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## **1. Abstract**

The purpose of this research is to identify the relationship between Internal Audit and Company performance, the importance of Internal Audit in Business and the added value that Internal Audit can offer.

The current thesis is consisted of the analysis of the theoretical foundations of Internal Audit and Company Performance and the methodology utilized, the Empirical analysis and the Conclusions and policy implications

For the purpose of the thesis a questionnaire of 30 questions was given to employees of various companies in Greece. The questionnaire was addressed to men and women of different ages. The results indicated that the internal audit is really important for companies and definitely enhances their performance.

## **2. Introduction**

The internal auditing is considered one of the most crucial functions among the companies, as it provides various functions that mean to improve the controlling and monitoring in these organizations. Moreover, it plays an important role in the process of designing and developing the internal control system and supporting the corporate governance. Furthermore, internal auditing is able to help companies to measure and evaluate the risks that may arise in the work environment (Al Matarneh, 2011; Anderson et al. 1993; Blue Ribbon Committee, 1999; IIA, 2003).

Internal audit assists in measuring and evaluating competence and efficiency performance, as well as in maximizing companies' capacity and adapting the best methods to use the available resources, in order to get the most possible quality and to meet the entity's goals (Eighme & Cashell, 2002).

For this importance the purpose of this research is to identify the relationship between Internal Audit and Company performance, the importance of Internal Audit in Business and the added value that Internal Audit can offer.

Internal Audit, as it stands today, has nothing to do with what it was 20 years ago. Changes in technology and the supervisory framework have led administrations to be alert to managing the risks they face. The result is decentralization of activities, with the creation of units such as Risk Management, Compliance & Controllers and the cut-off of Internal Audit activities, which previously, even with time lag, provided information for larger entities. Now, no Internal Auditor rests, but he/she audits all the individual units (Paschas, 2006).

The fact, on the other hand, that internal control spreads to all the sub-units of an organization, has as consequence the necessity of upgrading and further specializing it, and its systems.

The purpose of this research is to identify the relationship between Internal Audit and Company performance, the importance of Internal Audit in Business and the added value that Internal Audit can offer, in the effort of a more objective aspect, so that some conclusions and possible improvements and suggestions on internal audit, as well as its impact on company performance. This is necessary as the adoption and development of effective and appropriate internal control systems is the most

important safeguard of business administrations against threats and generally damaging and harmful business operations.

In the first part, the analysis of the theoretical foundations of Internal Audit and company performance is presented and it includes the definition of internal audit (role, scope, best practices, etc.), the measurement of internal audit effectiveness and efficiency, the way internal audit can offer added value to organizations, as well as the methodology that will be used for the purpose of the thesis.

The second part includes the empirical analysis of the thesis, based on a questionnaire that was sent to employees of various companies in Greece. The correspondents were asked to express their opinion through a 30 questions questionnaire, including various types of questions, in order to examine the relationship between Internal Audit and Company performance, the effectiveness of Internal Audit and if they consider that internal audit delivers added value to their Company.



### **3. Analysis of the theoretical foundations of Internal Audit and Company Performance**

#### **3.1. Internal Audit: Why it's important**

Internal Audit has become an essential factor in the assurance environment of many companies and a valuable tool, which is able to help companies to manage their risks more effectively.

##### **3.1.1. What is internal audit?**

Internal audit is a key pillar of good governance. It provides the board of directors, the audit committee, the chief executive officer, senior executives and stakeholders with an independent view on whether the organization has an appropriate risk and control environment, whilst also acting as a catalyst for a strong risk and compliance culture within an organization (Ljubisavljević & Jovanovi, 2011).

“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.”(The International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors)

Internal audit work is risk-based and encompasses financial and non-financial operations of the organization.

The head of internal audit is generally called the chief audit executive.

##### **3.1.2. What internal audit does**

Companies and organizations need an independent function in order to monitor and review the effectiveness of the departments and processes. As a result Internal Audit function is established. Controls, risk management and governance processes can be

continuously reviewed by Internal Audit. Internal Audit can achieve that with the following ways (Ljubisavljević & Jovanovi, 2011).

First of all IA is independent. That means that it is able to provide impartial assessment of the operations of the organization. After assessment, IA can communicate to management the results of the review regarding the effectiveness of risk management, control and governance processes. Moreover, with the review done, IA can play a crucial role in the improvement of risk management, control and governance processes (Hutchinson & Zain, 2009).

Generally Internal Audit function is an advisor that tells management what it needs to know, when it needs to know it.

The purpose of internal audit is to support the board of directors, the audit committee and the chief executive officer by (Ljubisavljević & Jovanovi, 2011):

- Reviewing achievement of organization objectives.
- Assessing if decisions are properly authorized.
- Assessing integrity and reliability of information.
- Reviewing assets are safeguarded.
- Assessing compliance with laws, policies, contracts and regulations.
- Assessing effectiveness, efficiency and economy of business activities.
- Reviewing opportunity for corruption and fraud.
- Following-up previous audits to assess if remedial action has been effectively implemented.

### **3.1.3. What is the scope of internal audit work?**

The internal audit work acknowledges that the existing controls in companies are managing risks and aim at an effective and efficient governance and performance. As a result, the internal audit work takes into consideration the wider idea of corporate governance and risk.

The various types of internal audit work generally contain the following (Goodwin and Yeo, 2001; Goodwin, 2003; Scarbrough, Rama & Raghunandan, 1998):

- Assurance services.

In order to provide an independent evaluation of risk management, control and governance processes, the internal audit shall proceed with an impartial assessment of evidence.

- Consulting services

In order to add value and enhance company's operations, the internal audit shall provide consulting and related client activities. The scope of those activities shall be agreed between the internal audit and the client.

- Value-adding services

In order to achieve efficient and effective processes, the internal audit shall concentrate on the optimal usage of company's resources.

### **3.1.4. How can internal audit services be delivered?**

There are various models that internal audit uses in order to be delivered (Collier & Gregory 1996; Goodwin & Kent, 2003):

#### **In-house**

The internal audit department consists only of in-house employees and the management is exclusively upon the employees of the organization.

#### **Co-sourced**

Both in-house employees and service providers are involved in internal audit services. However, the management is upon the in-house employees.

#### **Outsourced with in-house management**

Third party service providers are undertaking the internal audit services of the company. However, the management is exclusively upon an in-house employee.

#### **100% Outsourced**

Third party service providers are undertaking the internal audit services of the company and the internal audit functions too. Project management of the service provider contract is done in-house by an employee of the organization.

*It is a generally accepted principle that the external auditor should not also provide internal audit services to the same organization.*

### **3.1.5. What do good practice internal audit services feature?**

In order to achieve the optimal appliance of internal audit the following practices should be embraced (Al-Shammari, 2010):

#### **Risk-based**

Internal audit should always take into consideration the factor of risk and it should always be client-focused.

#### **Independence and positioning**

All operations of internal audit should be independent from the activities that evaluates. In order to achieve objective assessment the internal audit should be placed suitably on company's governance framework.

#### **Internal audit planning and work**

An appropriate business strategy plan that clarifies the duties and responsibilities of internal audit, should always be developed and should always follow the internal audit standards. Moreover, internal audit should always be concentrated on business, providing accurate and clearly stated audit plans, keeping on mind the strategy and risk factors of the company. Finally, there is active management of service providers contracted to provide internal audit services.

#### **Resourcing**

The internal audit department should recruit qualified employees that fulfill all appropriate skills and have the required experience to keep up with its expectations. When it is appropriate, technical related experts should be included in the internal audit engagements.

#### **Communication and reporting**

Internal audit is responsible to verify the optimal operation of the organization to the key stakeholders: the board of directors, the audit committee, the chief executive officer, senior management, etc. The submission of thorough reports and various other services to the stakeholders is a responsibility of the internal audit. The efficiency and effectiveness of internal audit's assessment is evaluated by stakeholders. Regarding

the efficiency of organization control system, a report should be provided annually by the internal audit. Internal audit advises the audit committee and management of patterns, trends and systemic issues identified from its work.

Furthermore, internal audit is responsible to ensure the optimal communication between external audit and organization's management. Finally, internal audit keeps the audit committee updated regarding the practice of all internal and external audit recommendations.

### **Review and improvement**

Internal audit points out issues that arise during and after examination upon relevant areas of the company. Moreover, in order to achieve continuous improvement internal audit is subject to periodic assessment and review.

## **3.2. Measuring internal audit effectiveness and efficiency**

Internal audit is a crucial factor in company's governance and operation. Its efficient implementation and overall operation is a critical part for helping the organization reach its goals and aims. Internal audit's beneficial results consist of an effective identification of organization's risks, process and system's inadequacies, ability to recognize the suitable corrective actions and generally the support of a continuous improvement. Effectiveness and efficiency of internal audit must be evaluated in order to preserve and improve its reliability (Hutchinson and Zain, 2009).

In order to achieve high standard of operations and practices, internal audit should make use of the appropriate performance metrics and measures to identify if the desired goals and aims have been reached. This practice guide provides guidance to internal audit activities on measuring their effectiveness and efficiency and the level of customer service they provide to stakeholders.

The identification of key performance metrics that stakeholders assume that add value and optimize company's processes is the initial step. Examples of stakeholders include the board, executive management, external government bodies and regulators, the external auditor, as well as the internal audit activity itself.

The most common sources that are be used to identify the key performance metrics are the following: The IIA's International Professional Practices Framework (IPPF), the internal audit charter and mission, applicable laws and regulations, and audit strategies and plans.

Effectiveness and efficiency measurements can be quantitative and qualitative. In addition to compliance with The IIA's International Standards for the Professional Practice of Internal Auditing (Standards), audit activity performance measures may include (IIA, 2003):

- Level of contribution to the improvement of risk management, control, and governance processes.
- Fulfilment of key goals and aims.
- Assessment of progress against audit activity plan.
- Enhancement of employees' productivity.
- Improvement efficiency and effectiveness of the audit process.
- Increase in number of action plans for process improvements.
- Sufficiency of engagement planning and supervision.
- Effectiveness in meeting stakeholders' requirements.
- Results of quality assurance evaluations and internal audit activity's quality improvement programs.
- Effectiveness in conducting the audit.
- Clarity of communications with the auditee and the board.

When all key measurements have been successfully recognized, a process of reporting to stakeholders should be settled, including format, timing and metrics. Feedback from key stakeholders must be an ongoing procedure in order to achieve a continuous improvement and proceed with appropriate adjustments where necessary.

### **3.2.1. Defining internal audit effectiveness and efficiency**

A general description of effectiveness and efficiency is “the level (including quality) to which established objectives are achieved.” The same description can be used for internal audit effectiveness and efficiency. Internal auditing should establish performance metrics and related measurement criterion appropriate to its environment or organization to measure the degree (including quality) of achievement of objectives for which the internal audit activity is established. Internal audit effectiveness and efficiency should be monitored and assessed periodically as part of the internal audit process (IIA, 2003).

### **3.2.2. Internal audit Performance Metrics/Measures of effectiveness and efficiency**

Internal audit’s value must be established as a vital part of the company’s governance framework. The audit activity can lead by example with strong, reliable and relevant performance measures.

### **3.2.3. Establishing the Performance Measurement Process**

The chief audit executive is responsible for setting appropriate processes in order to create effective performance metrics (Al-Matari et al., 2012):

- Establish crucial performance categories like stakeholder satisfaction, internal audit operations and innovation and competences.
- Recognize performance category strategies and metrics. Strategies must comply with IIA Standards and applicable laws and regulations, keeping always in mind stakeholders’ satisfaction. Performance metrics can be used by organization as a part for internal audit’s operations effort to comply with IIA’s Standards.
- Frequently monitoring, processing and reporting performance metrics.

The process could follow these types of steps (Al-Matari et al., 2012):

- Review relevant IPPF guidance including Standards.
- Review the strategic plans of the internal audit activity and organization.
- Review the board, audit committee, and internal audit activity charters.

- Evaluate basic, expected, and targeted/preferred internal audit activity deliverables.
- Develop an initial definition of internal audit effectiveness and efficiency.
- Define agreement from key stakeholders of the definition of effectiveness and efficiency.

#### **3.2.4. Develop Measurements of Internal Audit Effectiveness**

- Understand key stakeholders' expectations of the internal audit activity.
- Understand what internal audit attributes, deliverables, and capabilities key stakeholders' value and related shortcomings or advancements in these areas.
- Develop measurement tools such as a balanced scorecard to document relevant attributes of effectiveness and efficiency and related performance against these.
- Agree upon effectiveness and efficiency metrics with key stakeholders.

#### **3.2.5. Monitoring and Reporting Results**

- Establish an agreed upon format and frequency for reporting that considers the organization's size, nature, and governance structure.
- Establish a periodic review of such monitoring and reporting to ensure relevance, efficiency, and effectiveness.
- Use the results of reporting to shape and guide internal audit activities.
- Align internal audit activities to the defined measures of internal audit effectiveness and efficiency.

#### **3.2.6. Categories of Performance Information for Internal Auditing**

The internal audit activity should identify key performance measurement categories such as stakeholder satisfaction, audit processes, and internal audit innovation and capabilities. Audit processes could include risk assessment, planning, and audit methodologies. Innovation and capabilities could include effective use of technology, training, and industry knowledge.



When developing performance measures, the internal audit activity should consider (Davidson, Goodwin-Stewart and Kent, 2005):

- How effective are the performance measures linked to the internal audit activity's strategy?
- Do performance measures include both leading and lagging indicators?
- Do performance measures reflect the mandate and role of the activity?
- How effectively are performance measures used for continuous improvement?
- Performance metrics can be established along dimensions, interests, and perspectives of a variety of key stakeholders. Each perspective would include related measures.

### **3.3. Adding Value through Internal Auditing**

Nowadays, The Internal Audit (IA) department is one of the key management instruments at an organization's disposal. While many companies have had an IA in place for many years, recently the various stakeholders have come to expect much more when it comes to internal controls and the way they are monitored. A company's Board of Directors and Management need transparent and reliable information on the effectiveness of Internal Audit. Also, more and more companies are realizing that taking a good look at their internal processes and controls is a great opportunity to make their internal organization more efficient. Every business is subject to certain risks based on the products or services it offers, the markets in which it operates, the way it is financed and the way it uses resources. Ultimately, the benefit to the company is a question of balancing risks and costs. The goal is to reduce the company's risk exposure to an acceptable level (Hala, 2003; Clikeman, 2003).

Continuing, there is a wide range of potential reasons for management to invest in assessing and improve Internal Audit. Those reasons could be grouped under two categories.

The first one refers to the fact that Internal Audit can "Keep the business out of trouble". To begin with Internal Audit can assist management to increase performance because they can identify the procedures and the parts that the company underperform

and then the right measures can be taken. Furthermore, it is able to ensure the orderly and efficient conduct of business in respect of systems being in place and fully implemented through control tests. Controls that are being tested by Internal Audit mean that business processes and transactions take place without disruption with less risk or disturbance and this, in turn, adds value and creates shareholder value. Moreover, Internal Audit can improve compliance with relevant local laws and regulations which something crucial for the company. In addition to the above it can help to safeguard the assets of the business (Hala, 2003; Clikeman, 2003).

The second category refers to the fact that Internal Audit can make the business better and add value to the company. By looking beyond processes and controls, Internal Audit can play an essential advisory role within the organization. It can identify enterprise-wide cost efficiencies, provide strategic insights that improve business performance and provide key insights that focus on the risks that matter. This kind of support reaps multiple benefits for the organization, including enhanced efficiency, and the ability to move more quickly and take advantage of opportunities. All of these factors can add value to companies.

To sum up, Internal audit function has a lot of things to offer within an organization. It has the ability to preserve, detect and correct something that can harm the company and it can add value adopting an advisory role (Hala, 2003; Clikeman, 2003).

### **3.3.1. Challenges**

A number of barriers can be faced ahead Internal Audit's efforts to assist companies improve performance. An effective Internal Audit function has to find the balance between risk, cost and value. If companies are not able to find this balance, then Internal Audit functions might not be able to offer the maximum result. This issue creates a value gap. Issues could lie in the areas of enablement or competency, or both (Eighme & Cashell, 2002).

Regarding enablement perspective, this gap can be appeared due to a traditional risk assessment and audit-planning approach by Internal Audit. Moreover, heavy focus on auditable units & locations and limited training & development could also create a value gap. Additional factors could be the lack of an effective prioritization and the

unwillingness to change. Finally, value gap could be created from a non-focused on key business process improvement approach (Eighme & Cashell, 2002).

Regarding enablement perspective, the value gap can be created due to the lack of scale to adequately staff certain areas such as IT, international, treasury, taxes, supply chain and fraud prevention and detection. In addition, available resources can influence audit activity. Another reason could be the limited scope of traditional role of Internal Audit function.

Both types of gaps can limit Internal Audit's ability to operate at higher levels. Identifying these challenges — and establishing solutions to address them — will form the foundation of the business case for change (Eighme & Cashell, 2002).

### **3.3.2. How it can be achieved in practice?**

#### **a) Focus on Strategy and Risk**

Provided that risk management is placed as a prominent area of concern, as well as recognizing effective and efficient audits as an important factor, we can easily state that the question of making value real is answered by supporting risk management, informing the risk assessment and providing relevant insights in an order to maximize the performance and quality of the Internal Audit.

A basic responsibility of internal auditors is the evaluation of all the strategically and risk-based important areas that emphasize on performance on a continuous basis. Internal auditors that take into consideration strategic goals and risk, in order to improve audits, are able to give additional value in the most important areas. For example, if a company's biggest risk is improving profitability, internal audit can contribute to strategic goals by identifying performance improvements that focus on reducing costs and increasing revenue (D'Aveni, 1990).

#### **b) Test Existing Metrics**

Testing metrics is a process that can be separated in two steps. The first step is about the identification of metrics that process owners are tracking in order to meet operating goals. The second step is about the identification of the metrics that might be disregarded. This process can be used for performance improvement. Where

metrics are not being tracked in the organization, some audit departments are taking on the task of calculating key metrics and leaving behind the framework for process owners to continuously monitor and report these metrics to management.

Auditors are able to add value to the company by reporting some key questions (D'Aveni, 1990):

- Are performance measures in place?

Measurement of performance is a significant factor for the company. Auditors can play a vital role by helping the management procure improved ways in order to achieve better measurement of performance. Such process can help the company improve performance efforts and at the same time can show the added value from Internal Audit. Auditors can rely on monitoring metrics and reporting – both financial and operational – to identify the performance measures that are in place.

- Are measures focused on factors that are aligned with strategic goals?

Audit results can significantly be improved by examining the relationship between the objectives & actions of company's operations and the strategic objectives of the business.

- How are performance measures used and reported?

Performance information that is collected can help management focus on the areas that is needed and at the same time it can help management to evaluate the monitoring process.

- Are performance measures accurate ?

Internal Audit plays a crucial role in the verification of the reported performance and the aligned with the reality. This is performed by examining the accuracy & validity of the underlying data and applying methodologies and calculations based on performance statistics and metrics. Often, the independent perspective of audit on existing measures provides insights that lead to improvement.

- Are incentive programs aligned with performance measures?

Auditors bring the various silos often found in organizations together when they reconcile performance measures to financial or operational incentives

**c) Embracing technology.**

The possibility of making value real by the usage of technology is enormous. Integrating especially a high percentage of data analytics operations and procedures into the audit itself can be rather effective. Greater insights and values can easily be achieved by applying an integrated solution of data and analytics throughout the Internal Audit (analytics driven continuous auditing, dynamic audit planning, audit scoping and planning, audit execution and reporting, etc.) (D'Aveni, 1990).

**d) Audit the Performance Improvement Process.**

The evaluation of the company's performance and its process for improvement is an area that auditors can have a significant contribution. It is of high importance for the company to apply processes for measuring and examining results, analyzing the root cause and implementing relevant corrective operations, as well as examine how rigorously are followed or how usable and valuable the respective results are (D'Aveni, 1990).

**e) Seek Subject-Matter Expertise.**

Few audit departments have the expertise to address all key functions within a company. Across all industry sectors, leading companies are using a diverse team of resources to add value to their audit processes. Auditors are improving department capabilities with subject-matter experts from within the organization and outside the organization. The use of objective and unbiased institutional talent or external experts can help focus the audit on critical issues, shorten audit cycle times, and grant auditors instant credibility.

An external expert can offer (Hillman & Dalziel, 2003):

- Organization-specific, sector-specific and international experience
- A fresh perspective and a wealth of experience gained from having helped other clients transform their Internal Audit functions

- Highly skilled talent who receive ongoing training to stay current on leading practices
- An array of technology solutions and audit tools that can be customized to meet specific Internal Audit needs

f) **Report Results.**

Audits reports that recommend performance improvements can play a crucial role for a positive change throughout the company and set a tone for value-added efforts in the audit department (Hillman & Dalziel, 2003)

### **3.4 Literature review**

Initially, Gareth (1980) analyzed the conflict of roles of the internal auditor and the problems that arise with the auditing people, from a perspective that emphasizes the pluralistic nature of the organizational structure of life. For his research, he used questionnaires answered by internal auditors in police departments (40 replies), educational institutions (172 replies) and social services (138 replies). The results showed that the audit function initially emerged as part of a supervision process, with the establishment of the Institute of Internal Auditors and Professional Standards, was emphasized as a service of the Administration and has recently come to be considered a "service to the organization" which is an integral part of Management. Thus, there appeared to be a change of view of the internal auditors, which also perform advisory functions from audit functions, leading to the reconfiguration of relations with the auditors and the problems of this change, as well as the inherent conflict of their roles.

Later, Celal(1989) examined the functioning of internal control in the Banks of Turkey and for this purpose he followed the following methodology: 25 questionnaires were sent to the officers of the internal auditors in the Banks and he took back 14 (answer rate 56%), while 90 different questionnaires were sent to auditors and 50 employees were answered to 15 banks (answer rate 56%). In the conclusions that have emerged, it is the confirmation that with the increase in the use of computers, the international expansion of banks and internationalization in general, the importance of internal audit in the banking sector is growing. The number of

internal auditors is related to the size of the Bank and research has shown that larger banks tended to employ reduced proportional internal auditing staff. All internal auditors have graduated from Universities and have studied Accounting. In addition, it was asked whether graduates should be theoreticians or more practical, and although educational programs are rather remote from practice, it was considered that learning on work and home-based programs acquires knowledge and experience. Finally, research has shown that internal control is a good foundation for high managerial positions.

Afterwards, Adams (1994) conducted an investigation into whether and how Representation Theory could contribute to explaining the existence and necessity of the Internal Audit Service to conclude that Representation Theory may in many ways contribute to an explanation of the existence and necessity of the Internal Audit Service.

During the same year, Rocco (1994) examined the international perspective of the audit committees in the context of increasing pressure on corporate responsibility, the obligation of listed companies to set up audit committees and the trend of their international expansion. For this purpose, he conducted extensive bibliographic research and came up with a variety of findings. In particular, it has emerged that internal auditors have to accept the challenge of providing appropriate information and training to the members of the audit committee, as this will allow them to better manage the variety of their internal control, organizational governance and management reports. In addition, the importance of audit committees in strengthening corporate governance has been fully recognized over the last few decades, with the many responsibilities assigned to them. The Statement on Auditing Standards (SAS 65), issued in 1991, aimed at clarifying the various aspects of the relationship that external auditors may have with internal auditors.

The purpose of the research by Alan et al (1994) was to describe the historical evolution, aspects and characteristics of the relationship developed between internal and external auditors (in the light of SAS 65). For this reason a questionnaire was sent to a sample of 130 companies due to the fact that 22 companies did not have separate internal control departments and of the eight companies failed to answer all those asked, the questionnaires were answered by 100 companies and specifically by the

general manager internal audit, the Chief Financial Officer, the Chairman of the Audit Committee and the external auditor who was in charge of each of these companies (a response rate of about 76.9%). The results of the survey have shown that, in most companies, collaboration and teamwork has been developed with regard to control by internal and external auditors and SAS has had little influence on these relationships. Finally, where internal audit staff does not meet the required level of professionalism or there is a frequent change of audit firms by the agencies, there is new guidance for the effective and efficient treatment of internal auditors by independent auditors.

Furthermore, Ali (1994) conducted a survey that dealt with the influence of time budget pressure on the operation and quality of internal control, the behavior of internal auditors against them, and the relationship of possible departures with the above. For the needs of the survey a questionnaire was sent to a random sample of 638 internal auditors who were members of the Institute of Internal Auditors and returned 262 useful answers (answer rate over 41%). The results of the survey revealed the dysfunctional behavior of internal auditors under the pressure of budgets, outlined the implications and suggested measures to combat them. Internal auditors consider the time budget as an interference with the behavior they must have and consider the opponent to be an aversion to collecting adequate and appropriate evidence. Specifically, compliance testing and financial control have been more vulnerable to this tactic, while less testing. The four main culprits for malfunctions in the behavior of internal auditors over time are, according to the above study, the inability of control measures, the lack of oversight, the over-dependence on presentations and the representation of operational staff and the pressures of the time budget.

A survey conducted by Colbert and Alderman (1995) examined whether a different control approach was chosen depending on the effectiveness and efficiency it can have. The result of the research has shown that a process-based approach is easier, and control based on a risk-based approach is more efficient and effective.

Chan (1995) conducted a case study, which he applied in the Asia-Pacific region on the importance of applying a single internal control methodology to bank branches of an international bank, which spread to a broad area with great diversity in culture and mentality, as well as in regulations, and has shown that uniformity in internal control



is actually achieved and co-operation and synchronization in work through diversity is promoted. In order to conduct his research, Chan, M.M.K. in 1995, based on the generalized crisis that exists, that an auditor leads to an initial conviction and confirms, modifies or rejects it, depending on the strength and direction of audit evidence. This research examines in principle the existence of a recent (after-acquired experience) influence in the opinion of an auditor when assessing a set of complex, not steadily positive or negative, evidence. Secondly, it examines the effect of a controller's (cognitive and independent) cognitive style on the process of adapting their beliefs and, finally, on the interaction between the two factors. This is an experiment based on an earlier theory and the use of hypotheses. For its needs, 20 questionnaires were sent and answered to auditors of four audit firms. The results showed a significant interaction between the cognitive style and the influence of post-event experiences. Those who are more dependent on their cognitive style tend to be more affected by the order of evidence than others. This research goes along with others that have shown that a change of opinion from later evidence, recent experience, occurs when a small set of complex, not consistently positive or negative evidence is assessed.

Another study by Rocco (1996) aimed to examine the role of professional organizations, governmental organizations and international accounting and auditing agencies in publicizing the standards for the independence of auditors at local and international level. In particular, this study focuses on the role played in it by the American Institute of Certified Accountants, the Institute of Internal Auditors, the Securities and Exchange Commission and the US Treasury Department. The same applies to other professional organizations, for example banks, industries and construction companies, which are related to sensitive internal auditing issues, perhaps caused by management consulting, operational responsibilities, outsourcing, rotation of controllers and others to impair the independence of auditors. To support the conclusions and initial assumptions, a historical review and bibliographic research was conducted. The results have shown that independence is considered the stamp of the audit and accounting profession. The American Institute of Certified Accountants, the Institute of Internal Auditors and other organizations have recognized its importance, both professionally and ethically, and have codified it in their codes of professional ethics. The Securities and Exchange Commission, the US Treasury

Department, foreign governments and stock exchanges have played an important role in requiring financial statements to be audited by independent auditors, and generally all of the above organizations have contributed to the independence of auditors.

In 2001 a new research was conducted by Loukis and Spinellis. The purpose of this research was to highlight the importance of IT systems security and even internal control procedures in the Greek public sector, as they often relate to sensitive and important information and are sometimes part of critical infrastructure and whether the necessary attention has been given to public bodies. Questionnaires were sent to a sample of 90 Greek public organizations and were responded and returned 53 (59% response rate). It has been shown that organizations in the Greek public sector have only a basic level of awareness on security issues of information systems. What seems to concern them is the confidentiality of digital data, but only a small percentage has developed a comprehensive, systematic approach to the security of information systems, including internal control procedures. Finally, research has concluded that appropriate training needs to be achieved and the importance of the human factor in achieving a high level of security of information systems is not underestimated.

Additionally, Read and Rama (2003) conducted a study investigating the role that malware complaints may play in internal auditors. Thus, data was collected from chiefs of internal auditors using a questionnaire. They were sent to 400 US listed construction companies with annual revenues of more than \$ 250 million and 129 respondents. The results of the survey showed that over the past two years 71% of the chiefs of internal auditors have received complaints of malfunctions, of which 65% was true. In fact, accepting such complaints is positively linked to the involvement of internal audit in the compliance audit with the Code of Conduct and the support of internal audit by the Audit Committee.

A survey that studies and highlights the fact that external auditors rely on internal auditors (especially for company financial statements), reducing costs to the client and ending with the main features that internal auditors need to have to rely on to them, was made by Haron et al. (2004). The study population consisted of different audit firms in the southern side of Malaysia, namely chief executives and executives, to whom there were sent questionnaires and responded to 64 using a convenient sample. The results of the survey showed that the necessary characteristics that the external

auditors considered that the internal auditors should have to rely on them in their control are technical competitiveness and functionality.

A study carried out in 2004 by Abdulrahman et al. discussed the extent of cooperation and synchronization between internal and external control in Saudi Arabian business. The methodology used was the use of questionnaires and interviews with Saudi Arabian business intelligence managers. Specifically, the sample was originally 157 companies from the top 1000 companies that were there, and was finally sent to 135 and responded by 78 (58% response rate). They were also sent to 39 external auditors working in Saudi Arabia and 16 external auditor offices, of which 33 questionnaires were returned (85% response rate). Finally, interviews with 15 internal and 13 external auditors were conducted. The results of the survey showed the following: 1) the external auditors expressed concern about the independence, the job perspective and the small size of many internal audit services, 2) the internal auditors considered the cooperation with the external auditors to be limited and the latter auditors more positive for its scope, provided that the quality of the internal control service was adequate, while this element (objectivity, competition and work experience) was also dependent on whether they were based on the work of internal auditors, and (3) the external auditors felt that the internal audit services in Saudi Arabia had lost professionalism and independence from management, with negative consequences for their work and their co-operation with them.

In addition, Faudziah et al. (2005) investigated whether Bursa Malaysia's Internal Audit Department complied with the Standards of Vocational Training of Internal Auditors and judged whether such compliance would affect the quality of the internal system companies. Two sets of questionnaires were sent to the internal auditors of 812 listed Malaysian "Bursa" companies, of which 250 responded, with a response rate of 38.23%. It has been shown that internal audit, professional certification, objectivity and criticism have a significant impact on the monitoring aspect of the internal control system. The performance of the internal control work significantly affects the internal control system, both in terms of information and communication. Professional qualification, objectivity and how the work is done affect the internal audit system from the audit environment. Also, the management and execution of the internal audit, the audit program and the audit reports, influence the control system on the risk assessment aspect. Finally, the performance of the audit work and audit

reports significantly affect the internal control system and in particular the control activities.

One more study was conducted by Bierstaker and Thibodeau (2006) on whether the use of a questionnaire or narrative record of events can affect an auditor's performance in identifying internal control design weaknesses. The methodology followed was the internet communication with a sample of 73 auditors from two South American companies that had a range of different experience each. The auditors had an average audit experience of 41.4 months and an average experience of 30.2 months of assessment and assessment of internal control. The results of the survey showed that the auditors who filled out questionnaires for finding weaknesses in the internal audit process correctly recognized more weaknesses than those who used the narrative record of events. Especially if the auditor had a lot of experience in internal control, this proved to be even more useful and effective.

Allegrini et al. (2006) conducted a survey (with the tools of the 2006 Global Common Body of Knowledge (CBOK study) and the Institute of Internal Auditors (IIA)), which is an effort to understand the expansionary view of internal control around the world. The aim of the review of European literature on internal control was to record how the functioning of internal control changes, in the face of changes in global business practices. This research was based on European literature focusing on developments that had an impact on the expanded scope of internal control, on the changing skills that internal auditors should have and on their role in strengthening good corporate governance. This study showed that literature shows changes in the activities of internal auditors, new opportunities and challenges are continually being created due to the increasing complexity of business transactions, the potential regulatory environment in Europe, and important achievements in information technology. Although the necessary professional standards - the qualifications of internal auditors in the IIA have been renewed in 2004, it is necessary to further refresh them in the future in order to respond to the internal auditor's skills and knowledge in the current developments, with the results of the survey.

Durbin (2007) tried to examine how financial organizations should demonstrate their efforts to combat fraud. One way is to create an anti-fraud framework that will offer many additional benefits, which auditors consider necessary and invaluable energy

from an economic organization as it offers a sense of protection to the employees of the institution and its shareholders and maintains or even and increases investor confidence by strengthening the value of the stock.

A further study was carried out in 2007 by Dessalegnand Aderajew, which aimed at identifying factors that had an impact on the effectiveness of internal control services, such as the quality of internal control, management support, organizational structure, behavior of the controlled and their interaction. The methodology used was a case study in a large educational institution in the Ethiopian public sector, while multiple sources of information were used. The result of the survey has shown that the effectiveness of internal audit is heavily influenced by the quality of internal audit and management support, while the organizational structure and behavior of the auditees does not exert great influence on it.

Koutoupis and Tsamis (2008), with literature review and three case studies (examining the practice of three major Greek banks), attempted to analyze the situation of Greek banks with regard to the implementation of the risk-based approach. The establishment of Internal Audit Services in Greek Banks is required by the Greek Law for listed companies, by the Bank of Greece, but also by international regulations, such as the requirements of the Basel Committee for the Supervision of Banking Systems and the Standards of the Institute Internal Auditors. Most of the regulations, however, were largely ignored by the Greek banking credit institutions, beyond the minimum requirements that the Bank of Greece required. The risk-based approach to control was an unknown idea, although most Greek banks considered it to be in place. Most Greek banks, following recommendations, are trying to implement the risk-based approach, and thus it is examined the current situation of three major Greek banks against the requirements of the Basel, the Risk Management Enterprise and the standards of professional training of internal auditors. The results of the survey have shown that both the Basel Committee and the training standards require the adoption of a risk-based approach by internal auditors, which in practice has not been fully achieved and although the Bank of Greece does not require it, however, issues arise during the audits carried out on Greek banks by non-adoption. Greek banks adopt an interim risk-taking approach that does not record them and does not link them with any relevant risk assessment. Proposals are generated and recorded.

In 2008, Ahmaddrafted an article to empirically investigate the impact of emerging IT on the activities of internal auditors and examine the extent to which IT systems ratings in Saudi Arabian organizations vary based on organizational characteristics and objective considerations. Approximately 700 questionnaires were sent to a sample of Saudi organisms and 218 questionnaires (SPSS analysis) were replied and returned, ie a response rate of about 31.1%. The results of the survey revealed that internal auditors need to improve their CIS knowledge and techniques to achieve better planning, guidance, supervision and judgment of the work done. In addition, Internal Audit focuses primarily on traditional risk and control information systems, such as information systems for data reliability, confidentiality, and security and process implementation. Less attention has been paid to systems development and acquisition of activities. The relationship of Internal Audit with the assessment of information systems is related to the purpose of the audits, the type of business, the number of its specialized personnel in the information systems and the existence of new information systems (CIS).

Ahmadand Taylor(2009) in their investigation in Malaysia examined the commitment to independence of internal auditors and the impact of confusion and conflict of their roles, using questionnaires sent to internal auditors of the Institute of Internal Affairs Malaysian Auditors who had worked for internal audit services for companies listed in Malaysia for at least three years. The number of listed companies with internal audit services was 565 and the responses finally received amounted to 101, representing a reputation rate of 17.9%. The findings of the survey showed that both the confusion and the conflict between the roles of internal auditors have a negative connection with their commitment to independence.

A further study was conducted by Joeet al. (2009), which aimed to analyze the independence of the internal control function through its relationship with the Management and the Audit Committee. The results were based on a comparative analysis of the answers to the questionnaires sent to Australian senior executives against existing literature and best practice guidelines. The sample was 206, of which only 34 (questionnaires) were answered. The results revealed threats as regards the relationship between management and internal control, such as: using the internal audit function as a step to progress to other positions, approving the internal audit budget, and feeding the internal control design by the Managing Director (Financial)

Advisor and to consider the internal auditor as an "associate", especially when combined with other indirect threats. Regarding the relationship of internal control with the Audit Committee, significant threats were identified, such as the malfunctioning of audit reports by senior auditors to the Audit Committee, incomplete assignment to the Audit Committee of the recruitment, redundancies and judgments of the heads of internal control services. Finally, it was noted that not all Audit Committees had members, or at least one member trained and qualified in Accounting.

Another survey conducted by Burnaby and Hass (2009), examined the practice of effective internal control and the compliance with the Standards of the Institute of Internal Auditors, the skills, competences and knowledge of Internal Auditors, the tools and the internal control techniques and the emerging roles of the Institute of Internal Auditors. For this study, questionnaires were sent and received by 99,000 members of the Institute of Internal Auditors of 91 countries. The percentage of answers ranged at 9.5%, with 9,366 answers being used. The conclusions include internal auditors' compliance with International Standards on Internal Auditors in their compliance with their duties, generally compliance, possible obstacles to this management's conviction that Standards do not add value to the business, lack of necessary personnel and time, non-compliance with Standard 1300 (Quality Assurance and Improvement Program) in many companies internationally, and finally, the CBOK 2006 database for Internal Auditors proved useful.

Finally, a further survey conducted by Palfi and Muresan (2009) examined the importance of a well-organized internal control system to ensure the security of a credit institution's activity and the stability of the banking system as a whole. In order to make a safe conclusion, a comparative analysis of the Basel Committee's opinion on the weaknesses of internal audits and this study was carried out in a sample of credit institutions in Romania. The investigation concluded that in order to ensure effective internal audit, complementary relationships and continuous cooperation, based on periodic meetings, should be ensured between all structures with audit activities, such as the supervisory authority and the internal and external auditors, and he has been very well organized.

## **3.5. Methodology**

### **3.5.1. Introduction**

This chapter identifies the population that is the "target group" of the research and the sample population that is the subset needed to reach the research goals and draw conclusions. In addition, it describes the technique of the sample selected.

### **3.5.2. Purpose of the study**

The survey is about examining the relationship between Internal Audit and Company performance, the importance of Internal Audit in Business and the added value that Internal Audit can offer.

### **3.5.3. Sample and Population**

This research explores the relationship between Internal Audit and Company performance, the importance of Internal Audit in Business and the added value that Internal Audit can offer. As a result, a questionnaire was given to 50 employees of various companies in Greece. The questionnaire was addressed to men and women of different ages.

To select the sample, the exact population number is required (Cohen et al., 2000). The sample refers to a representative subset of the population selected for research purposes to draw conclusions for the entire population. This survey follows a random selection method among companies' employees and as a result 50 questionnaires were sent to employees and the answers reached 68% (34 answers). It should be emphasized, however, that the larger the sample, the greater the accuracy of the conclusions.

The employees of the sample are working as managers or executive managers in various sectors of the firm. Some of them are working in the Internal Audit. The companies of the sample belong in various sectors. Some of them are: Information Systems, marketing, insurance, banking, accounting, audit, telecoms, tourism and finance.



#### **3.5.4. Sampling technique**

This study uses the random sampling technique. The questionnaires were sent by e-mail and through LinkedIn to the employees of the organization. As a result, the sample was convenient due to the fact that questionnaires were sent directly and were also the best possible access as they collaborated with colleagues, acquaintances and friends.

#### **3.5.5. Description of the questionnaire**

In this questionnaire, there are only "close-ended" questions where respondents are asked to choose from default answers. All questions of the questionnaire come from a three point or five-point Likert scale that measures positive or negative responses to a statement. The Likert scale was used for the correspondent to show the degree of agreement or disagreement on the issue of internal control.

As for the data collection, it was not considered necessary to clarify anything when completing the questionnaire. The questions were easy to be understood by the participants without extensive explanation for their response. After the questionnaires were gathered, their completeness and validity were checked. The survey (including questionnaires) was completed correctly.

#### **3.5.6. Limitations**

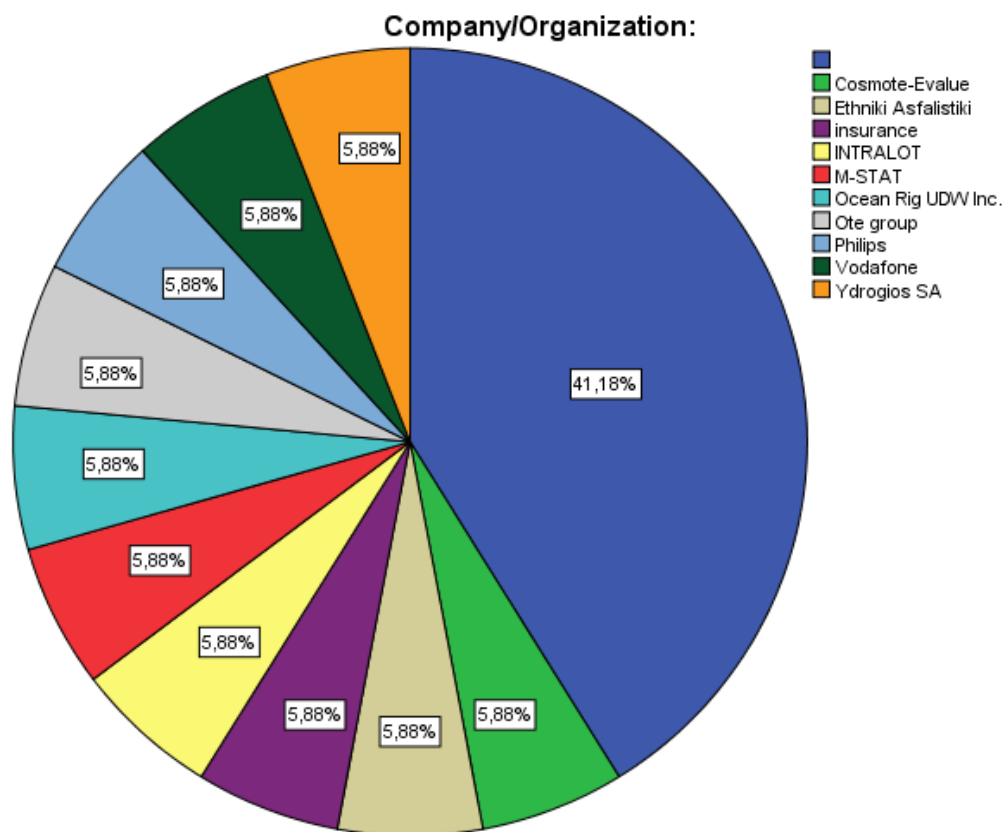
The design of the questionnaire made it easier for participants to respond anonymously, easily and quickly, while the researcher had the opportunity to quickly obtain a sufficient number of information which he could then easily and quickly process using statistical processing programs. As a disadvantage of this method, it is worth mentioning that there was no personal contact with the participants, resulting in their answers lacking spontaneity. Also, the questions were closed-ended and did not leave space for personal annotations. However, the very short time from 26/04/2017 to 31/08/2017 to which the investigation had to be completed, did not give space for a different approach

## 4. Empirical analysis

### 4.1. General information

There were 34 participants on the survey. Most of them (41,2%) didn't mention the company they work for, but the rest of them were employees in Cosmote, Ethniki Asfalistikiki, other insurance company, Intralot, M-stat, Ocean Rig UDW Inc., OTE group, Philips, Vodafone and Ydrogios SA.

#### Company/Organization:

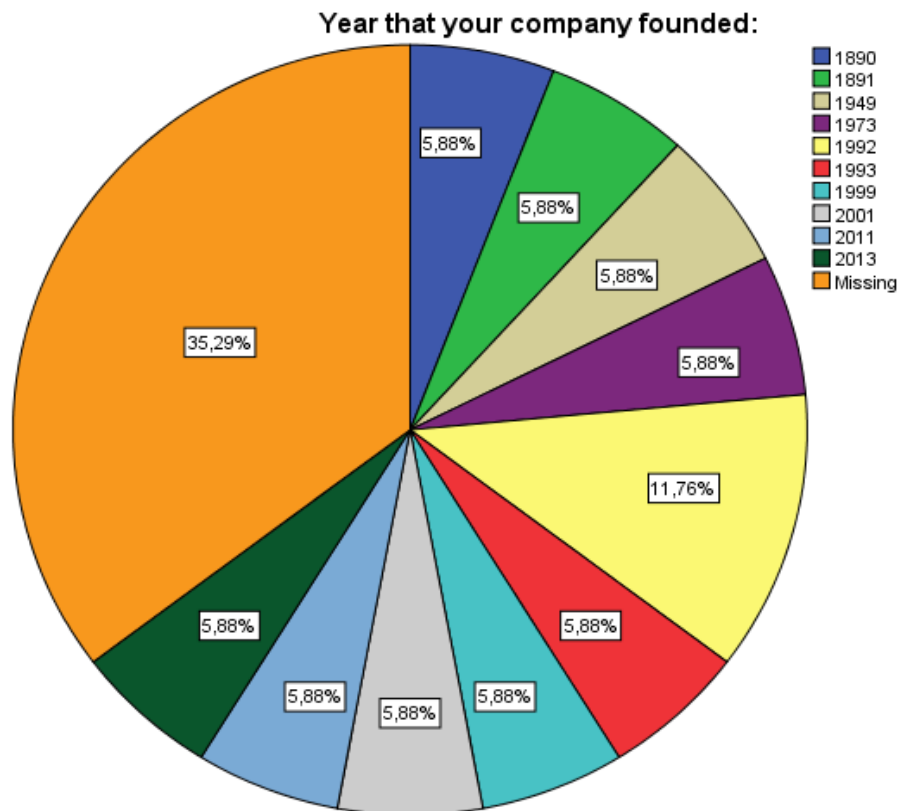


	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	14	41,2	41,2	41,2
Cosmote-Evalue	2	5,9	5,9	47,1

Ethniki Asfalistiki	2	5,9	5,9	52,9
insurance	2	5,9	5,9	58,8
INTRALOT	2	5,9	5,9	64,7
M-STAT	2	5,9	5,9	70,6
Ocean Rig UDW Inc.	2	5,9	5,9	76,5
Ote group	2	5,9	5,9	82,4
Philips	2	5,9	5,9	88,2
Vodafone	2	5,9	5,9	94,1
Ydrogios SA	2	5,9	5,9	100,0
Total	34	100,0	100,0	

Some of the companies were old enough (founded in 1890, 1891), some other were less old (founded in 1949, 1973), the majority was founded in 1992 (11,8%) and some others were founded between 1993 and 2013.

# Year that your company founded:

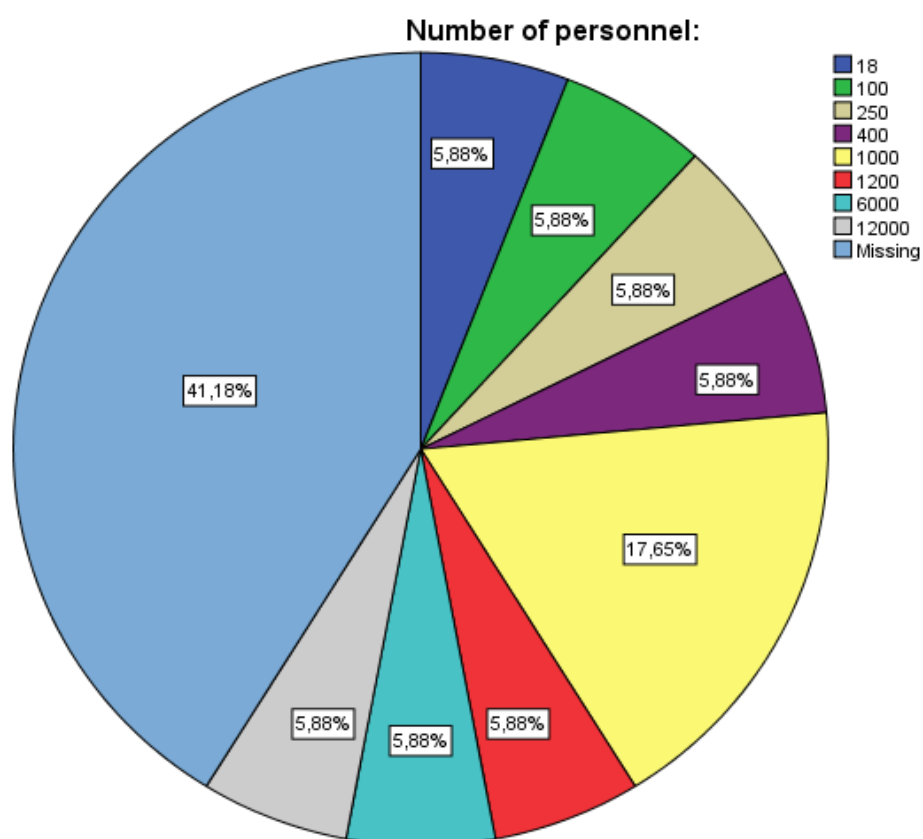


	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
1890	2	5,9	9,1	9,1
1891	2	5,9	9,1	18,2
1949	2	5,9	9,1	27,3
1973	2	5,9	9,1	36,4
1992	4	11,8	18,2	54,5
1993	2	5,9	9,1	63,6
1999	2	5,9	9,1	72,7
2001	2	5,9	9,1	81,8
2011	2	5,9	9,1	90,9
2013	2	5,9	9,1	100,0

Total	22	64,7	100,0	
Missing System	12	35,3		
Total	34	100,0		

17,6% had 1000 people as personnel and 5,9% had 18, 100, 250, 400, 1200, 6000 and 12000 members in their personnel.

### Number of personnel:

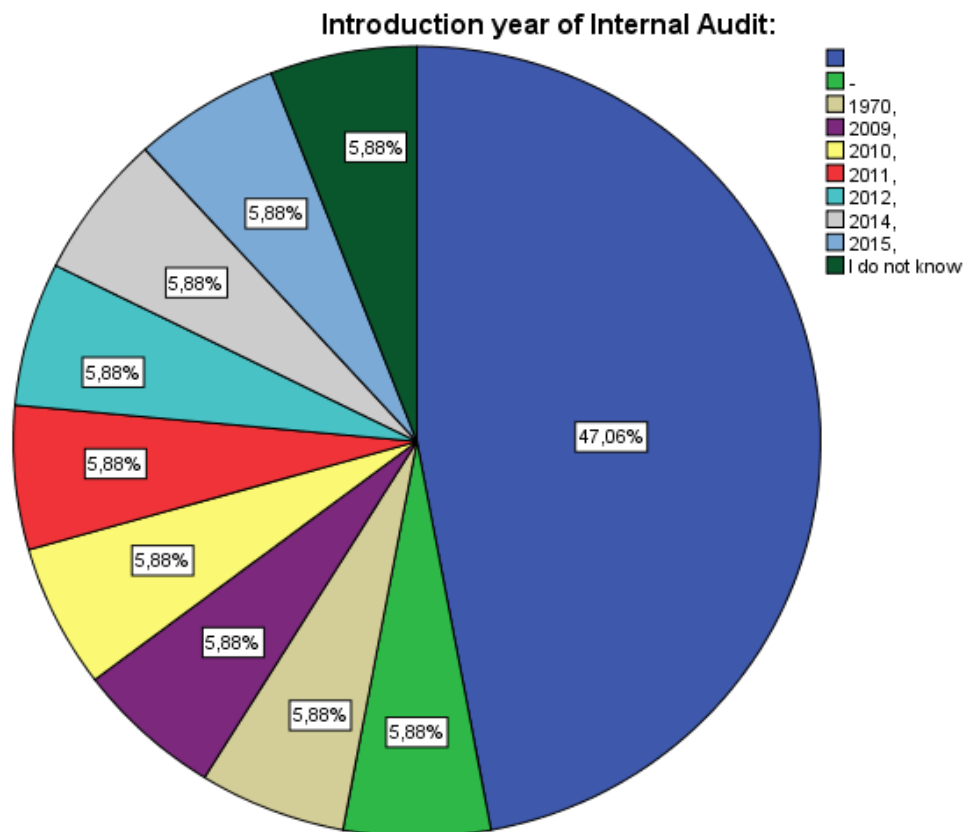


	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18	2	5,9	10,0	10,0
100	2	5,9	10,0	20,0
250	2	5,9	10,0	30,0

400	2	5,9	10,0	40,0
1000	6	17,6	30,0	70,0
1200	2	5,9	10,0	80,0
6000	2	5,9	10,0	90,0
12000	2	5,9	10,0	100,0
Total	20	58,8	100,0	
Missing System	14	41,2		
Total	34	100,0		

As for the introduction year of Internal Audit, 52,9% didn't answer, 5,9% didn't know, while the others said that it was in 1970, 2009, 2010, 2011, 2012, 2014 and 2015 that their company introduced Internal Audit.

### Introduction year of Internal Audit:



	Frequency	Percent	Valid Percent	Cumulative Percent
	18	52,9	52,9	52,9
Valid 1970,	2	5,9	5,9	58,8
2009,	2	5,9	5,9	64,7
2010,	2	5,9	5,9	70,6
2011,	2	5,9	5,9	76,5
2012,	2	5,9	5,9	82,4
2014,	2	5,9	5,9	88,2
2015,	2	5,9	5,9	94,1
I do not know	2	5,9	5,9	100,0

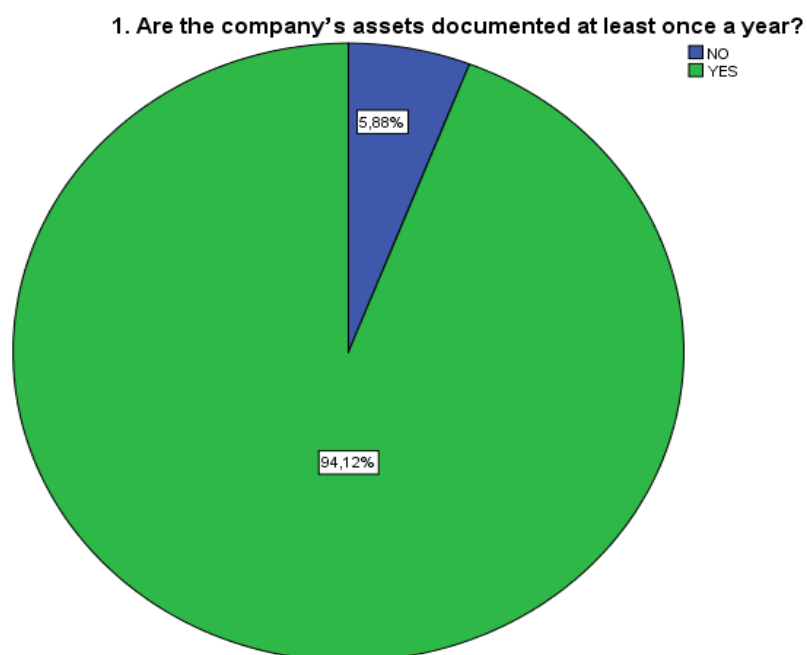
Total	34	100,0	100,0	
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## General Questions

The next part of the survey consisted of general questions about the company.

The great majority (94,1%) said that the company's assets are documented at least one year and that there is a clear segregation of duties of the company's personnel.

### Question1: Are the company's assets documented at least once a year?

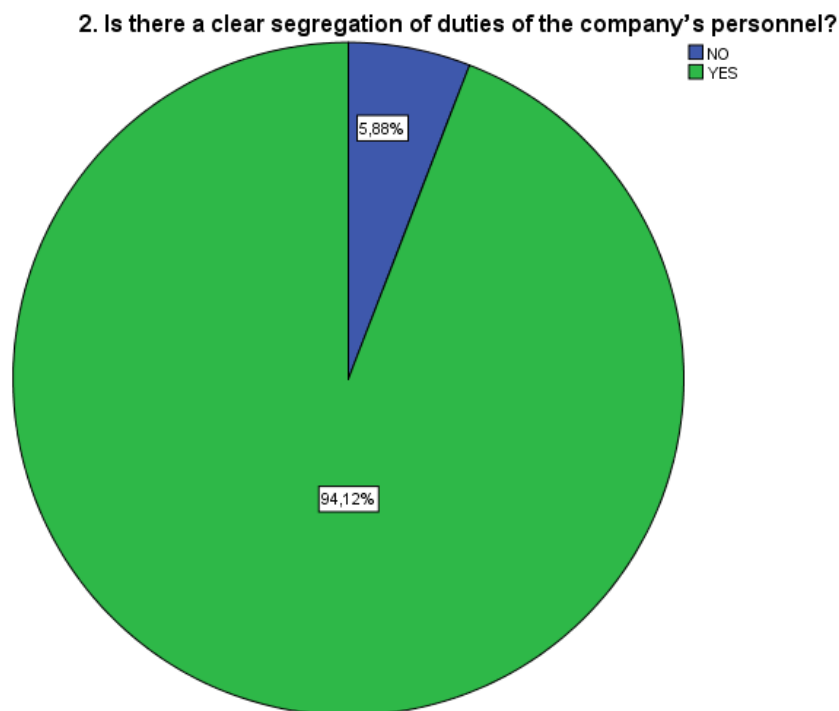


	Frequency	Percent	Valid Percent	Cumulative Percent
NO	2	5,9	5,9	5,9
Valid YES	32	94,1	94,1	100,0
Total	34	100,0	100,0	

Table 1: Question 1 Results



**Question2: Is there a clear segregation of duties of the company's personnel?**

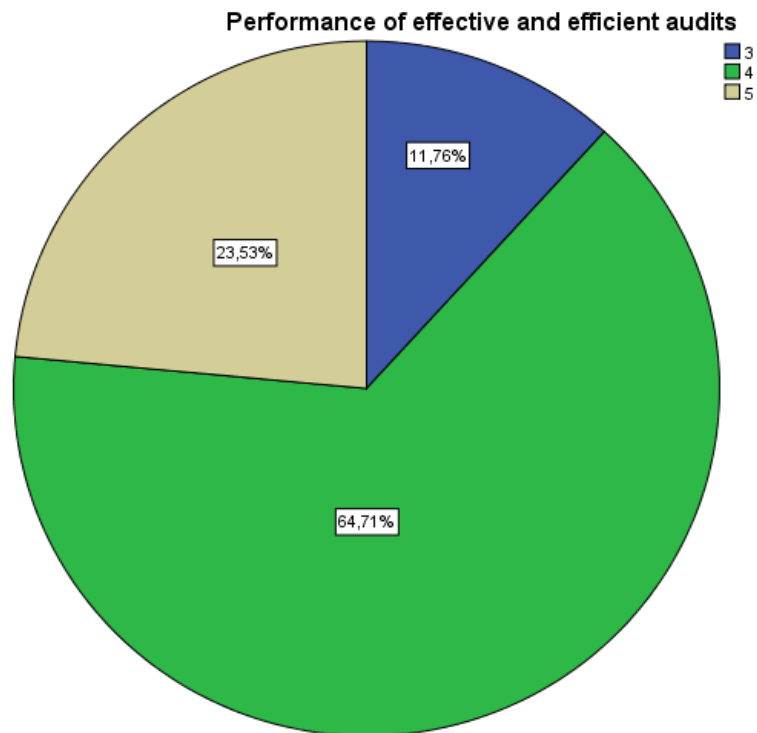


	Frequency	Percent	Valid Percent	Cumulative Percent
NO	2	5,9	5,9	5,9
Valid YES	32	94,1	94,1	100,0
Total	34	100,0	100,0	

Table 2:Question 2 Results

The next question (3) was about the importance of some elements to CFO and Audit Committee Chairs, evaluating them on a scale from 1 to 5. All of them said that the performance of effective and efficient audits, a measurable impact, the quality of IA reports, the Commitment /Technical excellence /Quality, the appropriately qualified personnel and the clear Standards / robust tools are really important (3-5).

## Performance of effective and efficient audits



	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3	4	11,8	11,8	11,8
4	22	64,7	64,7	76,5
5	8	23,5	23,5	100,0
Total	34	100,0	100,0	

## Measurable impact

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3	8	23,5	23,5	23,5
4	16	47,1	47,1	70,6
5	10	29,4	29,4	100,0

Total	34	100,0	100,0	
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### Quality of IA Reports

	Frequency	Percent	Valid Percent	Cumulative Percent
3	12	35,3	35,3	35,3
4	14	41,2	41,2	76,5
5	8	23,5	23,5	100,0
Total	34	100,0	100,0	

### Commitment /Technical excellence /Quality

	Frequency	Percent	Valid Percent	Cumulative Percent
3	6	17,6	17,6	17,6
4	12	35,3	35,3	52,9
5	16	47,1	47,1	100,0
Total	34	100,0	100,0	

### Appropriately qualified personnel

	Frequency	Percent	Valid Percent	Cumulative Percent
3	6	17,6	17,6	17,6
4	14	41,2	41,2	58,8

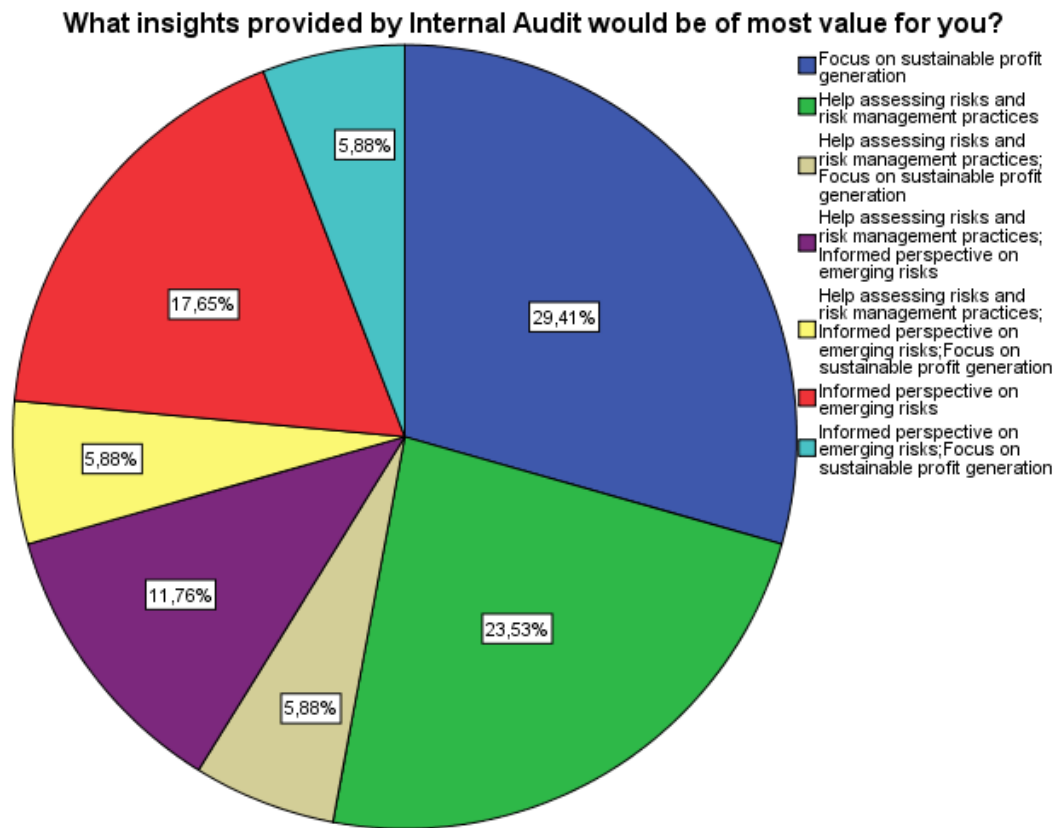
5	14	41,2	41,2	100,0
Total	34	100,0	100,0	

#### **Clear Standards / robust tools**

	Frequency	Percent	Valid Percent	Cumulative Percent
3	8	23,5	23,5	23,5
4	14	41,2	41,2	64,7
5	12	35,3	35,3	100,0
Total	34	100,0	100,0	

Afterwards the correspondents answered about the most valuable insights provided by Internal Audit. 29,4% consider the focus on sustainable profit generation as the most valuable, 23,5% mention to help assessing risks and risk management practices, while 17,6% believe that the most valuable is the Informed perspective on emerging risks and the 11,8% to help assessing risks and risk management practices and Informed perspective on emerging risks. Additionally, 5,9% support that the most valuable insights are to help assessing risks and risk management practices and Focus on sustainable profit generation, to Help assessing risks and risk management practices, the Informed perspective on emerging risks and to Focus on sustainable profit generation and the Informed perspective on emerging risks and to Focus on sustainable profit generation.

**Question4: What insights provided by Internal Audit would be of most value for you?**



	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Focus on sustainable profit generation	10	29,4	29,4	29,4
Valid Help assessing risks and risk management practices	8	23,5	23,5	52,9
Valid Help assessing risks and risk management practices and Focus on sustainable profit generation	2	5,9	5,9	58,8

Help assessing risks and risk management practices and Informed perspective on emerging risks	4	11,8	11,8	70,6
Help assessing risks and risk management practices;Informed perspective on emerging risks;Focus on sustainable profit generation	2	5,9	5,9	76,5
Informed perspective on emerging risks	6	17,6	17,6	94,1
Informed perspective on emerging risks;Focus on sustainable profit generation	2	5,9	5,9	100,0
Total	34	100,0	100,0	

Table 4:Question 4 Results

## 4.2. Effectiveness of the internal audit function

The next part of the survey was about the effectiveness of the internal audit function, measured on a 1-5 scale.

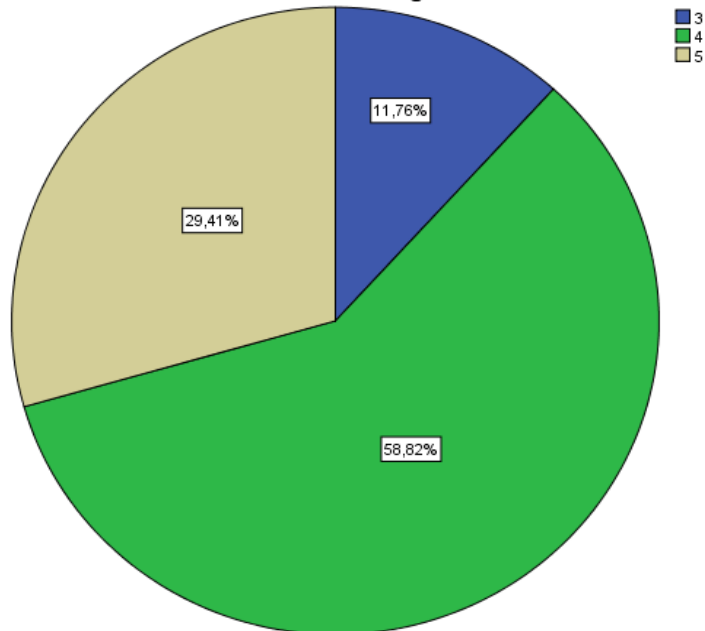
All of the participants claimed that internal audit has clearly defined audit plan for the year and over the longer term, that internal audit has sufficient resources to deliver on its annual plan and pick up ad hoc projects as necessary, that internal audit has team members with sufficient technical knowledge to perform their role effectively and that internal audit manages its resources effectively to maximize the value of its service to

the business. Furthermore, all of them support that the audit committee regularly reviews the quality and results of internal audit reporting and activities, that internal audit's independence and objectivity included in the assessment, that internal audit produces reports for individual audits with a clear rating scale which identify both root causes and consequences of issues which are delivered on a timely basis with clarity and impact, and include credible recommendations to management, it produces reports for the audit committee which present information in a clear, concise manner, including the identification of themes and trends, and their consequences for the organization as a whole, it has rapid and effective mechanisms in place for the escalation of issues requiring senior management or audit committee attention and its procedures produce many significant findings? Are these actioned by management on a timely basis

Additionally, 94,1% suggested that internal audit reflects on and adapt its methodology to ensure that it remains fresh and relevant, that internal audit has a presence in major governance and control forums throughout the organization, for example, any risk committee, it has team members with appropriate information systems auditing experience to understand and assess the level of technology used by the organization, its effectiveness is often evaluated, the measures are focused on factors that are aligned with strategic goals and the Internal Audit meets regularly with the external auditors to discuss risk assessments, scope of procedures, or opportunities to achieve greater efficiencies and effectiveness across the company's audit services.

**Question5: Does internal audit have clearly defined audit plan for the year and over the longer term?**

Does internal audit have clearly defined audit plan for the year and over the longer term?



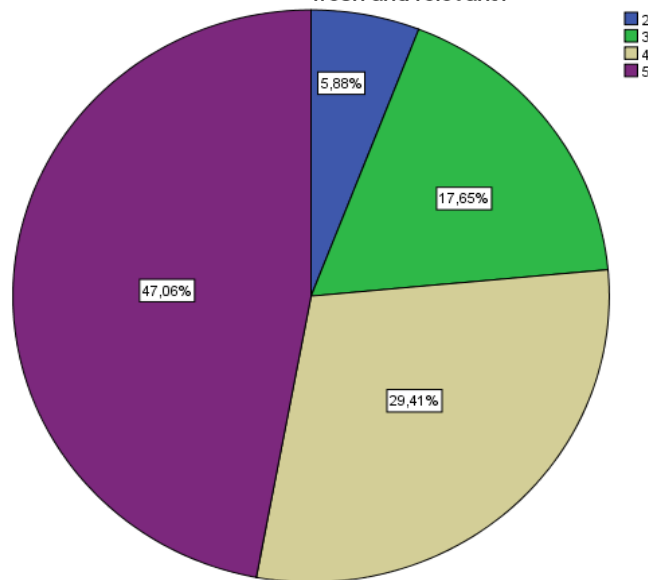
	Frequency	Percent	Valid Percent	Cumulative Percent
3	4	11,8	11,8	11,8
4	20	58,8	58,8	70,6
5	10	29,4	29,4	100,0
Total	34	100,0	100,0	

Table 5: Question 5 Results



**Question6: Does internal audit reflect on and adapt its methodology to ensure that it remains fresh and relevant?**

Does internal audit reflect on and adapt its methodology to ensure that it remains fresh and relevant?

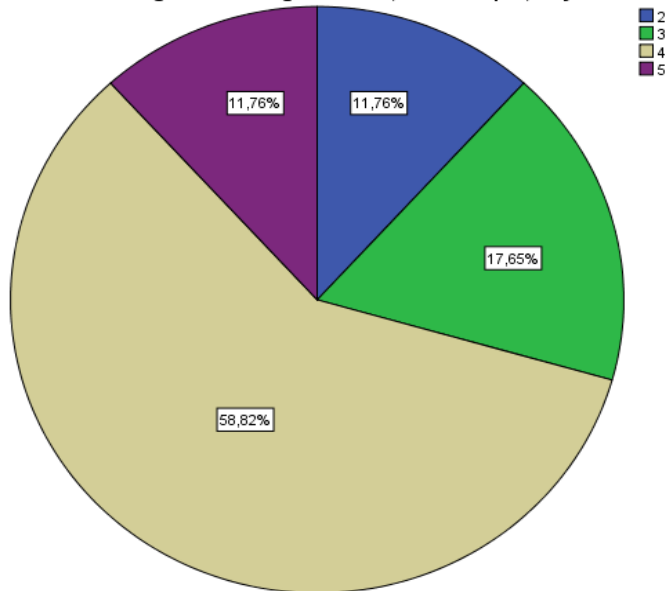


	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	6	17,6	17,6	23,5
Valid 4	10	29,4	29,4	52,9
5	16	47,1	47,1	100,0
Total	34	100,0	100,0	

Table 6: Question 6 Results

**Question7: Does internal audit have a presence in major governance and control forums throughout the organization, for example, any risk committee?**

Does internal audit have a presence in major governance and control forums throughout the organization, for example, any risk committee?

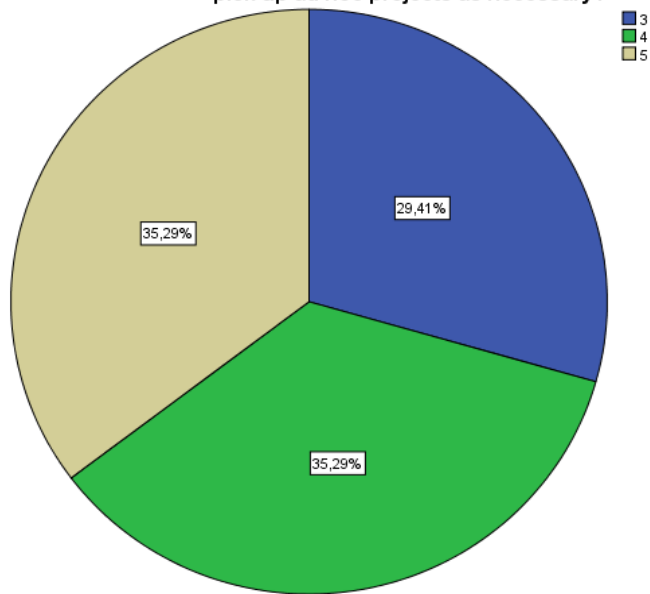


	Frequency	Percent	Valid Percent	Cumulative Percent
2	4	11,8	11,8	11,8
3	6	17,6	17,6	29,4
Valid 4	20	58,8	58,8	88,2
5	4	11,8	11,8	100,0
Total	34	100,0	100,0	

Table 7: Question 7 Results

**Question8: Does internal audit have sufficient resources to deliver on its annual plan and pick up ad hoc projects as necessary?**

Does internal audit have sufficient resources to deliver on its annual plan and pick up ad hoc projects as necessary?

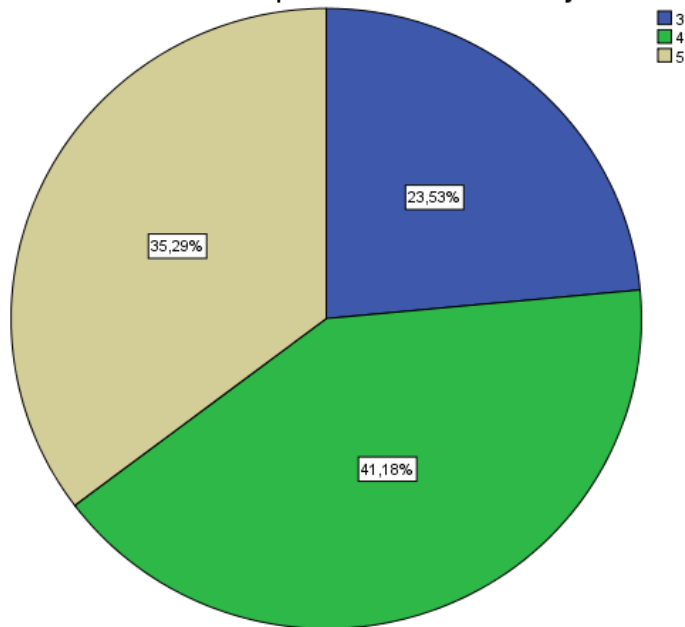


	Frequency	Percent	Valid Percent	Cumulative Percent
3	10	29,4	29,4	29,4
4	12	35,3	35,3	64,7
5	12	35,3	35,3	100,0
Total	34	100,0	100,0	

Table 8:Question 8 Results

**Question9: Does internal audit have team members with sufficient technical knowledge to perform their role effectively?**

Does internal audit have team members with sufficient technical knowledge to perform their role effectively?

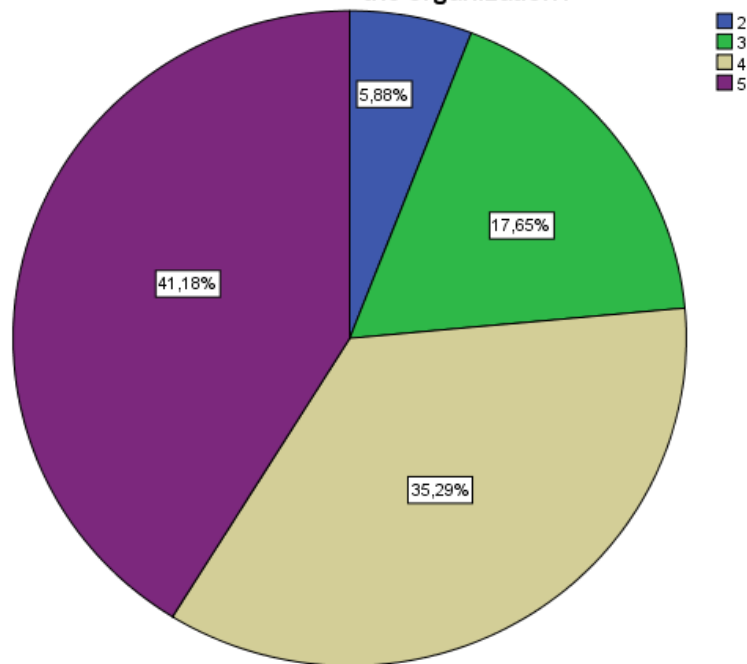


	Frequency	Percent	Valid Percent	Cumulative Percent
3	8	23,5	23,5	23,5
4	14	41,2	41,2	64,7
5	12	35,3	35,3	100,0
Total	34	100,0	100,0	

Table 9:Question 9 Results

**Question10: Does internal audit have team members with appropriate information systems auditing experience to understand and assess the level of technology used by the organization?**

**Does internal audit have team members with appropriate information systems auditing experience to understand and assess the level of technology used by the organization?**

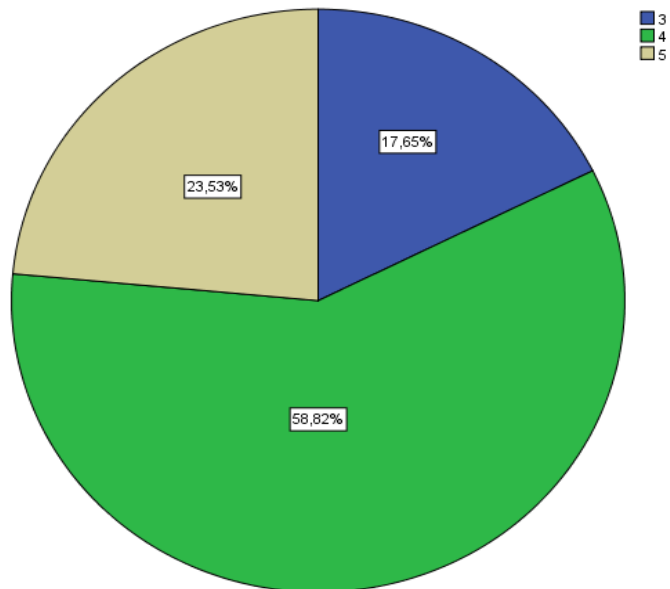


	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	6	17,6	17,6	23,5
Valid 4	12	35,3	35,3	58,8
5	14	41,2	41,2	100,0
Total	34	100,0	100,0	

Table 10:Question 10 Results

**Question11: Does internal audit manage its resources effectively to maximize the value of its service to the business?**

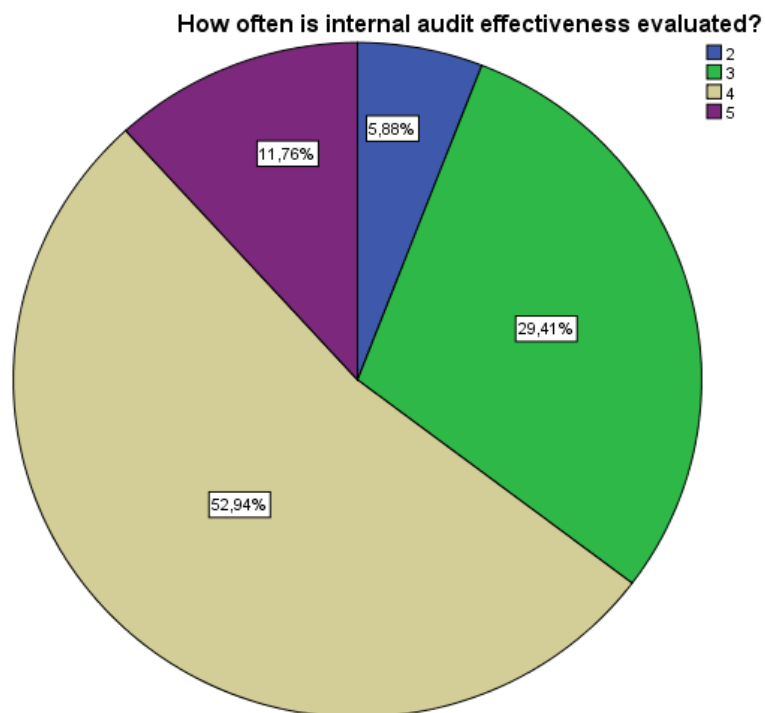
Does internal audit manage its resources effectively to maximize the value of its service to the business?



	Frequency	Percent	Valid Percent	Cumulative Percent
3	6	17,6	17,6	17,6
4	20	58,8	58,8	76,5
5	8	23,5	23,5	100,0
Total	34	100,0	100,0	

Table 11: Question 11 Results

**Question12: How often is internal audit effectiveness evaluated?**

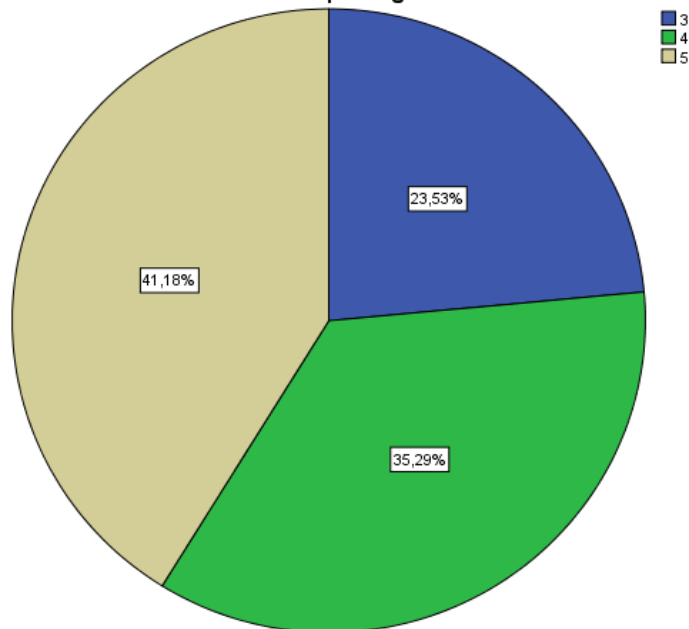


	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	10	29,4	29,4	35,3
Valid 4	18	52,9	52,9	88,2
5	4	11,8	11,8	100,0
Total	34	100,0	100,0	

Table 12:Question 12 Results

**Question13: Does the audit committee regularly review the quality and results of internal audit reporting and activities?**

Does the audit committee regularly review the quality and results of internal audit reporting and activities?

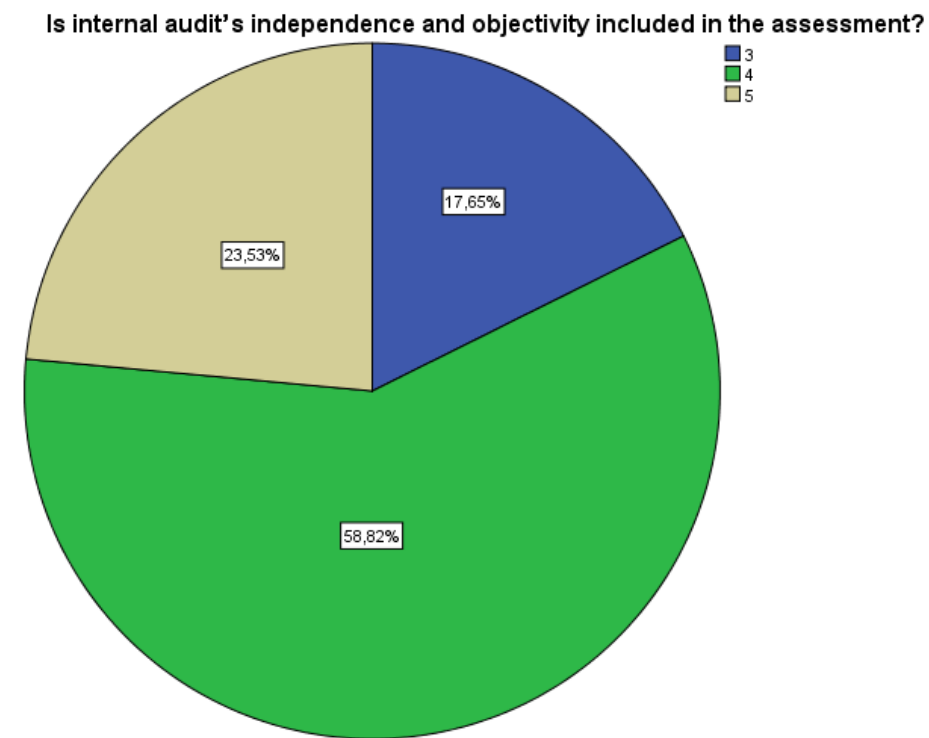


	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3	8	23,5	23,5	23,5
4	12	35,3	35,3	58,8
5	14	41,2	41,2	100,0
Total	34	100,0	100,0	

Table 13:Question 13 Results



**Question14: Is internal audit's independence and objectivity included in the assessment?**

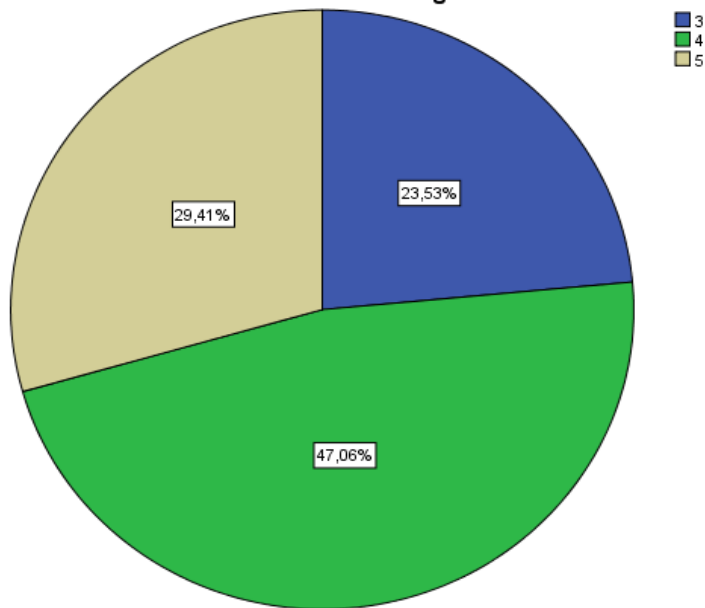


	Frequency	Percent	Valid Percent	Cumulative Percent
3	6	17,6	17,6	17,6
4	20	58,8	58,8	76,5
5	8	23,5	23,5	100,0
Total	34	100,0	100,0	

Table 14:Question 14 Results

**Question15: Do internal audit produce reports for individual audits with a clear rating scale which identify both root causes and consequences of issues which are delivered on a timely basis with clarity and impact, and include credible recommendations to management?**

Do internal audit produce reports for individual audits with a clear rating scale which identify both root causes and consequences of issues which are delivered on a timely basis with clarity and impact, and include credible recommendations to management?

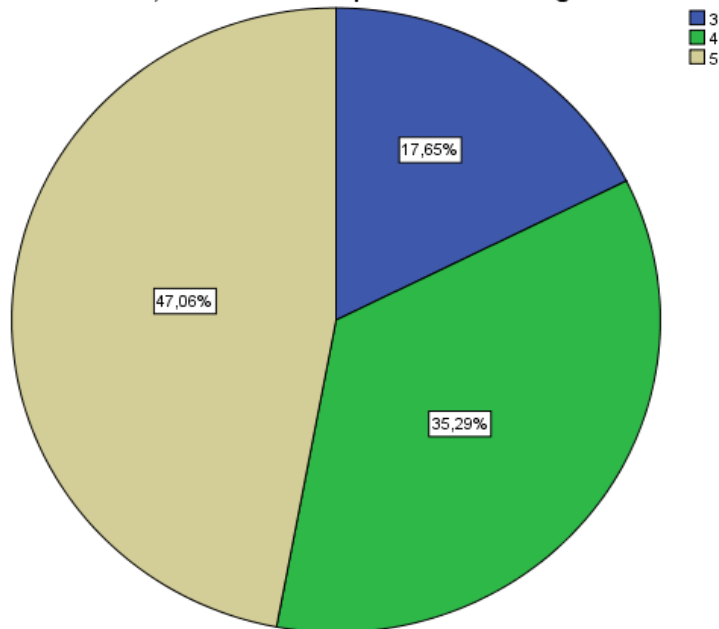


	Frequency	Percent	Valid Percent	Cumulative Percent
3	8	23,5	23,5	23,5
4	16	47,1	47,1	70,6
5	10	29,4	29,4	100,0
Total	34	100,0	100,0	

Table 15:Question 15 Results

**Question16: Does internal audit produce reports for the audit committee which present information in a clear, concise manner, including the identification of themes and trends, and their consequences for the organization as a whole?**

Does internal audit produce reports for the audit committee which present information in a clear, concise manner, including the identification of themes and trends, and their consequences for the organization as a whole?

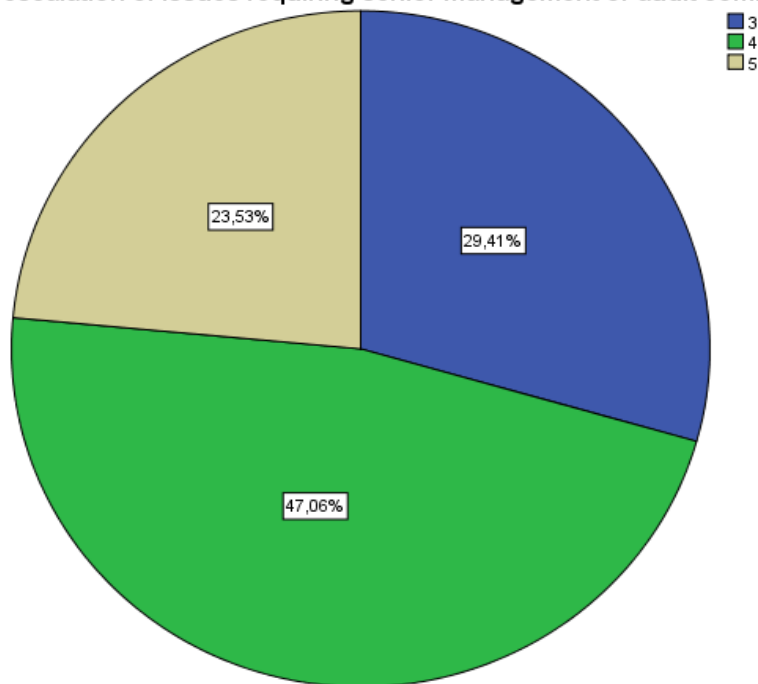


	Frequency	Percent	Valid Percent	Cumulative Percent
3	6	17,6	17,6	17,6
4	12	35,3	35,3	52,9
5	16	47,1	47,1	100,0
Total	34	100,0	100,0	

Table 3:Question 15 Results

**Question17: Does internal audit have rapid and effective mechanisms in place for the escalation of issues requiring senior management or audit committee attention?**

Does internal audit have rapid and effective mechanisms in place for the escalation of issues requiring senior management or audit committee attention?



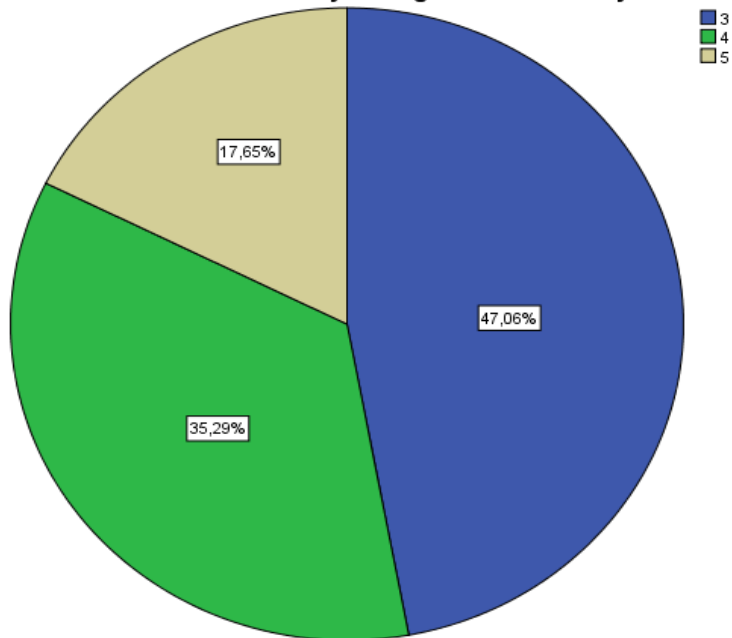
	Frequency	Percent	Valid Percent	Cumulative Percent
3	10	29,4	29,4	29,4
4	16	47,1	47,1	76,5
5	8	23,5	23,5	100,0
Total	34	100,0	100,0	

Table 17:Question 17 Results

**Question18: Do internal audit procedures produce many significant findings?**

**Are these actioned by management on a timely basis?**

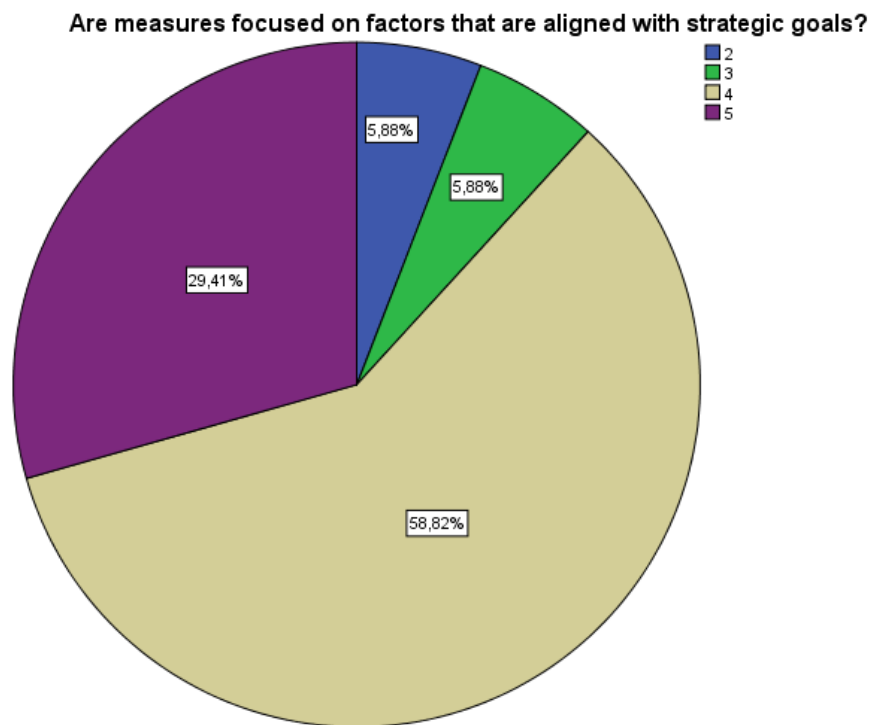
Do internal audit procedures produce many significant findings? Are these actioned by management on a timely basis?



	Frequency	Percent	Valid Percent	Cumulative Percent
3	16	47,1	47,1	47,1
4	12	35,3	35,3	82,4
5	6	17,6	17,6	100,0
Total	34	100,0	100,0	

Table 18:Question 18 Results

**Question19: Are measures focused on factors that are aligned with strategic goals?**

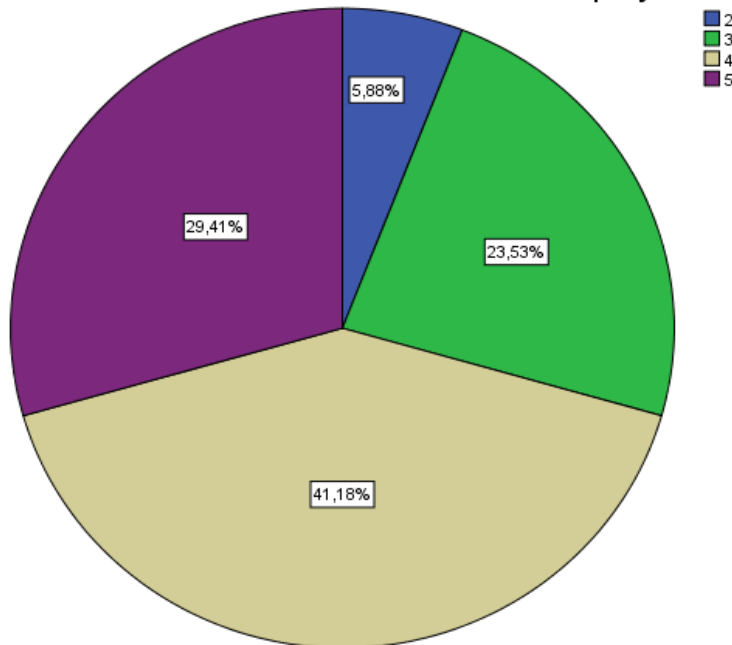


	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	2	5,9	5,9	11,8
Valid 4	20	58,8	58,8	70,6
5	10	29,4	29,4	100,0
Total	34	100,0	100,0	

Table 19:Question 19 Results

**Question20: Does Internal Audit meet regularly with the external auditors to discuss risk assessments, scope of procedures, or opportunities to achieve greater efficiencies and effectiveness across the company’s audit services?**

Does Internal Audit meet regularly with the external auditors to discuss risk assessments, scope of procedures, or opportunities to achieve greater efficiencies and effectiveness across the company’s audit services?



	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	8	23,5	23,5	29,4
Valid 4	14	41,2	41,2	70,6
5	10	29,4	29,4	100,0
Total	34	100,0	100,0	

Table 20:Question 20 Results

#### 4.3. Expectations from internal audit regarding improvements

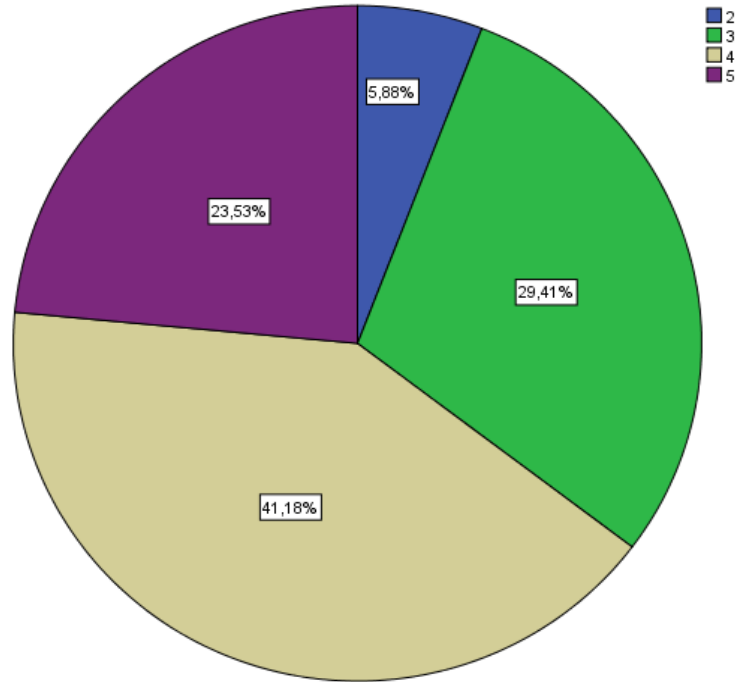
The last part of the research was about the expectations respondents have from internal audit regarding improvements.

94,1% believe that the goals of their Internal Audit function are aligned with those of their business, the CAE is respected as an advisor to the audit committee and management on emerging risks of the organization, internal audit is recognized by business leaders as a function providing quality challenge, the Internal Audit is highly regarded and respected within the organization, their Internal Audit function is a pipeline for organizational leadership and they have a positive opinion regarding the internal audit’s effectiveness for the whole organization.

Additionally, all of them consider that internal audit helps them in assuring the premises for next projects.

**Question21: Are the goals of your Internal Audit function aligned with those of your business?**

Are the goals of your Internal Audit function aligned with those of your business?



	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2	2	5,9	5,9	5,9

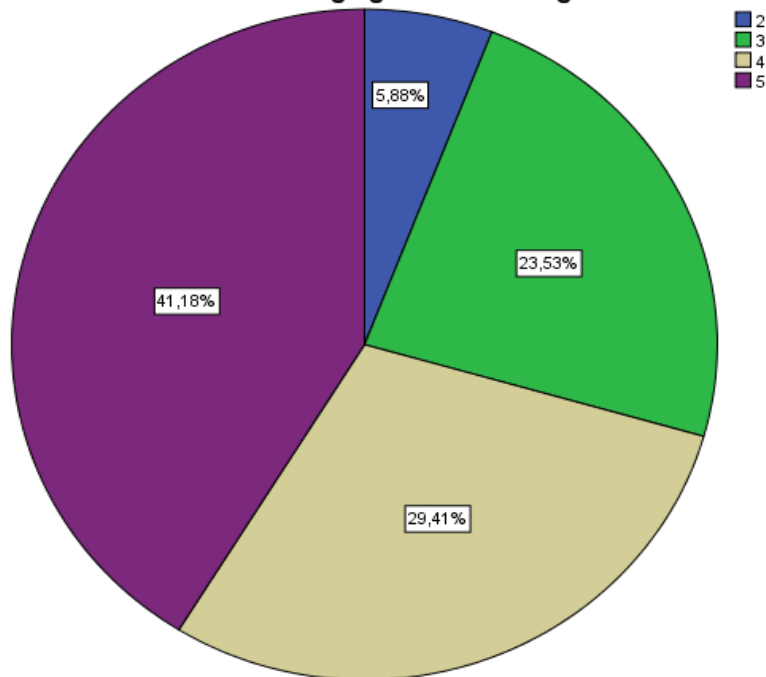


3	10	29,4	29,4	35,3
4	14	41,2	41,2	76,5
5	8	23,5	23,5	100,0
Total	34	100,0	100,0	

Table 21:Question 21 Results

**Question22: Is the CAE respected as an advisor to the audit committee and management on emerging risks of the organization?**

Is the CAE respected as an advisor to the audit committee and management on emerging risks of the organization?



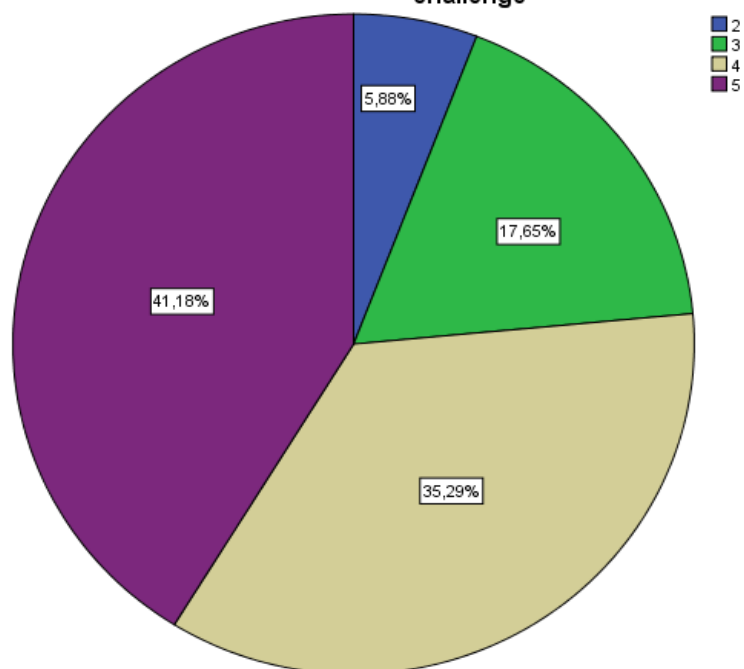
	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	8	23,5	23,5	29,4
4	10	29,4	29,4	58,8
5	14	41,2	41,2	100,0

Total	34	100,0	100,0	
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Table 22:Question 22 Results

**Question23: Is internal audit recognized by business leaders as a function providing quality challenge?**

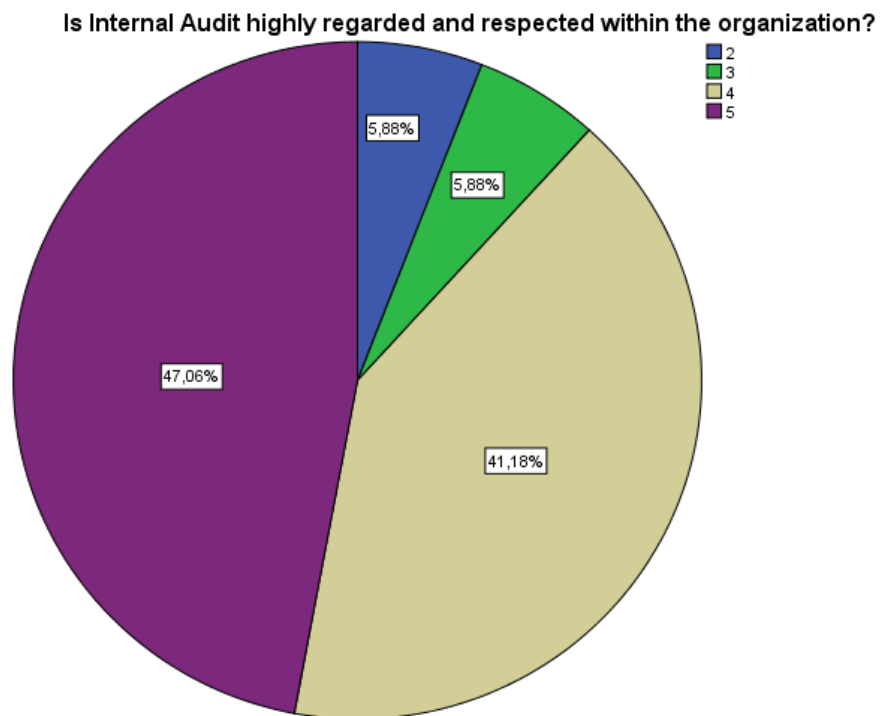
Is internal audit recognized by business leaders as a function providing quality challenge



	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	6	17,6	17,6	23,5
Valid 4	12	35,3	35,3	58,8
5	14	41,2	41,2	100,0
Total	34	100,0	100,0	

Table 23:Question 23 Results

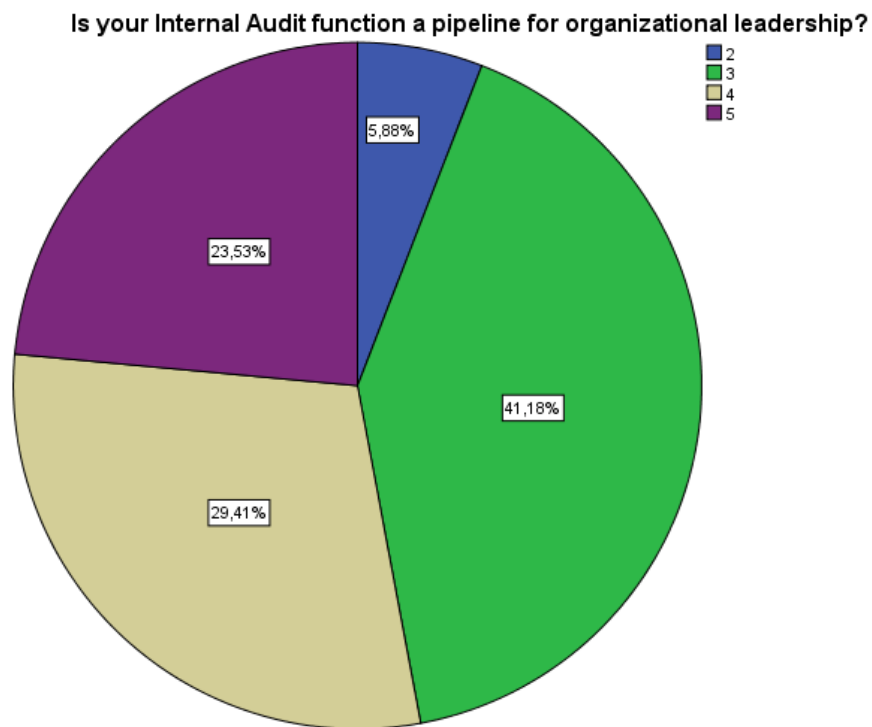
**Question24: Is Internal Audit highly regarded and respected within the organization?**



	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	2	5,9	5,9	11,8
Valid 4	14	41,2	41,2	52,9
5	16	47,1	47,1	100,0
Total	34	100,0	100,0	

Table 24:Question 24 Results

**Question25: Is your Internal Audit function a pipeline for organizational leadership?**

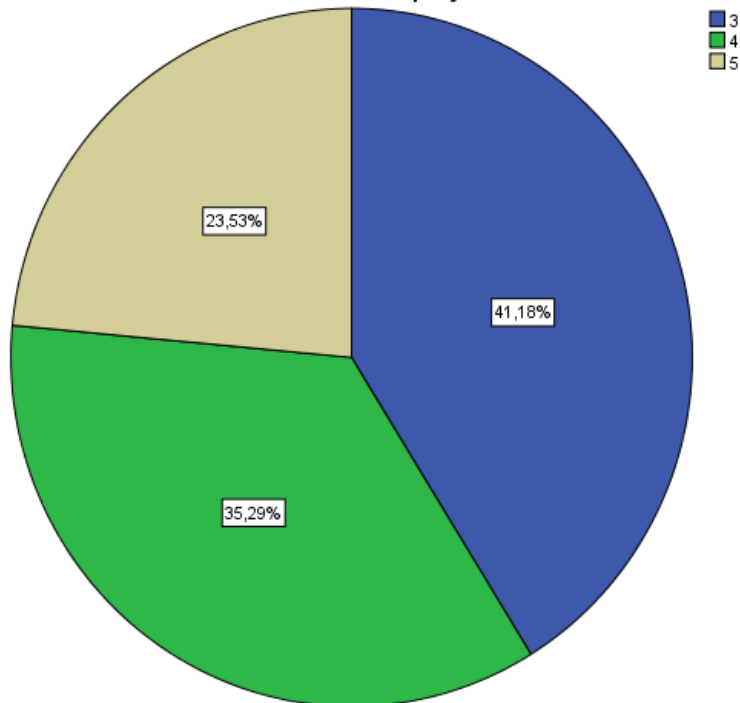


	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	14	41,2	41,2	47,1
Valid 4	10	29,4	29,4	76,5
5	8	23,5	23,5	100,0
Total	34	100,0	100,0	

Table 25:Question 25 Results

**Question26: Do you consider that internal audit helps you in assuring the premises for next projects?**

Do you consider that internal audit helps you in assuring the premises for next projects?

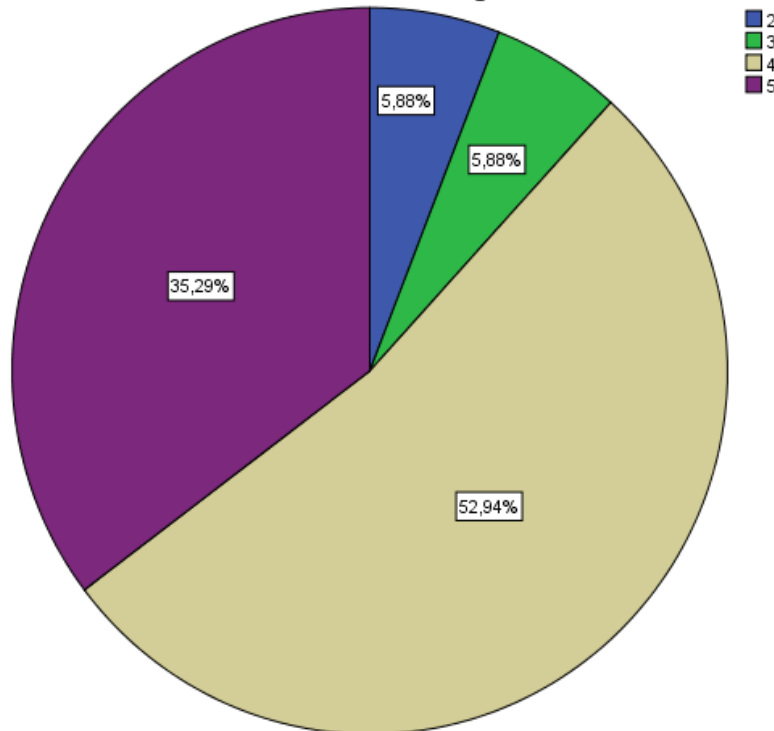


	Frequency	Percent	Valid Percent	Cumulative Percent
3	14	41,2	41,2	41,2
4	12	35,3	35,3	76,5
5	8	23,5	23,5	100,0
Total	34	100,0	100,0	

Table 26:Question 26 Results

**Question27: Which is your general opinion regarding the internal audit's effectiveness for the whole organization?**

Which is your general opinion regarding the internal audit's effectiveness for the whole organization?



	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	5,9	5,9	5,9
3	2	5,9	5,9	11,8
Valid 4	18	52,9	52,9	64,7
5	12	35,3	35,3	100,0
Total	34	100,0	100,0	

Table 27:Question 27 Results

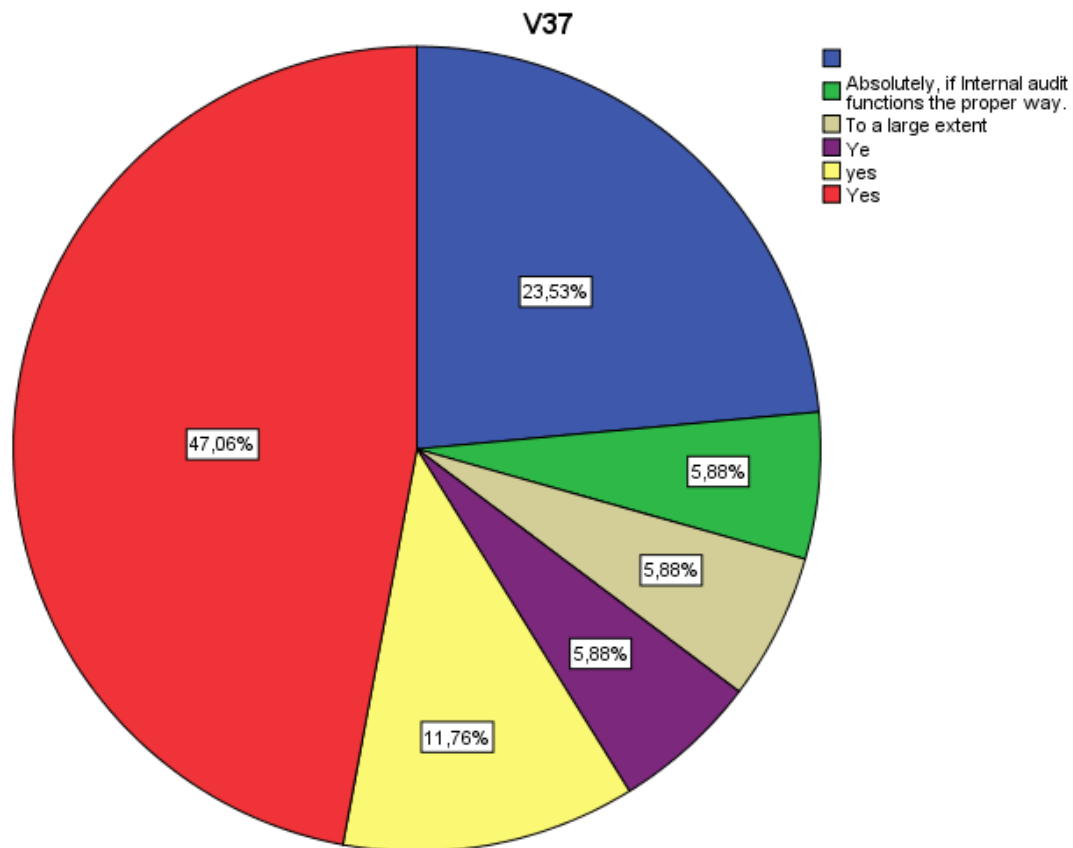
## 4.4. Opinions

Finally, the correspondents were asked to express their opinion on three questions.

Firstly, they were asked whether they consider that consulting from Internal Audit can improve organizational effectiveness. 64,8% agreed with that, 5,9% said that it does it

to a large extent and 5,9% claimed that it can absolutely happen if Internal audit functions the proper way.

**Question28: Do you consider that consulting from Internal Audit can improve organizational effectiveness?**



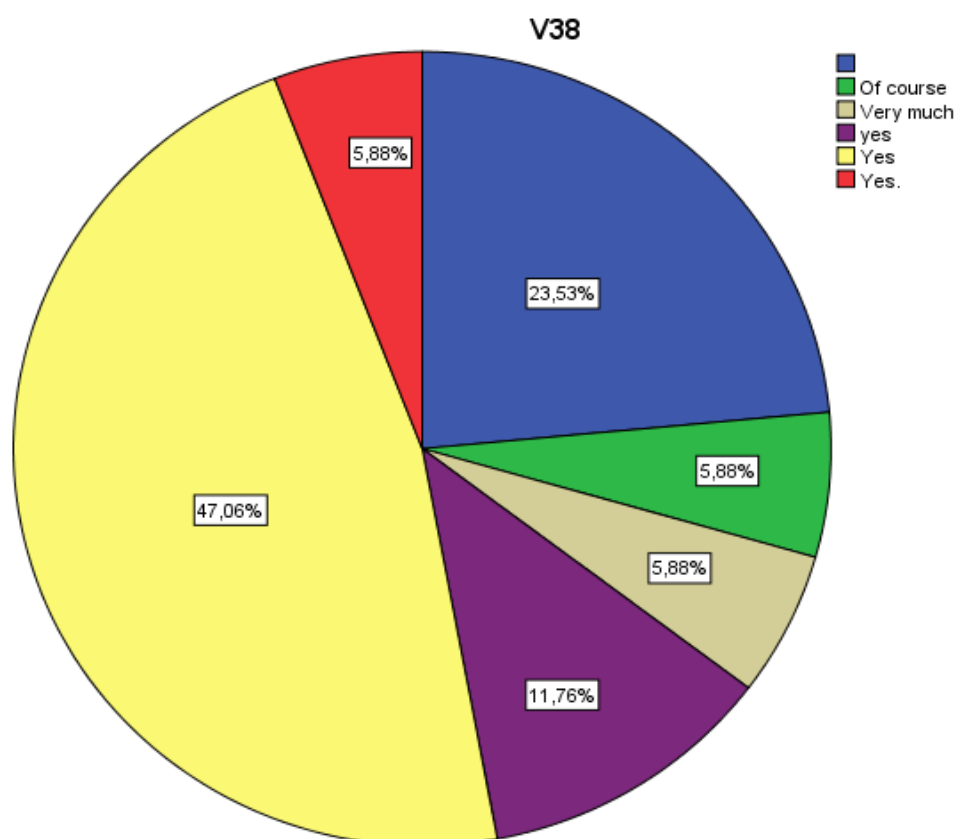
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Absolutely, if Internal audit functions the proper way.	2	5,9	5,9	29,4
To a large extent	2	5,9	5,9	35,3
Yes	22	64,8	64,8	100,0

Total	34	100,0	100,0	
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Table 28:Question 28 Results

Secondly, the respondents were asked if they consider that internal audit delivers added value to their Company and they all answered positively.

**Question29: Do you consider that internal audit deliver added value to your Company?**



	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	23,5	23,5	23,5
Of course	2	5,9	5,9	29,4
Very much	2	5,9	5,9	35,3
Yes	22	64,8	64,8	100,0

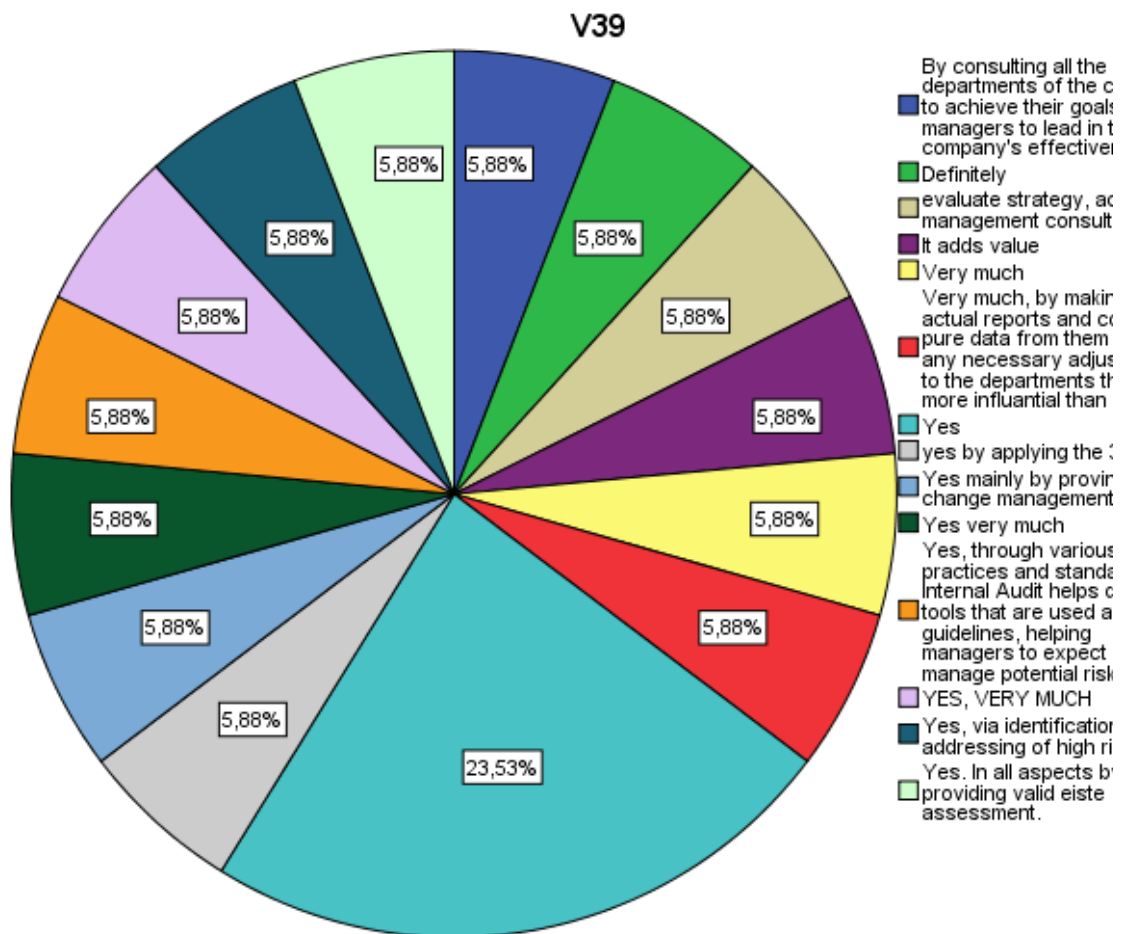


Total	34	100,0	100,0	
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Table 29: Question 29 Results

Finally, the correspondents were asked whether they believe that Internal Audit is able to increase Company's performance and how it does that. All of them said that it does that very much, by consulting all the departments of the company to achieve their goals and managers to lead in the company's effectiveness, by evaluating strategy and acting as management consultant, by making actual reports and collecting pure data from them to make any necessary adjustments to the departments that are more influential than others, by applying the 3Es, by providing change management, through various practices and standards, by helping managers to expect and manage potential risks, via identification and addressing of high risks and by providing valid assessment.

**Question30: Do you believe that Internal Audit is able to increase Company's performance? How?**



	Frequency	Percent	Valid Percent	Cumulative Percent
Valid By consulting all the departments of the company to achieve their goals and managers to lead in the company's effectiveness.	2	5,9	5,9	5,9
Definitely	2	5,9	5,9	11,8
evaluate strategy, act as management consultant	2	5,9	5,9	17,6

It adds value	2	5,9	5,9	23,5
Very much	2	5,9	5,9	29,4
Very much, by making actual reports and collecting pure data from them to make any necessary adjustments to the departments that are more influential than others.	2	5,9	5,9	35,3
Yes	8	23,5	23,5	58,8
yes by applying the 3 E s	2	5,9	5,9	64,7
Yes mainly by provining change management	2	5,9	5,9	70,6
Yes very much	2	5,9	5,9	76,5
Yes, through various practices and standards the Internal Audit helps develop tools that are used as guidelines, helping managers to expect and manage potential risks.	2	5,9	5,9	82,4
YES, VERY MUCH	2	5,9	5,9	88,2
Yes, via identification and addressing of high risks.	2	5,9	5,9	94,1

Yes. In all aspects by providing valid eiste assessment.	2	5,9	5,9	100,0
Total	34	100,0	100,0	

Table 30: Question 30 Results

## **5. Conclusions and Policy Implications**

Summarizing the results of the research we could draw the following conclusions. First of all, the great majority said that the company's assets are documented at least one year and that there is a clear segregation of duties of the company's personnel, while all of the correspondents said that the performance of effective and efficient audits, a measurable impact, the quality of IA reports, the Commitment /Technical excellence /Quality, the appropriately qualified personnel and the clear Standards / robust tools are really important.

Afterwards the correspondents answered about the most valuable insights provided by Internal Audit. Most of them identified the focus on sustainable profit generation as the most valuable, the help assessing risks and risk management practices and the Informed perspective on emerging risks as the most valuable insights, while all of the participants claimed that internal audit has clearly defined audit plan for the year and over the longer term, that internal audit has sufficient resources to deliver on its annual plan and pick up ad hoc projects as necessary, that internal audit has team members with sufficient technical knowledge to perform their role effectively and that internal audit manages its resources effectively to maximize the value of its service to the business.

Furthermore, all of them support that the audit committee regularly reviews the quality and results of internal audit reporting and activities, that internal audit's independence and objectivity included in the assessment, that internal audit produces reports for individual audits with a clear rating scale which identify both root causes and consequences of issues which are delivered on a timely basis with clarity and impact, and include credible recommendations to management, it produces reports for the audit committee which present information in a clear, concise manner, including the identification of themes and trends, and their consequences for the organization as a whole, it has rapid and effective mechanisms in place for the escalation of issues requiring senior management or audit committee attention and its procedures produce many significant findings.

Additionally, almost all the participants suggested that internal audit reflects on and adapt its methodology to ensure that it remains fresh and relevant, that internal audit

has a presence in major governance and control forums throughout the organization, for example, any risk committee, it has team members with appropriate information systems auditing experience to understand and assess the level of technology used by the organization, its effectiveness is often evaluated, the measures are focused on factors that are aligned with strategic goals and the Internal Audit meets regularly with the external auditors to discuss risk assessments, scope of procedures, or opportunities to achieve greater efficiencies and effectiveness across the company's audit services.

As for the expectations respondents have from internal audit regarding improvements, they said that the goals of their Internal Audit function are aligned with those of their business, the CAE is respected as an advisor to the audit committee and management on emerging risks of the organization, internal audit is recognized by business leaders as a function providing quality challenge, the Internal Audit is highly regarded and respected within the organization, their Internal Audit function is a pipeline for organizational leadership and they have a positive opinion regarding the internal audit's effectiveness for the whole organization. Additionally, all of them consider that internal audit helps them in assuring the premises for next projects.

Finally, the correspondents were asked to express their opinion on three questions. Firstly, they were asked whether they consider that consulting from Internal Audit can improve organizational effectiveness and most of them agreed with that, secondly, the respondents were asked if they consider that internal audit delivers added value to their Company and they all answered positively and, finally, the correspondents were asked whether they believe that Internal Audit is able to increase Company's performance and how it does that and all of them said that it does that very much, by consulting all the departments of the company to achieve their goals and managers to lead in the company's effectiveness, by evaluating strategy and acting as management consultant, by making actual reports and collecting pure data from them to make any necessary adjustments to the departments that are more influential than others, by applying the 3Es, by providing change management, through various practices and standards, by helping managers to expect and manage potential risks, via identification and addressing of high risks and by providing valid assessment.

Regarding the small number of participants, a future study could investigate a greater number of them, including people from companies around the country. This could help in generalizing the results.

***"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."***

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## **6. APPENDIX**

### **Questionnaire**

#### **Survey**

#### **Internal Audit and Company Performance**

The survey is about examining the relationship between Internal Audit and Company performance, the importance of Internal Audit in Business and the added value that Internal Audit can offer. It is a part of the research for my thesis entitled “Internal Audit and Company performance” that is needed to complete my Master in Business Administration-Internal Audit.

**Before proceeding, I ensure you that your company’s data will not be published, and your answers will be used for statistical purposes only.**

The completion of this questionnaire will not take more than 20 minutes. Most of the questions can be answered by “Yes” or “No”. You will be asked to write down your opinion in only two questions.

After completion of the survey please send it by e mail at [thodoriscostas@gmail.com](mailto:thodoriscostas@gmail.com)

#### **General Information**

**Full Name:**

**Position:**

**Company/Organization:**

**Address:**

**Phone Number:**

**e-mail:**

**Year that your company founded:**

**Number of personnel:**

**Introduction year of Internal Audit:**

**General Questions**

1. Are the company's assets documented at least once a year? Yes/No
2. Is there a clear segregation of duties of the company's personnel? Yes/No
3. How important are the following to CFO and Audit Committee Chairs? (1-5)
  - Performance of effective and efficient audits
  - Measurable impact
  - Quality of IA Reports
  - Commitment /Technical excellence /Quality
  - Appropriately qualified personnel
  - Clear Standards / robust tools
4. What insights provided by Internal Audit would be of most value for you? (1-5)
  - Help assessing risks and risk management practices
  - Informed perspective on emerging risks
  - Focus on sustainable profit generation

**Effectiveness of the internal audit function (1-5)**

5. Does internal audit have clearly defined audit plan for the year and over the longer term?
6. Does internal audit reflect on and adapt its methodology to ensure that it remains fresh and relevant?
7. Does internal audit have a presence in major governance and control forums throughout the organization, for example, any risk committee?

8. Does internal audit have sufficient resources to deliver on its annual plan and pick up ad hoc projects as necessary?
9. Does internal audit have team members with sufficient technical knowledge to perform their role effectively?
10. Does internal audit have team members with appropriate information systems auditing experience to understand and assess the level of technology used by the organization?
11. Does internal audit manage its resources effectively to maximize the value of its service to the business?
12. How often is internal audit effectiveness evaluated?
13. Does the audit committee regularly review the quality and results of internal audit reporting and activities?
14. Is internal audit's independence and objectivity included in the assessment?
15. Do internal audit produce reports for individual audits with a clear rating scale which identify both root causes and consequences of issues which are delivered on a timely basis with clarity and impact, and include credible recommendations to management?
16. Does internal audit produce reports for the audit committee which present information in a clear, concise manner, including the identification of themes and trends, and their consequences for the organization as a whole?
17. Does internal audit have rapid and effective mechanisms in place for the escalation of issues requiring senior management or audit committee attention?
18. Do internal audit procedures produce many significant findings? Are these actioned by management on a timely basis?
19. Are measures focused on factors that are aligned with strategic goals?
20. Does Internal Audit meet regularly with the external auditors to discuss risk assessments, scope of procedures, or opportunities to achieve greater efficiencies and effectiveness across the company's audit services?

**Expectations from internal audit regarding improvements (1-5)**

21. Are the goals of your Internal Audit function aligned with those of your business?

22. Is the CAE respected as an advisor to the audit committee and management on emerging risks of the organization?
23. Is internal audit recognized by business leaders as a function providing quality challenge (for example by telling them things that they did not already know, identifying root causes and opportunities for improving control design, and trends in risks and controls)?
24. Is Internal Audit highly regarded and respected within the organization?
25. Is your Internal Audit function a pipeline for organizational leadership?
26. Do you consider that internal audit helps you in assuring the premises for next projects?
27. Which is your general opinion regarding the internal audit's effectiveness for the whole organization?

**Express your opinion:**

28. Do you consider that consulting from Internal Audit can improve organizational effectiveness?
29. Do you consider that internal audit deliver added value to your Company?
30. Do you believe that Internal Audit is able to increase Company's performance? How?