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Master's Thesis

FRAUDULENT FINANCIAL STATEMENTS AND THE IMPORTANCE OF RED FLAGS

By

MARIA G. KARAVELI

Supervisor: Odysseas Pavlatos

A thesis submitted in part fulfilment of the requirements for the degree of Applied Accounting and Auditing

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STUDENT'S DECLARATION

I, the undersigned declare that this is my original work and has not been submitted to any other college, institution or university other than the University of Macedonia, Thessaloniki, Greece for academic purposes.

Signed: _____

Date: _____

Maria G. Karaveli (ID No: aud18017)

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ABSTRACT

Prior researches have been conducted in order to determine the importance of Red Flags with the use of different sample. Gullkvist & Jokipii (2013) perceived the importance of Red Flags across fraudulent financial reporting and misappropriation of assets. The purpose of this study is to cover the gap in the literature about the importance of red flag among different sample groups. For this reason, a literature review about Financial Statement Fraud is written, so as to initially deeply understand this field and then a quantitative research with the use of questionnaires was carried out. Data analysis revealed the top 10 most important Red Flags. Data analysis also showed that the correlation between only a few red flags and the demographical characteristics is statistically significant and generally the demographical characteristics of the respondents, who currently work in Auditing companies in the Netherlands, do not differentiate the answers based on the importance of red flags.

Keywords: Red Flags, Financial Statement Fraud, demographical characteristics, Auditing companies, The Netherlands

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CHAPTER ONE

1.1 Background of the study

According to Spathis (2002) and Spathis et al. (2010), falsifying financial statements involve the manipulation of financial accounts by overstating assets, sales and profit, or understating liabilities, expenses or losses. When a financial statement contains falsifications so that its elements no longer represent the true picture, we speak of fraud. Spathis et al. (2010) define also financial statement fraud as the intentional misstatements or omissions of amounts or disclosures in financial statements (cited by AICPA, 1977).

Toit (2015) defines fraud as "an array of irregularities and illegal acts characterized by intentional deception" (cited by The Institute of Internal Auditors (IIA), 2001) and as “all means that human ingenuity can devise, and which are resorted to by an individual to get an advantage over another by false suggestions or suppression of the truth” (cited by Turner, 1980; Robertson, 2002). This type of fraud includes surprises, tricks, cunning, misleading and any other unfair way by which another person is cheated. Financial statement fraud is, thus, fraud committed by the management of an organization with the goal to artificially improve the financial performance and results of the company as stated in the financial statements.

According to Knapp and Knapp (2001), fraud is an intentional act designed to deceive or mislead another party (cited by Arens & Loebbecke,1996). Regardless of how the fraud is manifested, it is typically difficult for auditors to discover since the perpetrators take steps to deliberately conceal the resulting irregularities.

According to Rezaee (2005), financial statement fraud is a deliberate attempt by corporations to deceive or mislead users of published financial statements, especially investors and creditors, by preparing and disseminating materially misstated financial statements. Financial statement fraud involves intent and deception by a clever team of knowledgeable perpetrators (e.g. top executives) with a well-designed plan.

According to Rubasundram (2015) fraud is an intentional act designed to deceive others, resulting in the victim suffering a loss after relying on the deceit and the perpetrator achieving a gain (cited by AICPA, 2008).

Spathis (2002) and Spathis et al. (2010) place an emphasis to Risk-factor ‘’red flags’’, that relate to fraudulent financial reporting, is separated in the following three categories (cited by SAS No. 82):

- Management’s characteristics and influence over the control environment. These pertain to management’s abilities, pressures, style and attitude relating to internal control and the financial reporting process. For example, strained relationships between management and the current or previous auditor.
- Industry conditions. These involve the economic environment in which the entity operates. For example, a declining industry with increasing business failures.
- Operating characteristics and financial stability. These pertain to the nature and complexity of the entity and its transactions, the entity’s financial condition and its profitability. For example, significant related-party transactions not in the ordinary course of business or with related entities not audited or audited by another firm.

According to Gullkvist & Jokipii (2013), a large number of prior studies have focused on the importance of red flags to fraud detection.

The most important red flags concerning material irregularity are: “decision making dominated by a single person”, “poor profitability”, and “management placing undue emphasis on meeting earnings projections” (cited by Loebbecke et al., 1989). The two most important factors alerting auditors to the risk of fraud and possible material irregularities were “misstatements in prior audits” and “indicators of going-concern problems’’ (cited by Majid et al., 2001). The most important single fraud risk indicator is “management’s failure to display appropriate attitude about internal control” (cited by Smith et al., 2005). External auditors identified the most important red flag to be “client dishonesty” within the category “management attitudes” (cited by Heiman-Hoffman and Morgan, 1996). After questioning Internal Auditors, the fraud is considered to be more probable under certain conditions, such as, when income is

greater than expected, and managers' bonuses are based on earnings (cited by Church et al., 2001).

According to Baader and Krcmar (2018) the red flag-based approach is a well-established technique in fraud detection and is recommended by most auditing standards (cited by Albrecht et al., 2012). Red flags are hints or indicators for fraudulent behavior and show that something irregular has happened. A red flag is not a proof of fraud, as there might be a sound explanation for the existence of the indicators (cited by Albrecht et al., 2012).

Fraud is conducted intentionally. The perpetrator tries to cover up his tracks (cited by Albrecht et al., 2012).

Every user action leaves traces in the system. These audit trails are generally automatically stored in the system. Datasets are then analyzed using structured query language (SQL) to identify process instances where these red flags occur (cited by Coenen, 2008; Stamleret, 2014). Sources analyzed include ERP systems, document management or supply chain systems. In addition, paper-based sources like original receipts may be taken into account (cited by Albrecht et al., 2012).

1.2 Purpose of this study

The purpose of this study is to investigate the importance of the risk – factor ''Red Flags'' between professionals who currently work in Auditing firms in the Netherlands.

1.3 Research question – Subject of study

1.3.1. How important is every red flag included in the questionnaire?

Professionals should indicate the degree of the importance of 28 red flags in their opinion based on a scale 1 (Not important at all) to 5 (Extremely important).

1.4 Importance of the study

The current study is based on a previous study of Gullkvist and Jokippi (2013). They used the same questionnaire which includes 28 Red Flags. The difference with the current study is that another sample was used in order to be completed. A study about Red Flags is important for auditors, as they show where fraud was possible committed or maybe in the future will be committed. For this reason, similar research needs to be done in Auditing firms in other countries so as to enable generalization of the findings. In other countries may be followed another Accounting legislation and people have also another level of education and that is why it is interesting to go deeper in the field of ‘’Red Flags’’, so as to note the differences.

1.5 Scope of the study

The focus of this study lays on investigating the importance of red flags between professional who currently work in Auditing firms in the Netherlands.

Detailed definitions of Financial Statements and Financial Statement Fraud are presented because it is extremely important that they are firstly understandable and then to go deeper to this theme which is also the subject of this study.

1.6 Chapter summary

This chapter briefly introduces the subject of this study. In the first section, definitions of the Financial Statement Fraud and of the Red Flags are presented, according to the literature. The second section gives a summary of the purpose of the study. The third section summarizes the research question. The fourth section highlights the importance and the value of the study. The fifth section specifies the scope of the study.

The chapter two broadly explores the existing literature about the Auditor's role and defines the Financial Statement Fraud. The effects of Financial Statement Fraud are also described, as well as the detection techniques. In addition, the chapter closes with several definitions of red flags. Chapter three discussed the research methodology, which chapter four presents the results and findings of the study and chapter five focuses on the discussion, conclusion and recommendation of this study.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a literature review on Fraudulent Financial Statements and red flags. The material is collected from sources which are closely related to the theme and the objectives of the study. The chapter focuses on a complete description of Fraudulent Financial Statements, why they are currently a common phenomenon, their effects and a summary description of their detection. In addition, a definition of red flags is given in order to create an image of the research, which follows, over their importance.

2.2 Definition of Auditor's role

Toit (2015) place emphasis to define the role of an auditor. Auditors are not responsible for the detection and identification of financial statement fraud. Their main responsibility is to express an opinion about whether financial statements are prepared within an acceptable accounting framework and provide assurance that financial statements are free from material misstatement, whether caused by fraud or error (cited by IAASB, 2007). "Audit" means the examination of financial statements in accordance with applicable auditing standards with the objective of expressing an opinion as to their fairness and compliance with a financial reporting framework and any applicable statutory requirements. This means that auditors should focus on events that lead to materially misleading financial statements, but that it is not their main responsibility to detect and identify such occurrences (cited by Auditing Profession Act 26, 2005).

An auditor cannot provide complete assurance that material misstatements will be detected, because of the use of judgment, the use of testing, the limitations of internal control and the fact that some of the audit evidence available to the auditor is persuasive rather than conclusive in nature (cited by ISA 240, IAASB, 2007).

If an auditor comes across any material irregularity, has a duty to report such material irregularities to the Independent Regulatory Board for Auditors. First of all, this duty includes the sending of a written notice to the management of the entity to inform them about the report. (cited by Section 45 of the Auditing Profession Act, 2005).

The management of a company is responsible for the financial statements of an entity with the oversight of those charged with governance. The audit of financial statements does not relieve management from the responsibility of complying with relevant standards and regulations (cited by ISA 200, IAASB 2007).

Punishing and incapacitating violators of the law would probably help to reduce financial statement fraud, but measures must be implemented to prevent fraud from happening in the first place.

2.3. Definition of Financial Statements

According to Ravisankar et al. (2011), financial statements are a company's basic documents to reflect its financial status. A careful reading of the financial statements can indicate whether the company is running smoothly or is in crisis. If the company is in crisis, financial statements can indicate if the most critical thing faced by the company is cash or profit or something else. Companies are required to publish their financial statements every year and every quarter. The stockholders can form a good idea about the companies' financial future through the financial statements and can decide whether the companies' stocks are worth investing. The bank also needs the companies' financial statements in order to decide whether to grant loans to them. The financial statements are the "mirrors" of the companies' financial status. Financial statements are records of financial flows of a business. Generally, they include balance sheets, income statements, cash flow statements, statements of retained earnings, and some other statements.

2.4 Definition of Financial Statement Fraud

It is useful to mention a number of definitions of fraud so as to achieve a better understanding of the meaning of Financial Statement Fraud.

According to Spathis (2002) and Spathis et al. (2010), falsifying financial statements involve the manipulation of financial accounts by overstating assets, sales and profit, or understating liabilities, expenses or losses. When a financial statement contains falsifications so that its elements no longer represent the true picture, we speak of fraud. Spathis et al. (2010) define also financial statement fraud as the intentional misstatements or omissions of amounts or disclosures in financial statements (cited by AICPA, 1977).

Toit (2015) defines fraud as "an array of irregularities and illegal acts characterized by intentional deception" (cited by The Institute of Internal Auditors (IIA), 2001) and as “all means that human ingenuity can devise, and which are resorted to by an individual to get an advantage over another by false suggestions or suppression of the truth” (cited by Turner, 1980; Robertson, 2002). This type of fraud includes surprises, tricks, cunning, misleading and any other unfair way by which another person is cheated. Financial statement fraud is, thus, fraud committed by the management of an organisation with the goal to artificially improve the financial performance and results of the company as stated in the financial statements.

According to Knapp and Knapp (2001), fraud is an intentional act designed to deceive or mislead another party (cited by Arens and Loebbecke, 1996). Regardless of how the fraud is manifested, it is typically difficult for auditors to discover since the perpetrators take steps to deliberately conceal the resulting irregularities.

According to Rezaee (2005), financial statement fraud is a deliberate attempt by corporations to deceive or mislead users of published financial statements, especially investors and creditors, by preparing and disseminating materially misstated financial statements. Financial statement fraud involves intent and deception by a clever team of knowledgeable perpetrators (e.g. top executives) with a well-designed plan.

According to Rubasundram (2015) fraud is an intentional act designed to deceive others, resulting in the victim suffering a loss after relying on the deceit and the perpetrator achieving a gain (cited by AICPA, 2008).

2.5 Difference between Financial Statement Fraud and accounting errors

Financial Statement Fraud must be clearly distinguished from accounting errors.

Spathis (2002) explains that the characteristic, which differentiates fraud and error, is intent (cited by The International Federation of Accountants issued in 1982 the International Statement of Auditing (ISA) No. 11). Errors result from unintentional actions (cited by Colbert, 2000). He also defines errors as ‘’unintentional misstatements or omissions of amounts or disclosures in the financial statements’’ (cited by The American Institute of Certified Public Accountants (AICPA) (1983) in Statement on Auditing Standards (SAS) No. 47).

According to Toit (2015), as a result of the lack of intent, errors are normally easier to detect. The perpetrator of fraud tries to hide the intentional fraudulent misstatements.

2.6 Why does fraud occur?

It is a very common question and we can get all answers through literature.

Toit (2015) emphasizes that management’s behavior is the main cause for fraud committed, as managers are the primary influence in unethical decision-making (cited by Robertson, 2002). Financial statement fraud is mostly committed because management tries to make earnings look better (cited by Robertson, 2002). Other reasons are encouraging investment, demonstrating higher earnings per share (EPS), obtaining financing and receiving performance-related bonuses. In such cases, the fraudulent financial statements still harm investors and creditors, because assets that they believe exist, do not really exist. When it becomes difficult for companies to do better, they need to try and enhance performance through other creative means. The

line between what is ethical and what is not, between legality and illegality, is very thin and managers are motivated to operate as closely as possible to that line and sometimes to cross the line.

According to Rezaee (2005), there is a number of factors which lead to Financial Statement Fraud:

- Lack of vigilant oversight functions (e.g. the board of directors, the audit committee)
- Arrogant and greedy management
- Improper business conducts by top executives
- Ineffective audit functions
- Tax regulations
- Inadequate financial reports

2.6.1 White collar crime

Rubasundram (2015) defines white-collar crime as ‘’fraud committed by top managers (corporate executives)’. A white-collar crime is committed by a person of respectability and high social status during he/she exercises his/her profession. (cited by Sutherland, 1949). It is also defined as ‘’an intentional financial misrepresentation by trusted executives of public companies’’ (cited by Choo and Tan, 2007).

There is also a distinction between active participation (individuals are actively involved in illegal activities) and passive acquiescence (managers are aware of illegality within the organization but are unwilling to take corrective action) (cited by Daboub et al., 1995).

2.7 Why fraud is also a problem for small companies?

Spathis et al. (2010) emphasize that fraud is not just a problem in large firms. Small businesses with 1–100 employees are also susceptible. This is a serious problem

because fraud in a small firm has a greater impact, as the firm does not have the resources to absorb the loss (cited by Wells, 1997). Spathis et al. (2010) also present the results of a report by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) that examined fraudulent financial reporting from 1987–97 by US public companies. The companies committing fraud generally were small, and most (78% of the sample) were not listed in the New York or American Stock Exchanges. The audit committees and boards of the respective companies appeared to be weak. Twenty-five per cent of the companies did not have an audit committee.

2.8 Characteristics, behaviors and techniques often associated with companies that engage in fraudulent activities

2.8.1 Characteristics and behaviors

According to Toit (2015) **Table 1** is based on a review of previous literature.

2.8.2. Techniques used in order to commit Financial Statement Fraud

Spathis (2002) and Spathis et al. (2010) state that most techniques for financial statement fraud can be grouped into three categories: changing accounting methods, fiddling with managerial estimates of costs and shifting the period when expenses and revenues are included in results (cited by Worthy, 1984). Other false statements include manipulating documents, altering test documents and producing false work reports (cited by Comer, 1998). Typical financial statement fraud techniques involved the overstatement of revenues and assets (cited Beasley et al., 1999). Many of those revenue frauds only affected transactions recorded at the end of significant financial reporting periods (i.e., quarter-end or year-end). About half the frauds also involved overstating assets by understating allowances for receivables, overstating the value of inventory, property, plant and equipment and other tangible assets, and recording assets that did not exist.

Table 1

Characteristic category	**Result**
Accounting transactions	Accounting practices and transactions tend to be complex. Subjective judgements are often used. Significant related – party transactions.
Auditors	Frequent changes of auditors. Close relationship between management and auditors. Conflicts and disagreements with auditors. Hide information from auditors.
Cash Flow	Poor cash flow, especially in relations to profit.
Company age	Companies are more often younger.
Control	A poor/ weak control environment.
Culture	A lack of documentation to formalize processes (e.g. code of contact, ethics policy, fraud policy).
Debt	Tendency to have higher debt.
Directors	A weak or no audit committee.
Financial distress	The presence of high financial pressure can often be noticed.
Geographic location	Decentralized companies have higher risk.
Industry	Industries where changes (e.g. technology) are frequent and significant. A high level of competition. Certain economic factors affect certain industries. Inconclusive results were obtained in regard to specific industries.
Liquidity	Risky companies often have poor liquidity.
Management	Automatic or dominant management team makes unethical behavior by management easier. A high management turnover is often present. Conflict of interests. An emphasis on shorter – term performance.
Personnel	Rapid turnover of personnel. Luxurious lifestyles of personnel, especially management.
Receivables and inventory	Increases in receivables and/ or inventory.
Remuneration	Based on shorter – term performance.
Shareholding	High levels of internal shareholding (by management and/ or directors).
Structure	Companies with complex structures are more at risk.

2.9. Fraud triangle

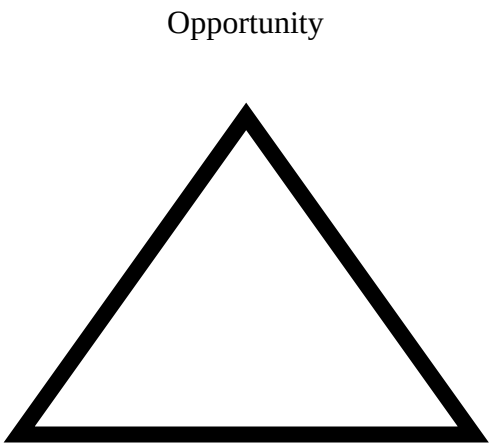

Figure 1 *The Fraud Triangle*

Toit (2015) makes use of a fraud triangle (see Figure 1) in order to explain how three basic elements, make fraud possible (cited by Robertson, 2002).

These elements are present in various forms in the characteristics of a firm that engages in fraudulent activities. The elements are as follows:

- *Opportunity* is an open door to solve a problem by violating a trust. The higher the position of a person in the organizational hierarchy, the more trust is placed in him/her and the greater is his/her opportunity to commit fraud.
- *Rationalization* is the ability to act according to self-perceived moral and ethical values. Fraudsters find a way to rationalize their actions and make it acceptable for themselves.
- *Motive* is the pressures that a person experience. These can be psychotic (related to habit), egocentric (related to personal prestige), ideological (believing that the cause is morally superior) or economic (related to a need for money.

Srivastava et al. (2019) replace the word 'motivation' with 'incentives/ pressures'' and recommend for the ''rationalization'' as ''attitude/ rationalization'' (cited by Ramos, 2003).

According to Rusasundram (2015) critics for the fraud triangle argued that it provides a limited perspective since it ignores important factors like the capabilities of the fraudster, culture etc.

For this reason, the Fraud Diamond is introduced, extending the Fraud Triangle to include fraudster capabilities. The ‘’capability’’ as a component takes into account the fraudster’s position or function within the organization which may furnish the ability to create or exploit an opportunity for fraud not available to others, which also includes the fraudster’s ability to take advantage of internal control weakness (cited by Wolfe and Hermanson, 2004).

2.10 Fraud tree

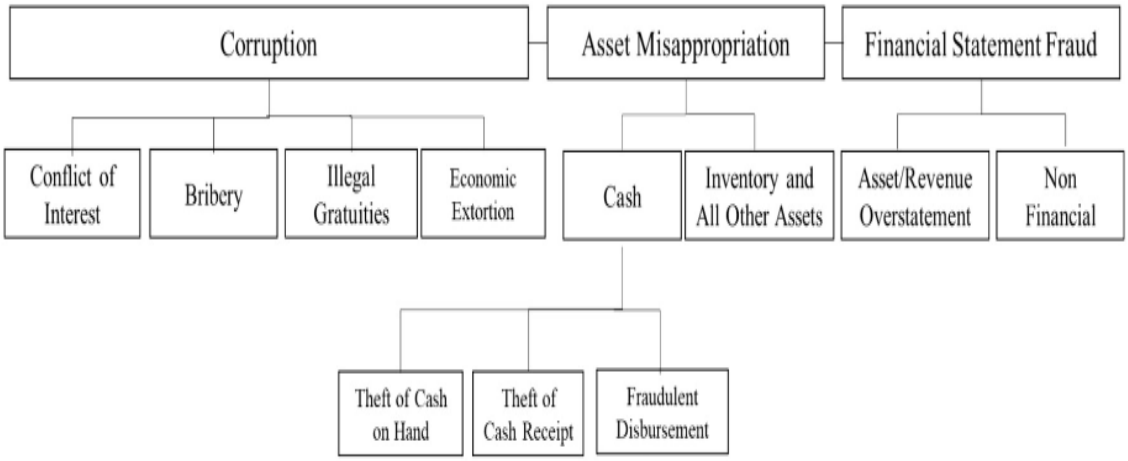

Figure 2: *Fraud tree* (Baader & Krcmar, 2018)

Baader and Krcmar (2018) describe the Fraud tree: Corruption, asset misappropriation and fraudulent statements are at the highest level of the fraud tree. Both corruption and asset misappropriation are transactional in nature and include the theft or intentional misuse of assets or the abuse of one's position. Fraudulent statements are defined as an intentional misrepresentation of a company's financial statements, timing differences or improper disclosures.

2.11. Effects of Financial Statement Fraud

Spathis et al. (2010) mention that severe consequences resulted when companies committed fraud, including bankruptcy, significant changes in ownership and suspension from trading in national exchanges.

According to Toit (2015), financial statement fraud has larger implications than many managers realize. For many, it is only a means to improve results, but apart from harming the company in which it is being committed, it can also affect economic markets.

Below is given a summary of the potential harmful effects of financial statement fraud (cited by Rezaee, 2002):

- It undermines the quality and integrity of the financial reporting process.
- It endangers the integrity and objectivity of the accounting profession.
- It reduces the confidence of capital markets and market participants in the reliability of financial information.
- It makes the capital market less efficient.
- It negatively affects a nation's growth and prosperity.
- It may result in litigation losses.
- It destroys the careers of individuals involved in the fraud.
- It causes bankruptcy or economic losses by the company engaged in the fraud.
- It encourages a higher level of regulatory intervention.
- It causes destructions to the normal operations and performance of the alleged companies.

2.12 Fraud detection

2.12.1 Introduction

According to Knapp (2001) the most fraudulent cases involve improper revenue recognition, overstatement of assets and improper deferral of expenses.

The analytical procedures involve comparing actual Financial Statement amounts with expected amounts that are derived from the application of a simple or complex prediction model. However, the misstatements resulting from fraudulent misrepresentations result in differences from predicted amounts, they should be potentially detectable with analytical procedures.

The central task of an auditor in applying analytical procedures is to develop expectations. The expectations, which the auditor develops, will be based on both the external information that the auditor collects and his/her own existing knowledge. An auditor's existing knowledge is an important factor in his/her understanding and explanation of information and can be expected to influence the auditor's effectiveness in assessing the risk of Financial statement fraud. Research on experience and expertise suggests that an individual's knowledge changes as experience increases (cited by Chi et al., 1982), thus an auditor's performance of analytical procedures may be affected by experience. Generally, the findings indicate that experienced individuals have greater total knowledge (cited by Christ, 1993; Knapp, 1995; Libby & Frederick, 1990; Tubbs, 1992), more understanding of relationships between variables (cited by Chi et al., 1982; Frederick, 1991; Moeckel, 1990),and an ability to go beyond the surface features of information and identify the problem (cited by Biggs et al., 1988; Chi et al.,1982; Christ, 1993; Moeckel, 1990).

2.12.2 Strategies focused on audit function's development

According to Rezaee (2005) the commission of financial statement fraud by high profile corporations encourages publicly traded companies to take proactive roles by establishing fraud prevention and detection strategies to prevent and detect financial statement fraud. These strategies should be developed in order to protect the quality, integrity, and reliability of the financial reporting process as well as the effectiveness of audit functions and should include:

- *Fraud vulnerability review*

  Fraud vulnerability reviews should be performed both periodically and on an ongoing basis. Corporations should perform fraud vulnerability reviews that can be used by insiders (e.g. employees, internal auditors) and outsiders (e.g. customers, suppliers) to report fraudulent activities. Audit committees are required to establish procedures for receiving and treating complaints regarding accounting and auditing matters, including complaints from those who desire to remain anonymous.

- *Gamesmanship review*

  In achieving the goal of creating shareholder value, top corporate executives may try tricks in order to manage earnings, meet analysts' earnings expectations and prevent stock prices from falling. A gamesmanship review is an assessment of a top management team's philosophies, attitudes, operating styles, decisions, actions, beliefs, and ethical values referring to the financial reporting process and continuous review of management's financial reporting relationships with security analysts, internal auditors, external auditors, the board of directors, and the audit committee. A periodic gamesmanship review by the board of directors and its representative audit committee can improve the quality and reliability of financial reporting by preventing and reducing the possibility of collusion between financial statement fraud perpetrators. Management should ensure that the individuals hired are ethical, honest, competent, and stay ethical. This is not an easy task because temptation can override good intentions encouraging fraudulent behaviors based on greed. Establishing an ethical work environment

by promoting an ethical tone at the top and demonstrating zero tolerance for unethical and fraudulent behavior can reduce incidence of fraud.

- *Effective corporate governance*

  Corporate governance determines the way a corporation is governed through proper accountability for managerial and financial performance. Corporate governance participants are the board of directors, audit committee, top management team, internal auditors, external auditors and governing bodies. Traditionally, the focus has been placed on the role of external auditors in preventing financial statement fraud. In recent years, however, the attentions are placed on the entire corporate governance responsibility to ensure the quality, integrity, transparency, and reliability of financial reports. Corporate governance protects investors' interests, ensures the integrity, quality, transparency, and reliability of financial reports, monitors the adequacy and effectiveness of internal control structure and ensures the quality of audit functions.

- *Effective audit committees*

  Future audit committees are expected to be guardians of investors' interests and accountability. Recent developments in audit committee structure, composition and qualifications will challenge publicly traded companies to improve the oversight functions and practices of their audit committees. This challenge will provide opportunity to improve corporate governance and the quality of financial reporting which is in the best interests of investors and the financial community. Audit committee members should be financially literate enough to ask tough questions and effectively oversee the organization's internal controls, financial reporting process, and audit functions.

  The audit committees are required to:

  - Be directly responsible for the appointment, compensation, and oversight of the work of the external auditors.
  - Be composed of independent members of the board of directors.
  - Have authority to engage advisors.
  - Pre-approve any permissible non-audit services provided by the external auditors.
  - Establish procedures for employee whistle-blowers to submit their concerns regarding accounting and auditing issues.

- Disclose that at least one member of its audit committee is a financial expert.
- Receive regular reports from the independent auditors on accounting treatments.
- Receive corporate attorneys' reports of evidence of a material violation of securities laws or breaches of fiduciary duty (cited by The Sarbanes-Oxley Act, 2002).

- *Fraud prevention programs*

  Fraud prevention programs should be implemented and enforced by a group consisting of accountants, internal auditors, investigators, lawyers and human resource personnel and clearly specify that fraud prevention policies and procedures apply to all employees, including management. This group should periodically report to the board of directors and its representative audit committee regarding the efficiency and effectiveness of the program.

- *Forensic fieldwork audit*

  External auditors should use forensic-type fieldwork audit procedures by using a high level of professional skepticism throughout the audit process and paying special attention to fraud symptoms and red flags that may signal the occurrence of financial statement fraud. A professional skepticism is an attitude that includes a questioning mind and a critical assessment of audit evidence. Auditors should use forensic fieldwork audit procedures and continuous transaction testing in areas particularly susceptible to fraud (cited by The O'Malley Panel on Audit Effectiveness, 2000).

- *Auditors' independence*

To preserve auditors' independence, The Sarbanes-Oxley Act of 2002 requires the registered accounting firms to:

- Be subject to oversight by a Public Company Oversight Board (PCAOB).
- Comply with auditing and other professional standards.
- Retain audit work papers for at least 7 years.
- Submit audits to second partner reviews.
- Rotate audit partners assigned to an audit engagement every 5 years.
- Be responsible to the audit committee and regularly report to the audit committee on accounting treatments.

- Avoid offering certain non-audit services such as bookkeeping, system design, and internal audit outsourcing to public audit clients.

- *Communication with the board of directors and the audit committee*

  Open and candid communication between external auditors and the board of directors and its representative audit committee can improve the quality of financial reports by focusing on the areas that may indicate the existence of potential fraudulent financial activities. The audit committee involvement with the audit process by overseeing the audit strategy can promote the effectiveness of audits. The audit committee should oversee and review the audit plan and scope of audit functions to ensure that the external auditor is independent, competent, and knowledgeable about the client business and industry. However, the extent of the working relationship between the external auditors and the board of directors and the audit committee should not adversely affect the auditor's objectivity and independence. The Sarbanes-Oxley Act of 2002 requires that auditors report to and be overseen by the audit committee of their client and management. Auditors must also report to the audit committee on the critical accounting policies and practices used by management in measuring, recognizing, and reporting financial transactions.

- *Internal audit efficiency*

Internal auditors' responsibilities for detecting, investigating, and reporting financial statement fraud, according to their standards are to:

- Identify symptoms and red flags that indicate that financial statement fraud may have been perpetrated.
- Identify opportunities (e.g. ineffective internal control, lack of vigilant audit committee) that may allow financial statement fraud to occur.
- Assess the identified symptoms and opportunities, investigate the possibility of their occurrences, and determine actions necessary to reduce or minimize their likelihood of occurrences.
- Notify the appropriate individuals within the company, top executives if they are not involved in fraud or, otherwise, the board of directors and its representative audit committee for further investigation of the possibility of financial statement fraud (cited by IIA, 2002).

- According to Chen et al. (2019), four financial statement fraud types for business groups are modeled below that can identify how a fraudulent business process works by providing a graphical notation for presenting business fraudulent activities (cited by Chari, 2004; Kaplan and Kiron, 2004; Suraj and Sesia, 2011; Swartz and Watkins, 2003; Nguyen, 2010; Vernadat, 1996).

2.12.3 A brief description of Financial Statement Fraud detection techniques

In 2007, Kirkos investigated the usefulness of Decision Trees, Neural Networks and Bayesian Belief Networks in the identification of fraudulent financial statements. Genetic algorithm approach was proposed by HOOGS the patterns are capable of identifying potentially fraudulent behavior despite occasional missing values and provide low false positive rates. In 2008, BAI proposed in classification and Regression Tree so as to identify and predict the impacts of Falsified Financial Statements (FFS). In 2011, Cecchini developed a methodology for automating ontology creation using WordNet. Humpherys proposed a model with Naïve Bayes and achieved the highest classification accuracy and Glancy proposed, for detecting fraud in financial reporting, a computational fraud detection model, using a quantitative approach on textual data. Also, Ravisankar gave a comparison of data mining techniques; Multilayer Feed Forward Neural Network (MLFF), Support Vector Machines (SVM), Genetic Programming (GP), Group Method of Data Handling (GMDH), Logistic Regression (LR), and Probabilistic Neural Network (PNN) in the same year.

2.12.3.1 Definition of data mining

According to Gray and Debreceny (2014) data mining refers to the extraction of knowledge from large volumes of data (cited by Han and Kamper, 2006). Data mining involves acquisition, loading and integration of data, application of specialist data mining tools and finally, human interpretation of the discovered meaning. The decision

to incorporate data mining into financial audits is both a firm-level decision for accounting firms and an engagement-level decision. Firm-level decisions preclude engagement-level decisions in that if firm management does not see a beneficial reason to invest resources in software, infrastructure, training, and staffing then data mining will likely not be a cost-effective option for engagement teams. Larger accounting firms and some specialist providers offer a variety of data mining services. Currently, data mining is used in specialized audits (e.g., fraud audits or forensic audits) by expert staff in the professional services firms, however, data mining is rarely used in financial statement audits. When used, it is for identified high-risk clients by the firm's data mining specialists.

In general, when it comes to fraud detection for a given audit client, the audit team would make three major decisions:

- What specific types of fraud (e.g., revenue recognition, understated liabilities, etc.) should be included in the audit plan for a particular client?
- What sources of data (e.g., journal entries, emails, etc.) would provide evidence of each type of fraud?
- Which data mining technique(s) (e.g., directed or undirected techniques) would be the most effective for finding potential evidence of fraud in the selected data?

If used improperly, data mining can produce many false positives and false patterns that will require auditors to expend time to investigate. Identifying the more effective use of data mining could encourage auditors to include data mining as a regular element of their audit programs.

2.12.3.2 The use of Financial Ratios in the Fraud detection

Kanapickiene and Grundiene (2015) explain how the use of Financial Ratios may lead auditors to detection the potential fraud.

In research studies (Feroz et al., 1991; Stice et al., 1991; Persons, 1995; Wells, 1997; Fanning and Cogger, 1998; Beneish, 1999; Spathis et al., 2002, Lenard and Alam, 2009; Ravisankar et al., 2011) the analysis of ratios is chosen as one of the methods to

determine fraud. After theoretical research, the financial statement ratios used in scientific literature were grouped into 5 groups and subgroups of financial statement ratios. This confirms that different scholars choose different financial ratios for fraud investigation. Financial difficulties may be motivation for managers to engage in fraudulent activities. According to Fanning & Cogger (1998), Kirkos et al. (2007), Ravisankar et al. (2011), the higher levels of debt may increase the probability of the fraudulent financial statements too. The following ratios are mostly used in research works with regard to fraud detection: the total debt to total assets (TD/TA) ratio (Kirkos et al., 2007; Gaganis, 2009; Sen &Terzi, 2012; Dalnial et al., 2014) or the total liabilities to total assets (TL/TA) ratio (Lenard & Alam, 2009), the total debt to equity (TD/Eq) ratio (Spathis et al., 2002; Kirkos et al., 2007; Dalnial et al., 2014). Lower liquidity may be a motive for managers to engage in fraudulent financial statements. Mostly liquidity is measured by the working capital to total assets (WC/TA), the current assets to current liabilities (CA/CL) ratio (Lenard &Alam, 2009; Ravisankar et al., 2011). According to Song et al. (2014) and Stice et al. (1991), another fraud motivation for the company managers is to keep growing. In order to find out whether the company kept growing, researchers used activity, profitability, asset composition ratios to detect fraud: the sales to total assets (SAL/TA) ratio, the net profit to sales (NP/SAL) ratio, the net profit to total assets ratio (ROA), the current assets to total assets (CA/TA) ratio were frequently used. Kirkos et al. (2007) state that the gross margin is also prone to manipulation. The authors used the following ratios for fraud detection: The Gross profit to Sales (GP/SAL) ratio, the Gross profit to Total Assets (GP/TA) ratio. According to Stice et al. (1991), Persons (1995), Kaminski et al. (2004), Kirkos et al. (2007), Perols (2011), the inventories, accounts receivable are the financial statement variables which permit a subjective estimation. Thus, the ratios used to determine such fraudulent statements are the inventories to sales (INV/SAL) ratio, the inventories to total assets (INV/TA) ratio, the accounts receivable to sales (REC/SAL) ratio.

2.13 Financial Statement Fraud in journal entries

A number of important financial statement frauds have involved fraudulent journal entries.

Examples are explained by Debreceny and Gray (2010) below:

- The fraud involved straightforward and inappropriate accounting reallocations. These included transfers from flows to stocks. For example, significant transfers were made from what was effectively a suspense expenditure account, "Prepaid Capacity Costs," to the "Construction in Progress" account, which was treated as capital expenditure (cited by Beresford et al., 2003).
- Journal entries also involved accounting treatments designed to influence disclosure rather than recognition. For example, line costs were transferred to accounts that rolled up into "Selling, General and Administrative Expenses (SG&A)." These adjustments did not change the reported profits but changed the allocation between gross and net profit disclosures (cited by Beresford et al., 2003).
- Many of the suspicious journal entries were hided, with large adjustments in rounded amounts that would be obvious to the most casual of inspections (cited by Beresford et al., 2003).
- There was a large number of inappropriate or questionable journal entries.
- Inappropriate journal entries were often accompanied by inadequate or no documentation and which circumvented normal internal controls.
- The adjustments were almost universally at the corporate level. In many cases, however, these non-standard adjustments made at the corporate level required adjustments at operating divisions and international operations.
- Many individuals and groups within the corporation quickly became aware, or should have been aware, of the implications of fraudulent entries passed at headquarters, not the least of which was as the result of sweeping up after the aforementioned non-standard adjustments (cited Beresford et al., 2003).

According to Debreceny and Gray (2010), it is required the auditor to assess the risk of misstatement from fraud, effectiveness of controls over journal entries and the nature and complexity of entries and accounts.

Fraudulent entries are entries:

- Made to unrelated, unusual, or seldom-used accounts,
- Made by individuals who typically do not make journal entries,
- Recorded at the end of the period or as post-closing entries that have little or no explanation or description,
- Made either before or during the preparation of the financial statements that do not have account numbers, or
- Containing round numbers or a consistent ending number (cited by ASB, 2003).

Auditors are cautioned that they should pay attention to non-standard entries and to other adjustments such as consolidation entries.

The standard notes that fraudulent journal entries are likely to occur around the closing process and that, consequently, testing should concentrate on entries posted in the period leading up to the fiscal year end or during the preparation of the financial statements.

Indicative tests of the journal entries data set include:

- Non-standard journal entries
- Entries posted by unauthorized individuals or individuals who while authorized do not normally post journal entries
- Unusual account combinations
- Round number
- Entries posted after the period-end
- Differences from previous activity
- Random sampling of journal entries for further testing

(cited by SAS 99).

2.14. Red flags

Spathis (2002) and Spathis et al. (2010) place an emphasis to Risk-factor ‘’red flags’’, that relate to fraudulent financial reporting, is separated in the following three categories (cited by SAS No. 82):

- Management’s characteristics and influence over the control environment. These pertain to management’s abilities, pressures, style and attitude relating to internal control and the financial reporting process. For example, strained relationships between management and the current or previous auditor.
- Industry conditions. These involve the economic environment in which the entity operates. For example, a declining industry with increasing business failures.
- Operating characteristics and financial stability. These pertain to the nature and complexity of the entity and its transactions, the entity’s financial condition and its profitability. For example, significant related-party transactions not in the ordinary course of business or with related entities not audited or audited by another firm.

According to Gullkvist and Jokipii (2013), a large number of prior studies have focused on the importance of red flags to fraud detection.

The most important red flags concerning material irregularity are: “decision making dominated by a single person”, “poor profitability”, and “management placing undue emphasis on meeting earnings projections” (cited by Loebbecke et al., 1989). The two most important factors alerting auditors to the risk of fraud and possible material irregularities were “misstatements in prior audits” and “indicators of going-concern problems’’ (cited by Majid et al., 2001). The most important single fraud risk indicator is “management’s failure to display appropriate attitude about internal control” (cited by Smith et al., 2005). External auditors identified the most important red flag to be “client dishonesty” within the category “management attitudes” (cited by Heiman-Hoffman and Morgan, 1996). After questioning Internal Auditors, the fraud is considered to be more probable under certain conditions, such as, when income is greater than expected, and managers’ bonuses are based on earnings (cited by Church et al., 2001).

According to Baader and Krcmar (2018) the red flag-based approach is a well-established technique in fraud detection and is recommended by most auditing standards (cited by Albrecht et al., 2012). Red flags are hints or indicators for fraudulent behavior and show that something irregular has happened. A red flag is not a proof of fraud, as there might be a sound explanation for the existence of the indicators (cited by Albrecht et al., 2012).

Fraud is conducted intentionally. The perpetrator tries to cover up his tracks (cited by Albrecht et al., 2012).

Every user action leaves traces in the system. These audit trails are generally automatically stored in the system. Datasets are then analyzed using structured query language (SQL) to identify process instances where these red flags occur (cited by Coenen, 2008; Stamleret, 2014). Sources analyzed include ERP systems, document management or supply chain systems. In addition, paper-based sources like original receipts may be taken into account (cited by Albrecht et al., 2012).

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CHAPTER THREE

RESEARCH METHOLOGY

3.1 Data collection

The target of this survey is to investigate the importance of a list of Red Flags, according to the opinion of people who currently work in Auditing companies. The choice of people only from the Netherlands guarantees a better control of the variables, because people from the same country uses the same Auditing standards during the control.

A quantitative research with use of questionnaires was carried out. The questionnaire was consisted of 28 Red Flags and was based on a previous empirical study of Gullkvist & Jokipii (2013). However, the questionnaire, which was used, is the same, the sample in this survey was completely different.

I currently live and work in the Netherlands and that is why I chose my research sample to be consisted of people who work in Auditing companies in the Netherlands. These professionals are expected to have experience and knowledge of financial fraud issues and interest in Financial Fraud detection. Although their perceptions of red flag importance might be considered subjective, they have been selected so as to represent the opinions of different professional groups, according to their age, work position, years of experience and education. Demographical characteristics are also included in the questionnaire, such as the gender, the age, the working position, the working experience and the level of the education.

The professionals were contacted through e-mails and their e-mails were found online through the websites of their companies and a number of answers also came from my colleagues at work. In line with the above, 182 e-mails were sent, and 56 responses are received (response rate 30,77%). The reason of the low rate response is that the survey was conducted during the summer (between the months July – August 2019), a vacation period for the most Auditors in the Netherlands. I, also, received answers from people who stated that their company did not allow them to participate in

such surveys, however, I ensured them that the survey was unanimous and only for academic purposes.

Before sending the relevant e-mail to each professional, the questionnaire was pilot tested. It was sent to 6 Audit-assistants. Pilot-testing suggested improvements in the design of the questionnaire, such as some word replacements that were confusing and changes in the sequence of questions. This would ensure clearer understanding of the issue which was researched (Pavlatos & Kostakis, 2018).

The questionnaire was designed in ‘’Google Drive’’ and the empirical data was also collected through it in one Excel which included the total results. E-mails with the questionnaire were sent to the respondents who were provided with a full description of the survey and the purpose of it and also a uniform resource locator (URL) in the e-mail. The URL included a unique identifier (ID). A participant following the URL link was automatically directed to a website hosting the survey, where it could be completed. When a questionnaire was completed, I automatically received an e-mail in which each answer was written but the name and the e-mail of every respondent was not obvious. As I referred in my questionnaire, the research was only for academic purposes and it was anonymous.

After 15 days from the original email, a reminder e-mail was sent and 15 days later, another reminder e-mail was sent and professionals were politely asked to fill the questionnaire, if they wished.

The respondents were asked to indicate their opinion on the level of importance of each of the 28 Red Flags on a five-point Likert scale denoted by “1” for “not important at all”, ‘’2’’ for ‘’Not important’’, ‘’3’’ for ‘’neutral’’, ‘’4’’ for ‘’important’’ and “5” for “extremely important”.

During our research, statistical tests were done, in order to investigate if the importance of red flags differentiates among Auditors in consideration to their demographic characteristics, for example, their gender, age, working position, years of working experience and the highest level of education and if the correlation between demographic characteristics and Red Flags are statistically significant. All the statistical tests are completed with the use of IBM SPSS Statistics 23. In the following table, **Table 2,** the demographic characteristics of the professionals are presented.

Table 2 shows that the majority of the questionnaires was filled by males (87,5%) and only the 12,5% were females. In addition, 26,8% of the respondents were under 30 years old, 26,8% were also 40-49 years old and 26,8% were 50-59 years old. 16,1% were 30-39 years old and only 3,6% were over 60 years old. Furthermore, the majority of the respondents were managers (32,1%) and partners (32,1%). 14,3% were assistants, 8,9% seniors, 7,1% owners, 3.6% supervisors and 1,8% senior advisors. 71,4% of the professionals had over 10 years of working experience, 12,5% 0-2 years of working experience, 10,7% 3-5 years of working experience and 5,4% 6-9 years of working experience. According to the level of education, 46,4% of the respondents had a Master's degree, 44,7% had a Professional Title and only 8,9% had a Bachelor's degree.

3.2 Research design

The target of this study is to reveal the importance of 28 Red Flags according to the opinion of people who currently work in Auditing firms in the Netherlands.

The respondents were asked to indicate their opinion on the level of importance of each of the 28 red flags on a five-point Likert scale denoted by "1" for "not important at all", ''2'' for ''Not important'', ''3'' for ''neutral'', ''4'' for ''important'' and "5" for "extremely important".

Before the final survey was administrated, a pilot questionnaire consisting of 28 Red Flags was compiled, based on a previous empirical study of Gullkvist & Jokipii (2013).

According to Gullkvist & Jokipii (2013), the bulk of prior research on fraud prevention and detection methods has addressed fraud risk indicators. These so-called Red Flags are events, conditions, situational pressures, opportunities, or personal characteristics that may cause management or employees to commit fraud on behalf of the company or for personal gain (cited by Romney et al., 1980).

A professional's assessment of the likelihood of fraud is argued to be a high-level judgement (cited by Loebbecke et al., 1989). Further, researchers argue that professionals' ability to detect accounting errors and misstatements is associated with and influenced by their materiality judgements. It is suggested that materiality works

as a filter for identifying and evaluating the numerous risk factors, which are believed to be associated with a heightened risk of fraud.

Table 2

Demographic characteristics of the respondents who participated in the survey

	N	**%**
Gender		
Female	7	12,5%
Male	49	87,5%
	56	100%
Age		
Under 30	15	26,8%
30-39 years old	9	16,1%
40-49 years old	15	26,8%
50-59 years old	15	26,8%
60 and over	2	3,6%
	56	100%
Working position		
Assistant	8	14,3%
Senior	5	8,9%
Senior Advisor	1	1,8%
Supervisor	2	3,6%
Manager	18	32,1%
Partner	18	32,1%
Owner	4	7,1%
	56	100%
Years of working experience		
0-2 years	7	12,5%
3-5 years	6	10,7%
6-9 years	3	5,4%
Over 10 years	40	71,4%
	56	100%
Level of education		
Bachelor’s degree	5	8,9%
Master’s degree	26	46,4%
Professional title	25	44,7%
	56	100%

The following table (**Table 3**) shows the descriptive statistics of the 28 red flags.

Table 3

Descriptive statistics of the 28 red flags

RED FLAGS	MEAN	SD	MAX	MIX
1	4,61	0,65	5	2
2	4	0,76	5	2
3	3,79	0,85	5	2
4	4,18	0,69	5	2
5	4,08	0,84	5	2
6	3,91	0,98	5	2
7	4,41	0,83	5	2
8	4,59	0,65	5	2
9	3,5	0,71	5	2
10	4,36	0,70	5	2
11	4,29	0,71	5	2
12	3,69	0,85	5	2
13	4,09	0,67	5	3
14	3,86	0,88	5	1
15	4,41	0,73	5	2
16	4,34	0,67	5	3
17	3,52	0,83	5	1
18	4,69	0,74	5	1
19	3,96	0,63	5	3
20	3,84	0,76	5	2
21	3,55	0,89	5	2
22	4,05	0,67	5	2
23	3,98	0,77	5	2
24	3,84	0,87	5	2
25	3,80	0,72	5	2
26	3,68	0,74	5	1
27	3,64	0,80	5	1
28	3,87	0,71	5	2

3.3 Chapter summary

This chapter focuses on the research design approach and the choice of our sample, data collection and presentation of the descriptive data are clearly described. By using the tool ‘’IBM SPSS Statistics 23’’ we managed to complete our descriptive and inferential statistical methods.

Tables and bar charts were used to present and summarize the results and findings obtained. All the bar charts are presented in the appendix.

The next chapter presented the results and findings out of the data that was collected through the questionnaires as set out in the research methodology. The study findings were presented on the importance of Red Flags between Auditors who currently work in Auditing firms in the Netherlands.

REFERENCES OF CHAPTER 3

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CHAPTER FOUR

RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the results established from the data analysis done. This includes analysis of our answers which we have received, normality test, so as to be able to choose the right analysis method later. In addition, further research was done in order to investigate if the correlation between the demographical characteristics and the Red Flags are statistically significant and also if the demographical characteristics differentiate the answers according to the importance of Red Flags among the professionals. A reliability test is also done so as to check the reliability of our variables.

4.2 The method of analysis

The mean values of the 28 Red Flags ranges between 3,5 and 4,69. The top 10 Red Flags ranked according to their mean. In the **Table 4,** the most important Red Flags of our survey are described. The most important Red Flag is ‘’There is a need to cover up an illegal act’’ and then following, ‘’Management displays a significant lack of moral fiber’’, ‘’Dishonest or unethical management’’, ‘’Key managers have (or one has) a questionable or criminal background’’, ‘’Threat of imminent bankruptcy’’, ‘’Significant and unusual related – party transactions are present’’, ‘’Company tries to cover up a temporary poor financial situation’’, ‘’Doubts about entity’s ability to continue as a going concern’’, ‘’Key managers live beyond their means’’ and ‘’The company has solvency problems’’.

Table 4

Top 10 Red Flags ranked by means

Number of RD	Red Flag	MEAN	RANK
18	There is a need to cover up an illegal act	4,69	1
1	Management displays a significant lack of moral fiber	4,61	2
8	Dishonest or unethical management	4,59	3
7	Key managers have (or one has) a questionable or criminal background	4,41	4
15	Threat of imminent bankruptcy	4,41	5
10	Significant and unusual related – party transactions are present	4,36	6
16	Company tries to cover up a temporary poor financial situation	4,34	7
11	Doubts about entity's ability to continue as a going concern	4,29	8
4	Key managers live beyond their means	4,18	9
13	The company has solvency problems	4,09	10

The respondents were asked to indicate their opinion on the level of importance of each of the 28 red flags on a five-point Likert scale denoted by "1" for "not important at all", ''2'' for ''Not important'', ''3'' for ''neutral'', ''4'' for ''important'' and "5" for "extremely important".

In the table below (**Table 5**), the total results of our research are presented. Analytically, the number of the respondents and the percentage of the respondents in each question are described.

Table 5

Red Flags	Not important at all	Not important	Neutral	Important	Extremely important
1	-	1 (1,8%)	2 (3,6%)	15 (26,8%)	38 (67,9%)
2	-	3 (5,4%)	7 (12,5%)	33 (58,9%)	13 (23,2%)
3	-	4 (7,1%)	15 (26,8%)	26 (46,4%)	11 (19,6%)
4	-	1 (1,8%)	6 (10,7%)	31 (55,4%)	18 (38,1%)
5	-	1 (1,8%)	16 (28,6%)	20 (35,7%)	19 (33,9%)
6	-	5 (8,9%)	14 (25%)	18 (32,1%)	19 (33,9%)
7	-	2 (3,6%)	6 (10,7%)	15 (26,8%)	33 (58,9%)
8	-	1 (1,8%)	2 (3,6%)	16 (28,6%)	37 (66,1%)
9	-	4 (7,1%)	23 (41,1%)	26 (46,4%)	3 (5,4%)
10	-	1 (1,8%)	4 (7,1%)	25 (44,6%)	26 (46,4%)
11	-	1 (1,8%)	5 (8,9%)	27 (48,2%)	23 (41,1%)
12	-	5 (8,9%)	17 (30,4%)	25 (44,6%)	9 (16,1%)
13	-	-	10 (17,9%)	31 (55,4%)	15 (26,8%)
14	1 (1,8%)	2 (3,6%)	14 (25%)	26 (46,4%)	13 (23,2%)
15	-	1 (1,8%)	5 (8,9%)	20 (35,7%)	30 (53,6%)
16	-	-	6 (10,7%)	25 (44,6%)	25 (44,6%)
17	1 (1,8%)	4 (7,1%)	21 (37,5%)	25 (44,6%)	5 (8,9%)
18	1 (1,8%)	-	3 (5,4%)	8 (14,3%)	44 (78,6%)
19	-	-	12 (21,4%)	34 (60,7%)	10 (17,9%)
20	-	3 (5,4%)	12 (21,4%)	32 (57,1%)	9 (16,1%)
21	-	8 (14,3%)	16 (28,6%)	25 (44,6%)	7 (12,5%)
22	-	1 (1,8%)	8 (14,3%)	34 (60,7%)	13 (23,2%)
23	-	3 (5,4%)	8 (14,3%)	32 (57,1%)	13 (23,2%)
24	-	4 (7,1%)	14 (25%)	25 (44,6%)	13 (23,2%)
25	-	2 (3,6%)	15 (26,8%)	31 (55,4%)	8 (14,3%)
26	1 (1,8%)	2 (3,6%)	15 (26,8%)	34 (60,7%)	4 (7,1%)
27	1 (1,8%)	2 (3,6%)	19 (33,9%)	28 (50%)	6 (10,7%)
28	-	3 (5,4%)	9 (16,1%)	36 (64,3%)	8 (14,3%)

In the table below, (**Table 6**), our target was to investigate if our variables are normally distributed or if they are non-normally distributed. If we check the Sig. of Kolmogorov-Smirnov and Shapiro-Wilk, it is clearly that they are 0 for all variables. If the Sig. is up to 0,05, then our data is normally distributed and if Sig. is below 0,05, our data is non-normally distributed. In this case, we have non-normal distributed variables and for this reason the Spearman's analysis follows.

Table 6: ***Test of normality***

Tests of Normality						
Red Flags	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
1	0,405	56	0	0,631	56	0
2	0,321	56	0	0,800	56	0
3	0,261	56	0	0,864	56	0
4	0,281	56	0	0,793	56	0
5	0,218	56	0	0,831	56	0
6	0,207	56	0	0,852	56	0
7	0,351	56	0	0,719	56	0
8	0,396	56	0	0,645	56	0
9	0,276	56	0	0,832	56	0
10	0,285	56	0	0,761	56	0
11	0,255	56	0	0,782	56	0
12	0,254	56	0	0,870	56	0
13	0,285	56	0	0,795	56	0
14	0,261	56	0	0,856	56	0
15	0,325	56	0	0,745	56	0
16	0,285	56	0	0,768	56	0
17	0,255	56	0	0,865	56	0
18	0,453	56	0	0,498	56	0
19	0,308	56	0	0,781	56	0
20	0,316	56	0	0,828	56	0
21	0,263	56	0	0,868	56	0
22	0,308	56	0	0,797	56	0
23	0,313	56	0	0,813	56	0
24	0,252	56	0	0,863	56	0
25	0,303	56	0	0,833	56	0
26	0,346	56	0	0,783	56	0
27	0,280	56	0	0,842	56	0
28	0,355	56	0	0,783	56	0

In the table below **(Table 7**), we investigate if the correlation between the demographical characteristics of the respondents (gender, age, working position, years of working experience and highest level of education) and the Red Flags are statistically significant.

For example, we can by chance choose Gender and Red Flag 1 (Management displays a significant lack of moral fiber). Correlation-Coefficient is 0,149, so there is no correlation. Sig (2-tailed) is 0,273 > 0,05 (Not statistically significant).

From the table below, we come to the following conclusions: Correlation is statistically significant at the level 0,05 level (2-tailed) between gender and Red Flags 17,22, age and Red flag 4,8,9 working position and Red Flags 7,8,11, years of working experience and Red Flag 4 and highest level of education and Red Flags 2,25. Correlation is also statistically significant at the level 0,01 (2-tailed) between age and Red Flags 1,3,6,7, working position and Red Flags 1,4 and years of working experience and Red Flag 1,7.

Table 7: ***Spearman's analysis***

Red Flags	Gender			Age			Working position			Years of working position			Highest level of education		
	Cor.-Coe.	Sig. (2-tailed)	N	Cor.-Coe.	Sig. (2-tailed)	N	Cor.-Coe.	Sig. (2-tailed)	N	Cor.-Coe.	Sig. (2-tailed)	N	Cor.-Coe.	Sig. (2-tailed)	N
1	0,149	0,273	56	0,394**	0,003	56	0,423**	0,001	56	0,384**	0,004	56	0,256	0,057	56
2	0,134	0,324	56	0,090	0,511	56	0,094	0,489	56	0,165	0,223	56	0,312*	0,019	56
3	0,027	0,844	56	0,349**	0,008	56	0,138	0,310	56	0,183	0,178	56	-0,153	0,260	56
4	-0,030	0.827	56	0,319*	0,017	56	0,375**	0,004	56	0,317*	0,017	56	0,225	0,095	56
5	0,251	0,062	56	0,132	0,332	56	0,079	0,561	56	-0,030	0,825	56	0,055	0,690	56
6	-0,056	0,682	56	0,354**	0,007	56	0,143	0,293	56	0,189	0,164	56	0,118	0,388	56
7	-0,047	0,728	56	0,447**	0,001	56	0,304*	0,023	56	0,451**	0	56	0,179	0,186	56
8	0,161	0,236	56	0,266*	0,047	56	0,265*	0,048	56	0,123	0,368	56	0,067	0,623	56
9	0,038	0,778	56	0,294*	0,028	56	0,228	0,091	56	0,243	0,071	56	0,112	0,410	56
10	0,106	0,438	56	0,005	0,971	56	-0,065	0,633	56	-0,043	0,751	56	-0,176	0,193	56
11	0,057	0,675	56	0,210	0,120	56	0,292*	0,029	56	0,096	0,483	56	0,088	0,521	56
12	-0,062	0,648	56	0,260	0,053	56	0,221	0,102	56	0,094	0,490	56	-0,053	0,696	56
13	-0,115	0,397	56	0,198	0,143	56	0,241	0,074	56	0,026	0,847	56	0,161	0,237	56
14	0,188	0,166	56	0,026	0,850	56	-0,102	0,453	56	-0,112	0,412	56	-0,067	0,624	56
15	0,153	0,260	56	0,226	0,094	56	0,176	0,195	56	0,055	0,688	56	0,109	0,424	56
16	0,216	0,110	56	0,137	0,316	56	0,171	0,207	56	0,047	0,730	56	0,256	0,057	56
17	0,290*	0,030	56	0,031	0,820	56	0,079	0,563	56	-0,057	0,676	56	0,103	0,450	56
18	0,196	0,148	56	0,176	0,195	56	0,166	0,221	56	0,066	0.629	56	0,201	0,137	56
19	0,107	0,432	56	0,087	0,525	56	-0.013	0,923	56	-0,077	0,575	56	-0,090	0,511	56
20	-0,037	0,785	56	0,052	0,704	56	0,110	0,418	56	-0,111	0,414	56	-0.019	0,888	56
21	0,023	0,866	56	0,148	0,276	56	0,154	0,257	56	0,018	0,893	56	0,083	0,542	56
22	0,306*	0,022	56	0,013	0,926	56	0,148	0,276	56	-0,026	0,851	56	-0,039	0,776	56
23	-0,037	0,784	56	0,110	0,421	56	0,088	0,519	56	-0,048	0,726	56	-0,196	0,148	56
24	0,057	0,677	56	0,118	0,386	56	-0,025	0,853	56	-0,084	0,536	56	-0,239	0,077	56
25	0,104	0,445	56	-0,011	0,938	56	-0,043	0,752	56	-0,042	0,759	56	-0,326*	0,014	56
26	0,134	0,323	56	-0,027	0,842	56	-0,097	0,476	56	-0,069	0,612	56	-0,192	0,156	56
27	0,057	0,678	56	0,012	0,932	56	-0,073	0,594	56	-0,149	0,242	56	-0,250	0,063	56
28	0,029	0,830	56	0,112	0,410	56	-0,068	0,619	56	-0,039	0,775	56	-0,254	0,059	56

**Correlation is significant at the 0,01 level (2-tailed).

*Correlation is significant at the 0,05 level (2-tailed).

Table 8: ***Mann Whitney test***

Red Flags	Z	Asymp. Sig. (2-tailed)
RD1	-1.106	0,269
RD2	-0,995	0,320
RD3	-0,199	0,824
RD4	-0,222	0,824
RD5	-1,862	0,063
RD6	-0,415	0,678
RD7	-0,352	0,725
RD8	-1,194	0,232
RD9	-0,285	0,775
RD10	-0,784	0,433
RD11	-0,425	0,671
RD12	-0,463	0,644
RD13	-0,856	0,392
RD14	-1,393	0,164
RD15	-1,135	0,256
RD16	-1,599	0,110
RD17	-2,154	0,031
RD18	-1,454	0,146
RD19	-0,795	0,426
RD20	-0,277	0,782
RD21	-0,171	0,864
RD22	-2,272	0,023
RD23	-0,277	0,782
RD24	-0,422	0,673
RD25	-0,772	0,440
RD26	-0,997	0,319
RD27	-0,420	0,674
RD28	-0,218	0,828

In **Table 8**, we check if the gender of the respondents differentiates the answers.

In this test if the p(value) is below 0,05, then we reject the Hypothesis 0 of equal mean ranks and of the p(value) is up to 0,05, then we accept the Hypothesis 0.

For example, for the first Red flag (Management displays a significant lack of moral fiber), Z<0. Asymptotic Sig. (2-tailed) is 0,260 > 0,05. This means that we accept the Hypothesis 0 of equal mean ranks (The importance of this red flag does not differentiate between men and women). The situation is the same for all red flags, expect from two, Red flag 17(Company holdings represent a significant portion of management's personal wealth) and Red flag 22 (There appears to be a continuous cash-deficit). The Asymptotic Sig. (2-tailed) is 0,031 and 0,023< 0,05. This means that we reject the Hypothesis 0 of equal mean ranks, so the importance of these red flags differentiates between men and women.

In conclusion, the two red flags are only 7% of the other red flags, so we generally consider that the gender does not differentiate the answers.

Table 9: ***Kruskal Wallis test***

Red Flags	Chi-Square	Asymp. Sig.
RD1	10,771	0,029
RD2	2,574	0,631
RD3	8,778	0,067
RD4	12,779	0,012
RD5	1,783	0,776
RD6	8,302	0,081
RD7	13,968	0,007
RD8	5,564	0,234
RD9	7,859	0,097
RD10	6,755	0,149
RD11	8,035	0,090
RD12	8,642	0,071
RD13	2,790	0,594
RD14	5,724	0,221
RD15	3,853	0,426
RD16	2,619	0,624
RD17	2,024	0,731
RD18	3,279	0,512
RD19	5,772	0,217
RD20	1,723	0,787
RD21	3,530	0,473
RD22	3,450	0,486
RD23	5,048	0,282
RD24	11,111	0,025
RD25	4,490	0,344
RD26	4,411	0,353
RD27	10,790	0,029
RD28	9,128	0,058

In **Table 9**, we analyze if the age of the respondents differentiates the answers.

In this test if the p(value) is below 0,05, then we reject the Hypothesis 0 of equal mean ranks and of the p(value) is up to 0,05, then we accept the Hypothesis 0.

For example, for the first Red flag (Management displays a significant lack of moral fiber), Asymptotic Sig. is 0,029 < 0,05. This means that we reject the Hypothesis 0 of equal mean ranks (The importance of this red flag differentiates according to the age of the respondents). We can also use Chi-Square.: Chi-Square 1/(N-1) = 10,771/55 = 0,1958=19,58% of the variability in Rank Scores is accounted by age.

We come to the same conclusion for Red flags 4,7,24 and 27 (Their p(value) <0,05.)

For the majority of Red Flags, the p(value) > 0,05, so we accept the Hypothesis 0 of equal mean ranks and we conclude that the age of the respondents does not differentiate the answers.

In **Table 10,** we investigate if the working position of the respondents differentiates the answers.

In this test if the p(value) is below 0,05, then we reject the Hypothesis 0 of equal mean ranks and of the p(value) is up to 0,05, then we accept the Hypothesis 0.

For example, for the first Red flag (Management displays a significant lack of moral fiber), Asymptotic Sig. is 0,013 < 0,05. This means that we reject the Hypothesis 0 of equal mean ranks (The importance of this red flag differentiates according to the working position of the respondents).

We come to the same conclusion for Red flags 4,7,11, 13, 20, 23, 24 and 27 (Their p(value) <0,05.)

For the majority of Red Flags, the p(value) > 0,05, so we accept the Hypothesis 0 of equal mean ranks and we conclude that the working position of the respondents does not differentiate the answers.

Table 10: ***Kruskal Wallis test***

	Chi-Square	Asymp. Sig.
RD1	16,075	0,013
RD2	1,166	0,979
RD3	7,569	0,271
RD4	13,512	0,036
RD5	5,479	0,484
RD6	6,549	0,365
RD7	13,663	0,034
RD8	8,214	0,223
RD9	4,780	0,572
RD10	9,506	0,147
RD11	14,873	0,021
RD12	6,004	0,423
RD13	13,674	0,034
RD14	3,558	0,736
RD15	9,974	0,126
RD16	6,285	0,392
RD17	7,343	0,290
RD18	3,853	0,697
RD19	7,291	0,295
RD20	13,479	0,036
RD21	4,403	0,622
RD22	11,332	0,079
RD23	15,221	0,019
RD24	13,228	0,040
RD25	5,874	0,437
RD26	6,813	0,339
RD27	13,521	0.035
RD28	9,817	0,133

Table 11: ***Kruskal Wallis test***

	Chi-Square	Asymp. Sig.
RD1	10,938	0,012
RD2	1,590	0,662
RD3	7,661	0,054
RD4	5,675	0,129
RD5	1,328	0,722
RD6	7,397	0,060
RD7	12,284	0,006
RD8	8,617	0,035
RD9	6,465	0,091
RD10	5,315	0,150
RD11	2,334	0,506
RD12	3,264	0,353
RD13	1,537	0,674
RD14	0,864	0,834
RD15	5,315	0,150
RD16	2,510	0,474
RD17	3,936	0,268
RD18	1,618	0,655
RD19	7,054	0,070
RD20	1,238	0,744
RD21	2,931	0,402
RD22	4,763	0,190
RD23	4,603	0,203
RD24	6,062	0,109
RD25	5,820	0,121
RD26	4,409	0,221
RD27	7,548	0,056
RD28	4,668	0,198

In **Table 11**, we analyze if the years of working experience of the respondents differentiate the answers.

In this test if the p(value) is below 0,05, then we reject the Hypothesis 0 of equal mean ranks and of the p(value) is up to 0,05, then we accept the Hypothesis 0.

For example, for the first Red flag (Management displays a significant lack of moral fiber), Asymptotic Sig. is 0,012 < 0,05. This means that we reject the Hypothesis 0 of equal mean ranks (The importance of this red flag differentiates according to the years pf working experience of the respondents).

We come to the same conclusion for Red flags 7 and 8. (Their p(value) <0,05.)

For the majority of Red Flags, the p(value) > 0,05, so we accept the Hypothesis 0 of equal mean ranks and we conclude that the years of working experience of the respondents does not differentiate the answers.

Table 12: ***Kruskal Wallis test***

	Chi-Square	Asymp. Sig.
RD1	6,415	0,040
RD2	6,584	0,037
RD3	2,923	0,232
RD4	4,715	0,095
RD5	0,183	0,913
RD6	1,325	0,516
RD7	2,033	0,362
RD8	1,678	0,432
RD9	1,616	0,446
RD10	5,727	0,057
RD11	0,929	0,629
RD12	0,773	0,679
RD13	3,024	0,220
RD14	0,781	0,677
RD15	1,880	0,391
RD16	4,911	0,086
RD17	1,864	0,394
RD18	2,233	0,327
RD19	0,836	0,658
RD20	1,480	0,477
RD21	3,603	0,165
RD22	1,693	0,429
RD23	2,451	0,294
RD24	5,037	0,081
RD25	5,856	0,054
RD26	2,304	0,316
RD27	4,303	0,116
RD28	3,555	0,169

In **Table 12**, we analyze if the highest level of education of the respondents differentiates the answers.

In this test if the p(value) is below 0,05, then we reject the Hypothesis 0 of equal mean ranks and of the p(value) is up to 0,05, then we accept the Hypothesis 0.

For example, for the first Red flag (Management displays a significant lack of moral fiber), Asymptotic Sig. is 0,040 < 0,05. This means that we reject the Hypothesis 0 of equal mean ranks (The importance of this red flag differentiates according to the years pf working experience of the respondents). For no other Red Flag, p(value) <0,05.

For the majority of Red Flags, the p(value) > 0,05, so we accept the Hypothesis 0 of equal mean ranks and we conclude that the highest level of education of the respondents does not differentiate the answers.

Table 13: ***Reliability test***

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,923	0,923	28

Cronbach's alpha is close to 1, which means that our reliability is really high.

Table 14

Red Flags	Corrected Item-Total Correlation	Cronbach's Alpha if item deleted
RD1	0,267	0,924
RD2	0,104	0,927
RD3	0,671	0,918
RD4	0,493	0,921
RD5	0,497	0,921
RD6	0,640	0,919
RD7	0,477	0,921
RD8	0,542	0,920
RD9	0,528	0,920
RD10	0,487	0,921
RD11	0,480	0,921
RD12	0,494	0,921
RD13	0,589	0,920
RD14	0,495	0,921
RD15	0,673	0,918
RD16	0,290	0,924
RD17	0,478	0,921
RD18	0,458	0,921
RD19	0,625	0,919
RD20	0,533	0,920
RD21	0,573	0,920
RD22	0,649	0,919
RD23	0,567	0,920
RD24	0,706	0,918
RD25	0,614	0,919
RD26	0,619	0,919
RD27	0,619	0,919
RD28	0,599	0,919

In **Table 14**, the 28 red flags are classified in the first column. The second column shows the correlation of each item with all other items combined. This amount should be up to 0.40. The third item shows the Cronbach's Alpha if an item is deleted. It means that if I remove any particular individual item of the scale, does it significantly increase Cronbachs̈ Alpha? If the amount is up to 0,70, then the Cronbachs̈ Alpha is significantly increased.

4.3 Chapter summary

This chapter has highlighted results and findings. Firstly, the top 10 most important Red Flags are presented and then, the total results of our research, the number of the respondents and the percentage of the respondents in each question are described. After that, a normality test follows and then analysis is conducted in order to investigate if the correlation between the demographical characteristics and the Red Flags are

statistically significant and also if the demographical characteristics differentiate the answers according to the importance of Red Flags among the professionals. To end up, a reliability is done so as to check the reliability of our variables.

In chapter five these results are discussed, and relevant conclusions and recommendations for further research were made, with regard to the importance of Red Flags. There were also a number of limitations according to this study, which are analytically described.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The target of this section is to analyze the findings of the research ‘’Importance of red flags between professionals who currently work in Auditing firms in the Netherlands’’ which is done by use of a list of 28 Red Flags. Our incentive was to continue a previous research of Gullkvist & Jokipii (2013) by use of the same questions but the difference was the choice of another completely different population sample. They support that the importance of fraud detection and Red Flags to the accounting profession and society as a whole cannot be denied. There is a need to adopt a more comprehensive view of fraud detection and investigation in the entire corporate reporting value chain. They also believe that the current low detection rate of fraud provides motivation for change and more attention of the professional to Red Flags. Our research was organized through a questionnaire in Google Drive and the results were exported by using the Statistics instrument ‘’ IBM SPSS Statistics 23’’.

5.2 Summary of findings

With a quick look at the results, it is visible that the minority of the answers vary between ‘’Not important at all’’ and ‘’Not important’’.

Data analysis showed that the variables are non – normal distributed. Data analysis also showed that the correlation between a few Red Flags and the demographical characteristics is only statistically significant. In addition, according to the majority of the Red flags and the demographical characteristics there is no differentiation to the answers given by the respondents.

In relation to our findings, our variables are reliable and if we erase one Red Flag from the scale, then our reliability becomes higher.

The findings also from our data analysis are that the top 10 most important Red Flags are: "There is a need to cover up an illegal act", "Management displays a significant lack of moral fiber", "Dishonest or unethical management", "Key managers have (or one has) a questionable or criminal background", "Threat of imminent bankruptcy", "Significant and unusual related – party transactions are present'', ''Company tries to cover up a temporary poor financial situation'', ''Doubts about entity's ability to continue as a going concern'', ''Key managers live beyond their means'' and ''The company has solvency problems''. The description above is from number 1 (The most important Red Flag) until the number 10. The Red Flag ''There is a need to cover up an illegal act" is the most important Red Flag according to our survey.

In comparison with the study of Gullkvist and Jokipii (2013), we conclude that the similarities between Finnish external auditors and Dutch auditors are that 8 from the 10 most important Red Flags on the list, are the same. Red Flags 18, 1, 8, 7, 15, 10, 16 and 11 (There is a need to cover up an illegal act, Management displays a significant lack of moral fiber, Dishonest or unethical management, Key managers have or one has a questionable or criminal background, Threat of imminent bankruptcy, Significant and unusual related – party transactions are present, Company tries to cover up a temporary poor financial situation and Doubts about entity's ability to continue as a going concern) exist on both lists. Red Flag 8 (Dishonest or unethical management) and Red Flag 15 (Threat of imminent bankruptcy) are also on the same position in both lists (position 3 and position 5). The population sample which was used in both surveys was completely different and for this reason it is interesting the above comparison.

The sample population of the survey of Gullkvist & Jokipii (2013) was separated into 3 groups: Finnish internal auditors, external auditors and economic crime investigators. We have compared our results with the findings only between external auditors.

5.3 Limitations of the study

Our research has its limitations. Initially, the study was conducted among professionals who currently work in Auditing firms in the Netherlands. We can easily

understand that our population sample is restricted in a limited geographical area. In the Netherlands, most of Auditing companies use the "Dutch GAAP" during the control and the Professional Title for Auditors are ''Postmaster RA''. Secondly, our data was collected during the summer period, which is for the majority of the Auditors a vacation period and that is the reason for a quite low response rate. The response rate might have been higher if data were collected in another time point or even at more time points There is also here a doubt, as another chosen period of time might be ''a busy period'' for the professionals and the response rate might be the same or even lower. Thirdly, a number of answers were received from people who stated that their company did not allow them to participate in such surveys, however, I ensured them that the survey was unanimous and only for academic purposes. That means that it remains unknown from how many companies were the results collected. Fourthly, the questionnaires were filled through ''Google Drive'', so it was not controllable if one person has answered two times the questionnaire. Furthermore, we could not find online the e-mails from professionals from all Big 4 companies. Regardless of these limitations, this work provides knowledge on the Red Flags and especially, results are presented related to their importance among a population sample.

5.4 Recommendation for further research

We anticipate that the findings of this study will become an incentive to future researchers. More powerful and analytical theories are needed to study the importance of Red Flags. Similar research needs to be done in Auditing firms in other countries so as to enable generalization of the findings. In other countries may be followed another Accounting legislation and people have also another level of education and that is why it is interesting to go deeper in the field of ''Red flags'', so as to note the differences.

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APPENDICES

APPENDIX I: REQUEST TO PARTICIPATE IN THE STUDY

This survey is conducted under the aegis of the ‘’University of Macedonia, Thessaloniki, Greece’’ as a part of the requirements for my Master’s Degree ‘’MSc in Applied Accounting and Auditing’’.

The aim of this study is to continue a previous survey about the importance of reg flags, by formulating the following research question:

Which are the most 10 important red flags from a list given?

The questionnaire will be completed online at the following address:

https://forms.gle/6YYSv58reZw9Xb9F6

It should take about 5 minutes for you to complete. There is absolutely no risk to participants as this study is solely for academic purposes and all participation is strictly voluntary. No one’s identity will be disclosed. Only aggregate results of voluntary responses will be recorded and reported.

To achieve the objective of this study, a sample of Auditing and Accounting firms in the Netherlands is used and the e-mails of people who currently work in them, are found online. Regardless of the extent of your involvement, your completion of the questionnaire is absolutely necessary to assure an acceptable response rate for valid results.

If you have any questions or concerns regarding this study, please feel free to contact me at one of the email addresses provided below.

As I stated the success of this study depends on your participation. Therefore, your contribution to this effort will be greatly appreciated.

Yours sincerely,

Karaveli Maria

E-mail:

mariakaraveliuom@gmail.com

mkaravel@outlook.com.gr

APPENDIX II: QUESTIONNAIRE

Questionnaire for Data Selection

Please complete this questionnaire by selecting in the appropriate boxes for the appropriate answers. (Select one only).

A. PERSONAL BACKGROUND

Gender

Male

Female

Age

Under 30

30-39 years old

40-49 years old

50-59 years old

60 and over

Working position

Owner

Partner

Manager

Supervisor

Senior

Assistant

Other

Highest level of education

PhD

Professional title

Master's degree

Bachelor's degree

Other

B. RED FLAGS

Please indicate the degree of the importance of red flags in your opinion based on a scale 1 (Not important at all) to 5 (Extremely important).

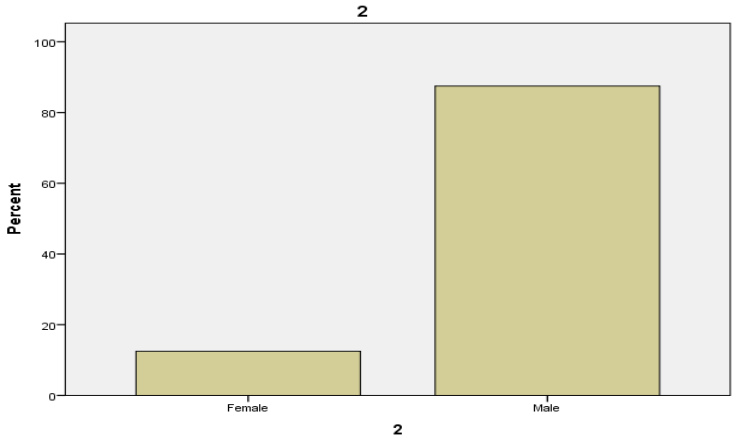
Red flags	**The importance of red flags**				
	Not important at all	**Not important**	**Neutral**	**Important**	**Extremely Important**
	1	**2**	**3**	**4**	**5**
Management displays a significant lack of moral fiber (1)					
Management personnel display a strong need for increased personal wealth (2)					
Close relations between keys managers and suppliers (3)					
Key managers live beyond their means (4)					
Key managers are schemers (5)					
Key managers are greedy (6)					
Key managers have (or one has) a questionable or criminal background **(7)**					
Dishonest or unethical management (8)					
Management turnover is high (9)					

Significant and unusual related – party transactions are present **(10)**					
Doubts about entity's ability to continue as a going concern (11)					
Misstatements detected in prior period audit (12)					
The company has solvency problems (13)					
Bank accounts or operations in tax – heaven jurisdictions (14)					
Threat of imminent bankruptcy (15)					
Company tries to cover up a temporary poor financial situation (16)					
Company holdings represent a significant portion of management's personal wealth (17)					
There is a need to cover up an illegal act (18)					
The company has significant assets subject to misappropriation (19)					
Poor retention of accounting material (20)					
Company loyalty, work moral and work motivation are poor (21)					
There appears to be continuous cash-deficit (22)					
Management failure to display appropriate attitude on internal control (23)					
Transactions are not recorded accurately and in a timely manner (24)					
Weak internal control environment (25)					
Organization is decentralized without adequate monitoring (26)					

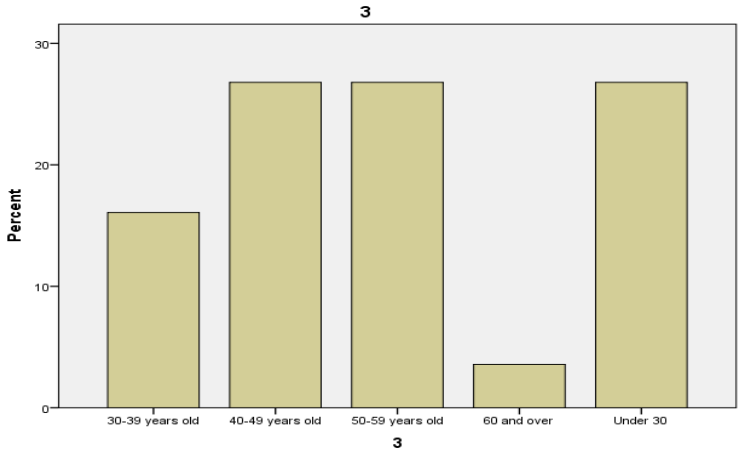
Poor data processing controls (27)					
Internal control designed by management is not followed (28)					

APPENDIX III: BAR CHARTS

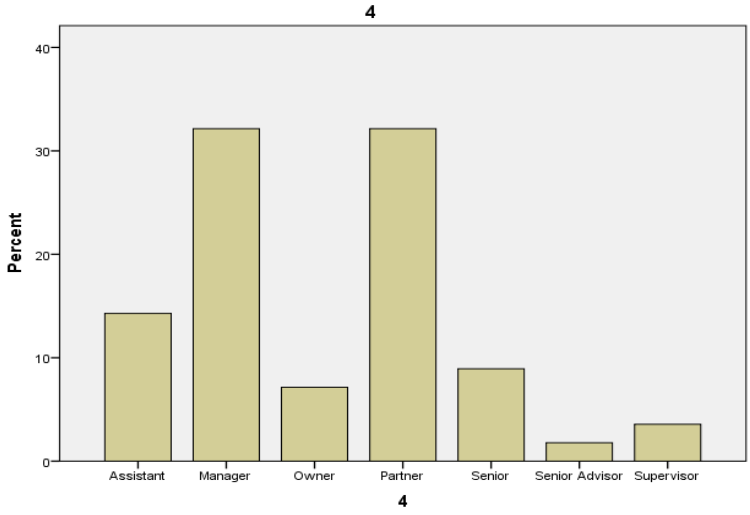
BAR CHARTS ACCORDING TO THE DEMOGRAPHICAL CHARACTERISTICS



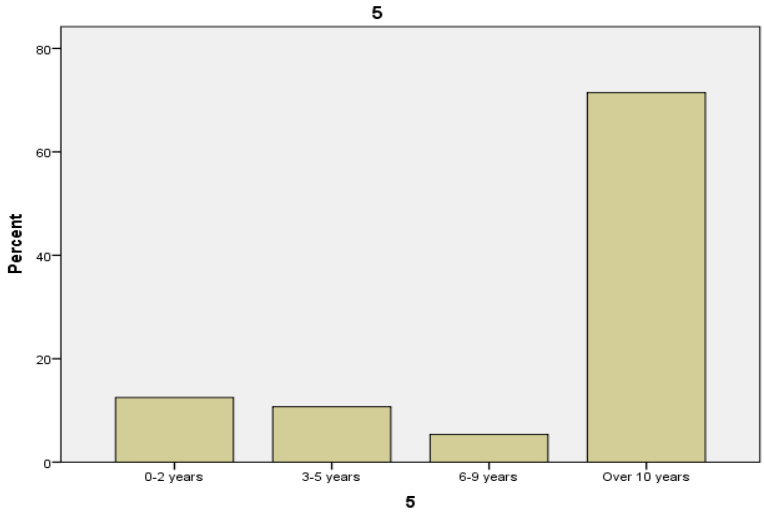
Bar chart 1: *Gender of the respondents*



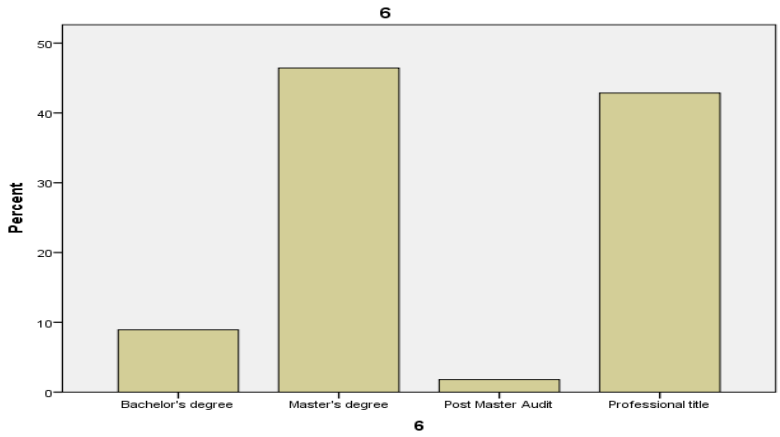
Bar chart 2: *Age of the respondents*



Bar chart 3: *Working position of the respondents*

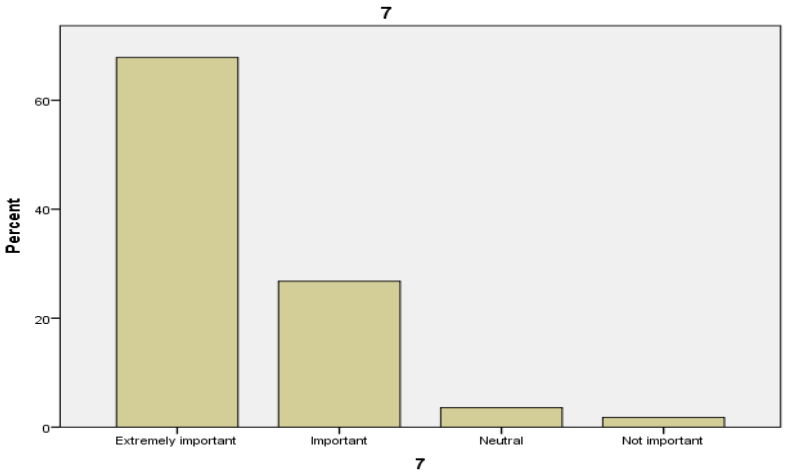


Bar chart 4: *Years of working experience of the respondents*

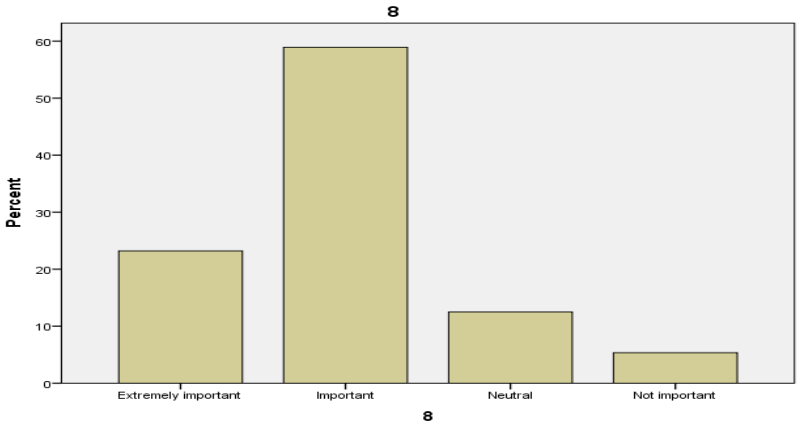


Bar chart 5: *Level of education of the respondents*

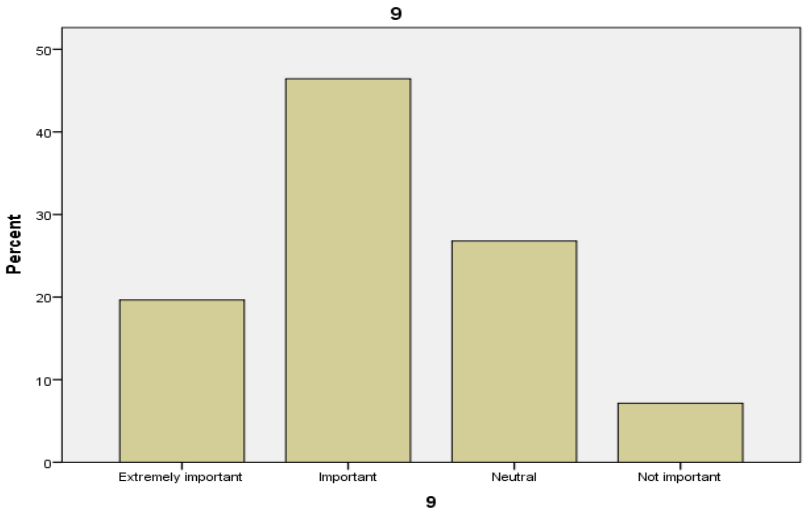
BAR CHARTS ACCORDING TO RED FLAGS



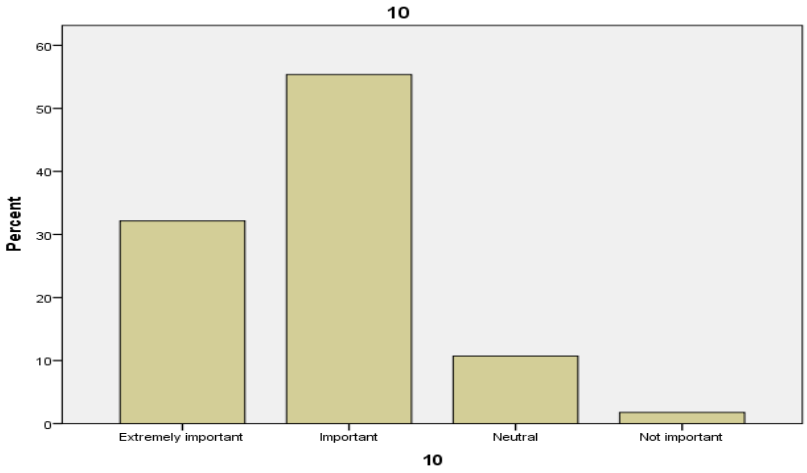
Bar chart 6: *Management displays a significant lack of moral fiber*



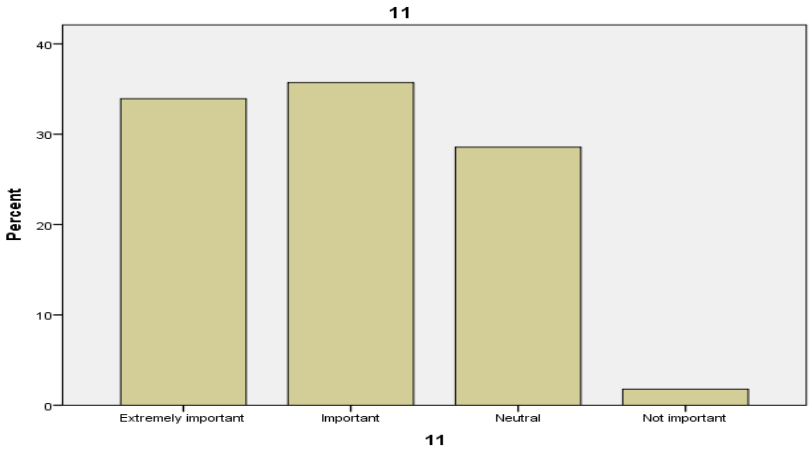
Bar chart 7: *Management personnel display a strong need for increased personal wealth*



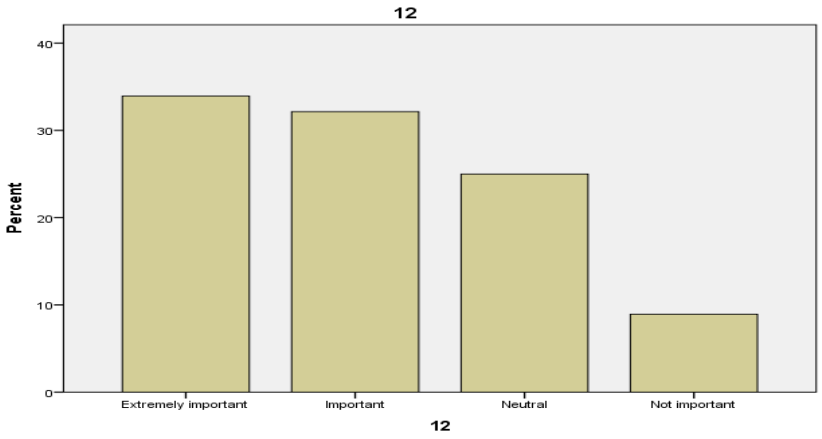
Bar chart 8: *Close relations between keys managers and suppliers*



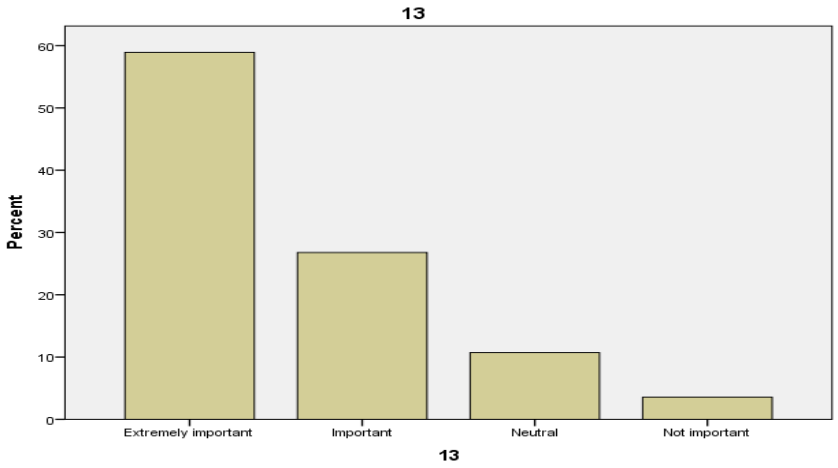
Bar chart 9: *Key managers live beyond their means*



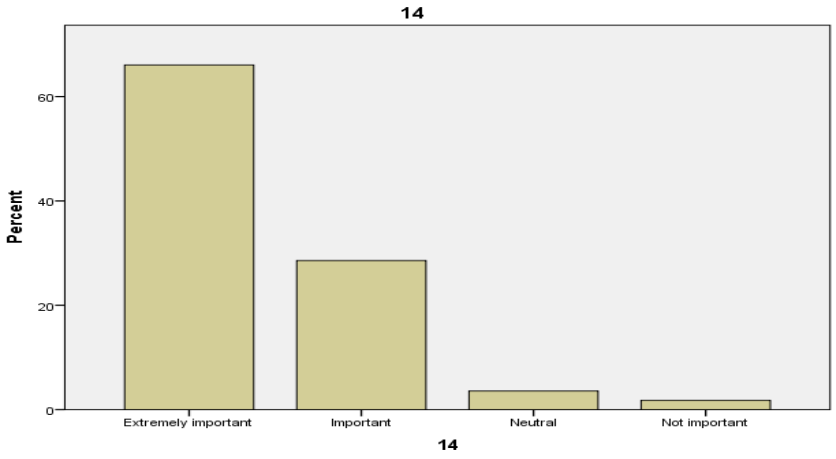
Bar chart 10: *Key managers are schemers*



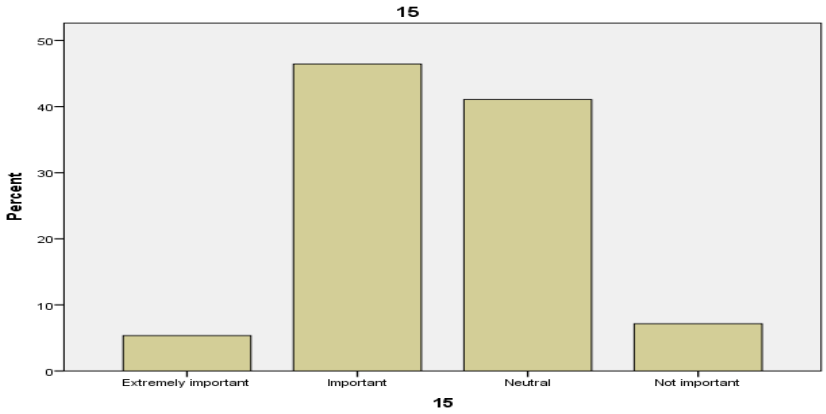
Bar chart 11: *Key managers are greedy*



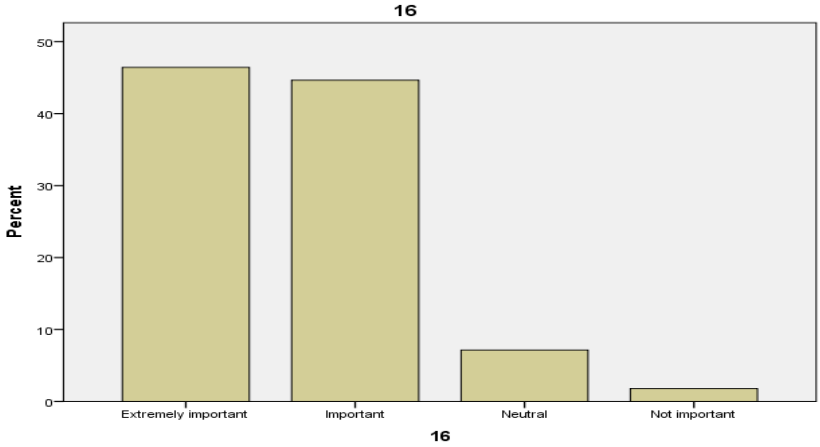
Bar chart 12: *Key managers have (or one has) a questionable or criminal background*



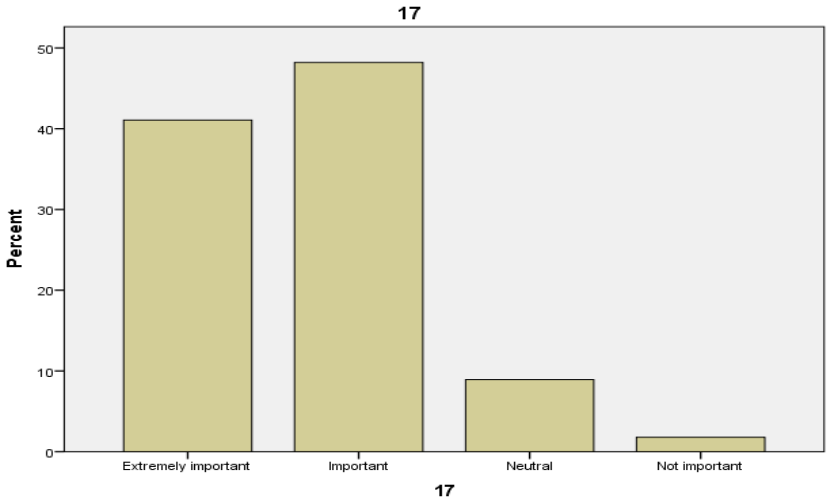
Bar chart 13: *Dishonest or unethical management*



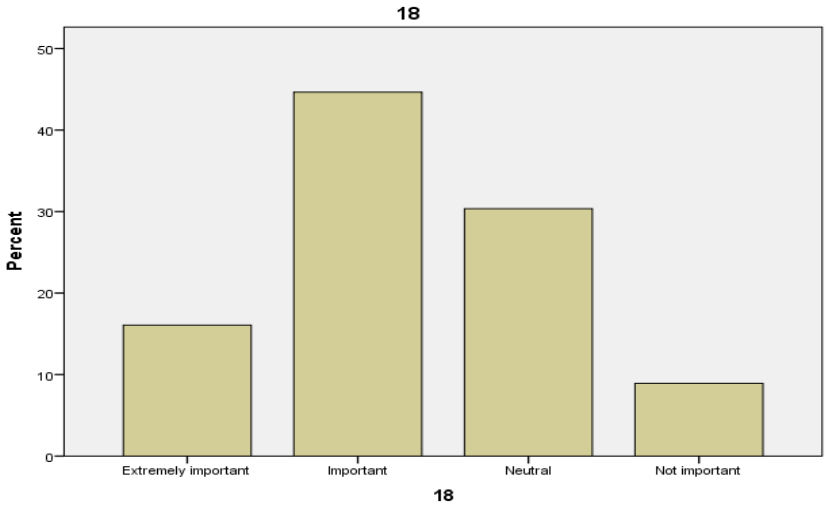
Bar chart 14: *Management turnover is high*



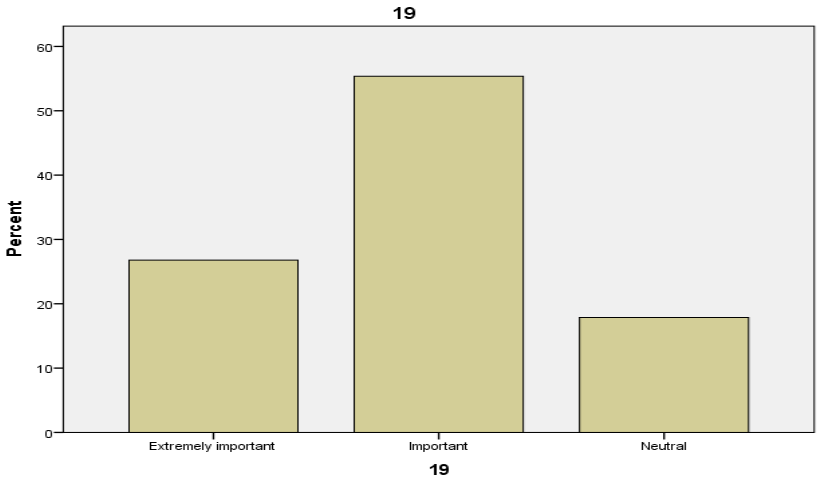
Bar chart 15: *Significant and unusual related – party transactions are present*



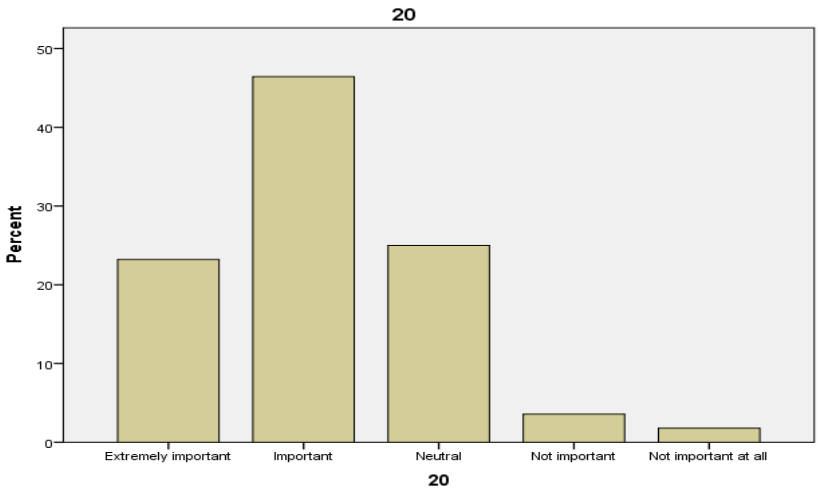
Bar chart 16: *Doubts about entity's ability to continue as a going concern*



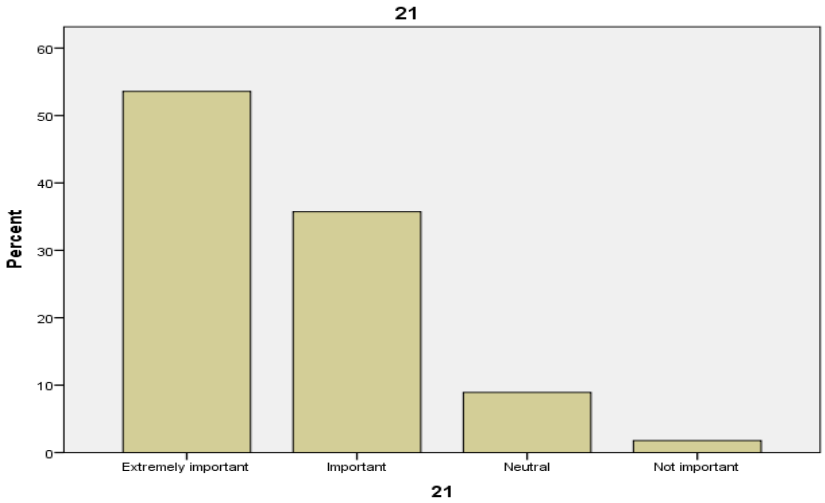
Bar chart 17: *Misstatements detected in prior period audit*



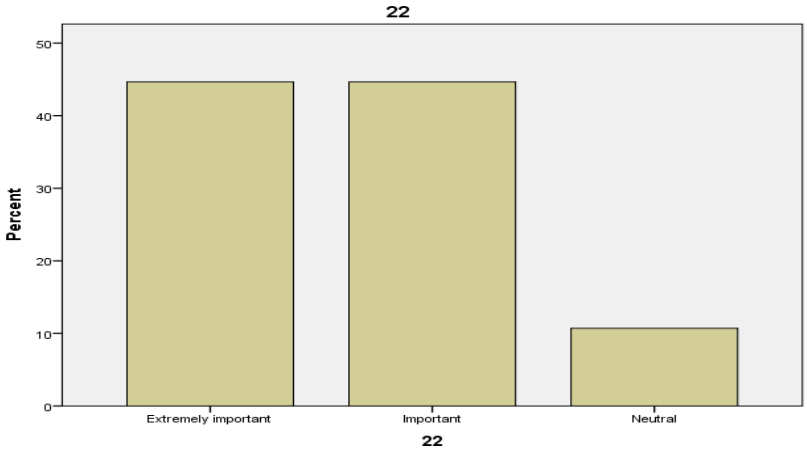
Bar chart 18: *The company has solvency problems*



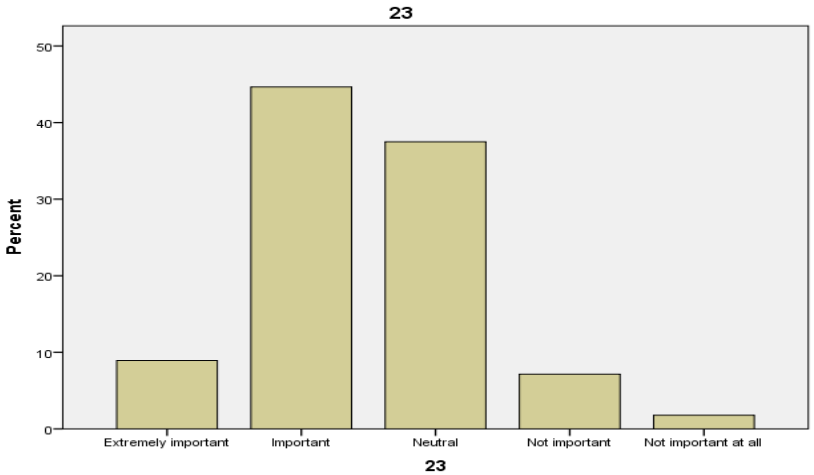
Bar chart 19: *Bank accounts or operations in tax – heaven jurisdictions*



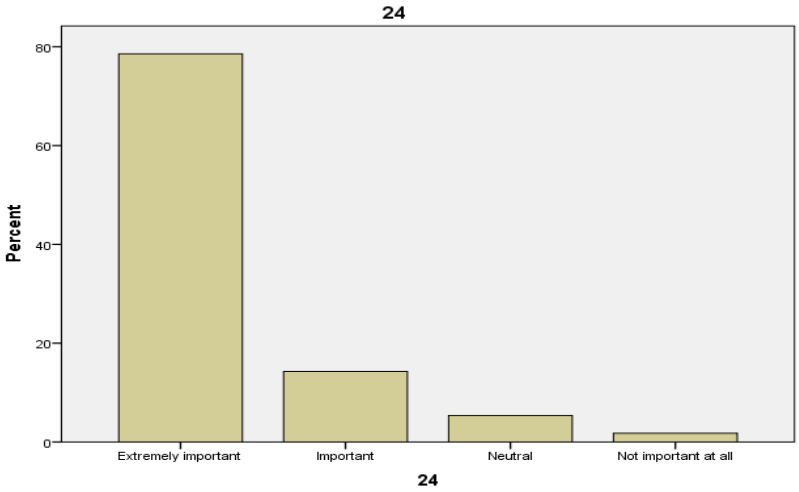
Bar chart 20: *Threat of imminent bankruptcy*



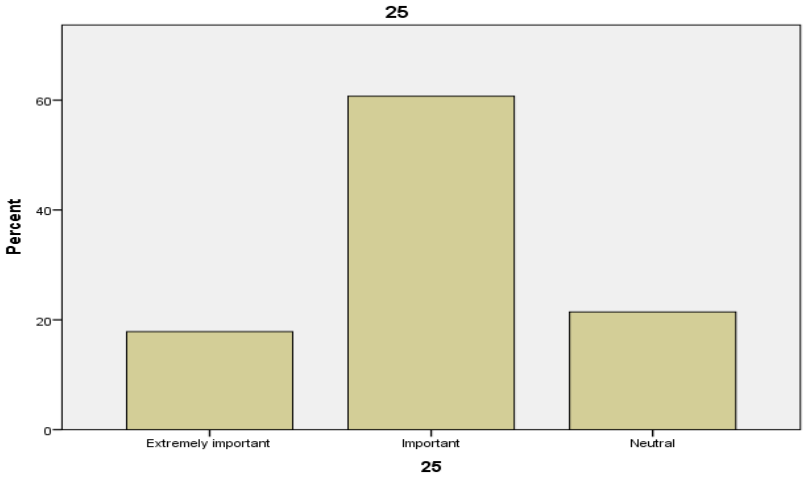
Bar chart 21: *Company tries to cover up a temporary poor financial situation*



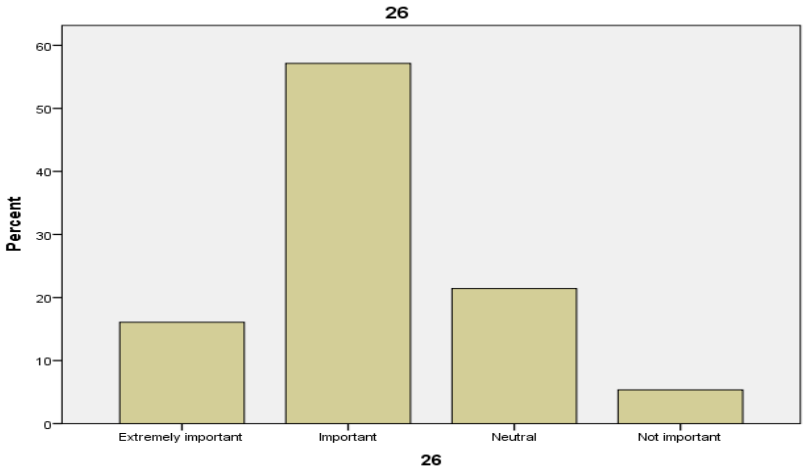
Bar chart 22: *Company holdings represent a significant portion of management's personal wealth*



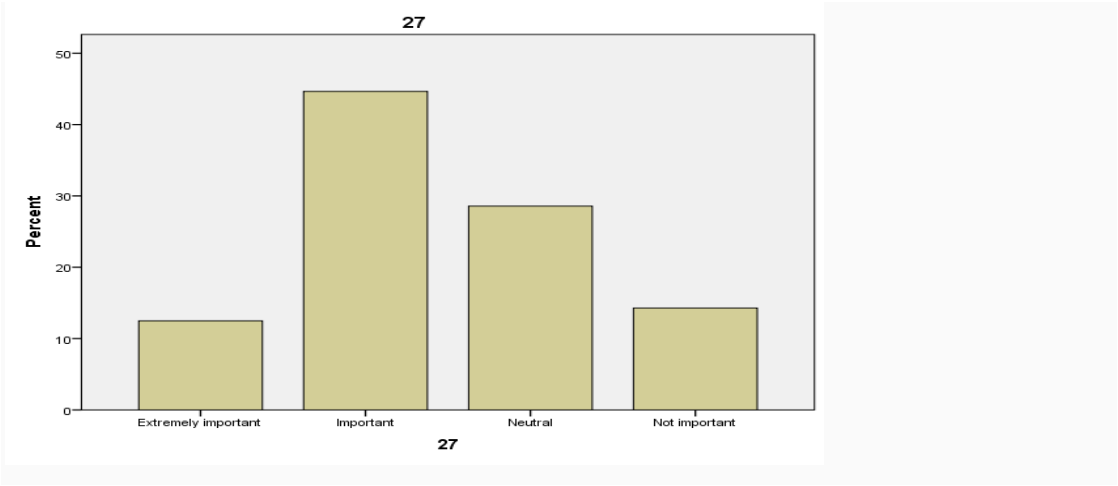
Bar chart 23: *There is a need to cover up an illegal act*



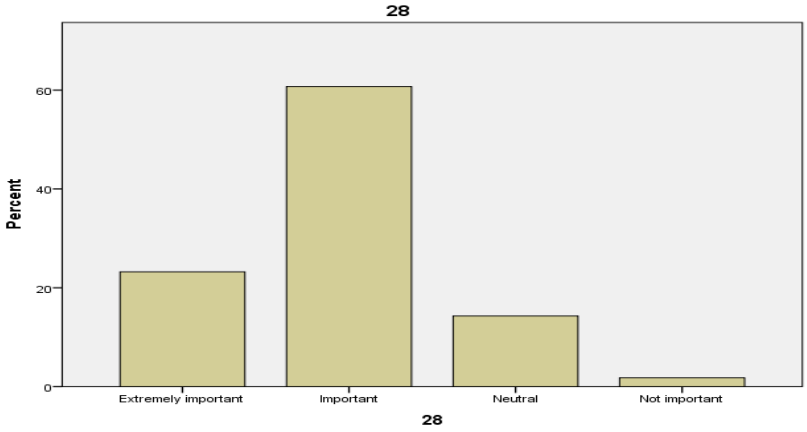
Bar chart 24: *The company has significant assets subject to misappropriation*



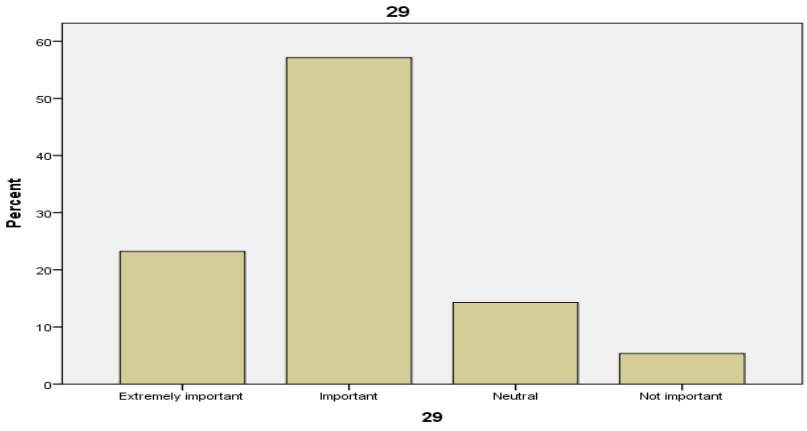
Bar chart 25: *Poor retention of accounting material*



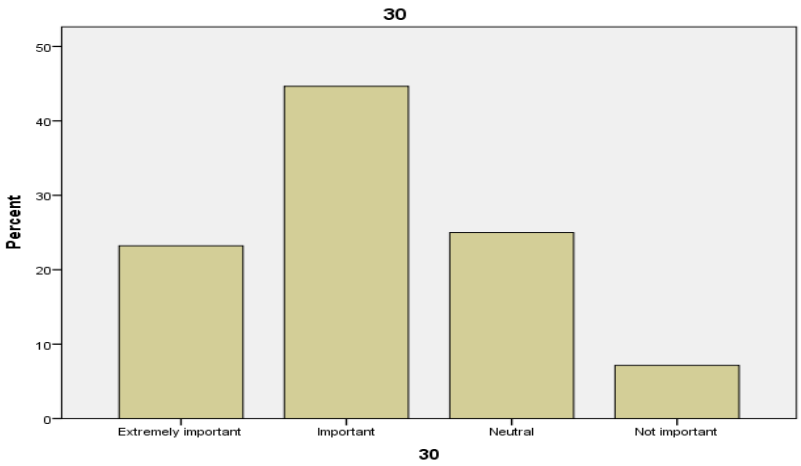
Bar chart 26: *Company loyalty, work moral and work motivation are poor*



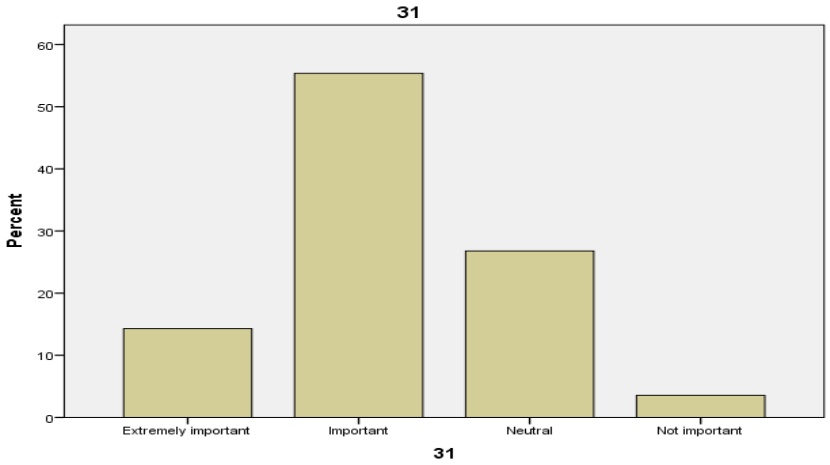
Bar chart 27: *There appears to be continuous cash-deficit*



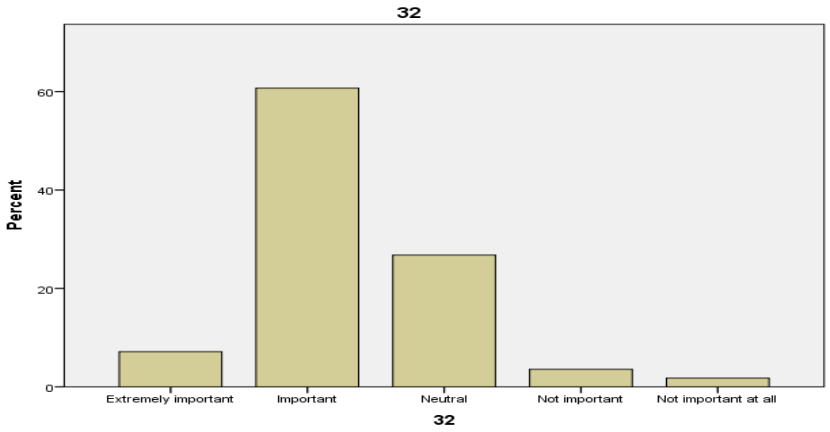
Bar chart 28: *Management failure to display appropriate attitude on internal control*



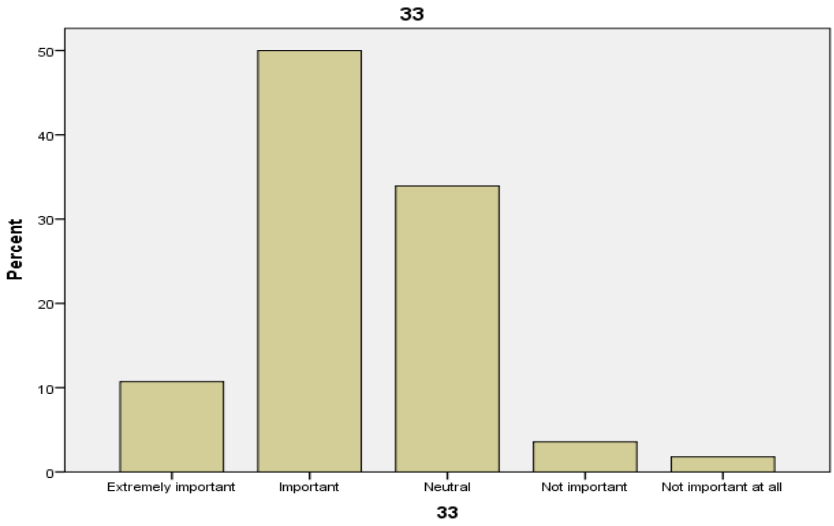
Bar chart 29: *Transactions are not recorded accurately and in a timely manner*



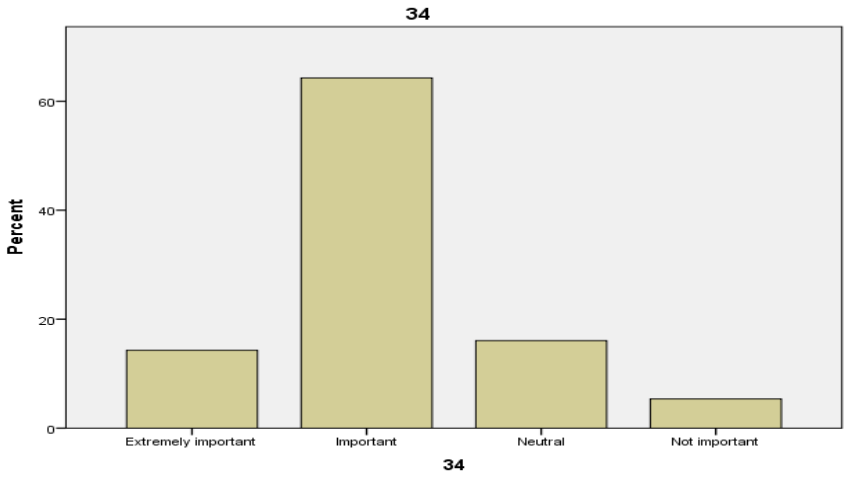
Bar chart 30: *Weak internal control environment*



Bar chart 31: *Organization is decentralized without adequate monitoring*



Bar chart 32: *Poor data processing controls*



Bar chart 33: *Internal control designed by management is not followed*

APPENDIX IV: LIST OF FIRMS

Baker Tilly

BDO

Crowe – Foederer

Deloitte

EY

Flynth

Grand Thornton

HLB Van Daal & Parthners

Koenen en Co

KPMG

Kroese Wevers

MTH

Reanda

RSM Netherlands

Schipper Groep

Van Oers

Visser & Visser

Witlox van de Boomen