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Framework for Detecting Risk of Financial Statement Fraud: Mapping the Fraudulent Environment

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ABSTRACT: The theme of financial statement fraud is still incipient in the Brazilian academic literature. This work seeks to contribute in this area by constructing a framework of red flags to detect such fraud. To establish this framework, we consulted various sources of information, including academic journals, dissertations, books and pronouncements from regulatory bodies. Based on this analysis, we selected six works to form the framework proposed: the American Institute of Certified Public Accountants (2002), Conselho Federal de Contabilidade (1999), Albrecht and Romney (1986), Eining, Jones and Loebbecke, (1997), Bell and Carcello (2000) and Wells (2005). Together, these works present a total of 266 red flags. As a criterion, we only selected the red flags mentioned by at least two sources, leaving 45 red flags, which we divided into six clusters: internal structure or environment, sector/industry, management, financial situation, accounting reports and auditing services. In general, the formulation of this framework permitted the identification of risk factors found in fraudulent environments.

Keywords: financial statement fraud, red flags, risk factors, fraudulent environment

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1. INTRODUCTION

It can be said that a company's financial statements seek to present information on its financial and equity position to the external public. Particularly after the works of Ball and Brown (1968) and Beaver (1968), considered seminal in the spread of the positive emphasis of accounting research, there appears to be a consensus in the academic community of various countries that accounting reporting must be evaluated by its ability to provide useful information to investors (LOPES, 2002).

From this perspective, the financial statements should reduce the information asymmetry between the firm's internal and external users. According Lopes and Martins (2005), reducing information asymmetry is fundamental for the capital market to function properly. Consequently, to attain this goal, the information disclosed in the financial statements should also be reliable.

However, the recent cases of fraud involving companies such as Enron, WorldCom, Adelphia, Global Crossing, Parmalat, Lucent, Tyco and Xerox have eroded the credibility of financial statements, causing their external users to question their integrity. In the case of Enron, for example, the lower level employees were encouraged by management to buy its shares without knowing of the real situation, and wound up suffering along with the rest of the stockholders (LOPES, 2004).

A priori, the financial statements should be prepared impartially, seeking to faithfully depict the firm's financial and equity position. However, in some cases those responsible for preparing these statements have manipulated information aiming to maximize the interest of the company and/or their own interests, generating undeservedly flattering information that can lead external users to make biased judgments.

Some hypotheses have been formulated to understand the motivations and incentives to manipulate accounting information. According to the positive approach to accounting, firms choose their accounting disclosure policies trying to minimize contractual costs and in defense of managers' individual interests (WATTZ and ZIMMERMAN, 1986). According to Beaver (1998), managers have various personal incentives in the choice of disclosure procedures, and it is thus the job of the independent accountant to monitor and certify the fairness of the financial statements.

In general, auditors need to base their opinions on evidence that can be verified. Based on this evidence, the independent auditors must express an opinion on the veracity of the information contained in the financial statements in conformity with the generally accepted accounting principles (PORTER, SIMON and HATHERLY, 2003). From this standpoint, it can be said that the independent auditor's function is to validate the financial statements for the sake of users who do not have the same access to information as those within the organization.

However, because the auditing process is generally conducted by sampling procedures, it does not cover all the firm's transactions (CUNHA and BEUREN, 2006). Therefore, for this process to be efficient in detecting possible fraud, it is necessary to have an understanding of the organizational environment of the audited company. (ALBRECHT, 2003). So, looking for possible indications of fraud must be part of the planning stage of an independent audit.

In this respect, Wells (2005) stresses that it is possible to identify some warning signals, or red flags, that indicate the existence of a fraudulent environment. According to Reinstein and McMillan (2004), the red flags are danger signs that aim to alert independent auditors of the possible occurrence of fraud. For example, some authors, such as Albrecht and Romney (1986), Eining, Jones and Loebbecke, (1997), Bell and Carcello (2000) and Wells

(2005), point to the existence of excessive pressure on a firm's executives to meet the targets set by the board of directors as suggesting an environment propitious for fraud.

In this line of thinking, knowledge of the various red flags related to accounting fraud provides a better understanding of the overall fraudulent environment. The purpose here is exactly this, to construct a framework of red flags to help detect the risk of fraud in the financial statements.

The rest of this work is organized as follows. Section 2 presents some justifications for undertaking this study. Section 3 addresses some aspects related to financial statement fraud and presents some related studies. Section 4 describes the methodological aspects of this study. Then, Section 5 illustrates and analyzes the results, and Section 6 presents the conclusions and recommendations for further study.

2. JUSTIFICATIONS

To be considered relevant, a scientific study must address a theme that is not a matter of consensus among the academic community and/or examine a real problem of organizations (CHOW, HARRISON, 2002). This study meets these two requirements.

Initially, it can be said that fraud is a real problem of organizations. A survey conducted in Brazil by the auditing firm KPMG (2004) showed that 69% of the firms analyzed (medium and large) had been victims of fraud at one time or another. However, fraud is not only a problem of large corporations. According to Wells (1997), often the impact of fraud on small companies is even greater than that on their larger brethren, because smaller ones have more difficulty absorbing the possible losses.

Foreign investments in Brazil (a country that in 2004 occupied 59th place in the ranking of Transparency International (TI), behind countries like Trinidad and Tobago and Costa Rica) also are affected by fraud. According to Parodi (2005), as a result of the high level of corruption in Brazil, many investors simply turn their backs on the country.

More specifically regarding financial statement fraud, the theme here, it can be said that the main sufferers are the employees, who lose their jobs if the company fails, and investors, who lose their capital. According to Rezzae (2005), accounting fraud has generated losses of 500 billion dollars to investors in recent years.

The growing number of companies that have had to restate (republish) their balance sheets and the cases of bankruptcy resulting from fraudulent financial statements has eroded public confidence in the process of independent auditing (REZAEE, 2004). According to Almeida (2004), these scandals cast doubt on the role of auditing in the eyes of the public. Consequently, it can be said that independent auditing firms also need studies regarding accounting fraud.

In this line of thinking, Lynn Turner (1999), former chief accountant [not ex-president] of the Securities and Exchange Commission (SEC), points out that "given the fact that accounting is done by people, I do not expect us to be able to totally eliminate fraud. We shouldn't ignore it but rather, we should proceed with timely and appropriate enforcement actions." For Lopes de Sá and Hoog (2005), a policeman who does not know the "thief's technique" will not be able to solve crimes efficiently. Hence, knowledge of fraud is the safest way to protect against it.

In some extreme cases, independent auditing firms can be held liable for the occurrence of financial statement fraud. The prime example of this is Arthur Andersen, which was one of the Big Five auditing firms, but was held to have colluded in the accounting fraud at Enron, and went bankrupt just as its client did. In this sense, the study of accounting fraud

can be considered vital to the recovery of credibility of independent auditors (WILKS; ZIMBELMAN, 2004).

To study themes related to fraud, accountants and auditors in the United States created the Association of Certified Fraud Examiners (ACFE) in 1988, which today has over 35 thousand members. In contrast, in Brazil, a country according to Kanitz (1999) that is "little audited and very vulnerable to the action of corruptors and the corruptible," the theme of fraud is still incipient. According to Jesus (2000), there is a lack of studies in Brazil on the subject.

The work of Murcia and Borba (2005), for example, which sought to quantify the academic works on the theme of "fraud" in the main management and accounting periodicals, found that although it was much discussed in the international literature, it was discussed very little in Brazil. So, it can be said that the study of accounting fraud is hardly a consensus among the national scientific community, for the very lack of empirical studies of the theme.

Similarly, in Brazilian universities, the theme of "fraud" appears to be only rarely addressed by accounting professors. For Silva (2004), the teaching of accounting in Brazil is deficient in this respect. According to him, "the good side of accounting" is what gets discussed in the classroom. Improper accounting practices are not studied.

In contrast, in the international sphere themes related to fraud are often discussed in university courses. Peterson and Reider (2001) list 19 American schools that have specific courses on fraud. Apparently this initiative of American universities aims to meet the demand in the market for professionals who know how to deal with this complex theme. A survey conducted by the magazine U.S. News & World Reports showed that the career of forensic accountant is among the eight most promising professions in the United States (LEVINE, 2002).

Thus, it can be said that the study of financial statement fraud is very necessary and timely as an academic contribution to a real problem of organizations, one not widely addressed in the national literature.

3. FINANCIAL STATEMENT FRAUD

In 1939, James Sutherland coined the term "white collar crime" to describe criminal acts involving individuals within organizations who act in their own benefit to the organization's detriment (WELLS, 2005). Since then, this term has gained force, and now white collar crime can be said to take in any financial fraud. According to Lopes de Sá and Hoog (2005), fraud is a planned malicious act aiming to obtain personal advantage by causing harm to others.

Unlike an unintentional error, fraud refers to an intentional act to obtain undue benefit from a certain situation. The Brazilian Federal Accounting Board (Conselho Federal de Contabilidade, or CFC), in Resolution 836/00[1] interpreting its NBC T11 – IT 3, characterizes fraud as:

- Manipulation, falsification or alteration of documents so as to modify the records of assets, liabilities and results;
- Misappropriation of assets;
- Suspension or omission of transactions in the accounts;
- Records of transactions without proof; and
- Application of improper accounting practices.

[1] The numbers after the slash indicate the year of enactment or issuance, in this case 2000.

Once fraud is described, it is necessary to make a division to better understand the complexity of this theme. Thus we break it down into two groups: misappropriation of assets and financial statement fraud, as shown below.

	Misappropriation of assets	**Financial statement fraud**
Definitions	Improper use of resources and assets of the organization in personal benefit (WELLS, 2005).	Adulterated records in the financial statements by omitting facts, imprecise figures and failure to apply generally accepted accounting principles (ALBRECHT, 2003).
Expressions	Occupational fraud and misappropriation of assets	Financial statement fraud, fraudulent financial reporting
Affect on the company	Harms the company because it reduces the assets and thus the net equity (ALBRECHT, 2003)	Benefits the company, because it aims to mislead external users of the financial statements (ALBRECHT, 2003).
Who commits it?	Employees, customers or suppliers (PARODI, 2005).	Members of top management (WELLS, 2005).
Example	Improper use or theft of various types of assets (DZAMBA, 2004).	Booking fictitious revenues (REZZAE, 2005).

Source: The authors.

Chart 1 – Misappropriation of Assets versus Financial Statement Fraud

In many cases, financial statement fraud and misappropriation of assets (occupational fraud) occur simultaneously, that is, the manipulation of accounting figures and the diversion of funds by members of the organization are committed together. In general, a fraudulent posture in reporting the financial statements suggests a climate equally propitious for misappropriation of assets. And misappropriation will eventually also affect the accounts, so in this sense the two are related.

Despite the efforts of regulatory bodies, professionals and researchers in the accounting area, the characterization of financial statement fraud is very difficult, because the process of generating accounting information is quite arbitrary and subject to human judgment. In other words, the dividing line between outright “cooking the books” and merely “seasoning” them a bit can be hard to distinguish. As is known, a debit can be both the record of an asset or an expense (WELLS, 2005). Additionally, detecting fraud by reading the financial statements can be extremely difficult because besides the inherent flexibility of the rules on reporting, individuals may not register all the transactions in the “official accounts”.

According to Wells (2005), in some cases fraudsters get around the accounting system and produce the desired information. Basically this boils down to keeping a parallel set of books, omitting or registering spurious information in the official books, or maintaining a “slush fund” totally off the books. This makes it easier to show that there is an environment favorable to fraud than to actually detect its occurrence. Such an environment can be characterized through alert signals called red flags.

Red flags are symptoms, signs that can show fraud might be occurring (ALBRECHT, 2003). To Parodi (2005), red flags are indicators to raise suspicion that fraud may be occurring. Hence, it can be said that these signals work as a “thermometer” in prevention and detection of fraud. However, there can be various red flags related to an organization without any fraud occurring. They only alert to the possibility of fraud, which can only be proved with actual evidence, gleaned from further examination.

3.1 Review of the Literature on Financial Statement Fraud

Based on a review of the literature, it can be said that the theme of "fraud" is infrequently addressed by the Brazilian academic community. An analysis of the main periodicals in the area of business organizations evaluated through the Qualis/Capes academic database showed that there are no academic works on the theme of "fraud" or "financial statement fraud". Unlike in Brazil, in the international arena there are many works addressing this theme, as shown in the following chart.

Authors / Periodical	Objective
Knapp and Knapp (2001) *Accounting, Organization and Society*	They examined whether the auditor's experience and an instruction guide to fight fraud influenced its detection in the financial statements. The results showed that just the instruction guide was significant in detecting fraud.
Owusu-Ansah et al. (2002) *Managerial Auditing Journal*	They analyzed the efficiency of 56 auditing procedures in detecting fraud in New Zealand companies and stated that fewer than half the procedures were efficient.
Erickson, Hanlon and Maydew (2004) *Accounting Review*	They checked whether a sample of 27 firms accused of fraud on their balance sheets paid taxes on their overstated profits. The results showed that these companies paid nearly 320 million dollars in taxes on their overstated profits.
Farber (2005) *Accounting Review*	He investigated the governance mechanisms of a sample of 87 companies that had been reported as committing fraud by the Securities and Exchange Commission (SEC). The results were that these companies had governance mechanisms considered poor.
Gillet and Uddin (2005) *Auditing*	They analyzed the intentions of 139 chief financial officers (CFOs) in disclosing fraudulent accounting reports. The results showed that the compensation structure of these executives did not influence their disclosure of fraudulent accounting reports.

Source: The authors.

Chart 2 – Some Studies of Fraud

4. METHODOLOGY

Meeting the objectives of this work – building a framework of red flags to detect the risk of financial statement fraud – involved three main steps:

- Identification of the works that presented a set of red flags related to financial statement fraud,
- Selection of the main red flags; and
- Classification of these red flags into clusters.

Below are the criteria used in each of these steps.

4.1 Identification of the Works that Presented a Set of Red Flags Related to Financial Statement Fraud

To identify these works we analyzed the following data sources: academic periodicals, dissertations, books and pronouncements from regulatory bodies. The aim was to identify

works so that there was no repetition with earlier works, whether by other authors or the same author.

For example, the American Institute of Certified Public Accountants (AICPA) has issued three statements (SAS No. 53, SAS No. 82 and SAS No. 99) that establish standards for performing the functions of an independent auditor. All three have a framework of red flags related to financial statement fraud. However, SAS No. 99 – Consideration of Fraud in a Financial Statement Audit*,* revoked the previous SAS No. 82, which in turn had revoked SAS No. 53. So for this study we chose the last of these, SAS No. 99.

Using this same criterion, we did not choose works that presented red flags already used in other studies. For example, Heiman-Hoffman, Zimbelman (1997) and Apostolou et al. (2001) conducted studies on financial statement fraud using the red flags listed in the SASs. So, we did not select these because they did not present any new red flags.

Another example is Albrecht and Romney, who carried out two studies that presented a set of red flags, the first in 1980 and the second in 1986. However, the set of red flags in the two is the same, so we only chose Albrecht and Romney (1986).

We did not set out to choose or exclude any work based on its relevance (number of citations, periodical in which it was published, etc.) or the standing of a particular researcher. The objective of this criterion was only to select the works that presented red flags without overlapping with other studies, so that the later analysis could present a representative framework without any repetition.

Based on this criterion, we selected six works: American Institute of Certified Public Accountants (2002), Conselho Federal de Contabilidade (1999), Albrecht and Romney (1986), Eining, Jones and Loebbecke, (1997), Bell and Carcello (2000) and Wells (2005). Chart 3 below presents a brief description of these works.

Author(s)	Work
American Institute of Certified Public Accountants Body representing American CPAs. Main functions: ➢ To provide standards for the accounting profession	**SAS 99. Consideration of Fraud in a Financial Statement Audit (2002)** Aims to establish guidelines for independent auditors regarding financial statement fraud. Revoked SAS No. 82, which had revoked SAS No. 53. SAS No. 99 lists a total of41 red flags, divided into 3 groups: ➢ Incentives ➢ Rationalization ➢ Opportunity
Conselho Federal de Contabilidade Independent organization without government ties. Main function: ➢ Provide rules and oversee the accounting profession	**CFC – NBC T 11 - IT 3 Fraud and Error (1999)** Seeks to clarify the responsibility of independent auditors regarding frauds and errors in financial statements. Presents 32 red flags divided into 5 groups: ➢ Inadequate structure or action of management ➢ Internal and external pressures ➢ Transactions that appear abnormal ➢ Internal problems in complying with auditing work ➢ Specific factors in the computerized information systems
Steve Albrecht and Marshall Romney Professors and researchers in the area of accounting and auditing.	**Red-flagging management fraud: a validation (1986)** Considered a seminal work, the study of Albrecht and Romney (1986) sought to identify the perception of American auditors on the relevance of 87 red flags in preventing fraud. These are divided into 3 groups: ➢ Relevant ➢ Not relevant ➢ Not tested (due to the low number or responses)
Martha Eining, Donald Jones and James Loebbecke	**Reliance on decision aids: an examination of auditors' assessment of management fraud (1997)** A scientific study principally aiming to test whether the use of an expert

Independent auditors, professors and researchers in the area of accounting and auditing.	system by American independent auditors helped to fight financial statement fraud. It presented 19 red flags divided by the respective level of risk: ➢ Low risk ➢ Medium risk ➢ High risk
Joseph Wells Founder and current presiden of the Association of Certified Fraud Examiners (ACFE).	**Principles of Fraud Examination (2005)** A book on the theme of fraud in organizations, it presented 42 red flags divided into: ➢ Fictitious revenues ➢ Differences in the period of recognition ➢ Improper valuation of assets ➢ Hidden liabilities ➢ Improper disclosure
Timothy Bell and Joseph Carcello Independent auditors, professors and researchers in the area of accounting and auditing.	**A decision aid for assessing the likelihood of fraudulent financial reporting (2000)** An academic study that tested a logistic regression model to estimate cases of fraud in financial statements. The sample was composed of 77 companies where fraud was suspected ("fraud engagements") and 305 where it was not ("nonfraud engagements"). It also presented 46 red flags.

Source: The authors.

Chart 3 – Works Selected

4.2 Choice of the Main Red Flags Related to Financial Statement Fraud

The six works chosen together present 266 red flags. Consequently, it was necessary to define a criterion to select the main red flags from these. To have a representative framework of these six works that was not too extensive, we decided to select only those that had been mentioned in at least two of the six works. In this effort we opted for essence over form of the red flags, seeking to capture their gist. Chart 4 below illustrates an example of a red flag.

Author(s)	Red Flag
SAS No. 99 (2002)	✡ Past violations of the laws on disclosure and other laws and rules, as well as lawsuits against the company, top executives; the board of directors alleges fraud or violation of laws and rules.
NBC T 11 - IT 3 (1999)	✡ Company has prior case of having committed frauds and/or errors.
Albrecht and Romney (1986)	✡ Operating license revoked or at risk of being revoked. ✡ Continuous problems with regulatory agencies.
Bell and Carcello (2000)	✡ Company is facing legal/judicial problems.
Wells (2005)	✡ Past violations of the laws on disclosure and other laws and rules, as well as lawsuits against the company, top executives; the board of directors alleges fraud or violation of laws and rules.
Result of the Analysis	✡ **In the past, the company has already presented problems regarding publication of financial statements.**

Source: The authors.

Chart 4 – Example of Analysis of Red Flags

We followed this analytical procedure for all the 266 red flags, winnowing them down to 45 flags that had been cited in at least two of the six works.

4.3 Classification of the Red Flags in Clusters

The last step in preparing a framework of detecting the risk of financial statement fraud was to classify the 45 red flags into 6 overall clusters:

- **Structure and environment:** Organizational structure, work climate and internal controls of the company.
- **Sector (industry):** External environment and sector (industry) of the company..
- **Management:** Behavior of the company's directors and officers.
- **Financial situation**: The company's financial situation.
- **Accounting reports:** The company's accounting reports and registration of transactions.
- **Auditing:** Work of the independent auditor, evidence found during audits and relation between auditors and company management.

4.4 Restrictions

Since this work was originally prepared for the Brazilian case by consulting international works in English (five of the six chosen), the translation of the ideas behind the various red flags into Portuguese involved a degree of inherent subjectivity. In this respect, other researchers could choose other red flags to formulate a risk-detection framework. This is an unavoidable restriction of this work.

5. ANALYSIS OF THE RESULTS

The 45 red flags chosen, classified into the 6 clusters, are shown below. The respective works are: CFC (1) AICPA (2), Albrecht and Rommey (3), Eining, Jones and Loebbecke (4), Wells (5) and Bell and Carcello (6).

5.1 "Structure and Environment" Cluster

Organizational climates where moral and ethical values are not respected can serve as a "springboard" to fraud. In this line of thinking, it can be said that the ethical environment within an organization is extremely important as a way to prevent frauds, because it "sets the tone" of how activities must be conducted (BOLOGNA; LINDQUIST; WELLS, 1993).

In some cases, financial statement fraudsters create an overly complex organizational structure to camouflage frauds (ALBRECHT, 2003). Thus, knowing the company's structure and environment can be considered a fundamental aspect of the auditor's job.

Similarly, the absence of an effective internal control system provides opportunities for fraudulent acts. According to Antunes (2004), auditors need to assure themselves about the reliability of the data generated in light of the internal controls. In Brazil this aspect was addressed by the Brazilian Central Bank through Resolution 2554/98, which made it mandatory to adopt appropriate internal controls by the country's financial institutions.

The red flags related to the organizational structure, work environment and internal controls are presented in Chart 5 below.

RED FLAGS	1	2	3	4	5	6*
The company's organizational structure is overly complex, involving various bodies or lines of authority.						
The company has an inadequate internal control system.						
The company has accounts at various banks, or constantly changes banks.						
The company does not present a policy of punishing dishonest acts.						
In the past, the company already had problems related to the publication of financial statements.						
Communication and implementation of ethical and moral values are not done by management and/or the ethical and moral values are considered inadequate.						
There is a conflict of interest or dispute between shareholders and management.						
There is a strong suspicion that the employees are in collusion with people outside the company.						
There is an abnormal turnover of key people in the financial, accounting and internal auditing areas.						
The company presents serious difficulties in satisfying the requirements for listing on exchanges (or from regulators).						
The company is dominated by a small group of people.						
The board of directors or audit committee does not adequately monitor the process of generating accounting reports.						

Source: The authors.

* CFC (1) AICPA (2), Albrecht and Rommey (3), Eining, Jones and Loebbecke (4), Wells (5) and Bell and Carcello (6).

Chart 5 - Red Flags Related to the Company's Structure and Environment

5.2 "Sector / Industry" Cluster

In general, external factors to the company, more specifically the industry (sector) in which it operates, also can contribute to increase the risk of fraud. According to Albrecht (2003), companies in sectors that are undergoing rapid changes and/or that are saturated can have a greater propensity of commit fraud. Chart 6 below presents the red flags in this cluster.

RED FLAGS	1	2	3	4	5	6
The sector/industry in which the company operates is in decline, with bankruptcies increasing.						
The company has a significant investment in a product line or sector that is subject to rapid innovations and changes.						
The sector/industry in which the company operates is highly competitive or the market is saturated, generating declining profits.						

Source: The authors.

Chart 6 - Red Flags Related to the Company's Sector/Industry

5.3 "Management" Cluster

The late renowned Harvard economist John K. Galbraith (2004) was emphatic in saying that "managers, not the owners of capital, are the effective power in the modern enterprise." Similarly, according to the Committee of Sponsoring Organizations (COSO) of the Treadway Commission (1999), three of every four cases of financial statement fraud count on the participation of the company's CEO.

Thus, due to the involvement of these executives in the majority of these crimes, it is necessary to know the motives and pressures that lead to their behavior. Enron, for example, had an overall goal to "Be the World's Leading Company". This excessive pressure to be the best may have led its managers and employees to seek ways to "beat the system". In this line of thought, understanding executives' motivations can help prevent and detect financial statement fraud by enabling recognition of some abnormal circumstances regarding the company (WELLS, 2005).

Chart 7 below presents the red flags related to some of the characteristics of company management.

RED FLAGS	1	2	3	4	5	6
A large part of executive compensation is tied to operating profits, financial profits or share price.						
The executives have excessive interests in maintaining or increasing the share price and/or reporting a rising profit trend.						
Management is dishonest or unethical, with some executives being of "doubtful" character.						
The executives of areas other than financial area (sales, production, human resources) are extremely concerned with the selection of accounting methods or determination of estimates.						
The executives have an "aggressive" lifestyle involving vices such as gambling, drinking and drugs.						
The majority of executives are young and inexperienced.						
There is excessive pressure on the executives to meet the targets set for them by the board of directors, such as sales and profitability.						
The executives have a propensity to make decisions involving exaggerated risks and/or show a tendency to try to "beat the system".						
There is a high turnover of executives.						
The executives repeatedly try to justify the use of accounting procedures considered improper.						
The executives demonstrate resentment with orders from superiors.						

Source: The authors.

Chart 7 - Red Flags Related to Management

5.4 "Financial Situation" Cluster

It is intuitive that a company in financial distress would be more likely to commit financial statement fraud to cover up its real situation and try to keep the confidence of its shareholders. Similarly, some abnormal indications regarding a firm's financial situation can raise suspicions of possible fraud. A possible response would be for the independent auditors

to compare the company's financial statements against those of other companies in the same sector, trying to detect possible fraud (WELLS, 2005).

In this line of thinking, the moment through which the company is passing, whether good or bad, can influence the risk of fraud. Chart 8 below presents the red flags classified in the "financial situation" cluster.

RED FLAGS	1	2	3	4	5	6
The company's profitability is not in line with the average in the sector.						
The company is undergoing rapid expansion.						
There is a need to raise funds through loans of by issuing shares, bonds or debentures.						
The company has a high level of doubtful receivables.						
The company's working capital is not considered sufficient to finance its operations.						
The company's inventories are increasing abnormally.						
There are internal and/or external questions that trigger doubts about the company's continued operation.						
The company is participating in transactions considered relevant (significant), such as a large acquisition, sale or joint venture.						
The company is highly dependent on a single product, customer or supplier.						

Source: The authors.

Chart 8 - Red Flags Related to the Company's Financial Situation

5.5 "Accounting Reports" Cluster

The red flags classified in the "accounting reports" cluster present aspects related to the company's transactions, accounting department and accounting estimates. For example, Enron managed to keep a large part of its liabilities off the balance sheet by using highly complex transactions involving special purpose companies. Chart 9 below shows the red flags related to the accounting reports.

RED FLAGS	1	2	3	4	5	6
There are a significant number of operations carried out with entities of unknown origin or whose business culture or climate raises suspicions.						
The assets, liabilities, revenues and expenses are based on estimates that involve judgments or uncertainties that are hard to corroborate.						
There are a significant number of transactions with related parties, or with companies not audited or audited by other independent auditing firms.						
There are inadequate records, incomplete files, excessive adjustments in the accounts and unrecorded transactions.						
The accounting department does not have enough experience or does not carry out its						

functions adequately.						
There are a significant number of overly complex transactions, especially at the end of an accounting period, that raise questions about their essence and form.						

Source: The authors.

Chart 9 - Red Flags Related to the Company's Accounting Reports

5.6 "Auditing" Cluster

Independence in the auditing service is fundamental for the credibility of the opinion expressed by these professionals about the financial statements (PORTER; SIMON; HATHERLY, 2003). However, there is a potential for conflict of interest in the relationship between the audited company and its independent auditor. This happens because the company is indirectly paying the salary of the outside auditors. Thus, in some cases the independent auditor can be influenced to issue a favorable opinion. Below are the red flags that deal basically with the relationship between the outside auditors and audited company.

RED FLAGS	1	2	3	4	5	6
The executives have a domineering behavior toward the auditors, trying to influence the scope of the audit or choice of the people involved in the auditing service.						
The company constantly changes its auditing firm.						
There are formal or informal restrictions that limit access to the company's personnel or information, as well as restrictions that limit the dialog with the board of directors and audit committee.						
The company is a new client of auditing service.						

Source: The authors.

Chart 10 - Red Flags Related to the Independent Auditing Service

6. CONCLUSIONS AND RECOMMENDATIONS

Recently white-collar crimes have been gaining the attention of Brazilian society, in both the public and private spheres. In this respect, it can be said that the requirement for greater transparency in the use of funds is necessary as a way to combat these crimes. As stated by Rebouças (2006), Brazil still does not have a specific law on the control of accounting fraud, as is the case in the United States, where Sarbanes-Oxley was enacted in response to the wave of accounting scandals.

Similarly, the theme of accounting fraud, unlike in the international academic literature, has not been discussed by the Brazilian scientific community. The literature review did not find any academic works addressing this theme in the main Brazilian management and accounting periodicals.

Therefore, the aim of this work was to contribute to a subject still little discussed in Brazilian academic circles, by constructing a framework of red flags to detect the risk of financial statement fraud.

First, based on the literature review, we chose six works that presented red flags related to financial statement fraud: American Institute of Certified Public Accountants (2002), Conselho Federal de Contabilidade (1999), Albrecht and Rommey (1986), Eining, Jones and Loebbecke, (1997), Bell and Carcello (2000) and Wells (2005). Due to the large number of red flags in these works (a total of 266), we decided to select only those that had been mentioned in at least two of the six works, a total of 45 red flags. Then we classified these into six clusters: structure and environment; sector/industry; management; financial situation; accounting reports; and auditing service.

In general, we conclude that the existence of an inadequate system of internal controls is not the only element responsible for the occurrence of fraud in the financial statements. After all, it would be naïve to think that the reasons for the frauds in large corporations like Enron, WorldCom, Adelphia, Global Crossing, Parmalat, Lucent and Xerox, among others, only occurred because of inadequate internal controls. In this respect, the red flags seek to map a potentially fraudulent environment, identifying signals related to the rationalization of fraudulent acts and the pressure or incentive to commit them.

In the final analysis, just as Sherlock Holmes sought clues to unravel his cases, the user of accounting information must be able to identify the red flags that indicate possible financial statement fraud (SCHILIT, 2002). Granted, many red flags can be present where there is no fraud. But if fraud exists, some red flags are sure to exist as well, unfortunately only on hindsight in many cases.

Hence, the intention of this exploratory work is to help turn hindsight into foresight by contributing to the construction and improvement of Brazilian accounting science, proposing a framework of red flags to detect the risk of financial statement fraud. However, due to this exploratory nature, there is a need for further studies to build on and improve this framework.

Future works might well call on a sample of experts on the theme of fraud (auditors, professors, researchers, etc.) to verify the relevance of the structure formulated in this work. These experts could verify which red flags are more suggestive of fraud. This is an important but complex theme that offers rewarding opportunities for further study.

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