting fraud in accounting and marketing (and because such detection is difficult) is that in many situations scammers are actively trying to hide their behavior. Much of the trust market research or explicitly expects to observe the subjects revealing their behavior; it is likely that fraud cannot spread on its own. Moreover, although certain types of fraud can be detected using parametric statistical models (such as logistic regression) formed on a known sample of fraudulent transactions discovered; there are other types of fraud for which the identification of fraudulent actions is very difficult. An example of fraud that the parametric statistical analysis provided is credit card fraud where the legitimate user can identify fraudulent charges at the end of the billing cycle (or before) or credit card identifies a series of actions using theft of the suspect card.

Keywords: fraud, financial, accounting and marketing, detection etc.

Introduction

What is financial statement fraud?

According to a study conducted by the Association of Certified Fraud Examiners (ACFE), fraudulent financial statements represent about 10% of incidents involving white-collar crimes. The misappropriation of property and corruption tend to occur much more frequently, but the financial impact of these crimes is much less serious. ACFE defines fraud as "deception or false statements that an individual or entity makes false knowing could result in some unauthorized for the individual or for any other party entity or benefit." Greed and pressure at work are the most common factors that push the administration to deceive investors and creditors.

Fraud creates a significant and costly burden for the national economy and for companies (such as Enron, WorldCom, Arthur Anderson, costs associated with Sarbanes-Oxley compliance, etc.). According to the National Bureau of Insurance Crimes, the second most expensive crime in the United States is fraud (the first is tax evasion). In addition, about 10% of all incidents of white-collar crime involve reporting fraudulent financial statements, citing a study by the Association of Certified Fraud Examiners.

The Indian States Government. He responded with preventive measures. Despite the approval of the Sarbanes-Oxley Act, a direct result of the Enron, WorldCom and Tyco scandals, irregularities in financial statements remain very common. And the complex accounting fraud like the one practiced in Enron is often extremely difficult for the average investor to discover. However, there are some basic red flags that help. After all, Enron fraud was not exposed by Wall Street analysts with high shares in the Ivy League, but by journalists who used journal articles and public documents in their due diligence process. You can be the first on the scene to discover a fraudulent business can be very profitable from the

point of view of a short seller and can be very useful for a skeptical investor who is weighing on the general market sentiment.

Fraud problems are not limited to the Indian states. Since it is a global phenomenon. According to a report by BDO LLP auditors, the total average cost of fraud is about £ 2910 billion (\$ 4.7 trillion) of almost 5.5% of global GDP. In addition, they estimate that around 85.3 billion pounds (\$ 138.2 billion) in the UK are lost each year due to fraud.

Accounting fraud is the intentional manipulation of financial statements to create a façade of a company's financial health. It involves an employee, an account or the organization itself and is misleading for investors and shareholders. A company can falsify its financial statements by exaggerating its revenues or assets, not by recording the expenses and liabilities that have been subdivided. For example, a company commits accounting fraud if it exaggerates its income. Suppose the ABC Company is really operating at a loss and is not generating revenue. In its financial statements, the company's earnings would be inflated and its equity would be exaggerated. If the company exaggerates its income, it would increase the price of its shares and would falsely represent real financial health.

Budget fraud can appear in many different forms, although, once misleading accounting practices have been initiated, various management systems will be used to maintain the aspect of sustainability. Common approaches to artificially improve the appearance of financial income include exaggerating registered expected future sales, costs underestimating through means such as capitalized management fees, inflating equity to not deliberately implement a program of amortization of the case, hides obligations from the company's balance sheet and from incorrect information on transactions with related parties and structured finance agreements.

There are five basic types of fraud in the financial statements

- Fictitious sales
- Insufficient recognition of expenses
- Incorrect evaluation of activities
- Hidden responsibilities
- Inadequate information

Another type of fraud in the financial statements involves cookies accounting practices, a process by which a company underestimates revenue in an accounting period and kept as a reserve for future periods. These procedures eliminate the appearance of volatility of operations.

Another example of a company that has committed accounting fraud when it exaggerates its assets and underestimates its liabilities. For example, suppose a company exaggerates its current assets and underestimates its current liabilities. This distorts the short-term liquidity of a company. Suppose a company has current assets of \$ 1 million and its current liabilities are \$ 5 million.

And then, of course, there is total production of statements. In the spring of 2000, financial fraud investigator Harry Markopolos approached the SEC, claiming the asset management business of \$ 65 billion Bernard Madoff was fraudulent. After modeling Madoff's portfolio, Markopolos realized that the constant returns achieved were impossible. For example, according to an interview with the certified fraud investigator, "he concluded that, for Madoff to execute the business strategy he said he was using, he would have to buy more options on the Chicago Board Options Exchange that actually exists." Fortunately, this type of fraud is quite rare.

Methodology

If the company exaggerates its current assets and underestimates its current liabilities, this will falsify the liquidity of the company. If the company claims to have \$ 5 million in current assets and \$ 500,000 in current liabilities, potential investors believe that the company has sufficient liquid resources to cover all its obligations.

A third example is if a company does not record its expenses. As a result, the company's net income is inflated and expenses are underestimated in the income statement. This type of accounting fraud creates a façade of the amount of net income received from a company, whereas in reality it could be a waste of money.

Methods of detecting financial fraud

Looking at red flags can be extremely difficult as companies involved in fraudulent activities will try to portray the image of financial stability and normal commercial operations. The analysis of vertical and horizontal budgets introduces a direct approach to fraud detection. Vertical analysis involves considering each item in the income statement as a percentage of revenue and comparing trends year after year which could be a possible cause for concern. A similar approach can also be applied to the balance sheet, using total assets as a benchmark for comparison, to monitor significant deviations from normal activity.

Horizontal analysis implements a similar approach based on

which, instead of having an account as a reference point, financial information is represented as a percentage of the base year figures. Likewise, unexplained changes in percentages can serve as a red flag that requires further analysis.

In the consumer environment, customer fraud can also be very costly for companies. For example, customer return fraud is a growing problem for retailers and the Federal Bureau of Investigation (FBI) estimates that only US health care frauds cost about \$ 80 billion each. Year The NICB estimates that ten percent of insurance for property damage and damage in the United States. They are fraudulent and Accenture estimates that less than 20% of these fraudulent claims are detected or denied.

On the other hand, fraud that is less visible and difficult to identify a priori statistically with a set of forecasting variables are misleading in financial statements in accounting. Fraud can be very difficult to identify even in the marketing of services, such as insurance, in which a previously profitable customer can be the author (opportunistic fraud), or there may be a plan carefully designed to cover the traces of a fraud premeditated organized. Clicking on fraud associated with paid advertising on the Internet is another example where the separation of fraudulent clicks from non-fraudulent clicks (for payment purposes) can be extremely difficult.

Result and discussion

While a dependent variable that indicates whether a fraud is verified or not may be available for model building, there are often "red alert" indicators available that arouse suspicion of fraud or give indications that fraud can succeed. For example, for financial fraud, presents a list of red flag indicators of financial frauds that are shown below.

- Accounting anomalies, such as the increase in revenues without the corresponding increase in cash flow.
- Constant growth in sales at times when competitors show weak performance.
- A rapid inexplicable increase in the number of sales in credits, in addition to the growth in stocks.
- A strong increase in the company's performance during the final reporting period of the fiscal year.
- The company constantly maintains its gross profit margins, while others in its sector face price pressures.
- A large accumulation of fixed assets (which could mark the use of the capitalization of operating expenses, instead of recognizing the expense to reduce the expenses received).
- Depreciation methods or estimates of the useful life of assets that do not correspond to the sector in general.
- A weak internal control system.
- Too many complex transactions with related parties or third parties that do not seem to add tangible value (to hide the debt from the balance sheet).
- The company is close to breaking its debt commitments.
- The auditor has been replaced, resulting in a loss of the accounting period.
- A disproportionate amount of management compensation for objectives based on short-term bonds.

Internet advertising click fraud, Wiley and MEC Labs suggest

signs of fraud, such as the observation of unusual peaks in impressions, unusual peaks in the number of clicks, the inability to see an increase in conversions when peaks of clicks, a decline in the number of pages viewed per visitor during peak shots, large amounts of clicks from the same IP address or a range of IP addresses, clicks from geographic areas where the company does not do business and a higher percentage of people clicking on announcement and immediately return to the search page during maximum clicks. For the claims injury insurance Red Alert body fraud may be: The insured has a history of previous claims, no objective evidence of injury, previous history claims applicant, the only damage is strain or distortion, there is not an emergency treatment given on the scene, non-emergency treatment is delayed, and / or there is no police report on the scene.

PRIDIT can better use the "suggestions" on frauds that are not easily observable compared to the analysis of factors or groups on the same data. This leads to a more accurate fraud forecast for situations of identification of more difficult frauds. In short, PRIDIT can predict without a training sample, which has applications beyond the application of fraud discussed here. In all previous examples, the indicators increase the level of suspicion of fraud, but not clearly identified or reliability fraud itself: there may be other explanations for any red flags that are activated. The question is how to combine these indicators or evidence of fraud in a general assessment of suspected fraud. Hand as Bolton and discussed approaches for fraud detection analysis "You may think that the purpose of statistical analysis is to return about twenty suspects"

Summary and conclusion

As can be seen, for many accounting and marketing applications it cannot be a "dependent variable" or identifiable label fraud on which it is possible to train a standard statistical model, such as logistic regression to detect fraud. The company should try to detect such fraud, even when there are no measurable dependent variables. This article indicates a new statistical method, PRIDIT (Analysis of the main components of RIDIT), to identify the fraud in this configuration of "non-dependent variable".

In conclusion, there are relatively few methods available to create an overall suspect score for each entity under investigation when there is a set of red flag binary predictors or signs of fraud, but there is no employee designating definitive variable if not there was fraud. The analysis of the conglomerate and the maps of the characteristics of Kohonen are possible; however, they suffer from defects in the identification of fraud clusters and the possibility of numerically classifying entities on a scale of suspicions for future investigations.

PRIDIT analysis takes a set of predictive variables (red flags or indicator variables of fraud) that can be observed for each entity and there is a "latent variable" suspected of fraud "that underlies the probability of a response in a particular variable indicator will be Resolved in the affirmative or negative By using these new techniques, the manager can ^[1] evaluate the relative likelihood of fraud in the entity being studied, ^[2] find out which predictive variables are most important to detect fraud, ^[3] classify entities in terms of relative level of suspicion,

and ^[4] be able to incorporate the propensity score produced by PRIDIT frauds as input for future fraud fraud investigation.

The comparative analysis also allows analysts and auditors to detect discrepancies in the company's financial statements. When analyzing proportions, you can determine and analyze information about daily sales in credits, multiply multipliers and other vital metrics to detect inconsistencies. A mathematical approach, known as the Beneish model, evaluates eight reasons for determining the likelihood of manipulating profits. The analysis examines asset quality, depreciation, gross margin, leverage and other variables. By combining the variables in the model, an M score is calculated; higher value at -2.22 ensures further investigation as the company may be manipulating their earnings, while a score below -2.22M suggests the company is not a manipulator. Similar to most other relationship-related strategies, the complete image can be accurately represented only after comparing the multiples with the industry and the historical average of the specific company. (Knowing why this relationship can be a good alternative to current, effective and fast relationships.

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