Effectiveness Of Red Flags in Detecting Fraudulent Financial Reporting: An Application In Turkey

Elif YÜCEL*

ABSTRACT

The intense competition in all markets of the world due to globalization has driven companies in capital markets to panic. As they are in a race to be the best, often times they may resort to fraud and manipulation. Upon examination of fraud and manipulation in the past, it is seen that many of them emerged after similar symptoms. Although not considered as a definite proof of fraud, these symptoms that indicate fraud in financial statements are reported as "red flag". In line with importance of red flags in detection of frauds, initially some descriptions have made about detecting fraud and manipulations, evaluating fraud risk and red flags as indicators of fraudulent financial reporting in this study. And the main purpose of this study is to investigate the level of effectiveness of the 42 red flags determined from SAS No.99 in detecting the fraudulent financial reporting from the perspective of auditors in Turkey. For this purpose, a questionnaire was designed and sent to the Firms Engaged in Independent Auditing Activities of Capital Markets Board of Turkey. Their responds were analyzed in SPSS 17 pack program. According the results of this study, the level of fraud-detecting effectiveness of these red flags determined as 'somewhat effective' by the auditors. However, the red flags related to opportunities are judged to be the "mostly effective" category of red flags. So according to the responds of the auditors it can be say that the opportunities are more dangerous for the companies in our country and both companies and auditors should be careful about the indicators related to opportunities for preventing fraud and manipulations.

Key Words: *Red Flags, Fraud and Manipulations, Detection of Fraudulent Financial Reporting*

Jel Classification: *M41, M42*

Hileli Finansal Raporlamanın Tespitinde Kırmızı Bayrakların Etkinliği: Türkiye Uygulaması

ÖZET

Küreselleşme ile birlikte tüm dünya pazarlarının yoğun bir rekabet ortamı içinde olması özellikle sermaye piyasalarındaki şirketleri paniğe sürüklemektedir. Şirketler en iyi olma yarışı içerisindeyken pek çok zaman çeşitli hile ve yolsuzluklara da başvurabilmektedirler. Geçmişte yaşanan hile ve yolsuzluklar incelendiğinde çoğunun benzer belirtiler ortaya çıktıktan sonra gerçekleştikleri görülmektedir Kesin olarak hile yapıldığının ispatı sayılmasalar bile finansal tablolarda hile yapıldığını gösteren bu belirtiler "kırmızı bayrak" olarak ifade edilmektedir. Kırmızı bayrakların hilelerin tespitindeki önemi doğrultusunda bu çalışmada öncelikle hile ve manipülasyonların tespit edilmesi, hile riskinin değerlendirilmesi ve kırmızı bayrakların hileli finansal raporlamanın tespitinde gösterge olarak kullanılması açıklanmıştır. Çalışmanın asıl amacı ise SAS No.99'da belirtilen 42 kırmızı bayrağın hile ve yolsuzlukların tespitindeki etkinliğinin Türkiye'deki bağımsız denetçilerin bakış açılarıyla değerlendirilmesini sağlamaktır. Bu amaçla hazırlanan anket soruları, Sermaye Piyasasında Bağımsız Denetimle Yetkili Kuruluşlara gönderilmiş ve gelen cevaplar SPSS 17 paket programında analiz edilmiştir. Çalışmada elde edilen bulgulara göre bu kırmızı bayrakların denetim çalışmalarında kısmen etkin olduğu belirlenmiştir. Ancak fırsatlara ilişkin kırmızı bayraklar, denetçiler tarafından "oldukça etkin" olarak değerlendirilmiştir. Bu sonuçlara dayanılarak fırsatların ülkemizdeki işletmeler için daha büyük bir tehlike olduğu ve gerek işletmelerin gerekse denetçilerin hile ve manipülasyonları engellemek için bu fırsatlara ilişkin göstergeler konusunda daha dikkatli olmaları gerektiği söylenebilmektedir.

Anahtar Kelimeler: *Kırmızı Bayraklar, Hile-Manipülasyon, Hileli Finansal Raporlamanın Tespiti*

Jel Sınıflandırması: *M41, M42*

* Dr. Elif Yücel, Uludağ Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, emugal@uludag.edu.tr

1. INTRODUCTION

The fact that many businesses face bankruptcy due to serious economic oppression and the consequent lack of job security for employees gradually increases the risk of fraud and manipulation everyday (Owojori and Asaolu, 2009: 183). The widespread use of technology in accounting and the difficulty of controlling frauds emerging in electronic media increase this impact (Ozkul and Pektekin, 2009: 59). These accounting tricks not only brings damage to company owners and investors, but also the employees, credit institutions, the state, and audit firms (Pazarceviren, 2005: 2).

PricewaterhouseCoopers concluded in their 2009 research titled Global Economic Crimes that the risk of fraudulent business is especially high during economic crisis. Participated by more than 3000 senior executives in 54 countries, the research revealed that at least one incident of fraud happened in 30% of businesses. 68 percent of the reported fraud took place through embezzlement, 38 percent through accounting, and 27 percent through bribery and abuse. Another important result of the research is that fraud in accounting increased three times since 2003 in organizations that were further affected by the crisis. In terms of countries, the research revealed that fraudulent transaction was most seen in Russia with 71% while more than one third of the 105 companies that participated in research from Turkey encountered economic crimes. Financial loss in Turkey due to economic crimes is 3.9 million dollars per incident, 63 percent higher than the world average of 2.4 million (Oztop, 2010: 87).

As can be seen in the provided data, all the fraud and collapse of global companies in the world made it an obligation to specialize in the profession. At the present day auditors must work as a detective to examine the validity of evidence and the accuracy of financial statements with an inquisitive approach. Therefore during the audit process, auditors use many procedures and techniques to detect fraud and manipulations. One of the procedures is using of red flags that might act as fraudulent financial reporting indicators. Red flags are indicators that fraudulent activity could exist; they are not absolute, but should be investigated to ensure fraudulent activity is not present.

According the importance of red flags international accounting institutions use them in their regulations as they have signs about fraudulent activities. The Statement on Auditing Standards (SAS) No. 82, The Consideration of Fraud in a Financial Statement Audit which superseded SAS No. 53, was one of the first statements that identified 25 fraud risk factors (red flags) for auditors. This standard was later replaced by SAS No. 99 (AICPA, 2002) that requires auditors to use 42 red flags in financial statement audits to detect fraudulent financial reporting. The list of red flags found in SAS No. 99 is organized based on the fraud-triangle concept which involves the interaction of the following three factors: incentive, opportunity, and attitude.

This study examines the perceived effectiveness of red flags in the detection of fraudulent financial statements by Firms Engaged in Independent Auditing Activities of Capital Markets Board of Turkey. And also it is aimed to determine the more effective red flags in detecting fraud for our country.

2. LITERATURE REVIEW

One of the first major research studies on red flags is conducted by Albrecht et al. (1985). In this study, partners from 20 major CPA firms evaluated 87 red flags for detecting the management fraud. Also Albrecht and Romney (1986) found one-third of these red flags represented "significant predictors of management fraud", which tended to be personal characteristics of management rather than company-specific factors. Likewise, Green and Calderon (1996) commented, "Qualitative red flags are crucial pieces of evidence in signaling the likelihood of management fraud".

Pincus (1989) examined the efficacy use of red flags among auditors. In this study, Pincus found that only half of the respondents indicated they used red flag questionnaires to assist in their fraud assessment, since they considered red flags an important tool in the audit process.

In a study conducted by Heiman-Hoffman and Morgan (1996), external auditors from one of the then Big Six public accounting firms were asked to rank the thirty most important warning signs (i.e., red flags) of possible fraud. This study emphasized the fact that red flags or warning signs did carry different weights as perceived by the sample of auditors.

Apostolou et al. (2001) surveyed both external and internal auditors in which, these auditors rated the importance of the twenty-five red flags found in SAS No. 82. Similar to Apostolou et al. (2001), a study conducted by Moyes (2007) also requested internal auditors to determine the fraud-detecting effectiveness of red flags within each of the SAS No. 99 categories: opportunities, incentives or pressures, and attitudes or rationalizations.

Differently from prior literature that examined the perception of various red flags for fraud detection, Coram et al., (2008) and Liou (2008) adds a third participant group, the economic crime investigator, because these investigators determine and document the course of each suspected economic crime offence in order to determine if essential elements of a crime case are evident.

In summary, prior research on the importance of various red flags (e.g. Loebbecke et al., 1989; Hackenbrack, 1993; Apostolou et al., 2001; Mock and Turner, 2005; Moyes, 2007) has primarily examined external or internal auditors' perceptions of the fraud risk indicators related to management fraud. Findings from these studies indicate various and inconclusive results with regard to which fraud risk indicators are the most important. Over time, regulators and researchers addressing fraud prevention and detection have also identified new fraud risk indicators and taxonomies, making comparisons difficult. It is apparent that most auditors consider red flags to be an important part of the audit process. However, all red flags do not appear to be equally important. There appears to be some disparity among auditors regarding their agreement on the importance and use of red flags.

When we investigate the prior literature in Turkey the number of studies about red flags is limited. Arzova (2003) investigated the effects of red flags on detecting employee frauds and Abdioğlu (2007) focused on the red flag method which is on revealing and to prevent the frauds in the process of mortgage borrowing made by third people. However, according the literature review there couldn't be found any studies examining the perceived effectiveness of red flags and this study attempted to fill this gap.

3. DETECTION OF FRAUD AND MANIPULATIONS

With transactions becoming more and more complex, fraud and manipulation being usually buried in legal transactions, information and documents being easier to hide or alter using technological advancements (Kenyon and Tilton, 2006: 120) today due to development of markets, detection of fraud and manipulation has gradually become more difficult. It is also a known fact that the traditional concept of audit is inadequate at this point and auditors have to investigate everything meticulously during the all auditing process.

The first step for detecting fraud is, knowing where to start implementing control. Understanding the factors that cause fraud and accordingly defining primary areas to conduct detailed examination by estimating the riskiest accounts is the way to detect fraud in the most effective manner. At this stage, suspicions and skepticism of the auditor are fundamentally important. Moreover, the auditor must evaluate all processes with a professional skepticism while detecting fraud. It should be kept in mind that all books and financial statements may include deceptive applications and all the documents may be false. It is not a state of distrust but a necessity for the investigation (Kenyon and Tilton, 2006: 122). Auditors follow various indicators (red flags) and employ different methods in detecting fraud and manipulations. These methods for detection and indication of fraud and manipulations are explained in detail below.

3.1. Assumptions Used to Detect Fraud and Manipulations

Detecting fraud and manipulations are based on the following assumptions (Singleton and Singleton, 2010: 14).

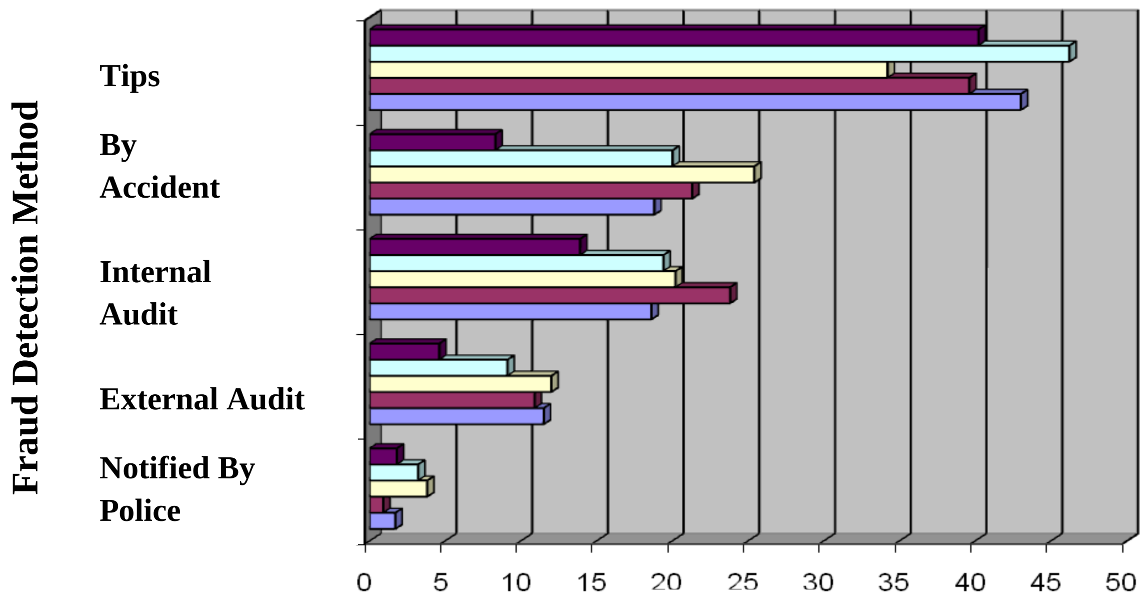
- Fraud and manipulation are inevitable in companies with a weak control system.
- Visible parts of fraudulent transactions make up a small amount of the loss while the unseen part may cause much bigger material losses.
- Red flags of fraud and manipulation can be seen if sufficiently long and deep investigations are carried out.
- Any person may commit fraud and manipulation regardless of status.

Based on the aforementioned assumptions, primary objective of fraud control is actually to completely eliminate fraud but it is not a reachable target in reality because when a fraud is eliminated, another one emerges. Thus, the important thing is to detect and minimize their impact fraud and manipulation before they cause extensive losses.

3.2. Detection Methods of Fraud and Manipulations

Fraud is notoriously difficult to detect since they are committed on purpose and therefore concealed extremely well. Time pressure on auditors and responsibilities against the customer paying the audit fee makes it more difficult to detect fraud and manipulation and traditional audit methods fundamentally based on analysis of documents and financial statements remain incapable (Kapardis, 2002: 267). Therefore, various methods are being employed to detect fraud in practice. According to reports regularly issued by ACFE, the most commonly used fraud detection methods are given in Graphic 1

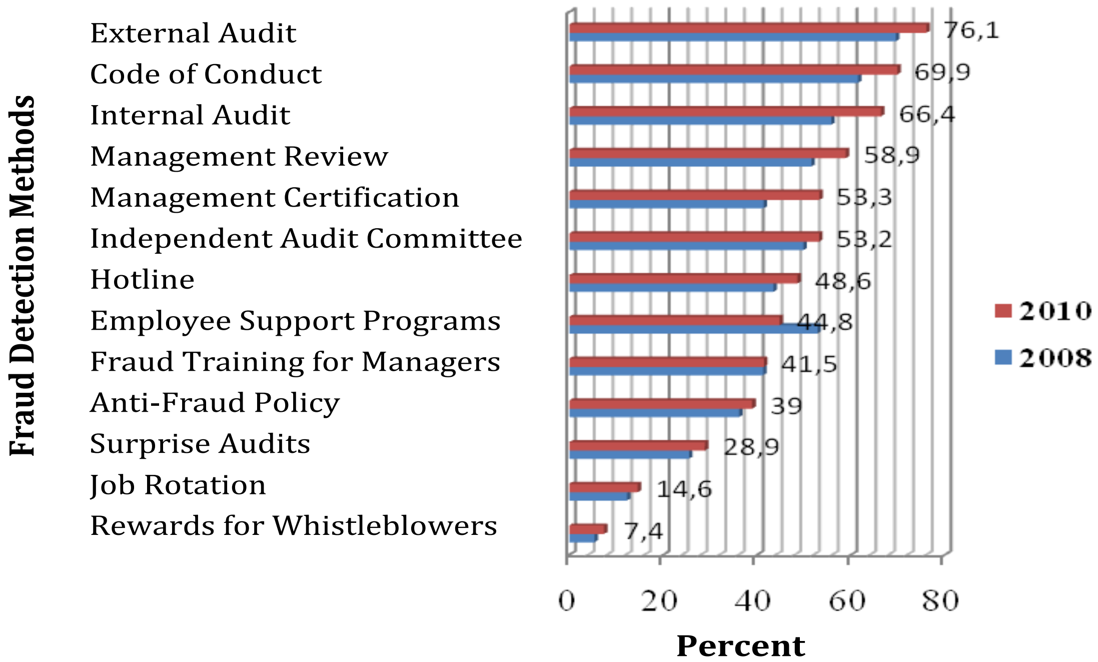
Graphic 1. Fraud Detection Methods (ACFE: 2002 – 2010)



As can be seen from the data above, the most commonly used method of detection for all years is warnings and complaints which come mainly from employees. Upon examination of data in 2002 – 2010, it is seen that 58% of information obtained on fraud has been provided by employees who can closely observe activities of the company and detect fraud at an earlier stage. These employees also help to directly execute a successful internal control system. However, they often report the fraud they observe to upper management in secret ways due to the threat they face and the fear they live. In this respect, fraud is detected by anonymous warnings amount to 13%. Another important source of information for detection of fraud is customers with 18%. They can also closely monitor company activities like employees and even become a party to these activities. Considering all these facts, the first thing an auditor should do to detect fraud is interrogation. An interrogation in a friendly atmosphere will help to obtain necessary information on employees or managers more easily.

Researchs conducted by ACFE in 2008 and 2010 extended the examination and asked which fraud detection methods were used by companies that were victimized by fraud and manipulation in past years. Results of this research are as seen in Graphic 2.

Graphic 2. Fraud Detection Methods at Victim Organizations



As can be understood from the results in this graphic, companies which are victim of fraud mostly trust audits conducted by independent parties. Various activities such as establishing ethical rules in the company, effectuating internal audit activities, auditing the management facilitate detection of fraud. Therefore, the auditor must primarily focus on internal systems of the company as distinct from the traditional concept of audit and begin auditing of books, documents, and tables after detecting the deficiencies both in the company's managerial and internal control system.

Auditors use various techniques in detecting fraud and manipulation. These techniques can be examined in two sections as financial statement fraud and fraud for abuse of assets, the most commonly used of which can be listed below (Singleton and Singleton, 2010: 148-155):

3.2.1. Detection of Fraudulent Financial Reports:

- Analysis of financial statements with horizontal and vertical percentage methods
- Conduction ratio analysis to make comparisons between units
- Making spot checks and doing cash count and stock taking without notice (especially right after the end of working hours)
- Data mining in areas that require careful and detailed examination
- Comparing previously paid taxes and those due to be paid and examining compatibility of the calculated tax with relevant legislation
- Detecting whether the fee is determined reasonably according to the earnings ratio
- Making background checks on executives

3.2.2. Detection of Misappropriation of Assets:

- Rotating the duties or giving leaves to key employees for a period of time
- Classifying all transactions and separating them by order of importance
- Comparing and verifying stocks and receivables
- Examining differences between deposited and provided cash and prepayments
- Examining records on forgotten or adjusted sales
- Controlling and observing the daily cash movement
- Double-checking the bank accounts
- Examining cash and check movements on bank accounts
- Controlling the timeliness of transactions executed over the safe and bank
- Classifying payments by customers in order of amount and invoice number
- Examining the excess of expenses according to budget and paying close attention to same type of (double) transactions
- Billing and verifying the service provided to customers
- Verifying customer addresses and comparing them with employee addresses
- Listing and comparing customers in an alphabetical order
- Comparing bank account numbers of customers
- Comparing market prices and company’s fees and looking for reasons if there are important differences
- Listing customer transactions and detecting unusual purchases

- Estimating the areas with most deviation after conducting a performance evaluation
- Listing paid employees, comparing them with the employee list at the human resources department and controlling paychecks
- Examining the cancelled checks
- Checking the registered address of employees from freight, shipping, or mailing companies to confirm fake addresses
- Comparing the bank account numbers, social security numbers, addresses, and phone numbers of employees
- Investigating the employees who never take a day off, do too much overtime and have no pay cuts in their salary
- Examining the high-rate premium or payments to employees
- Comparing every sale, premium or wage of each employee, monitoring those with abrupt increases in their sales percentage
- Examining the sales uncollected by employees
- Supervising employees during sales transactions and monitoring those who do not write a receipt
- Measuring the income by employees and shifts
- Determining customer complaints by listening to customer services calls
- Investigating all dealers or suppliers who are in relation with partners, executives or employees
- Examining the reliability of dealers or suppliers in the market

4. EVALUATION OF FRAUD RISK

It is necessary to measure and evaluate the fraud risk before commencing audit activities is to detect and prevent fraud and manipulation before they emerge. By its most general definition, fraud risk is the risk of abuse on assets and of fraud caused by false pretenses on financial statements to cause alterations on financial statements enough to adversely influence decisions of the decision-makers (Guredin, 2010: 141). Compliance with all the procedures and standards in the audit process is not always directly proportional to detection of fraud (Ranallo, 2006: 111). That is why fraud risk factors are primarily detected.

Mostly important during the planning stage of auditing activities, fraud risk evaluation should in fact involve a cumulative process that goes on from beginning to evaluation of the works (Colbert and Turner, 2000: 45). By evaluation of fraud risk, the auditor can help to effectively use the sources, create an early warning system against possible risks, and implementing precautions before fraud and manipulation occurs (Ozbek, 2003: 3). In evaluating the fraud risk at this point, the auditor must consider the probability of occurrence of fraud risk factors and the magnitude of losses in case they take place (Singleton and Singleton, 2010: 115). Therefore the auditor can concentrate their work on the most risky areas and provide bigger contributions to companies with less cost (Reinstein and McMillan, 2004: 958).

Another factor to take into account when evaluating fraud risk factors is that fraud risk factor is not an evidence for fraud. They only draw attention to situations where fraud may take place. Furthermore, large numbers of fraud risk factors do not mean high risk of fraud (AICPA, 2002: 178).

Fraud risk evaluation is based on highly subjective conclusions which require the auditor to be careful when defining the fraud risk factors. These factors are extremely hard to determine because they vary according to ethical perceptions of both the company and its employees as well as the lack of management; so they are categorized in different ways according to needs of each establishment (Kenyon and Tilton, 2006: 127). For that reason, the auditor must collect evidence on the company from as much different sources as possible and analytically examine all obtained data in order to determine the fraud risk factors in the most effective way (Ramos, 2003: 28). Auditors in this process can benefit from the generally acceptable and commonly encountered general fraud risk factors for all companies. To this end, SAS No: 99 also states the most common fraud risk factors in companies and they are generally explained in a fraud triangle. According to standards, the most utilized fraud risk factors for auditors are as follows (Wilks and Zimbelman, 2002: 2):

- Pressure: The constant threat to financial stability and profitability of a company due to various external factors especially cause executives to commit fraud and manipulation. These external factors can be listed as high competition, changing environmental conditions, customer demands, and negative values from cash flows, overgrowth, and irregular profitability and frequently changing legal regulations. Expectations of third parties for the company also create a pressure on executives. High profitability expectations of investors and creditors may particularly cause fraud and manipulation. Other than that, high performance values and financial goals expected from the management also create risk factors for fraud and manipulation

- Opportunity: The most important risk factor in businesses is the lack of an effective internal control system. Not supervising the employees always poses a risk for fraud and manipulation. Also, fraud risk is higher for companies that have the opportunity to make purchases at different periods, amounts, and numbers due to conditions of the industry or country. Complex and variable organization structures are also always open for fraud.

- Rationalization: Rationalizations are the risk factors that may emerge when a small pressure or opportunity arises. Companies that lack effective communication, fail to convey ethical values to employees, have insufficient criminal sanctions against fraud and manipulation, lack an efficient control system, have inadequate wage and rewards, fail to meet social needs, fall unable to implement feedback mechanisms and have a tense work environment face fraud and manipulation through various excuses.

5. INDICATORS OF FRAUD AND MANIPULATIONS (RED FLAGS)

Scandals in companies after economic globalization drew the attention of audit authorities on detection of fraud and manipulation before suffering massive losses. Upon examination of fraud and manipulation in the past, it is seen that many of them emerged after similar symptoms. These symptoms are more frequent in companies with weak management structure. Although not considered as a definite proof of fraud, these symptoms that indicate fraud in financial statements are reported as “red flag” (Dzamba, 2004: 12). Red flags may be described as “potential symptoms existing within the company’s business environment that would indicate a higher risk of an intentional misstatement of the financial statements” (Price Waterhouse, 1985, p. 31). Situations that involve fraud usually exhibit a significant deviation and red flags signify the unnatural situations or those different than the normal ones (DiNapoli, 2010: 3). International accounting institutions use red flags in their regulations as they have signs about fraudulent activities. SAS No: 99 and ISA Article 240 are the most important ones among these regulations (Lundstrom, 2009: 1). In accounting literature, there are many red flag classifications to be used in audit applications. The most commonly accepted of these classification methods was devised by Federal Trade Commission (FTC) in Fair Accurate Credit Transactions Act (FACTA) which was regulated in 2003. FACTA classified red flags as follows (Singh and George, 2011: 3).

- Warning and notices from customer report agencies,
- Suspicious documents,
- Suspicious personnel identification,
- Unusual activities in accounts,
- Notices from customers, captured criminals, and law enforcement authorities.

Detecting fraud and manipulation committed by creative accounting practices is more difficult. They are usually committed by experts without violating any accounting principles so they require a more careful examination and if a situation seems suspicious even with a tiny possibility, it should be checked for any sign of fraud danger (TEPAV, 2006: 35). Red flags about financial statement manipulations are as follows (Toraman, 2002: 64):

- Unusually positive financial data
- Debt collection rate is lower than normal
- Suppliers are constantly making discounts
- The management staff is from companies that went bankrupt before
- Weak cash flow

- Excessive borrowing of the company
- Consistent fulfillment of earnings targets,
- Questionable definitions of income for the company to reach its targets,
- Significant changes in income policies,

Most important red flags in literature can be listed in titles below in terms of fraud and manipulation types.

5.1. Red Flags on Fraudulent Financial Reporting

5.1.1. Accounting and Document Abnormalities

High balance of reported income and sales accounts, low number of sales discounts and refunds, absence or lack of allowance accounts, excessive increase in trade receivables, mostly accrued reported income, absence of original documents, failure to declare important bank accounts, inconsistencies between incomes, sales and receipt of payment or other supporting evidence (Albrecht et al., 2011: 363), insufficient explanation in balance sheet footnotes, seasonal differences, generation of fictitious income and improper asset valuation, (Singleton and Singleton, 2010: 100) undisclosed changes in financial statement balances, regular change of bank accounts, excessive amount of bounced checks, high deviations in cash count (DiNapoli, 2010: 5-6), execution of large and highly profitable transactions near period ends, inadequate equity structure, excessive borrowing with high interest rates, growing amount of overdue debts (Bozkurt, 2000: 18-21).

5.1.2. Managerial Abnormalities

Rapid growth, unusual profits, aggressive style of management, making company's stock prices an obsession, adoption of a micro-management style which signifies an attempt by the upper management to execute the duties of subunits, (Singleton and Singleton, 2010: 100-101) important lawsuits and investigations filed against the company, management with high personal debt and financial difficulties, dishonest and unethical management staff, secret agreements between management and third parties, adoption of a management policy with a high personnel turnover rate (DiNapoli, 2010: 6-8), extremely complex business structure, high risk in the sector, constant changes in upper management.

5.2. Red Flags on the Abuse of Assets

5.2.1. Personnel Abnormalities

Changes in behavior of individuals, difficulty with making eye contact, increase in aggressive behavior, irregular work schedules, abrupt changes in lifestyle, unusual touchiness and suspicions, constant state of being worried, exhibiting excessively self-conscious behavior, becoming wasteful (Singleton and Singleton, 2010: 100-101), engaged in secondary jobs without any permission, decrease in work concentration, discounts offered by third parties to employees, unusual decisions conflicting the procedures, frequent business trips (TEPAV, 2006: 36).

5.2.2. Business Process Abnormalities

Unusual relationships between key employees and suppliers or customers, secrecy in relations with third parties and inadequate flow of information to management, abnormalities in recording sales and purchase transactions, abnormalities in approvals of sales, conflicts of interest between employees (Singleton and Singleton, 2010: 101-102), inconsistency of management or employees on income or analytical procedures, attempts to prevent the independent audit process, inefficiency of the internal control system (Albrecht et al., 2011: 363-364), increase in notices and complaints of fraud, decrease or increase in stocks, missing or excessive amount of money in the safe (Bozkurt, 2000: 21), providing conspicuous convenience for customers or suppliers, signing long-term contracts despite uncompetitive and inconvenient prices for the company (TEPAV, 2006: 37).

6. A RESEARCH ON THE EFFECTIVENESS OF RED FLAGS FROM THE PERSPECTIVE OF AUDITORS

6.1. Research Methodology

This study examines the perceived effectiveness of red flags in the detection of fraudulent financial statements by Firms Engaged in Independent Auditing Activities of Capital Markets Board of Turkey. And also it is aimed to determine the more effective red flags in detecting fraud for our country.

For this research, the questionnaire was designed based on 42 red flags identified in SAS No. 99 which fall into three categories: rationalizations, opportunity, and pressures. However, these red flags were randomly ordered in the questionnaire to avoid any bias by the respondents. Red flag questionnaires were mailed to 92 Firms Engaged in Independent Auditing Activities of Capital Markets Board of Turkey. A total of 34 usable questionnaires were received (37% response rate). For this study, each red flag's effectiveness was evaluated by the auditors on a Likert scale with values from one to five "Not Effective to Extremely Effective". The questionnaire also contained demographic questions concerning the job title, work experience, educational background, certifications and gender. Furthermore the auditors' experiences and knowledge level with red flags was evaluated. The results of the questionnaire were entered into the SPSS 17.0 in order to conduct statistical analyses.

The questionnaire was adapted from the research of Moyes (2007). In that study Cronbach's alpha value of 0.96 was found for the reliability of the questionnaire. These values indicate a high degree of internal validity for a questionnaire of this type. Also the reliability of the questionnaire done by the auditors in Turkey had high Cronbach's alpha

(0.93), indicative of good internal consistency reliability. Then Kolmogorov-Simirnov test was used to analyze whether test results have normal distribution since the number of observations are more than 30 and the results show that they have not normal distribution since all of the variables' asymp. significant values of 0.000 which is smaller than 0.05.

6.2. Findings of Research

6.2.1. Descriptive Statistic of Respondents

The first part of the survey investigated the demographic information of respondents. As can be seen on Table 1, according to the responses received to the survey, 88 percent of auditors that responded the survey were male and 12 percent of them were female. As regard as education level, an important part of the respondents (70.7 percent) graduated with bachelor degrees, 17.6 percent of them graduated with master degrees and 11.8 of them graduated with doctorate degrees. As for the type of the auditing firm, the 70.6 percent of auditors worked for national auditing firms and 29.4 percent of them worked for international agencies. With respect to experience, 64.7 percent of the auditors had at most 5 years experiences. As well as, only the 6 percent of them had at least 21 years. As to professional certification, only the 6 percent of the auditors were Responsible Partner Chief Auditor and Chartered Accountant, 17.6 percent of them were Senior Auditor and Auditor and 52.9 percent of them were Assistant Auditor. These results also were compatible with the sector' averages.

Table 1. Descriptive Statistic of Respondents

<table>
<tr><td rowspan="2"></td><td colspan="2">Gender</td><td colspan="3">Education Level</td><td colspan="2">Type Of The Auditing Firm</td></tr>
<tr><td>Male</td><td>Female</td><td>Bachelors</td><td>Master</td><td>Doctorate</td><td>National</td><td>International</td></tr>
<tr><td>Frequency</td><td>30</td><td>4</td><td>24</td><td>6</td><td>4</td><td>24</td><td>10</td></tr>
<tr><td>Percent</td><td>88.2</td><td>11.8</td><td>70.6</td><td>17.6</td><td>11.8</td><td>70.6</td><td>29.4</td></tr>
<tr><td rowspan="2"></td><td colspan="7">Auditing Experience</td></tr>
<tr><td colspan="2">1 – 5 Year</td><td>6 – 10 Year</td><td>11 – 15 Year</td><td>16 – 20 Year</td><td colspan="2">21 Years and More</td></tr>
<tr><td>Frequency</td><td colspan="2">22</td><td>8</td><td>0</td><td>2</td><td colspan="2">2</td></tr>
<tr><td>Percent</td><td colspan="2">64.7</td><td>23.5</td><td>0</td><td>5.9</td><td colspan="2">5.9</td></tr>
<tr><td rowspan="2"></td><td colspan="7">Professional Certification</td></tr>
<tr><td colspan="2">Responsible Partner Chief Auditor</td><td>Senior Auditor</td><td>Auditor</td><td>Assistant Auditor</td><td colspan="2">Chartered Accountant</td></tr>
<tr><td>Frequency</td><td colspan="2">2</td><td>6</td><td>6</td><td>18</td><td colspan="2">2</td></tr>
<tr><td>Percent</td><td colspan="2">5.9</td><td>17.6</td><td>52.9</td><td>17.6</td><td colspan="2">5.9</td></tr>
</table>

The second part of the survey investigated the level of awareness of red flags by auditors and experience in their use of red flags. For determining the level of awareness of red flags by auditors, it's asked that whether they have information about red flags and where they got that information from. Frequencies and percentages of responses are given in Table 2.

Table 2. The Level of Awareness of Red Flags by Auditors

	Having Information about Red Flags	Training on the Job	To Take Part in a Conference
Frequency	20	4	4
Percent	58.8	11.8	11.8

As can be seen from the Table 2, more than half of auditors (58.8 percent) have information about red flags. But this percentage is not sufficient for the necessity of future's auditing profession. Additionally, 11.8 percent of respondents got that information from training on the job and the percentage of taking part in a conference is the same. Two of the respondents learned red flags from both training and conferences. So it's understood that 41.2 percentage of auditors learned the usage of red flags by own demand.

Therefore, according to the results of the survey the usage of red flags in auditing activities is insufficient too. Much larger percentage of auditors (41.2 percent) stated they have never used red flags to detect fraud and manipulations. 35.2 percent of them have used red flags rarely or occasionally and only 23.5 percent of them have used red flags frequently or always to detect fraudulent financial reporting. And also the mean of these results found that (2.29). These percentages and the mean of the responses showed that the usages of red flags for detecting fraud and manipulations have not become prevalent yet in our country. Most of the auditors may prefer using classical investigation methods to determining the red flags. Frequencies and percentages of responses are given in Table 3.

Table 3. The Level of Experience in the Auditor's Use of Red Flags

	Frequency of Using Red Flags by Auditor	Frequency of Using Red Flags by Audit Firm
Never	41.2 %	41.2 %
Rarely	17.6 %	17.6 %
Occasionally	17.6 %	17.6 %
Frequently	17.6 %	17.6 %
Always	5.9 %	5.9 %

6.2.2. Analyzing the Effectiveness of Red Flag

In the last part of the questionnaire auditors' opinions were asked for 42 red flags to evaluate the effectiveness of these red flags in the detection of fraudulent financial statements by auditors in Turkey. The red flags in the questionnaire identified from SAS 99 and no new red flags were added to the questionnaire or no one was eliminated. Based on the responses of 34 auditors, the overall mean representing the perceived average level of effectiveness of all 42 red flags is 3.48 (Five Point Likert Scale). On the actual questionnaire, this rating represents 'somewhat effective' (value of 3). When we consider the frequency of using red flags by auditors, this result isn't unexpected. Because using of red flags in auditing activities is unnecessary for the auditors who don't prefer using this indicators to detect fraud and manipulations.

Table 4 shows the most effective red flags from the perspective of auditors that are classified both by the three SAS No. 99 categories "Incentives/Pressures, Opportunities and Attitudes/Rationalizations".

Table 4: Ranking of Red Flags for Detecting Fraud and Manipulations from the Perspective of Auditors

The Most Effective Red Flags from the Perspective of Auditors	Means	Std. Dev.	Percent*
Incentives/Pressures			
Rapid growth or unusual profitability, especially compared to that of other companies in the same industry	**3,82***	0,94	58,8
Excessive pressure on operating management or personnel to meet financial targets exerted by board of directors or chief executive officers	3,59	0,61	53
Recurring negative cash flows from operations or an inability to generate cash flows while reporting earnings and earnings growth	3,59	0,86	45,3
High degree of competition or market saturation, accompanied by declining margins	3,35	0,60	41,2
Operating losses making imminent threat of bankruptcy or foreclosure, or hostile takeover.	3,35	0,92	47,1
Opportunities			
Significant, unusual, or highly complex transactions, especially occurring close to year end that pose difficult "substance over form" questions	**3,76****	0,78	64,7
Ineffective accounting and information systems, including situations involving reportable conditions	**3,70*****	1,05	58,9
Significant bank accounts or subsidiary or branch operations in tax-haven jurisdictions for which there appears to be no clear business justification	3,65	0,99	58,9
Significant related-party transactions not in the ordinary course of business or with related entities are not audited or audited by another firm	3,59	0,78	58,9
Inadequate monitoring of significant internal controls	3,53	1,15	41,4
Attitudes / Rationalizations			
A practice used by management of committing to analysts, creditors, and other third parties to achieve aggressive or unrealistic forecasts	3,59	0,96	53
Domineering management behavior in dealing with the auditor, especially involving attempts to influence the scope of the auditor's work	3,53	0,68	47
Formal or informal restrictions on the auditor that inappropriately limit his access to people or information or limit his ability to communicate effectively with the board of directors or the audit committee	3,41	0,77	41,1
Management failure to correct known reportable conditions in internal controls in a timely basis	3,41	0,86	47,1
Known history of violations of securities law, or claims against the entity, its senior management, or board members alleging fraud or violations of securities laws	3,35	0,99	53
* Sum of "Extremely Effective" and "Mostly Effective" Percent			

As can be seen on Table 4, the red flags related to opportunities are judged to be the "mostly effective" category of red flags with a group average of 3.60. In the middle, the pressures category of red flags has the second highest average of 3.25, whereas the Rationalizations red flags are perceived as the least effective in detecting the fraudulent activity with a group average of 2.95[*]. So according to the responds of auditors it can be say that the opportunities red flags are more effective for detecting fraud and manipulations in our country.

When we analyzed the mean of responds elaborately, the most effective red flag is "Rapid growth or unusual profitability, especially compared to that of other companies in the same industry" according to the auditors in Turkey. Financial profitability is threatened by economic, industry or entity operating conditions frequently and this situation put pressure on the companies. Hence they usually try to increase their stock prices and also their profitability. Depending on this, 58.8 percent of auditors found effective this red flag to detect fraud and manipulations. According to results of the questionnaire, the second effective red flag is "Significant, unusual, or highly complex transactions, especially occurring close to year end that pose difficult 'substance over form' questions". The nature of the industry or the entity's operations provides opportunities to engage in fraudulent financial reporting. During the auditing process, the auditor may become aware of significant transactions that are outside the normal course of business for the company, or that otherwise appear to be unusual given the auditor's understanding of the company and its environment. Therefore auditors should always investigate the abnormal transactions carefully. Also the large part of the auditors (64.7 percent) in our country supported this view. Additionally the responds of the auditors show that the third effective red flag is "Ineffective accounting and information systems, including situations involving reportable conditions". This opportunity is also result from the nature of the companies' general structures. Deficiency of internal control system is still one of the most important problems of companies and it especially causes the employee frauds. Because of this reason, auditors should be more careful against the internal control deficiencies and as can be seen on the Table 4, 58.9 percent of auditors found effective this red flag for preventing fraudulent reporting.

7. CONCLUSION

The auditors' ability to detect fraud and manipulations continues to be a major concern for the auditing profession. Recently, the auditing profession has suggested that auditors should use selected red flags in order to assist them with fraud detection. Red flagging can be an important mechanism that can act as an early warning system to sensitive stakeholders, especially lenders and investors, of possible fraud. In line with importance of red flags, in this study, it's aimed to examine the perceived effectiveness of red flags in the detection of fraudulent financial statements by Firms Engaged in Independent Auditing Activities of Capital Markets Board of Turkey.

[*] These avarages calculated by using all 42 red flags (16 pressure red flags, 14 opportunities red flags and 12 rationalization red flags)

This study provided some insights into auditors' perceptions of, and decisions about red flag factors, was conducted in three parts. The first part of the survey investigated the demographic information of respondents and the results in this part were compatible with the sector' averages. The second part of the survey investigated the level of awareness of red flags by auditors and experience in their use of red flags. According to the responds, more than half of the auditors have information about red flags but only nearly 20 percent of them have used red flags frequently or always to detect fraudulent financial reporting. These results showed that the usages of red flags for detecting fraud and manipulations have not become prevalent yet in our country.

In the last part of the study the effectiveness of 42 red flags identified in SAS No. 99, analyzed based on the responds of auditors in Turkey. According to the results of analysis, average level of effectiveness of all 42 red flags found 3.48 and this rating showed that the auditors evaluated these red flags as "somewhat effective". When we consider the frequency of using red flags by auditors, this result isn't unexpected. Furthermore, when means of responds was analyzed, the most effective red flag was found "Rapid growth or unusual profitability, especially compared to that of other companies in the same industry" according to the auditors in Turkey. Financial profitability is threatened by a lot of factors frequently and this put pressure on the companies to increase their stock prices and also their profitability. Depending on this, more than half of the auditors found effective this red flag to detect fraud and manipulations.

According to the responds of auditors it can be say that the red flags related to opportunities were more effective for detecting fraud and manipulations in Turkey. This result might be caused by the deficiencies of internal control systems and management systems of the companies in our country. Because frauds and manipulations can be seen more frequently in companies with weak management structure. In companies where there is no internal control system or in those where it cannot be rendered effective, wrong decisions by the management, fraud in financial statements and loss of assets are more commonly seen. And also without corporate governance, fraud and manipulations can be occurred easily. Consequently these red flags which were seen more effective to detect frauds by the auditors show that management systems including internal control systems of the companies should be restructured to prevent the fraudulent reporting.

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