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Master in Business Administration – Internal Audit

INTERNAL AUDIT THESIS

“The effects of Fraud and Corruption and the role of Internal Audit”

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Abstract

Fraud and corruption always existed and will continue to exist. No matter how effective internal controls are, they cannot totally eliminate fraud. The impact of fraud and corruption is substantial for an organization and the role of its internal audit is of high importance, because detecting or even preventing fraud from occurring can lead to minimum or no loss.

In this dissertation thesis, we try to examine the effects of fraud and corruption and the role of internal audit. We start with definitions of fraud and corruption, we analyze the reasons of fraud, then we have a theoretical approach about the effects of fraud and corruption, we continue with fraud risk assessment and finally we examine the role of internal audit in fraud prevention and fraud detection.

For the purpose of this thesis, a survey was conducted through a questionnaire addressed to employees that work in companies that have an internal audit department. The findings of this survey are presented in the last section.

Key Words

Fraud, Corruption, Internal Audit, Fraud Prevention, Fraud Detection, Fraud Risk Assessment

Introduction

Over the years, fraud and corruption continue to occur and have a significant impact on the companies. When someone tries to explain why fraud happens, he must consider various reasons. According to Cressey's theory of fraud triangle, fraud is committed when three factors exist at the same time. Financial pressure, opportunity and rationalization.

The aim of this dissertation thesis is to analyze the effects of fraud and corruption. In the first part of this thesis theoretical foundations are analyzed. Among others, the definitions of fraud, corruption and internal audit are described. Then, the substantial effects for an organization due to fraud and corruption are analyzed. The most important effects are: financial losses, reputational damage, tainted company morale, decrease of company's value and increased audit costs. A description follows of how a fraud risk assessment is conducted. In this section, the three basic steps are referred, which are to identify, assess likelihood and significance, and respond to fraud risks. After this, the role of internal audit in fraud prevention and fraud detection is analyzed. Fraud prevention has to do with policies, procedures, training and communication and fraud detection refers to activities and programs for the identification that fraud is occurring or has occurred.

In the second section, the empirical analysis for the subject under investigation is presented. A survey was conducted through a questionnaire addressed to employees in companies with an internal audit department. The results of the survey depict that almost all organizations have realized how important it is to implement preventive and detective fraud controls in order to mitigate the risk of fraud. Moreover, employees are aware of the fraud risk management policy which is a deterrent to fraudulent behavior. The important role of internal audit is acknowledged and the effects of fraud and corruption are evaluated according to their level of impact on the organizations.

THEORETICAL FOUNDATIONS

Definitions of Fraud and Corruption

We can define fraud from many perspectives. The legal one is the most appropriate because fraud is an illegal action. According to Black's Law Dictionary:

"Fraud consists of some deceitful practice or willful device, resorted to with intent to deprive another of his right, or in some manner to do him an injury. As distinguished from negligence, it is always positive, intentional."

Black's Law Dictionary, Bryan A. Garner, 10th Edition

For the purposes of this thesis, it is crucial to define fraud from the perspective of internal audit. In 2017, the Institute of Internal Auditors (IIA) revised the Standards in the International Professional Practices Framework (IPPF). In the glossary of the Standards stands the definition of fraud:

"Any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage."

International Standards for the Professional Practice of Internal Auditing (Standards), Institute of Internal Auditors, 2017

Two more definitions can help us understand in which concept internal audit defines fraud:

"Fraud is any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving a gain."

Managing the Business Risk of Fraud: A Practical Guide sponsored by IIA, AICPA, and ACFE

"The use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets."

2018 Report to the Nation on Occupational Fraud, Association of Certified Fraud Examiners (ACFE)

This last definition introduces us to occupational fraud (internal fraud) which is the main category of fraud that internal audit deals with. Occupational fraud is the fraud that takes place in the workplace. There are three types of occupational fraud: corruption, asset misappropriation and financial statement fraud.

According to ACFE, corruption is a scheme in which an employee misuses his or her influence in a business transaction in a way that violates his or her duty to the employer in order to gain a direct or indirect benefit.

Below is ACFE's Occupational Fraud and Abuse Classification System, also known as the fraud tree where the types of fraud are classified:

THE FRAUD TREE

OCCUPATIONAL FRAUD AND ABUSE CLASSIFICATION SYSTEM

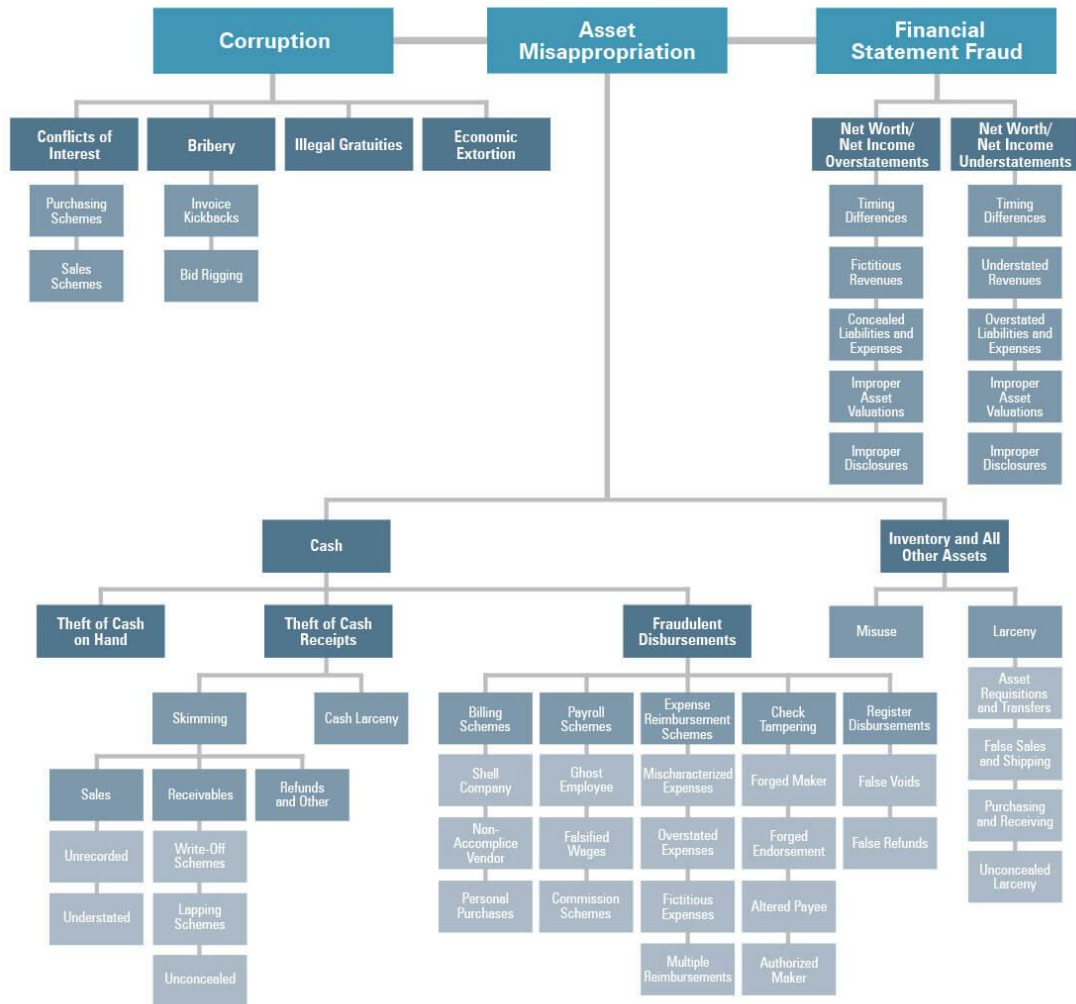


Exhibit 1: The Fraud Tree, Source: ACFE

Reasons of Fraud and Corruption

There have been done various researches on the subject of fraud. Most of them were trying to explain why someone commits fraud. The most widely accepted research is the one that Donald R. Cressey conducted. He created a model that explained why someone commits fraud. According to Cressey, an ordinary person can commit fraud when the following three factors exist at the same time:

- **Financial Pressure:** The perpetrators feel pressure due to a financial problem that they cannot share.

- **Opportunity:** The ability to commit fraud and the belief that if they commit the crime, there is no risk of getting caught. In other words, the perpetrators have the technical skill to do it and they know they can do it (they have heard it happened again, they have seen dishonest behavior from other employees or they just know that they can take advantage of their position).
- **Rationalization:** The perpetrators justify their action and they believe that they have done nothing wrong.

Cressey's model that explains why someone commits fraud is called The Fraud Triangle and it is depicted below:



Exhibit 2: The Fraud Triangle, D. Cressey, Source: ACFE

Except the three reasons that are described above by the Fraud Triangle, some researches have added other factors. The Fraud Scale by Steve Albrecht, Keith Howe and Marshall Romney stated that the three factors are pressure, opportunity and personal integrity. The concept is that when pressure and opportunity are high and personal integrity is low, then the probability of fraud is high.

The Fraud Diamond by David Wolfe and Dana Hermanson added to pressure, opportunity and rationalization the individual's capability which is the personal characteristics and abilities that assist someone to commit fraud.

Finally, Richard Hollinger and John Clark introduced job dissatisfaction as the main cause of fraud. Employees, especially the young ones, who are dissatisfied with their jobs are the most likely to become fraudsters. They believe that they rectify a perceived inequity.

The above factors are the root causes of fraud. There may be other reasons that are not easily identified in the above described. For instance, personal characteristics such as greed and generally an excessive interest in acquiring money or material things. Furthermore, the organizational environment and culture is a factor. For example, when there are instances of fraud and management does not react or reacts with a mild punishment. This is most probable to encourage more frauds within the company in the future.

Effects of Fraud and Corruption

Fraud and corruption have a significant impact on the activity of an organization regardless of its size. However, according to Report to the Nations, 2018 Global Study on Occupational Fraud and Abuse by ACFE, “the size of an organization’s staff can directly affect both the opportunity for fraud and the ability to enact certain anti-fraud mechanisms. Larger entities typically have more resources to invest in their anti-fraud programs, as well as a greater ability to separate duties among staff members to help prevent fraud; however the large staff size can also mean more potentially dishonest employees who might attempt schemes and more complex processes and transactions, which can increase the risk of fraud.” So, 2018 Report to the Nations, shows that small organizations (with fewer than 100 employees) had the highest percentage of fraud cases and the largest median loss. In some cases, fraud can threaten even the existence of the organization itself. The most substantial effects of fraud and corruption are the following:

- **Financial Losses:** ACFE estimates that a typical organization loses 5% of its gross revenues each year due to occupational fraud. In Report to the Nations, 2018 Global Study on Occupational Fraud and Abuse by ACFE, it is stated that if we try to project this finding to total global fraud loss, despite the fact that there are some limitations such as that we do not know the amount of frauds that go undetected or unreported or that in the frauds we do know, the full amount of loss might never be calculated, we would result that total global fraud loss is nearly USD 4 trillion. Apart from the obvious cost that a fraud might have which is easily calculated (for instance when someone is stealing cash and we know the exact amount that he has stolen), there are some additional costs that may occur. Depending on the fraud, an organization may be burdened with fines, sanctions or lawsuits which have severe financial impact. The financial damage has further consequences within the company as it causes a chain reaction that may lead to freezing or decrease of salaries, a cut of employees perks, increased demand for more sales to close the gap that the financial loss

from the fraud caused (which additionally could lead to bad sales) and in extreme situations it could lead to firing of a part of staff.

- **Reputational Damage:** Fraud and corruption within an organization disrupt its public image. Not only investors but also other business partners cannot trust an organization with a bad record. Even the customers could leave and go to the competition. Potential investors are discouraged and the already existed ones lose their trust and withdraw their support. Some consequences are that the organization may have problems in participating in trade associations or strategic alliances, it may have to pay higher prices for credit or even be denied credit from partners or banks.
- **Company Morale:** Morale inside the company can be irreparably tainted. If fraud has taken place at the high management level, it can have devastating effect on the lower level employees' morale as they may feel that they work for a company that there is no moral integrity. On the other hand, if fraud occurs in the lower sections of hierarchy, the problem still exists, because high management will find it hard to trust its employees in the future, so they have to intensify compliance within the company (resulting to slowing down the operations of the company), but also the co-workers of the fraudster will blame themselves for not noticing the signs of the fraud and they will find it more difficult to trust their co-workers in the future. Furthermore, having worked for a company where well-known fraud case has occurred, will make it more difficult for employees that will seek for another job in the future, because they will be haunted by bad reputation regardless the fact that they had no involvement to the fraud.
- **Company's Value Decrease:** There is a direct connection between a company's value and its reputation in the market. As it is mentioned above, investors can very quickly lose their trust and withdraw their support when company is linked with fraud accusations. The results of this could be a rapid fall of the stock price, if the company is in the stock market or simply loss of value if it is not. There have been numerous examples for this thesis in the past both in Greek and in global economy. There is a recent example in Greece, the case of Folli Follie company (in which a huge fraud considering fraudulent financial statements was revealed) where we had a rapid decrease in company's capitalization from 1.6 billion euros to 322 million, and there is a very good possibility that the stock's value will be zero when it starts negotiating in the market again.
- **Increased Audit Costs:** The fallout from the reveal of a fraud in an organization also includes the cost of increased precautionary measures in the future. More effective audit controls should be established in the organization to prevent

similar events in the future and that may have a significant cost. But it can also be really costly to conclude an ongoing investigation due to employees' working hours being lost in order to assist the research. Furthermore, it could be inevitable to hire external fraud examiners which would greatly increase audit costs.

Definition of Internal Auditing and relation to Fraud

The IIA's Definition of Internal Auditing states, "Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes."

In relation to fraud, this means that internal auditing provides assurance to the board and to management that the controls they have in place are appropriate given the organization's risk appetite.

Managing the Business Risk of Fraud: A Practical Guide sponsored by IIA, AICPA, and ACFE

Fraud Risk Assessment

"Fraud risk is the probability that fraud will occur and the potential consequences to the organization when it occurs."

IPPF-Practice Guide, Internal Auditing and Fraud, IIA, December 2009

Companies consist of individuals who have their own personal agendas. Because of that there is always the risk that someone inside the company decides, for his own reasons, to commit fraud. This is the reason why there should always be established a fraud risk assessment scheme within the organization. Otherwise, it would be impossible to prevent or detect fraud.

In 2008, the Fraud Guide, which is a guidance paper titled "Managing the Business Risk of Fraud: A Practical Guide" and it is a collaboration between the Institute of Internal Auditors (IIA), the American Institute of Certified Public Accountants (AICPA) and the Association of Certified Fraud Examiners (ACFE), introduced the following principal: "Fraud risk exposure should be assessed periodically by the organization to identify specific potential schemes and events that the organization needs to mitigate".

Fraud risk assessment is the process followed by an organization in order to detect, assess and develop responses to potential fraud risks. More specific, according to the Fraud Guide, we quote **the three basic steps** a fraud risk assessment should follow:

1. **Identify inherent fraud risk:** Gather information to obtain the population of fraud risks that could apply to the organization. Included in this process is the explicit consideration of all types of fraud schemes and scenarios; incentives, pressures, and opportunities to commit fraud; and IT fraud risks specific to the organization.
2. **Assess likelihood and significance of inherent fraud risk:** Assess the relative likelihood and potential significance of identified fraud risks based on historical information, known fraud schemes, and interviews with staff, including business process owners.
3. **Respond to reasonably likely and significant inherent and residual fraud risks:** Decide what the response should be to address the identified risks and perform a cost-benefit analysis of fraud risks over which the organization wants to implement controls or specific fraud detection procedures.

Before starting a fraud risk assessment, management should assemble a team from different sections of the organization with varying knowledge, skills and perspectives. This team may include personnel from:

- accounting and finance department
- risk management department
- legal and compliance department
- internal audit department
- non-financial business units (to use their knowledge of every day operations)

If the organization does not have one or more of the above, it may have to resort to outside help by outsourcing that particular section to specialists from the market.

The team assembled should meet and exchange ideas about the potential fraud threats. This can be done in various forms such as interviews, surveys and facilitated meetings. It is very important the management of the organization to participate in these meetings, as they have the responsibility for the effective function of the process of fraud risk assessment.

The first step of fraud risk assessment, as mentioned above, is to identify fraud risks. This step provides the foundation for the next steps in the fraud risk assessment process. The essential elements that should be considered in order to build a complete and comprehensive fraud risk assessment are the following:

- **Incentives, Pressures and Opportunities:** The team should gather as many motives (financial or non-financial), pressures (to achieve performance or targets) and opportunities (especially in areas with weak internal controls and lack of segregation of duties) to commit fraud as possible in order to find all scenarios that organization is vulnerable.
- **Risk of Management's Override of Controls:** Although management is most times trusted that make good decisions, the potential for them to override controls is existing because they know the controls in place.

- **Population of Fraud Risks:** There are some fraud risks that apply to all organizations and other that are met to certain industries or countries. It is crucial to understand the processes of the organization by interviewing the staff, so that you identify the risks. Such information can also be obtained from other sources like industry organizations, associations and consulting firms that may have documented them.
- **Fraudulent Financial Reporting:** In this category independent outside auditors could help in the interviews and meetings because they have the relevant experience.
- **Misappropriation of Assets:** First of all the process should start from identifying the assets that the organization has and the location these assets are maintained, then the personnel that have control over or access to these assets. Information technology can play an important role in controlling certain misappropriation of assets risks.
- **Corruption:** The types of corruption that may be applicable to the organization, depends on organization's industry and countries of operation. In industries that are connected to the public sector corruption is more common as it is in developing countries.
- **Information Technology and Fraud Risk:** The importance of having well-organized and up to date anti-fraud controls in operations that are connected to internet is impossible to be overestimated nowadays. Big part of operations is conducted through computers, so there must be consideration to avoid unauthorized access to accounting applications, theft of tangible and intangible assets, as well as misuse of customer data.
- **Other Risks:** Regulatory and legal misconduct (conflicts of interest, insider trading, theft of competitor trade secrets, anti-competitive practices, environmental violations, and trade and customs regulations in areas of import/export) and reputation risk.

The second step is to assess the likelihood and the impact of fraud risks. The most commonly used factor to determine the likelihood of a fraud risk to occur is the past events within the company or in other companies of similar industry, size or geographical location. Other factors are the number of transactions and the number of people in the approving process. It is common organizations to categorize potential frauds in three buckets: probable, reasonably possible and remote.

The impact of a fraud risk can be divided in two categories: the financial and monetary impact, and non-financial which includes damage in brand value, reputation and possible law or regulatory liabilities.

Finally, **the third step** is the organization's response to fraud risks. The organization's response to fraud is determined by the senior management and it depends on organization's risk tolerance. Usually, an organization has lower tolerance to fraud risks

than to other risks and there are many fraud risks that organization has zero tolerance. Risk tolerance but also response to fraud risk varies between the organizations. The COSO's Enterprise Risk Management - Integrated Framework can be applied when considering responses to fraud risks. More specifically:

- **Avoid risk:** The organization cannot allow not even a single incident to occur (no tolerance)
- **Reduce risk:** The organization cannot avoid the risk, because it affects its objectives (no or little tolerance). In this situation, preventive and detective controls are designed to reduce the likelihood of the risk to occur.
- **Share risk:** In order to reduce the likelihood of a risk, operation of preventive and detective controls is shared with a better equipped organization to execute such controls.
- **Accept risk:** If the risk is tolerable, the organization may accept it and not make any efforts to manage the risk.

There are thousands of controls that could be put in place. The organization has to decide which controls to implement considering cost and time-consuming. Due to cost and time-consuming, there are risks with zero tolerance that the organization may decide not to put controls to address them and if fraud occurs, then zero tolerance will be applied. Generally, the organization must be selective and efficient and implement controls that deliver the most benefit regarding their cost.

The role of Internal Audit in Fraud Prevention

No matter how many fraud prevention controls are implemented in an organization, fraud will always exist. There is no way to totally prevent fraud for various reasons. Many times the cost of control is larger than the benefit. For this reason, organizations put in place both preventive and detective controls. Fraud prevention has to do with policies, procedures, training and communication, while fraud detection involves activities and programs designed to identify fraud that is occurring or has occurred. As it was mentioned above, we cannot ensure that fraud will not exist, but we can mitigate the risk by preventive measures.

Fraud prevention starts by making all the personnel in the organization aware of the fraud risk management program. Awareness is a strong deterrent to fraud. People should know the types of fraud, what misconduct might occur, and disciplinary, criminal and civil actions that the organization could take against the fraudsters. Employees should feel that all techniques referred to the fraud risk management program are real and will be imposed. This deterrence from awareness of the fraud risk

management program shows how close the meaning of prevention and deterrence are. An effective preventing control is also a strong deterrence control.

COSO's Enterprise Risk Management - Integrated Framework is a tool to assess and improve internal control systems to fight fraud. The five components of this framework (control environment, risk assessment, control activities, information and communication, and monitoring) suggest how to design the anti-fraud controls. The IPPF - Practice Guide of Internal Auditing and Fraud (December 2009) describes the five components of COSO's ERM – Integrated Framework as it is quoted below:

- **Control Environment:** Elements of a strong control environment help prevent fraud including the following:
 - A code of conduct, ethics policy, or fraud policy to set the appropriate tone at the top.
 - Ethics and whistleblower hotline programs to report concerns.
 - Hiring and promotion guidelines and practices.
 - Oversight by the audit committee, board, or other oversight body.
- **Risk Assessment:** Establishing a fraud risk assessment process that considers fraud risk factors and fraud schemes.
 - Involving appropriate personnel in the fraud risk assessment process.
 - Performing fraud risk assessments on a regular basis.
- **Control Activities:** Policies and procedures for business processes, including appropriate authority limits and segregation of incompatible duties.
- **Information and Communication:** Promoting the importance of the fraud risk management program and the organization's position on fraud risk both internally and externally through corporate communications programs.
 - Designing and delivering fraud awareness training.
 - An affirmation or certification process to confirm employees have read and understand corporate policies and that the employees are in compliance with the policies.

- **Monitoring:** Providing periodic evaluation of anti-fraud controls.
 - Using independent evaluations of the fraud risk management program by internal auditing or other groups.
 - Implementing technology to aid in continuous monitoring and detection activities.

According to the Fraud Guide, fraud prevention should include the following procedures:

- **Human Resources Procedures:**
 - **Performing Background Investigations:** When someone has committed fraud in the past, he is more likely to do it again than someone who has not. A background investigation helps to find any issues of personal integrity that suggest someone is not suitable for the job and hiring him is an increased and possibly unacceptable risk. However, organizations and their legal departments should take under consideration that searching someone's past is applicable to laws and regulations and might need to follow certain procedures such as to receive a consent. Apart from employees, background investigations can be performed to other stakeholders (customers, vendors, partners etc.).
 - **Anti-fraud Training:** It is essential that all employees are educated on the fraud risk management program of the organization. Staff must know what fraud is, its red flags and how it can affect the organization. Furthermore, they must be aware of the code of conduct, how they can report fraudulent activity, what the consequences that fraudsters have are. All these training gives the tone from the top and informs the employees about the framework in which the organization operates regarding to fraud.
 - **Evaluating Performance and Compensation Programs:** Evaluating performance and competence helps to avoid fraudulent behaviour. When an employee is dissatisfied because he is not recognized for what he does or he has not been promoted although he deserves it, then he might make the rationalization that he is justified to commit fraud. Furthermore, the organization must evaluate whether the compensation programs are appropriate. Large bonuses related to short-term performance could lead managers to use illegal means in order to get those bonuses.

- **Conducting Exit Interviews:** Conducting exit interviews is mainly a detective control, because when someone is leaving from the organization, he can more easily refer to fraudulent behaviour of his colleague, taking under consideration that they do not work together any more. These interviews could also have a preventive effect, because when someone knows that these interviews exist, it serves as a deterrent to fraud.

- **Authority Limits:**

To avoid cases of abuse there should be authority limits in decision making and transactions. In most cases this is achieved by having the approval of two individuals. The existence of control activities and segregation of duties can assist fraud prevention.

- **Transaction-level Procedures:**

Board members or employees within the organization can make inappropriate transactions with third-party entities or individuals and commit fraud. There should be controls in place and related-party transactions should be examined with scrutiny before they are processed in order to avoid fraud activity.

All the anti-fraud controls and monitoring processes must be documented in details with description to the roles and responsibilities of all parties involved. If these controls are ineffective, then this must be indicated. There should also be a documentation of the test procedures for the adequate operation of anti-fraud controls with their results.

The adequacy of anti-fraud controls should be assessed and periodically reassessed in order to have an updated and complete fraud prevention in the organization. This process requires expert skills and knowledge, and for this reason the Institute of Internal Auditors has created some tools that can help (e.g. Fraud Prevention Scorecard which helps to identify and assess some of the most common fraud prevention areas). The monitoring of anti-fraud controls should be continuous and the fraud prevention program should be communicated to all stakeholders of the organization (employees, vendors etc.), so that everyone understand that there is a strong commitment of the organization to prevent fraud.

The role of Internal Audit in Fraud Detection

According to the principal 4 of the Fraud Guide, “Detection techniques should be established to uncover fraud events when preventive measures fail or unmitigated risks are realized.”

An organization must have fraud detection controls as a safety valve in cases that fraud prevention does not operate effectively, segregation of duties fail due to collusion among individuals or management overrides controls.

Detective controls are done secretly in contrast to preventive controls that are apparent and recognizable. They operate in the background of everyday business activities. More specifically, according to the Fraud Guide, fraud detective controls will usually:

- Occur in the ordinary course of business
- Draw on external information to corroborate internally generated information
- Formally and automatically communicate identified deficiencies and exceptions to appropriate leadership
- Use results to enhance and modify other controls

The most common and important detection methods are:

- **Whistleblower Hotlines:**

Whistleblower hotlines are the most effective detective controls. They can also be preventive, because their existence make the potential fraudsters to fear that they will get caught. In order to operate adequately, whistleblower hotlines must be easy to use and accessible 24 hours a day. It is essential that hotlines ensure callers’ anonymity and provide assurance to employees that will not have any consequences by their superiors. Furthermore, suspected fraud should be reported via hotlines to the right individual, for instance when the perpetrator is in senior management of the organization, the caller must be able to report directly to audit committee. Finally, there should be assured that every report will be investigated in an appropriate and timely manner.

- **Process Controls:**

Process controls include reconciliations, independent reviews, physical inspections or counts, certain types of analyses, internal audits or other monitoring activities. These controls can detect fraudulent activity but errors too. There is a clear correlation between significance of the fraud risks and the level of sensitivity a detective control operates.

- **Proactive Fraud Detection Procedures:**

Proactive fraud detection procedures are the use of various tools to detect fraud. Such as tools are data analysis, continuous auditing techniques and other

technology tools. Data analysis uses technology to discover information for trends, irregularities and potential risk within large amount of transactions. Furthermore, data analysis is used to discover relationships between people, organizations and events. Data analysis can also be used to evaluate the effectiveness of fraud controls.

According to the Fraud Guide, data analysis, data mining and digital analysis can:

- Identify hidden relationships among people, organizations and events
- Identify suspicious transactions
- Assess the effectiveness of internal controls
- Monitor fraud threats and vulnerabilities
- Consider and analyze thousands or millions of transactions

As in the case of preventive controls, detective controls as well should be documented and evaluated for their performance and effectiveness with a descriptive reference to the testing procedures and their results. There should also be documented the roles and responsibilities of everyone involved.

When an organization builds its fraud detection plan, this is not public. Some information must be kept confidential and only the board should approve who has access to it and up to what level. And after the plan is completed, then the team who created it should develop a public communication regarding the plan, because when the stakeholders of the organization (employees, vendors etc.) become aware of the existence of the fraud detection plan, this will be a strong deterrent to fraud. However, it is important that not all the details and characteristics of the plan should be revealed.

Fraud detection controls should be continuously monitored and evaluated in order to be improved. The fact is that there are thousands of controls that can detect fraud. Organizations must adopt those controls that have the greatest likelihood of detecting fraud risks.

The role of internal audit does not stop to fraud prevention and fraud detection. After detecting fraud, fraud investigation and corrective action are the final steps of an effective fraud risk management program.

IIA Standards related to Fraud

The International Standards for the Professional Practice of Internal Auditing in the International Professional Practices Framework (IPPF) include some standards that are related to fraud. These standards make it clear that internal auditors must be focused on fraud. Standards are considered as a guidance for internal auditors. Below we quote the standards:

- **Standard 1200: Proficiency and Due Professional Care**
1210. A2 – Internal auditors must have sufficient knowledge to evaluate the risk of fraud and the manner in which it is managed by the organization, but are not

expected to have the expertise of a person whose primary responsibility is detecting and investigating fraud.

- **Standard 1220: Due Professional Care**

1220. A1 – Internal auditors must exercise due professional care by considering the:

- Extent of work needed to achieve the engagement's objectives
- Relative complexity, materiality, or significance of matters to which assurance procedures are applied
- Adequacy and effectiveness of governance, risk management, and control processes
- Probability of significant errors, fraud, or noncompliance and
- Cost of assurance in relation to potential benefits.

- **Standard 2060: Reporting to Senior Management and the Board**

The chief audit executive must report periodically to senior management and the board on the internal audit activity's purpose, authority, responsibility, and performance relative to its plan. Reporting must also include significant risk exposures and control issues, including fraud risks, governance issues, and other matters needed or requested by senior management and the board.

- **Standard 2120: Risk Management**

2120. A2 – The internal audit activity must evaluate the potential for the occurrence of fraud and how the organization manages fraud risk.

- **Standard 2210: Engagement Objectives**

2210. A2 – Internal auditors must consider the probability of significant errors, fraud, noncompliance, and other exposures when developing the engagement objectives.

EMPIRICAL ANALYSIS

Purpose, Methodology and Details of the Survey

This survey examines if employees are aware of fraud prevention and fraud detection measures, how they evaluate these measures, how they evaluate the effects of fraud and corruption, and how the role of Internal Audit is perceived. For this purpose, a questionnaire was conducted and sent via email to 103 employees in several industries. The answers were anonymous and reached the number of 72.

The survey was conducted from September 2018 until October 2018. The questionnaire consists of 22 questions or statements. All of these questions are “closed-end” and participants are requested to choose a response from certain options. Most of these questions follow the Likert Scale with a 5 point scale from positive to negative end and mainly from “strongly agree” to “strongly disagree”. There are also three questions that have to do with demographic details (job experience, area of industry and whether the respondents are internal auditors) and their results are presented in the next chapter “Sample Analysis”.

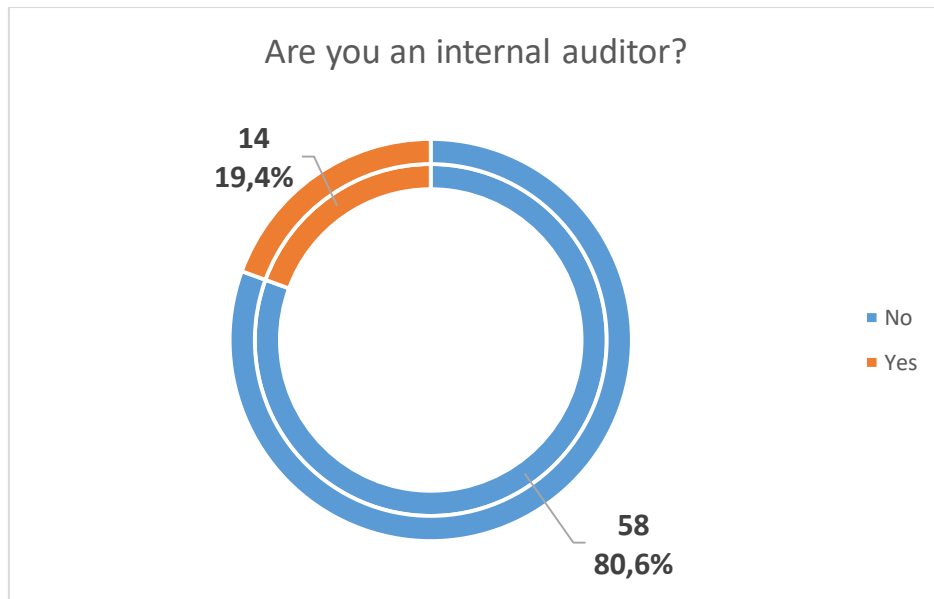
The questionnaire was created based on the subject of this thesis “The effects of fraud and corruption and the role of Internal Audit” and it help us to draw conclusions about the level of impact of the effects of fraud and corruption and the role of internal audit. Each question is analyzed with a statistical analysis of the variables with the use of pivot tables. Then to present and interpret the results in a more comprehensive way, we use a pie or a clustered column chart.

Sample Analysis

Below are three key demographics of the survey respondents.

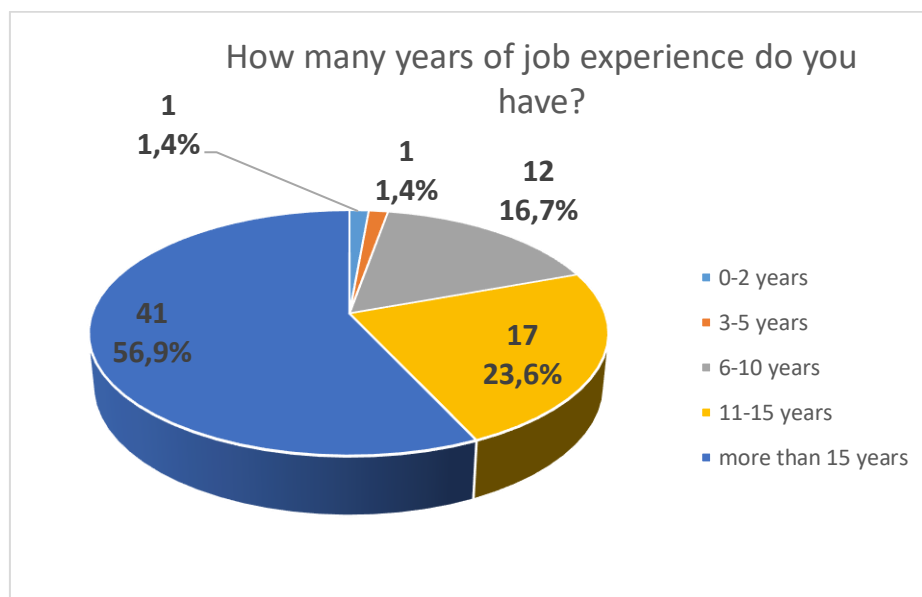
1. The individuals who responded to the survey are 72. They are employees that work in a company that has an established internal audit department. 14 of them (19.4%) are internal auditors.

Are you an internal auditor?	Frequency	Frequency %
No	58	80,6%
Yes	14	19,4%
Total	72	100,0%



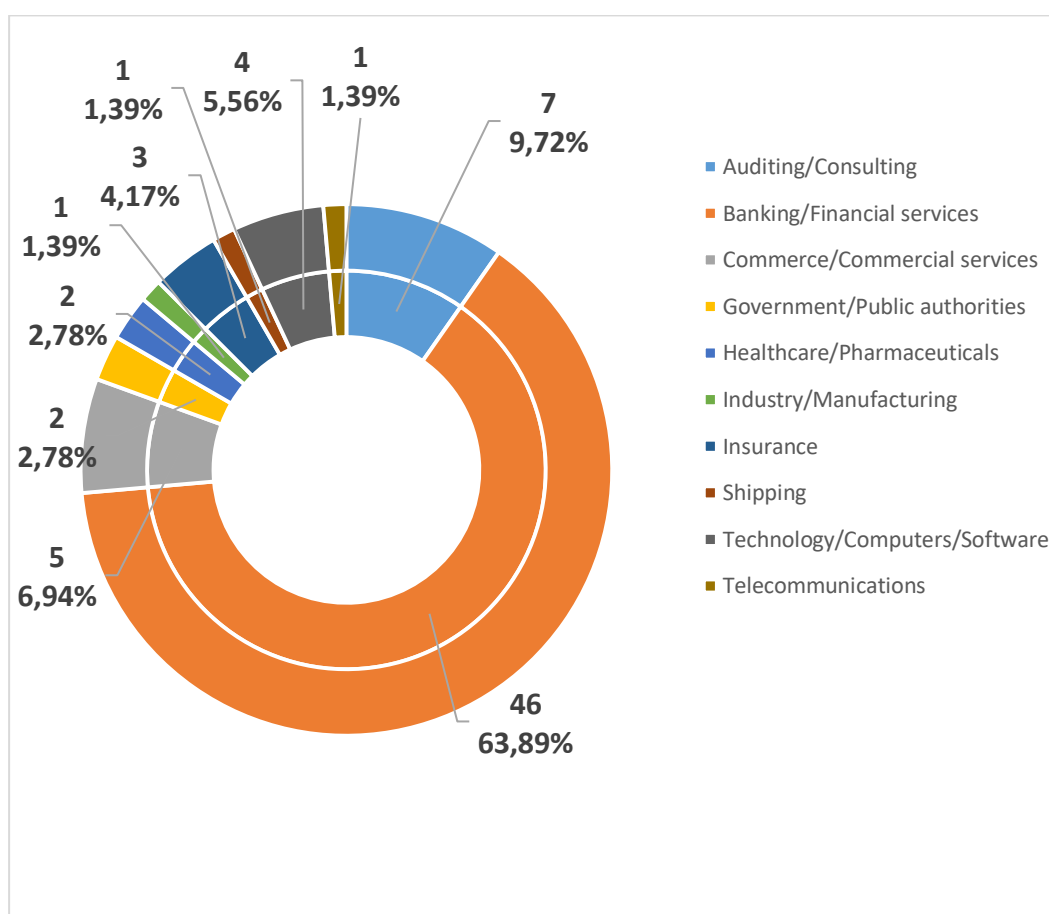
2. The job experience of the respondents is analyzed below, the majority of them are working more than 10 years:

	Frequency	Frequency %	Cumulative %
0-2 years	1	1,4%	1,4%
3-5 years	1	1,4%	2,8%
6-10 years	12	16,7%	19,4%
11-15 years	17	23,6%	43,1%
more than 15 years	41	56,9%	100,0%
Total	72	100%	



3. The majority of the respondents work in the banking/financial services which is a good variable, because our survey investigates among others the effects of fraud. According to 2018 Report to the Nations Global Survey, the greatest number of fraud cases occurred in the banking and financial services.

	Frequency	Frequency %
Auditing/Consulting	7	9,7%
Banking/Financial services	46	63,9%
Commerce/Commercial services	5	6,9%
Government/Public authorities	2	2,8%
Healthcare/Pharmaceuticals	2	2,8%
Industry/Manufacturing	1	1,4%
Insurance	3	4,2%
Shipping	1	1,4%
Technology/Computers/Software	4	5,6%
Telecommunications	1	1,4%
Total	72	100%



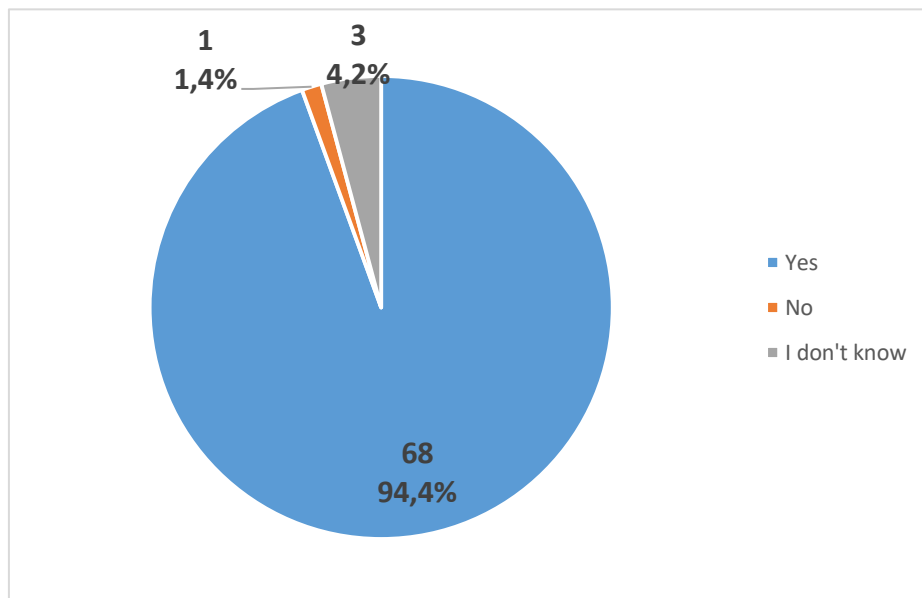
Results of the Survey

Below we analyze the results of the survey using the methodology we mentioned above.

Question 1

Has your organization implemented preventive and detective fraud control processes and procedures?

	Frequency	Frequency %
Yes	68	94,4%
No	1	1,4%
I don't know	3	4,2%
Total	72	100%



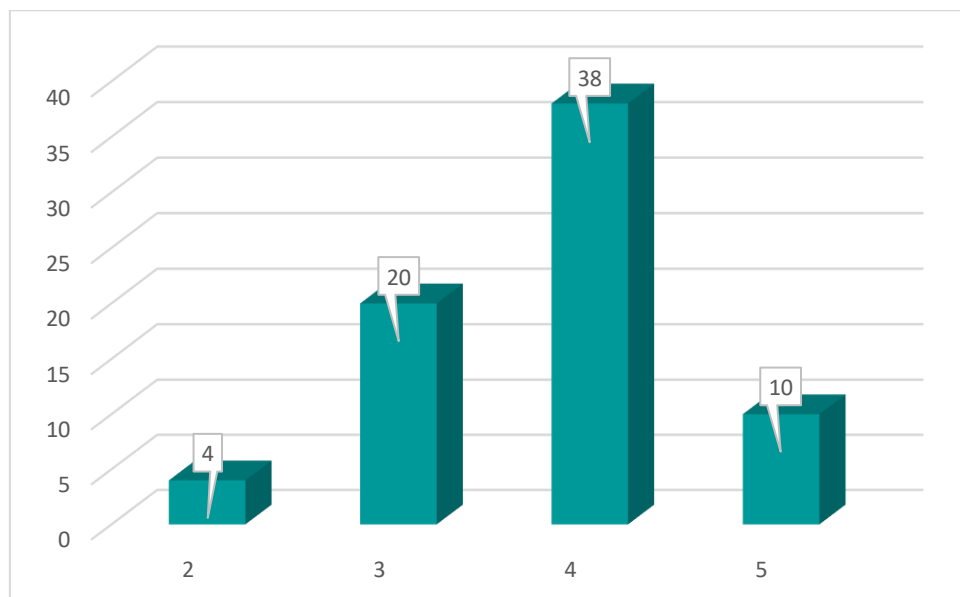
The majority of the respondents (68 respondents, percentage 94.4%) answered that their organization has implemented preventive and detective fraud control processes and procedures. 3 didn't know (4.2%) and only 1 respondent answered no (1.4%).

Almost all organizations have realized how important it is to implement preventive and detective fraud controls in order to mitigate the risk of fraud.

Question 2

*Do you believe that the fraud practices and policies of your company are adequate?
(1-5 scale with 5 being the positive end and 1 being the negative end)*

	Frequency	Frequency %	Cumulative %
1	0	0,0%	0,0%
2	4	5,6%	5,6%
3	20	27,8%	33,4%
4	38	52,8%	86,2%
5	10	13,8%	100%
Total	72	100%	



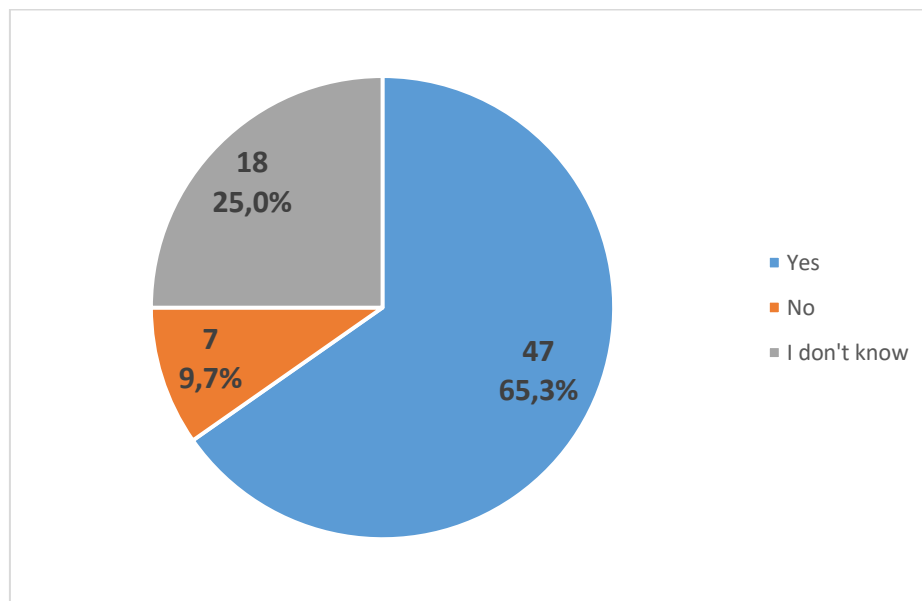
As it is depicted above, the majority of the respondents believe that the fraud practices and policies of their company are adequate. More specifically, 10 respondents (13.8%) evaluate the fraud practices and policies of their company with the top grade 5, the 38 respondents (52.8%) believe that fraud practices and policies of their company are graded with 4, the 27.8% of the respondents grade them with 3 (20 respondents) and 4 respondents (5.6%) graded practices and policies with 2.

We can notice that 66.6% of the participants believe that the fraud practices and policies of their company are very or extremely adequate, which draws the conclusion that the level of adequacy is satisfying.

Question 3

Is there an effective whistleblower process in place in your company?

	Frequency	Frequency %
Yes	47	65,3%
No	7	9,7%
I don't know	18	25,0%
Total	72	100%



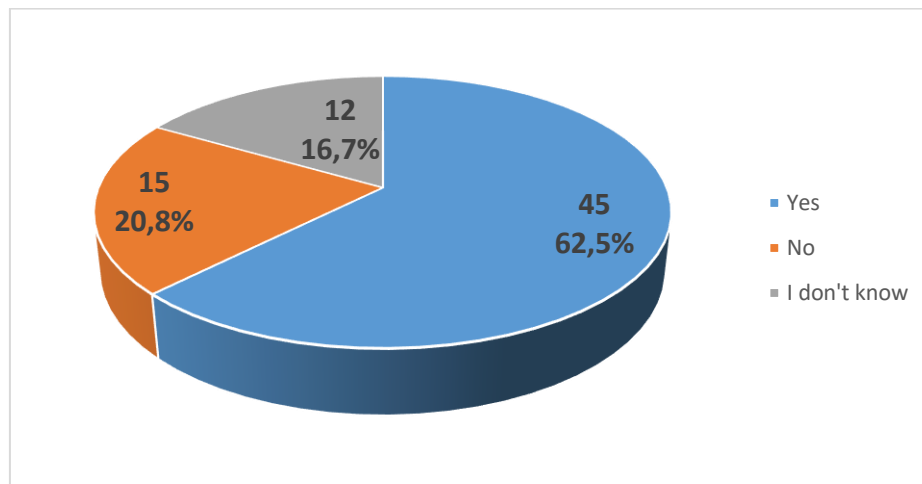
The majority of the respondents (47 respondents: 65.3%) have answered that their company has an effective whistleblower process in place. Moreover, 18 respondents (25%) answered that they are not aware if such a process exists in their company and only 7 respondents (9.7%) answered that they do not have a whistleblower process in their company.

According to 2018 Global Study on Occupational Fraud and Abuse Report to the Nations, tips are the most common detection method for fraud. Tips were the mean of detection at 40% of the cases that were revealed in 2017. So, establishing a whistleblower process is essential. But in order such a process to be effective, all stakeholders of a company (employees, customers, vendors etc.) must be aware of its existence. As it was mentioned above, in our survey 18 respondents answered that they do not know if a whistleblower process exists in their company which is a sign that even if there is a whistleblowing mechanism, it does not operate effectively, because employees do not know it.

Question 4

Do you believe that in your company any reasonably suspected or known violation, deviation or other breach of code of conduct, fraud or corruption is dealt with in a timely and effective manner?

	Frequency	Frequency %
Yes	45	62,5%
No	15	20,8%
I don't know	12	16,7%
Total	72	100%



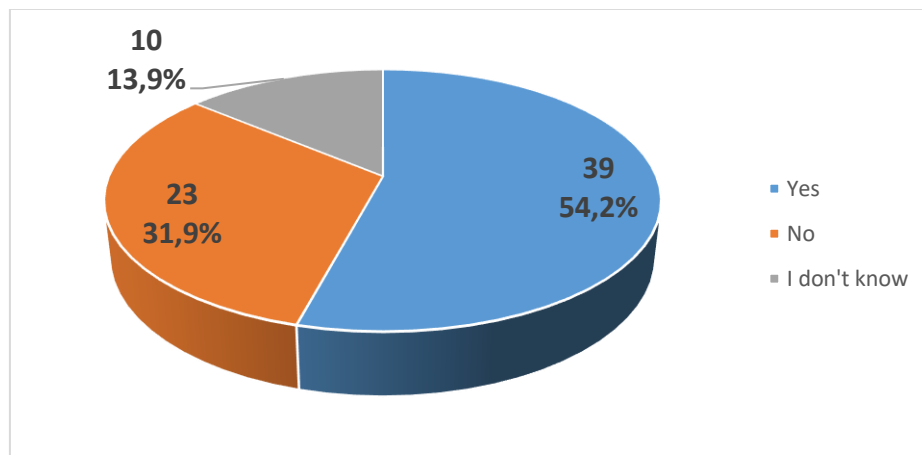
45 out of the 72 respondents of the survey (62.5%) answered to the above question that any suspected or known fraud or corruption is dealt with in a timely and effective manner. 15 respondents (20.8%) answered no to this question and 12 respondents (16.7%) answered that they do not know.

When a company reacts timely and effectively to the committed or suspected fraud or corruption, this acts as a strong deterrent to future events, because everybody gets the message that there is no tolerance in fraud and corruption.

Question 5

Do all employees of your company become aware of the details of key frauds that have occurred within the company including the ultimate consequences to the perpetrators?

	Frequency	Frequency %
Yes	39	54,2%
No	23	31,9%
I don't know	10	13,9%
Total	72	100%



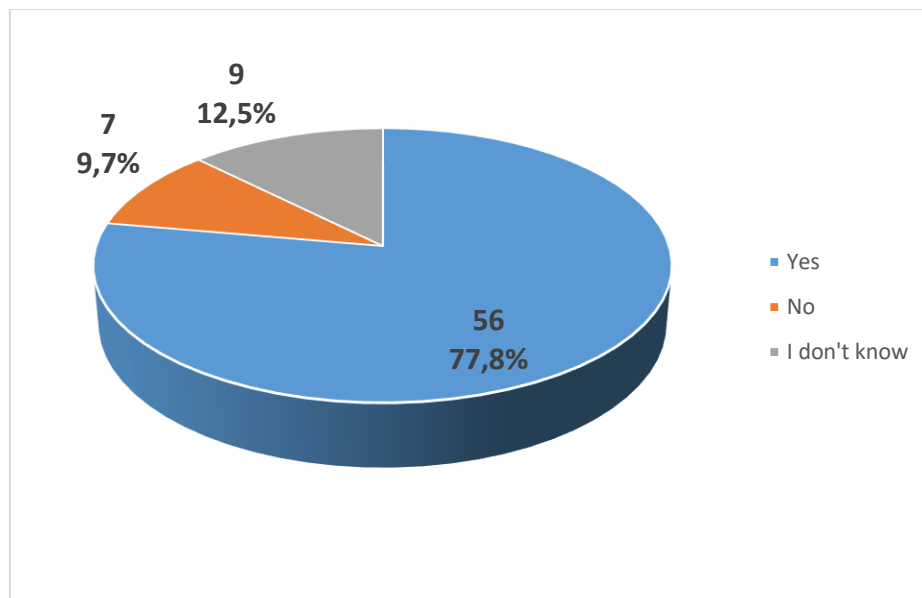
Most of the respondents, 39 (54.2%), answered that all employees become aware of the frauds and the consequences to the perpetrators. 23 respondents (31.9%) answered that not all employees have access to such information and there were 10 respondents (13.9%) that did not know if all employees become aware of frauds and consequences to the fraudsters.

As it has already be mentioned, when everybody know the framework in which the company operates regarding to fraud and corruption, this acts as a strong deterrent for most employees to even consider fraud.

Question 6

To your experience, has there ever been in your organization a firing of an employee due to corruption or fraud?

	Frequency	Frequency %
Yes	56	77,8%
No	7	9,7%
I don't know	9	12,5%
Total	72	100%



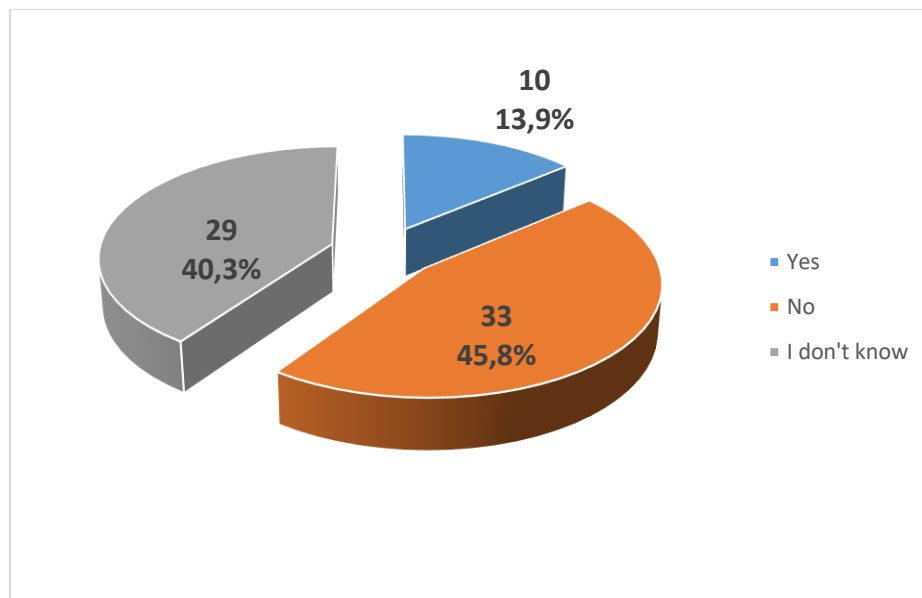
56 respondents (77.8%) answered that there has been a firing of an employee due to corruption or fraud. 9 respondents (12.5%) do not know such a case and 7 respondents (9.7%) answered that to their experience there has never been in their organization a firing of an employee due to corruption or fraud.

Questions 4, 5 and 6 help us to understand that when fraud is detected, corrective actions must be prompt and fair. All employees must be aware of these actions, so that there is the belief management will deal with other perpetrators in the same manner. In this question, question 6, firing a fraudster gives the tone from the top that no fraud will be tolerated.

Question 7

Are there any anonymous surveys conducted to assess employee morale?

	Frequency	Frequency %
Yes	10	13,9%
No	33	45,8%
I don't know	29	40,3%
Total	72	100%



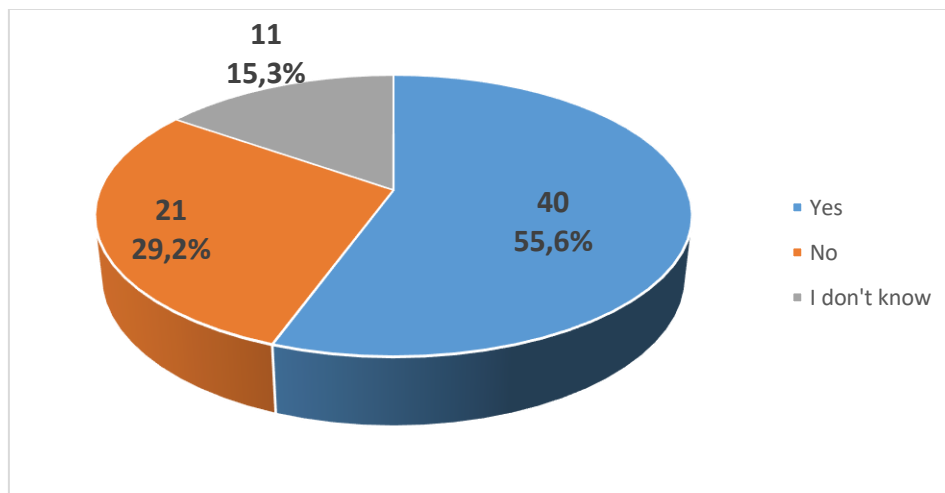
Almost half of the respondents, 33 out of 72 (45.8%), answered that in their organization there are no anonymous surveys conducted to assess employee morale. 29 respondents (40.3%) answered that they do not know and only 10 respondents (13.9%) answered that there are anonymous surveys conducted in their organization to assess employee morale.

Conducting such surveys is a very useful procedure that helps in fraud prevention. However, many organizations do not follow this procedure because there are restrictions to be considered like regulations and laws that prohibit to search someone's past without his consent.

Question 8

Does your organization has a fraud risk management policy that all employees know about?

	Frequency	Frequency %
Yes	40	55,6%
No	21	29,2%
I don't know	11	15,3%
Total	72	100%



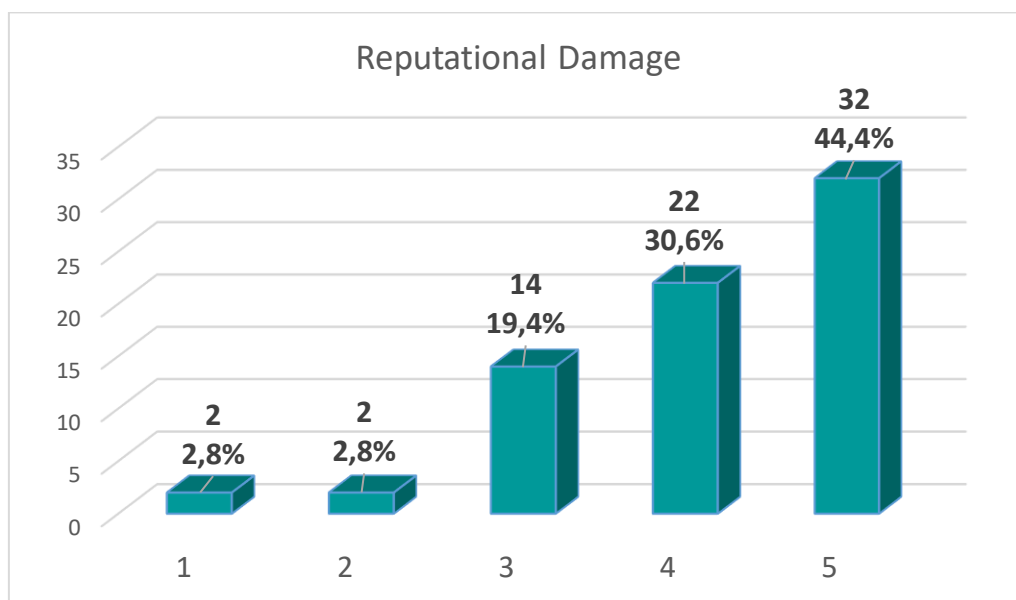
40 respondents (55.6%) answered that all employees are aware of the fraud risk management policy of their organization. 21 respondents (29.2%) answered that not all employees are aware of the fraud risk management policy and 11 respondents (15.3%) did not know if all employee know it.

Organizations have started making public their fraud risk management policy. That helps them to have an effective fraud risk management program.

Question 9

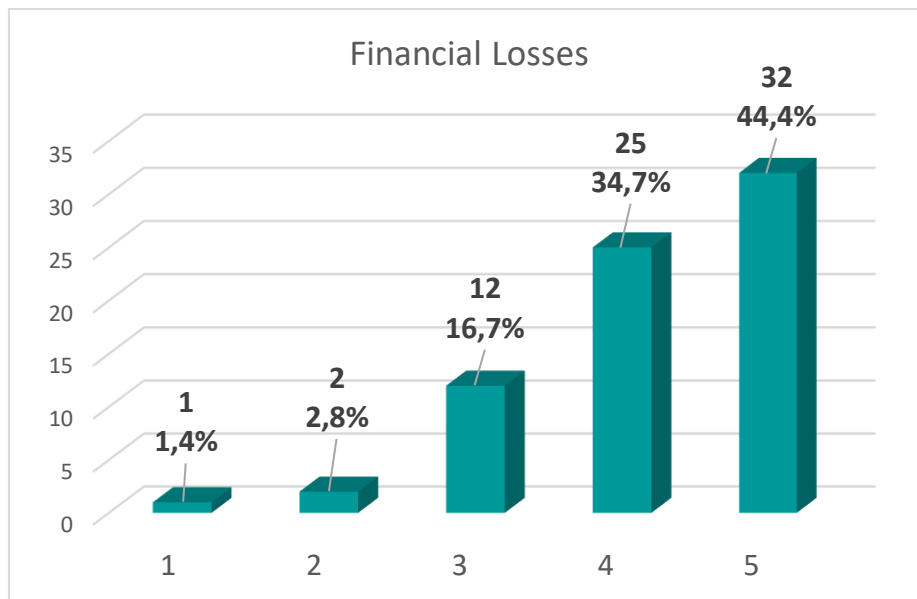
How do you evaluate the level of impact of the following effects of fraud? (1-5 scale with 5 being extremely material and 1 immaterial)

Reputational Damage	Frequency	Frequency %	Cumulative %
1	2	2,8%	2,8%
2	2	2,8%	5,6%
3	14	19,4%	25,0%
4	22	30,6%	55,6%
5	32	44,4%	100%
Total	72	100%	



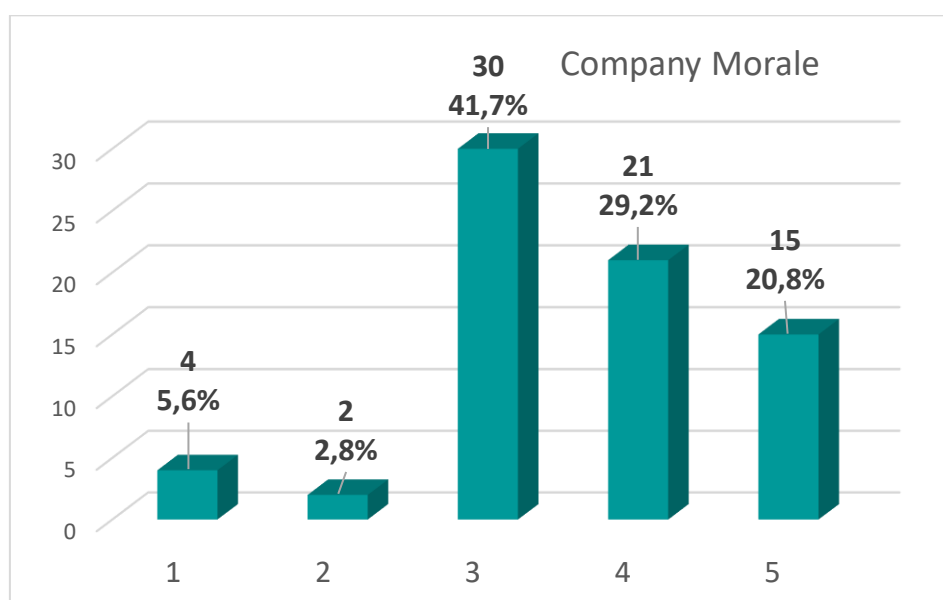
The respondents evaluate reputational damage as a great impact for an organization. 75% of the respondents evaluate the level of impact of reputational damage as extremely (32 respondents: 44.4%) or very material (22 respondents: 30.6%). 14 respondents (19.4%) evaluate it as material and 4 respondents (5.6%) find it less material (2 respondents) or immaterial (2 respondents).

Financial Losses	Frequency	Frequency %	Cumulative %
1	1	1,4%	1,4%
2	2	2,8%	4,2%
3	12	16,7%	20,8%
4	25	34,7%	55,6%
5	32	44,4%	100,0%
Total	72	100%	



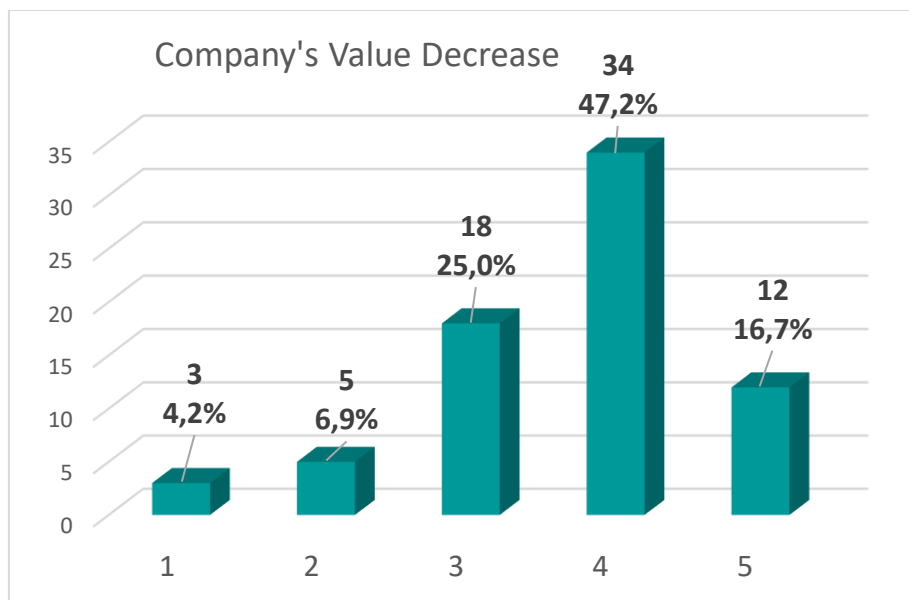
We notice the same perspective for financial losses as well. The majority of the respondents find financial losses have an extreme (32 respondents: 44.4%) or very large impact (25 respondents: 34.7%) on the organizations. 12 respondents (16.7%) grade it of medium impact and only 4.2% of the respondents (3 respondents) understate the impact.

Company Morale	Frequency	Frequency %	Cumulative %
1	4	5,6%	5,6%
2	2	2,8%	8,3%
3	30	41,7%	50,0%
4	21	29,2%	79,2%
5	15	20,8%	100,0%
Total	72	100%	



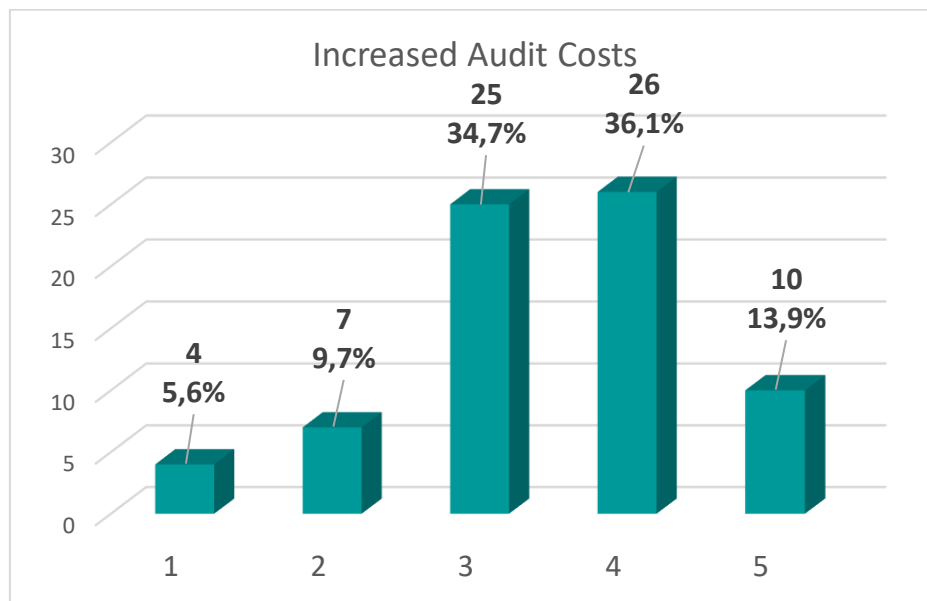
This effect of fraud is evaluated in the middle scale. 30 respondents out of 72 (41.7%) evaluate that the tainted company's morale is of medium impact. There are 21 respondents (29.2%) that grade this impact as significant and 15 respondents (20.8%) that grade as an impact of extreme significance. There are 2 respondents (2.8%) that believe tainted company's morale is an insignificant impact and 4 respondents (5.6%) evaluate it as immaterial.

Company's Value Decrease	Frequency	Frequency %	Cumulative %
1	3	4,2%	4,2%
2	5	6,9%	11,1%
3	18	25,0%	36,1%
4	34	47,2%	83,3%
5	12	16,7%	100,0%
Total	72	100%	



The vast majority of the respondents (46 respondents: 63.9%), evaluate the impact of company's value decrease extremely (12 respondents: 16.7%) or very material (34 respondents: 47.2%). 18 respondents (25%) find it material. There is 6.9% of the respondents (5 respondents) that evaluate the company's value decrease as less material and 3 respondents (4.2%) believe that it is immaterial.

Increased Audit Costs	Frequency	Frequency %	Cumulative %
1	4	5,6%	5,6%
2	7	9,7%	15,3%
3	25	34,7%	50,0%
4	26	36,1%	86,1%
5	10	13,9%	100,0%
Total	72	100%	



Finally, increased audit costs are evaluated by 10 respondents (13.9%) that they have extreme impact. 26 respondents (36.1%) believe they have a significant impact, 25 respondents (34.7%) evaluate increased audit costs of medium impact. 7 respondents (9.7%) believe that increased audit cost are of low impact and 4 respondents (5.6%) evaluate it with lower or no impact.

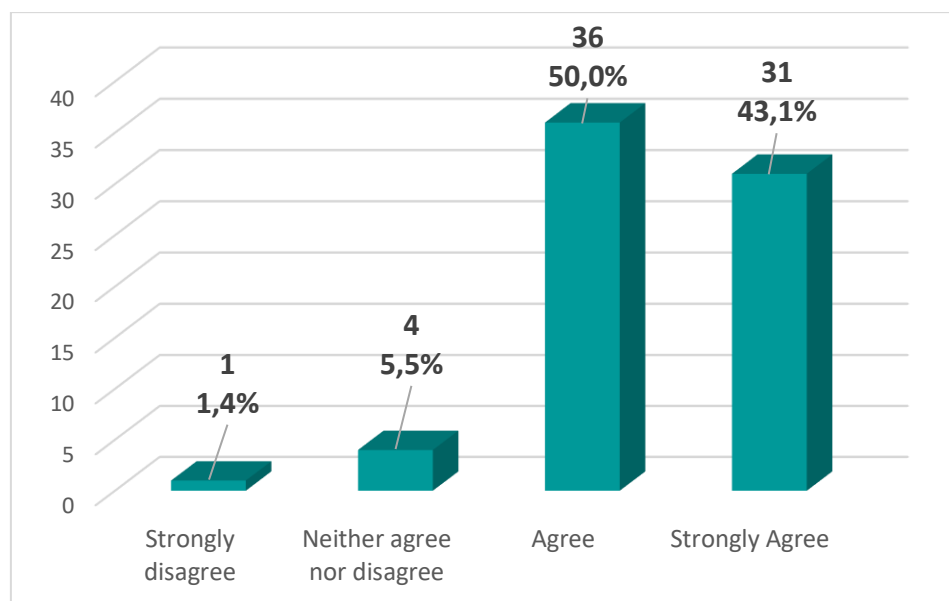
According to the answers of the 72 respondents of this survey about the evaluation of the level of impact of the five effects of fraud, we could create a rank. So, these are the results in a descending order according to the level of impact of the effects (first is the effect with the greater impact and last is the effect that is perceived to have the lower impact):

1. Financial Losses
2. Reputational Damage
3. Company's Value Decrease
4. Increased Audit Costs
5. Company's Morale

Question 10

Do you agree with the following statements? Ethics and honesty are very important in organization's fraud risk management.

	Frequency	Frequency %	Cumulative %
Strongly disagree	1	1,4%	1,4%
Disagree	0	0,0%	1,4%
Neither agree nor disagree	4	5,5%	6,9%
Agree	36	50,0%	56,9%
Strongly Agree	31	43,1%	100,0%
Total	72	100%	



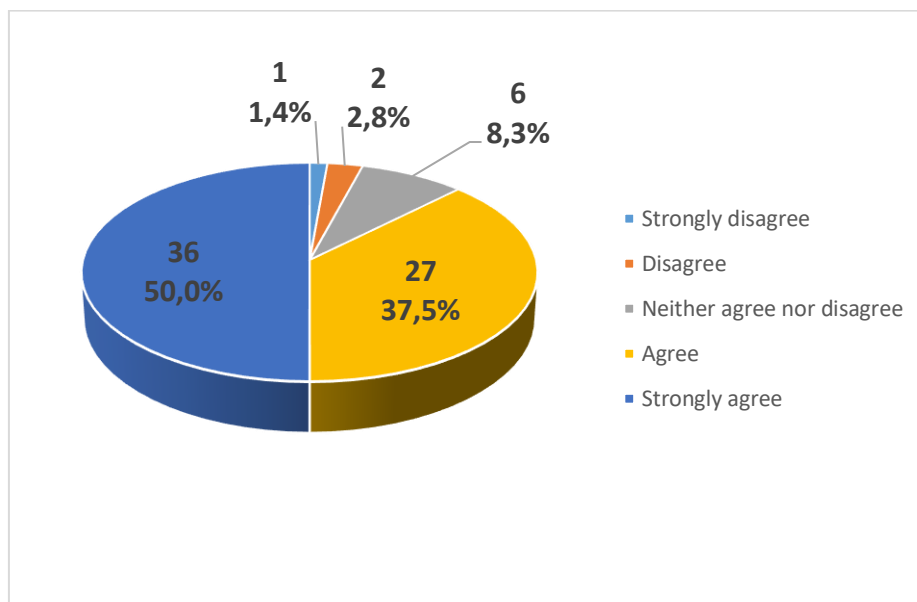
The vast majority of the respondents (93.1%) agree (36 respondents: 50%) or strongly agree (31 respondents: 43.1%) with the statement. There are only 4 respondents (5.5%) that are neutral, neither agree nor disagree and 1 respondent (1.4%) that strongly disagrees with the statement.

We conclude that employees believe that ethics and honesty are very important in organization's fraud risk management. Someone might consider that they are the foundation for fraud risk management.

Question 11

Opportunity to commit fraud is greater when internal controls are weak and there is lack of segregation of duties.

	Frequency	Frequency %	Cumulative %
Strongly disagree	1	1,4%	1,4%
Disagree	2	2,8%	4,2%
Neither agree nor disagree	6	8,3%	12,5%
Agree	27	37,5%	50,0%
Strongly agree	36	50,0%	100,0%
Total	72	100%	



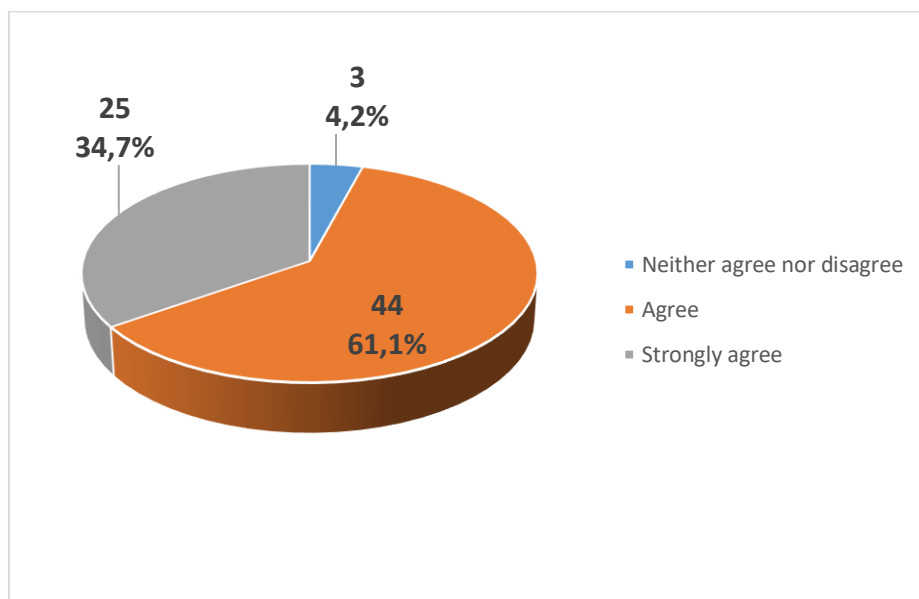
36 respondents strongly agree with the statement (50%) and 27 respondents agree (37.5%). There are 6 respondents that neither agree nor disagree (8.3%). 2 respondents disagree (2.8%) and 1 respondent strongly disagrees (1.4%).

There is a very high percentage of the respondents (87.5%) that agree or strongly agree with the correlation between opportunity to commit fraud, and weak internal controls and lack of segregation of duties.

Question 12

Management should react to instances of fraud in such a manner that should act as a strong deterrent to fraudulent behavior.

	Frequency	Frequency %	Cumulative %
Strongly disagree	0	0,0%	0,0%
Disagree	0	0,0%	0,0%
Neither agree nor disagree	3	4,2%	4,2%
Agree	44	61,1%	65,3%
Strongly agree	25	34,7%	100,0%
Total	72	100%	



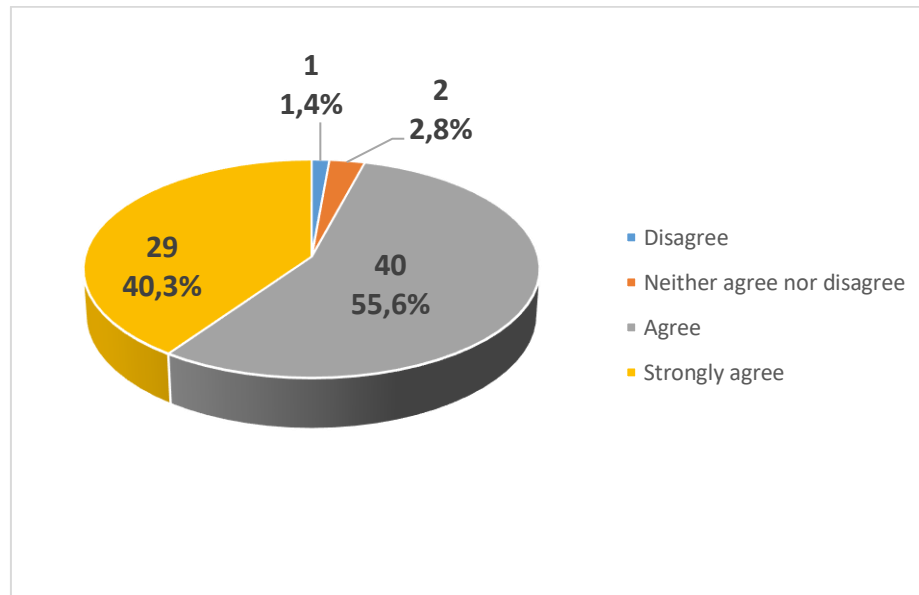
25 respondents (34.7%) strongly agree with the statement, 44 respondents agree (61.1%) and 3 respondents (4.2%) are neutral.

Once again, almost all respondents (95.8%) agree with the fact that the proper reaction of management in instances of fraud helps in its deterrence.

Question 13

There should be an anti-fraud training system for all employees of the company.

	Frequency	Frequency %	Cumulative %
Strongly disagree	0	0,0%	0,0%
Disagree	1	1,4%	1,4%
Neither agree nor disagree	2	2,8%	4,2%
Agree	40	55,6%	59,7%
Strongly agree	29	40,3%	100,0%
Total	72	100%	



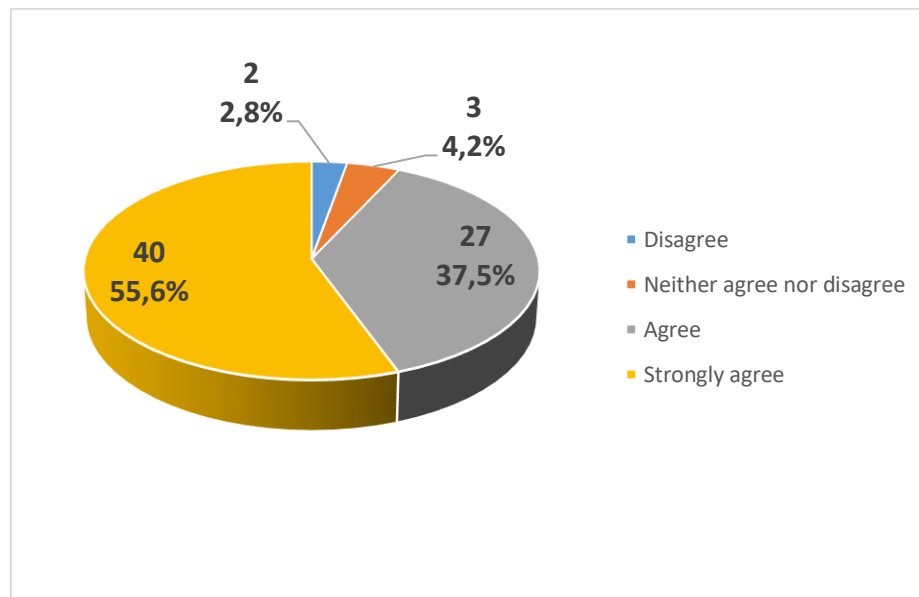
40.3% of the respondents (29 respondents) strongly agree and 55.6% (40 respondents) agree with the anti-fraud training of all employees in the company. 2 respondents neither agree nor disagree (2.8%) and 1 respondent (1.4%) disagrees.

The same percentage with that in previous question (95.9%) agrees that all employees should participate in anti-fraud training.

Question 14

The internal audit department of the organization should have the authority to operate effectively and without undue influence from senior management.

	Frequency	Frequency %	Cumulative %
Strongly disagree	0	0,0%	0,0%
Disagree	2	2,8%	2,8%
Neither agree nor disagree	3	4,2%	6,9%
Agree	27	37,5%	44,4%
Strongly agree	40	55,6%	100,0%
Total	72	100%	



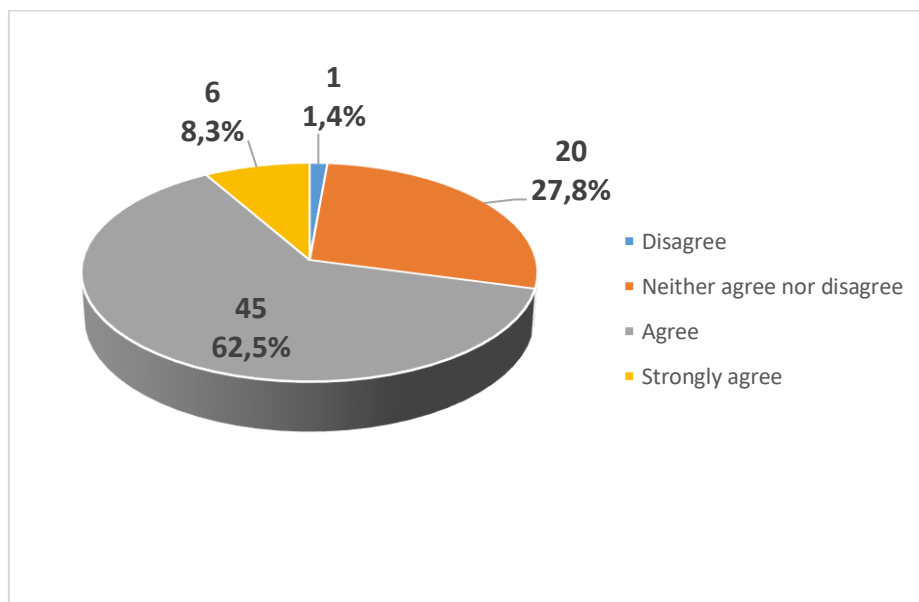
This statement has the agreement of 67 out of the 72 respondents (93.1%). 40 respondents strongly agree (55.6%) and 27 respondents agree (37.5%). 3 respondents neither agree nor disagree (4.2%) and 2 respondents disagree (2.8%).

We conclude that there is the belief that internal audit department of an organization should not operate under the undue influence from senior management.

Question 15

The anti-fraud controls in place in your organization operate effectively to identify and mitigate organization's vulnerabilities to internal and external fraud.

	Frequency	Frequency %	Cumulative %
Strongly disagree	0	0,0%	0,0%
Disagree	1	1,4%	1,4%
Neither agree nor disagree	20	27,8%	29,2%
Agree	45	62,5%	91,7%
Strongly agree	6	8,3%	100,0%
Total	72	100%	

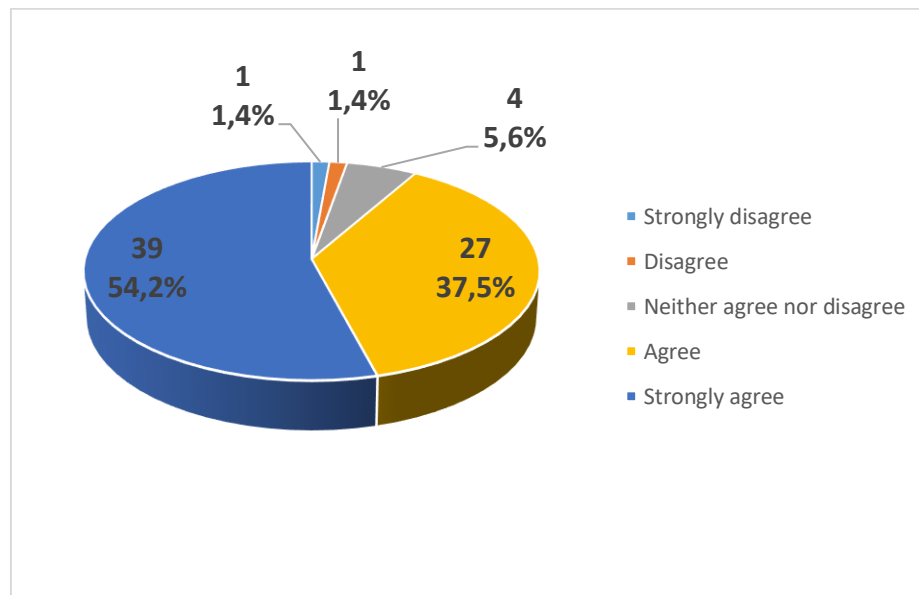


As it is depicted above, 6 respondents (8.3%) strongly agree and 45 respondents (62.5%) agree that anti-fraud controls in their organization operate effectively to identify and mitigate organization's vulnerabilities to internal and external fraud. 20 respondents (27.8%) answered that neither agree nor disagree and 1 respondent (1.4%) disagrees with the statement.

Question 16

In an organization surprise fraud audits should take place in addition to regularly scheduled ones.

	Frequency	Frequency %	Cummulative %
Strongly disagree	1	1,4%	1,4%
Disagree	1	1,4%	2,8%
Neither agree nor disagree	4	5,6%	8,3%
Agree	27	37,5%	45,8%
Strongly agree	39	54,2%	100,0%
Total	72	100,0%	



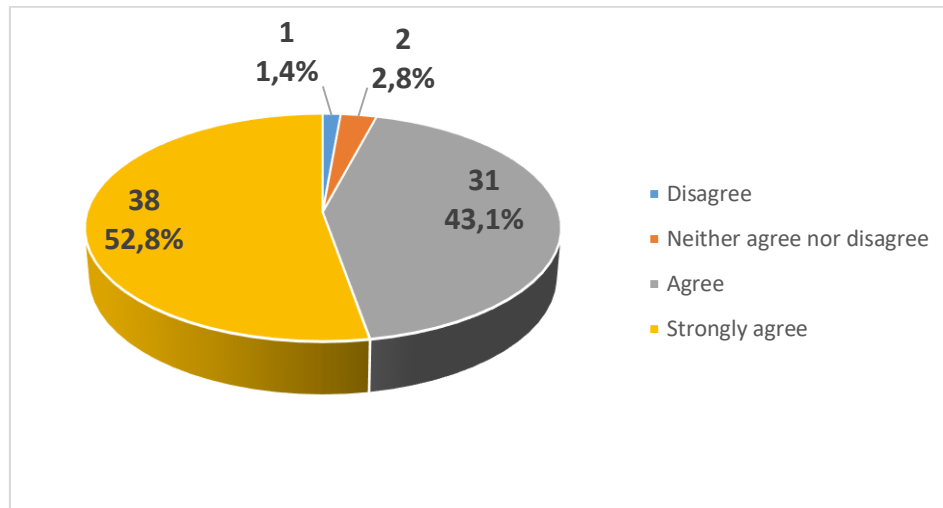
66 out of 72 respondents (91.7%), agree with the statement [39 strongly agree (54.2%) and 27 (37.5%) agree]. There are 4 respondents that neither agree nor disagree (5.6%). 2 respondents (2.8%) disagree (one of them strongly).

The vast majority of the respondents agree that surprise fraud audits should take place in addition to regularly scheduled ones.

Question 17

Internal audit plays significant role not only in the detection of fraud and corruption but also in preventing them from occurring.

	Frequency	Frequency %	Cumulative %
Strongly disagree	0	0,0%	0,0%
Disagree	1	1,4%	1,4%
Neither agree nor disagree	2	2,8%	4,2%
Agree	31	43,1%	47,2%
Strongly agree	38	52,8%	100,0%
Total	72	100%	



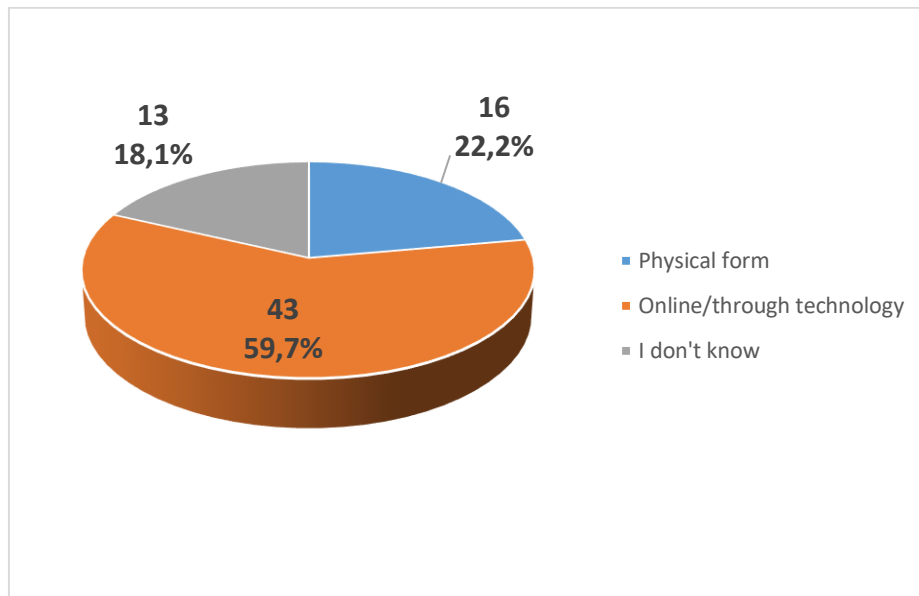
As it is depicted above, 38 respondents (52.8%) strongly agree and 31 respondents (43.1%) agree that internal audit plays significant role not only in the detection of fraud and corruption but also in preventing them from occurring. 2 respondents are neutral (2.8%) and 1 respondent disagrees with the statement.

Almost all respondents believe that the role of internal audit is significant both in fraud detection and fraud prevention.

Question 18

In your opinion, fraud is more probable to occur in physical form or online?

	Frequency	Frequency %
Physical form	16	22,2%
Online/through technology	43	59,7%
I don't know	13	18,1%
Total	72	100,0%



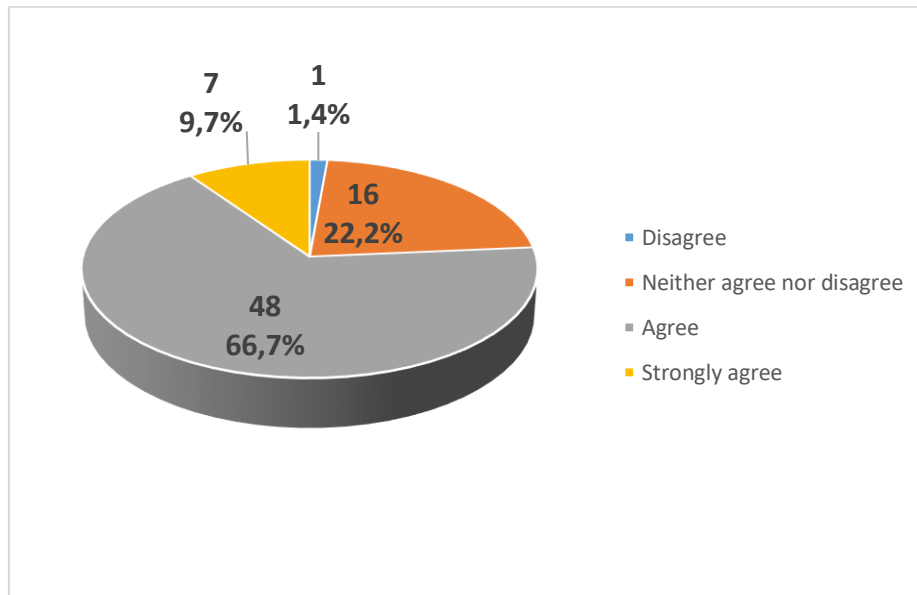
43 out of 72 respondents (59.7%) believe that fraud is more probable to occur online through technology and 16 respondents (22.2%) believe that fraud is more probable to occur in physical form. There are 13 respondents (18.1%) that do not know which is the most probable form of fraud.

Due to technological progress, most of the respondents believe that it is more likely that fraud is committed through technology.

Question 19

Nowadays due to technological progress, it is more effective for internal auditing to have continuous monitoring software to detect fraud than to conduct physical fraud audits.

	Frequency	Frequency %	Cumulative %
Strongly disagree	0	0,0%	0,0%
Disagree	1	1,4%	1,4%
Neither agree nor disagree	16	22,2%	23,6%
Agree	48	66,7%	90,3%
Strongly agree	7	9,7%	100,0%
Total	72	100%	



As it is depicted above, 7 respondents (9.7%) strongly agree and 48 respondents (66.7%) agree that continuous monitoring software is more effective to detect fraud than physical fraud audits. There are 16 respondents (22.2%) that are neutral and 1 respondent (1.4%) that disagrees with the statement.

The majority of the respondents (76.4%) find the continuous monitoring software more effective for internal auditing than physical fraud audits.

Conclusions

In this last section, we present the basic theoretical and empirical conclusions of the whole thesis.

Nowadays, risk of fraud is one of the most significant risks for the organizations. The effects of fraud and corruption can be devastating and are able to threaten an organization's existence. The level of impact of the effects of fraud and corruption on the activity of an organization is not related with its size. The most substantial effects of fraud and corruption are financial losses, reputational damage, tainted company's morale, company's value decrease and increased audit costs.

The role of internal audit is of high importance when we refer to fraud and corruption. According to the Fraud Guide, internal audit in relation to fraud provides assurance to the board and to management that the controls they have in place are appropriate given the organization's risk appetite. First of all, internal audit department participates to the team that conducts fraud risk assessment. Fraud risk assessment follows three steps which are to identify, to assess likelihood and significance and finally to respond to fraud risk. In the final step of respond to fraud risk, an organization takes under consideration its risk tolerance and decides to avoid, to reduce, to share or to accept a fraud risk. Then, the role of internal audit continues in fraud prevention. In fraud prevention, we take as granted that no matter how many controls are implemented, fraud will always exist. A basic step for fraud prevention is to make all personnel aware of the fraud risk management program. This awareness is a strong deterrent to fraud. Under the guidance of COSO's ERM-Integrated Framework anti-fraud controls are designed. Fraud prevention includes procedures such as background investigations, anti-fraud training, evaluating performance, exit interviews, authority limits and transaction-level procedures. On the other hand, fraud detection comes as a safety valve in cases that fraud prevention does not operate effectively, segregation of duties fail due to collusion among individuals or management overrides controls. Fraud detection controls operate in the background of everyday business activities. The most common fraud detection methods are whistleblowing mechanisms, process controls and proactive fraud detection procedures. Both preventive and detective controls must be documented and constantly evaluated for their adequacy and effectiveness. Finally, after detecting fraud, the role of internal audit is to investigate and take corrective action.

Based on the results of the survey conducted, it was concluded that almost all organizations have implemented preventive and detective fraud controls in order to mitigate fraud risk. Organizations are perceived to have adequate fraud practices and policies. When organizations react timely and effectively to the committed or suspected fraud or corruption, this acts as a strong deterrent to future events. It is crucial all employees to be aware of these actions, so that there is the belief management will deal with other perpetrators in the same manner. It gives the tone from the top that no fraud will be tolerated. Moreover, we concluded that organizations have started making public their fraud risk management policy. This helps the fraud risk management program to be more effective. The results of the survey pointed out how significant the effects of fraud and corruption are, and they also helped us to create a rank from effect with the greater impact (financial losses) to the effect with the lower impact (company's morale). Finally, the survey confirmed that internal audit plays significant role not only

in the detection of fraud and corruption but also in preventing them from occurring. And that the internal audit department of the organization should operate without undue influence from senior management.

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Appendix

Questionnaire

Dear Sir/Madam,

As part of my MBA-Internal Audit thesis at the National and Kapodistrian University of Athens, I am conducting a survey that investigates the effects of fraud and corruption and the role of internal audit.

I will appreciate if you could complete the following questionnaire. It is anonymous and any information will be held exclusively for the purposes of the master thesis. No individual will be identified and all responses will be reported in a summarized format.

Thank you in advance

1. Has your organization implemented preventive and detective fraud control processes and procedures?
 - ☐ -Yes
 - ☐ -No
 - ☐ -I don't know
2. Do you believe that the fraud practices and policies of your company are adequate? (1-5 scale with 5 being the positive end and 1 being the negative end)
 - ☐ Not at all 1 – 2 – 3 – 4 – 5 Very
3. Is there an effective whistleblower process in place in your company?
 - ☐ Yes
 - ☐ No
 - ☐ I don't know
4. Do you believe that in your company any reasonably suspected or known violation, deviation or other breach of code of conduct, fraud or corruption is dealt with in a timely and effective manner?
 - ☐ Yes
 - ☐ No
 - ☐ I don't know
5. Do all employees of your company become aware of the details of key frauds that have occurred within the company including the ultimate consequences to the perpetrators?
 - ☐ Yes
 - ☐ No
 - ☐ I don't know
6. To your experience, has there ever been in your organization a firing of an employee due to corruption or fraud?

- Yes
 - No
 - I don't know
7. Are there any anonymous surveys conducted to assess employee morale?
- Yes
 - No
 - I don't know
8. Does your organization has a fraud risk management policy that all employees know about?
- Yes
 - No
 - I don't know
9. How do you evaluate the level of impact of the following effects of fraud?
(1-5 scale with 5 being extremely material and 1 immaterial)
- Reputational Damage 1 – 2 – 3 – 4 – 5
 - Financial Losses 1 – 2 – 3 – 4 – 5
 - Company Morale (e.g. embarrassing for employees) 1 – 2 – 3 – 4 – 5
 - Company's Value Decrease 1 – 2 – 3 – 4 – 5
 - Increased Audit Costs 1 – 2 – 3 – 4 – 5
10. Do you agree with the following statements? Ethics and honesty are very important in organization's fraud risk management.
- Strongly disagree
 - Disagree
 - Neither agree nor disagree
 - Agree
 - Strongly Agree
11. Opportunity to commit fraud is greater when internal controls are weak and there is lack of segregation of duties.
- Strongly disagree
 - Disagree
 - Neither agree nor disagree
 - Agree
 - Strongly agree
12. Management should react to instances of fraud in such a manner that should act as a strong deterrent to fraudulent behavior.
- Strongly disagree
 - Disagree
 - Neither agree nor disagree
 - Agree
 - Strongly agree

13. There should be an anti-fraud training system for all employees of the company.
- Strongly disagree
 - Disagree
 - Neither agree nor disagree
 - Agree
 - Strongly agree
14. The internal audit department of the organization should have the authority to operate effectively and without undue influence from senior management.
- Strongly disagree
 - Disagree
 - Neither agree nor disagree
 - Agree
 - Strongly agree
15. The anti-fraud controls in place in your organization operate effectively to identify and mitigate organization's vulnerabilities to internal and external fraud.
- Strongly disagree
 - Disagree
 - Neither agree nor disagree
 - Agree
 - Strongly agree
16. In an organization surprise fraud audits should take place in addition to regularly scheduled ones.
- Strongly disagree
 - Disagree
 - Neither agree nor disagree
 - Agree
 - Strongly agree
17. Internal audit plays significant role not only in the detection of fraud and corruption but also in preventing them from occurring.
- Strongly disagree
 - Disagree
 - Neither agree nor disagree
 - Agree
 - Strongly agree
18. In your opinion, fraud is more probable to occur in physical form or online?
- Physical form
 - Online/through technology
 - I don't know

19. Nowadays due to technological progress, it is more effective for internal auditing to have continuous monitoring software to detect fraud than to conduct physical fraud audits.

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neither agree nor disagree
- ☐ Agree
- ☐ Strongly agree

20. Are you an internal auditor?

- ☐ Yes
- ☐ No

21. How many years of job experience do you have?

- ☐ 0-2 years
- ☐ 3-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ More than 15 years

22. Which is the area of your organization?

- ☐ Auditing/Consulting
- ☐ Banking/Financial services
- ☐ Insurance
- ☐ Technology/Computers/Software
- ☐ Healthcare/Pharmaceuticals
- ☐ Communications/Media
- ☐ Telecommunications
- ☐ Commerce/Commercial services
- ☐ Real Estate
- ☐ Building/Constructions
- ☐ Hotels/Tourism
- ☐ Shipping
- ☐ Government/Public authorities
- ☐ Transport
- ☐ Industry/Manufacturing
- ☐ Automobile
- ☐ Education
- ☐ Other

Author Declaration

“I hereby declare that, in accordance with article 8 of Law 1599/1986 and article 2.4.6 par. 3 of Law 1256/1982, this thesis/dissertation is solely a product of personal work and does not infringe any intellectual property rights of third parties and is not the product of a partial or total plagiarism, and the sources used are strictly limited to the bibliographic references.”