

## **Internal Audit in Public Hospitals: the case of Greece**

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**Abstract:** Internal control is of utmost importance for effective corporate governance, particularly in public hospitals aiming for modernization in the Greek framework. Internal audit functions enhance transparency, enforce accountability, and ensure compliance with societal values, bolstering public trust. This study delves into the implementation of internal control in Greek public hospitals, considering factors like size, structure, and operational intricacies. We explore the regulatory framework, procedures, scope, and objectives, while interviewing auditing experts for insights into challenges and opportunities. Findings reveal procedural dominance in current implementation of the Law. Focus on accounting neglects crucial functional departments. The audit committee's role and composition raise independence concerns. Understaffing further hampers operations. A significant weakness appears in the independence of the audit. Internal auditors report to the hospital administrator and participate in the audit committee. The appointment and remuneration of auditors is not based on the auditor's competence and suitability, but on a cost basis. The question therefore arises as to whether the auditor performs the duties objectively and impartially in accordance with the International Institute of Internal Auditors' standards. Furthermore, regarding the research question on the role of the internal auditor and the treatment by auditees, there has been a significant improvement as evident by the respondents' answers.

**Keywords:** Internal Audit, Public Sector, Greek Public Hospitals, Regulatory Framework, Governance Practices

**JEL classification:** I18, I10, M42, H83

## **1 Introduction**

The economic crisis and constantly changing conditions in the economy have brought organizations face to face with new challenges arising from increasing financial complexity, expanding regulatory requirements and technological advances. All of these highlights more than ever the need to adopt management practices and tools that can improve an organization's operations while increasing its value. Rapid economic developments such as the liberalization of markets, takeovers and mergers, privatization of public enterprises is some of the situations that bring administrations face to face with problems, financial irregularities and difficult legal procedures.

The result of the above is the need to make high-risk decisions and ultimately the management of operational risk. Internal control is a key management tool and a critical foundation of corporate governance as through the services it provides it helps in the timely management of the risks that arise and adds value to the organization. Based on the organization's strategic goals and with the necessary support from senior management, internal control contributes to the rational management of financial resources, cost reduction, better utilization of human resources and hedging of risks (Eulerich et al., 2020).

Particularly within the public sector, where inflexible and deeply entrenched policies can inadvertently foster issues like corruption, mismanagement, and wasteful practices, administrations should prioritize corporate governance matters and seek top-tier internal audit services. The main weaknesses of public organizations are the non-rational management of resources, the lack of adequate and reliable information and coordination between the various departments, and human weaknesses in terms of training and performance. Internal auditing includes a system of procedures for examining business operations or organizational problems and recommends financial reporting solutions, investigates potential fraud, assesses risks, secures assets, and confirms compliance with rules and laws. In this way, it guarantees the efficiency of the internal control framework within public sector entities and can identify areas that can be improved (Asare, 2009). Internal auditors with their specialized knowledge in new technologies and risk management become an ally of the administration with the aim of the smooth operation of public bodies, increasing their efficiency and safeguarding the public interest (OECD, 2018).

The aim of this research is to highlight the necessity of the internal control system and the support provided by the internal auditor to both management and employees in the exercise of their duties. The initial objective of the article is to highlight the problems that exist in public health structures and concern internal control and, secondly, to highlight proposals for improvement in the context of internal control and its implementation. The paper focuses on the public sector and in particular on Public Health Units. Hospitals are critical bodies for the public administration. However, the image of public Greek hospitals shows pathologies both in their internal and external environment. The organizational models in place are antiquated and political executives are usually appointed administrations instead of technocrats. Political power often intervenes in administrative matters, the multitude of laws creates confusion of responsibilities, while to this day phenomena of corruption and "customer relations" tarnish their operation. The problems are just as important internally. Underfunding combined with pre-existing bureaucracy hinders their modernization. Most hospitals, especially in the countryside, are understaffed with aging staff, while in many cases the administrative staff lacks the necessary education and training. The infrastructures need improvement while in some cases the IT systems are under-functioning and are not interconnected with the regional subsystems (LIS, Medical File, etc.) (Revanoglou, 2015). A well-organized and integrated internal control system provides management with all the critical information on where they need to intervene. In addition, it can instill in employees the mindset and logic of internal

control, improving the overall culture of the organization (Pelekanakis, 2015). The research will present the framework of internal control operations that has been established to date, the way it is applied, the fields it examines and finally its findings and what follows in the remainder of the paper.

The forthcoming sections of this article provide an in-depth exploration of the implementation of internal audit in Greek public hospitals. We begin by examining the historical evolution and organizational structure of internal control mechanisms in the public sector, along with the ethical considerations and qualifications of internal auditors.

We then shift our focus to the specific application of internal control in the public health care sector, highlighting its importance in ensuring efficient operations. Our research methodology and data collection strategies are elucidated, followed by the presentation and discussion of our empirical findings.

Conclusions drawn from the research are outlined, emphasizing key insights into the implementation of internal audit practices in Greek public hospitals. Additionally, we acknowledge the limitations encountered during the study, paving the way for future research endeavors in this domain.

## **2 Internal control in the public sector**

### **2.1. Historical development and organization of internal audit and the Greek case**

Internal audit in the public sector, according to history and many studies, is an institution that was incorporated into economic practice almost a century ago. However, its evolution over the last four decades has been rapid, reflecting the transformation of the public sector due to institutional changes and reforms that have led from traditional 'public administration' to a new 'public governance' (Mattei et al., 2021). Historical evidence from as early as 1900 (Collins, 1904) indicates that audit functioned as a confirmatory verification of certain accounting procedures by providing an intermediate accounting oversight to economic units. After the financial crisis of 1929 in America, American companies incorporated the process of certifying their financial statements by external auditing firms in order to depict the true and fair picture of the accounts they kept. The same external auditors gradually began to provide internal audit services (Meriam et al., 2017). It was then that the first internal auditing practice manual was compiled and published by Brinks. Until the middle of the 20th century, internal auditors were engaged in auditing accounting transactions and records trying to ensure that they were conducted properly, that the asset safeguarding system was in place and that policies and procedures were properly followed. In this way they tried to identify financial errors and irregularities (Asare, 2009).

Meigs (1951) in describing the internal audit practice of the time, stated that internal auditing was carried out either by employees of a company, when in the course of their duties they looked for errors in accounting records, or by company representatives travelling to check the company's branches. According to Mattei et al. (2021), until 1980, the logic of the public sector was built on the Weberian model, i.e. bureaucratic or traditional public administration. Control was focused on inputs, regulations and the proper use of public resources. The primary aims of the practitioners involved evaluating the sufficiency and precision of accounts to verify the legal compliance of public sector activities and taxpayers' money was spent rationally (Troupin et al., 2010). This is also indicated by the first definition given by the Institute of Internal Auditors that internal audit provides analysis, evaluations, recommendations and information to members of the organization to enable them to perform their jobs effectively" (Asare, 2009). During this period, performance audits were introduced with the goal of evaluating the outcomes attained by individual public sector entities. This change was also based on the way society now began to perceive the public sector (Mattei et al., 2021). It is noteworthy to mention

that in parallel, consultancy services are also developing, provided upon agreement with the organization's management or stakeholders, and in the same way the nature and scope of the consultancy engagement is defined. While offering consulting services, it is imperative for the internal auditor to uphold objectivity and refrain from taking on managerial responsibilities (Hellenic Institute of Internal Auditors, 2008).

Internal audit plays a crucial role, particularly within transparent public administrations, as a vital component of the toolkit administrations utilize to accomplish their goals and address emerging challenges. Its functions encompass management oversight, assessments, quality assurance, and control procedures that provide confidence and assurance that the organization is achieving its objectives (Enofe et al., 2013).

This approach extends to encompass the broader public sector, including external government entities, state-owned enterprises, and public-private partnerships. Some countries such as Canada, USA, UK, Australia and Scandinavian countries have been pioneers in public administration reforms and developed their internal audit systems based on these reforms. Africa, Asia and Latin America have lagged behind in this area (Johnsen, 2019). In countries where internal audit has evolved, competition among professionals has also increased in terms of their certification and access to public sector audit (Jeppesen, 2012).

Internal auditors formulate various approaches for conducting their audits. Some use specialized financial and performance audits and some choose hybrid solutions combining financial, performance and compliance audits (Jeppesen et al., 2017). According to Johnsen (2019) this can either positively or negatively affect audit relevance and independence.

Diamond (2002) refers to the centralized and decentralized model of internal audit organization. Within the centralized model, the Ministry of Finance assumes a pivotal role in budget preparation and allocation of funds to ministries and also participates in their audits in advance since it assigns appropriate staff to conduct internal audit. On the other hand, Asare (2009) has identified in international practice five main systems on the basis of which internal audit in the public sector has been developed:

- Internal audit within the Office of the Accountant General
- Internal audit function within the Ministry of Finance
- Decentralized internal control model at the entity level
- Internal audit as a component of the Office of the Auditor General
- Centralized internal audit function operating under the oversight of the Council of Ministers

The application of internal control in public administration has been successfully implemented in many countries of the European Union for several decades and is characterized by effective structures and procedures. The case of Greece lags behind in many important parameters. Lack of a comprehensive institutional framework, structures without the necessary staffing and, above all, insufficient information on the role and necessity of the internal audit function.

In Greece, the audit profession in the public sector was organized for the first time with the establishment of the Audit Court in 1833, which is the country's highest fiscal court and whose purpose was to monitor public expenditure. Among other things, the work of the internal auditor includes auditing the implementation of the Hospital's information systems, auditing the implementation of the double-entry accounting system, auditing financial and statistical data submitted to third parties and computer audits. The findings of the audits as well as any other issue arising during the auditor's work are submitted to the board of directors and the audit committee through regular reports. These reports also record outstanding issues and proposals for improving the audited procedures (Kremalis, 2013). These audit

findings, result from an audit program, which is approved by the audit committee and not by the head of the organization, as this contradicts the auditor's provision of independence (Koutoupis, 2021). Finally, the internal audit unit in public bodies operates with full independence which is ensured by its organizational subordination directly to the head of the body and by its support from the audit committee which consists of members independent of the audited body.

## **2.2. Applications and duties of internal control and the Greek paradigm**

Internal audit has become an essential component of the financial framework within public organizations. Thus, while it started as a simple administrative process aimed at checking the accuracy of transactions, verifying advance payments and counting assets, it is now an important factor in establishing the quality of public sector operations and its development (Unegbu et al., 2011). According to Izedomni (2000), audit involves an independent and objective examination of an organization's financial statements by an appointed auditor to express a professional opinion on whether they reflect the true and fair position of the organization in accordance with relevant statutory and professional regulations.

According to the findings of Goodwin, Stewart, and Kent (2006), internal auditors have a significant role in overseeing the organization's risk profile and pinpointing opportunities for enhancing risk management. Unegbu and Obi (2007) defined internal audit as "measuring, analyzing and evaluating the effectiveness and efficiency of individual controls implemented by management to ensure smooth operations, minimize costs, ensure productive capacity and derive maximum benefit".

In Adeniji's (2004) view, internal audit provides support to management and ensures that financial transactions are carried out in accordance with the law and the wishes of the board of directors. However, researchers Owler & Brown (1999) defined the objective of internal audit as protecting management against errors of authority and dereliction of duty.

Barker (1999) agreed with this definition and added an additional objective. To evaluate operations and document the control measures employed to guarantee the accurate representation of the organization's activities in financial and other reports. According to Tracey (1994), the internal auditor is tasked with evaluating the effectiveness of the accounting system and the efficiency of its functions. Additionally, the public sector accountant holds the responsibility of establishing systematic processes to offer management support for service delivery, while the public sector auditor is responsible for scrutinizing the effectiveness of service delivery by management. According to Johnson (1996) the general duties of internal auditors in public administration include the following:

1. To provide the management of the audited organization with an audited copy of the maintained statement of accounts.
2. To declare whether the accounts present, in their opinion, an accurate and fair picture of the operations.
3. To state whether the accounts provide sufficient information required by the organization's operating regulations.
4. If they find any dissatisfaction with any aspect of the financial statements, they should report it.

According to standard 2130, internal audit assesses and recommends improvements to governance processes in order to:

- Promote appropriate ethical principles and values within the organization.
- To ensure effective management in the organization's performance and accountability.
- Communicate information relevant to risks and the system of internal control to those responsible for the organization.

- To coordinate activities and communicate information between board members, internal and external auditors (Hellenic Institute of Internal Auditors, 2008).

Regarding risk, risk management involves a series of steps taken by management to identify risks, make decisions to compensate for them and create improvement opportunities that will minimize losses (Commonwealth of Australia, 2008).

Health is an indisputable human right, therefore the provision of health services to the citizens of a state is a basic element of social welfare that also aims to raise their standard of living. Health expenditure is constantly increasing due to the development of medical technology and the ageing of the population. In order to reduce costs, it is necessary to control hospital operations and in-hospital costs through governance exercised by the executives (Revanoglou, 2013). Control of prescribing, quality certification by international independent bodies, prevention policy and implementation of clinical protocols are some governance tools that help to reduce medical costs (Barber et al., 2013). According to OECD data, after an average annual increase in total health expenditure of 6% from 2000 to 2009, in 2010 expenditure decreased by 6.5% compared to the previous year (Morgan et al), the biggest scandals concern cases of care that was either overcharged or never provided and cases of fraud related to public procurement (Mikkers et al, 2017). In Greece, according to the Public Health Inspectorate, there were 162 cases of corruption in the health sector, accounting for 11.9% of all cases examined (Revanoglu, 2013). In less developed countries such as Tanzania, Zimbabwe, Jordan and Nigeria, the implementation of internal audit in public hospitals is not well developed. Thus, phenomena of corruption, opacity and waste characterize the operation of public hospitals in these countries (Rodakos et al., 2021). In some contexts, clinical governance has also been defined as related to the continuous improvement of the quality of health services through reports that include financial reports, quality characteristics and performance, compared to a standardized basis (Tabish, 2012). As part of clinical governance, audits are also defined for all hospital departments such as the nutrition department, the IT department, the technical department for whether they are implementing the procedures stipulated by the hospital's operating regulations (Rodakos et al., 2021). An important control is fraud control, which seeks to investigate and prevent cases of misuse or falsification of the organization's financial data, the exploitation of equipment for personal benefit, and the avoidance of illegal transactions (Papastathis, 2014).

### **1.3. Code of conduct and internal auditor qualifications**

The application of internal control in Public Administration serves as a crucial instrument for monitoring, evaluating, redesigning and improving the procedures and organizational framework of the Public Sector. As per research conducted by Zulkifli et al. (2014), which investigated key factors influencing the effectiveness of internal audit within the Malaysian public sector, primary considerations included the competency, independence, and objectivity of internal auditors. Competence relates to how an individual performs his/her duties based on his/her educational level, professional experience, skills, attitude and effort for continuous professional development. Enofe et al. (2013) define internal audit quality as the auditor's ability to provide useful findings and recommendations to management and this is a function of the auditor's level, expertise and ability to properly design and execute audit procedures. Papastathis (2003) extensively discusses the qualifications that an auditor must have in order to be able to be up to the mark in carrying out his or her work and successfully accomplish his or her mission. Some of the most important ones are the following:

- Higher university education commensurate with the entity he/she is auditing
- Scientific and professional training

- Fluency in the application of modern working methods and techniques
- Many years of professional experience, ideally in different sectors
- Have a broad understanding
- Be fair, honest, sincere and discreet in order to protect the interests of the audited entity

## **2 Research Methodology and Data**

To draw conclusive insights into the research questions at hand, a qualitative methodology was selected, employing structured interviews. This approach enables a comprehensive exploration of the topic, offering participants the flexibility to convey not only their opinions but also their emotions and thoughts. The interview method facilitates personal engagement, fostering a deeper connection with the participants and augmenting their interest in the research process and its outcomes. The interview questions emerged from an in-depth review of the literature and a meticulous analysis of legislative content concerning internal audit within public hospitals. These questions were meticulously designed to gauge the extent to which the practical implementation of internal audit aligns with the envisaged model. The questions are characterized by their precision, clarity, and comprehensive coverage of the internal audit spectrum, encompassing both the perspectives of auditors and auditees.

The interviewees included seasoned executives from public hospitals, occupying pivotal roles in management or within the financial department, which historically has been the focal point of internal audit activities. Additionally, internal auditors were included in the interview process. In total, 7 individuals were interviewed, consisting of 4 hospital executives occupying permanent roles in the financial department, and 2 supervisors along with 2 deputy directors.

These professionals boast extensive experience, with over 30 years spent in various capacities within public hospitals, affording them a well-rounded perspective. Moreover, one participant, an administrative figure in prominent capital hospitals, brought a wealth of experience in the implementation of the legislative framework governing internal control. Lastly, the two remaining participants are internal auditors who secured contracts through competitive tenders, mandated by Law 4025/2011, to provide audit services across public hospitals in both Athens and provincial regions.

The selection of these participants was meticulously executed to ensure that the research garners qualitative insights and robust conclusions, elucidating the nuances of internal audit implementation within the majority of public hospitals.

This research endeavor allows us to perceive the practical intricacies of internal control implementation, uncover potential challenges, gauge adherence to prescribed procedures, and evaluate the impact of legislative evolution and revisions on transparency, accountability, and good governance within these institutions. In alignment with the research objectives, a structured interview questionnaire was employed. By infusing this structured interview questionnaire into the research process, a comprehensive and nuanced understanding of the internal control implementation landscape within public hospitals is achieved. The interview methodology amplifies participant engagement, fostering a more holistic perspective that enriches the research's findings.

## **4 Results and Discussion**

According to what we have mentioned before, due to deficiencies in transparency, objectivity, and accuracy in financial reporting by public entities, there is a growing necessity to establish a model mechanism capable of addressing vulnerabilities within financial systems and accounting information. The concept, therefore, of the internal control system has gained great importance as it now determines

financial governance (Rodakos et al., 2021). The purpose of implementing internal control in public hospitals is to monitor the operation of the individual departments of the hospital in relation to the procedures, purposes and objectives set by the hospital's Management. Specifically, internal control aims to:

1. In the evaluation of the efficiency and effectiveness of the functional units.
2. In the compliance of the staff with the respective legislative framework and the policies of the Administration.
3. To promote the reliability and accuracy of financial management procedures.
4. To ensure that hospital resources are managed to avoid waste, fraud and embezzlement (Ministry of Health, 2011).

This research attempts to analyze the conditions of application of the control, problems that have arisen during its implementation, the changes that have occurred in the regulatory framework that governs it and to what extent it facilitates the organization in improving the services provided. Regarding the initial integration of the audit service in hospitals with Law 4025/2011 and its assignment to external auditors, the majority of respondents stated that it was not easy. From the point of view of hospital staff, there was mistrust and many reservations as internal control was considered as something not necessary for the organization and was treated with "suspicion, insecurity and fear" as characteristically mentioned by the supervisor in the third interview. It took considerable effort and time on the part of internal auditors to understand the nature and seriousness of the audit service. In the process, however, a good cooperation was achieved and the auditor's role as an advisory body was accepted. Only in the fourth interview was it mentioned that cooperation and acceptance of the auditor was easy from the beginning, thanks to the competence of the auditor.

As for the adaptation of internal auditors to the tasks they assumed in public hospitals, it appears that it was not equally easy for everyone. Some struggled quite a bit because they did not know the internal procedures and IT program of the hospital they took over (there is no single IT system for all hospitals), or they relied solely on the control of financial data and reports and not on procedures. As the internal auditor of the sixth interview mentions, in fact, the fact that the selection of a contractor for internal audit was made through a competitive tender and without quality assessment, led in some cases to the assignment of audits to inexperienced company personnel. On the other hand, there are cases of auditors, as in the third interview, who understood most of the functions (Financial Management, Pharmacy, Surgeries, etc.) and the computer program from the outset, were experienced and had the will and ability for further knowledge. Also, according to the deputy director of the first interview, with the passage of time the hospital staff was more mature and accepted the internal audit based on the legislation and the auditors were more experienced, therefore the cooperation became better.

Regarding the adequacy of the internal control implementation framework, in general it is characterized as satisfactory especially in relation to the difficulties of the public hospital and the resources allocated. "Public hospitals are large and labyrinthine organizations and as a result huge time and experience is required for their overall monitoring" says the deputy director of finance in the first interview. Problems and gaps in the performance of duties were not identified. Beyond the first period, cooperation between the parties involved was good. "With perseverance, will and understanding of the particular functioning of the public hospital, the audit becomes reliable", the deputy director asserts in the first interview. The most important problem, mentioned by the head of the financial department in the third interview, is the lack of permanent staff in the hospitals as many staff with years of experience and knowledge are retiring and being replaced by auxiliary staff on annual contracts which does not help the hospital to respond



fully and effectively to the auditor's observations. In the absence of similar audit mechanisms, there was confusion among hospital staff about the responsibilities of internal audit and the Court of Auditors, as pointed out by the internal auditor in the sixth interview. No cases of confusion or duplication of tasks were identified as there is no distinct job description in public hospitals according to the administrator interviewed in the fifth interview.

When asked about the findings of the internal audit, the majority of respondents replied that there were findings that indicated inefficient processes that could be improved. In their monthly reports to management, internal auditors disclosed any problems in processes accompanied by suggestions for changes and improvements to ensure transparency of processes and to eliminate or reduce the scope for error or fraud.

Where information was provided by the auditor himself to departments, this was informal and at a personal level. In the majority of cases the auditor's recommendations were implemented despite the problem of understaffing in the hospitals mentioned in the third interview, however there are cases where the hospital has taken no action to address the issues identified by the auditor in the seventh interview. Concerning the internal audit department within public hospitals, through the interviews there seems to be confusion about whether an audit unit will be established in each hospital, whether it can outsource internal audit services, or whether it will be under the audit unit of the district it belongs to. The law stipulates that the unit is composed of hospital employees, which is its main weakness according to the head of the third interview and the administrator of the fifth, as in reality the existing staff lacks basic training in audit matters, corresponding professional experience and service interest.

Also, weaknesses are identified regarding the Audit Committee by the auditor of the sixth interview as some clarifying instructions are missing, while the auditor of the seventh interview raises an issue regarding "the competence and quality of the new internal auditors to be appointed within the hospital without the necessary experience and skills, which leads to the discrediting of the Ministry of Finance's internal auditor register, which is the only one fully evaluated".

According to Law 4795/2021, the Audit Committee is an independent body with no management or administrative powers and is composed of individuals from outside the institution (one with audit experience) who have no dependent employment relationship with the institution. As one understands, the transition to the new internal control framework is at a primary stage, but most hospitals have proceeded to draft a manual of procedures with risks and safeguards as suggested by the Court of Audit and approved by the Board of Directors.

Finally, despite the aforementioned difficulties and question marks, the opinion of the respondents regarding Law 4795/2021 is mainly positive. The deputy director of the first interview acknowledges that the new law upgrades the function of internal control which is now defined as "internal control system" and is combined with the repressive control of the Court of Auditors which is responsible for its external evaluation. He believes that "if the Court of Audit positively assesses a hospital's control system as adequate and reliable, i.e. that it protects its operation from financial risks, then the avoidance of future repressive controls is automatically ensured".

The new law emphasizes the governance system (structures and procedures), risk management (safeguards) and regulatory framework, which should ensure the organization a rational effective and efficient management, financial reliability and compliance with laws. The head of financial services in the second interview considers the introduction of the Integrity Advisor important, a new supportive, advisory and informative role, while the head in the third interview recognizes that Law 4795/2021 is expected to further enhance the transparency of procedures and eliminate the possibility error or fraud. The internal auditor of the sixth interview identifies a key improvement compared to the previous legislative framework, the formal reference to International Auditing Standards and international best

practices formulated by recognized bodies (C.O.S.O.), while the seventh auditor considers that the internal auditors were already relying to the international standards for carrying out their control.

Finally, the change in the composition of the Audit Committee ensures the independence of the auditor in relation to Law 4025/2011. As mentioned above, the committee of Law 4025/2011 consisted of the internal auditor and two members of the board of directors, which calls into question basic principles governing internal control.

According to Law 4795/2021, the Audit Committee is an independent body without management or administration responsibilities and is composed of people from outside the organization (one with auditing experience) who do not have a dependent work relationship with it.

## **5 Conclusion**

### **5.1 Research conclusions**

Public hospitals are complex organizations with a multitude of functions and processes, staff of different professional orientation and level and an important position among the public organizations of a state. Their management is directly dependent on the political environment of the country (appointed according to the government), is not permanent, is not evaluated and is not always based on meritocratic and objective criteria.

The implementation of internal control is therefore essential to strengthen the work of the administration and decision-making. Addressing the currently low expectations of internal audit is being tackled through the implementation of enhanced guidelines by various stakeholders. It is imperative for internal audit to take a more prominent role in the realm of corporate governance, conducting more effective audits of corporate governance practices and delivering more reliable assurances to boards (Chambers and Odar, 2015).

As shown by this research and the literature review presented, the implementation of internal audit in hospitals in Greece to date is more formal than significant. In response to the research question regarding the adequacy of the legislative framework, we find that from the experience of the implementation of Law 4025/2011, the audits conducted have a limited scope as they are limited to accounting and computerized data. A significant weakness appears in the independence of the audit to date. The internal auditor reports to the hospital administrator and participates with him in the audit committee, so practically the legality of the administrator's actions and the quality of the auditor's work are not checked. The appointment and remuneration of the auditor is not based on the auditor's competence and suitability, but on a cost basis. The question therefore arises as to whether the auditor performs his duties objectively and impartially in accordance with the International Institute of Internal Auditors' standards. Furthermore, regarding the research question on the role of the internal auditor and the treatment by auditees, we would say that there has been a significant improvement since the first implementation. While initially the internal auditor was viewed with distrust and reservations and was seen as a disciplinary body with the aim of seeking violations and imposing sanctions, in the course of time it was accepted and the nature and necessity of its application as an advisory body was understood.

### **5.2 Limitations of the research**

It is important to mention that the research was based on interviews with hospital executives of the financial service (supervisors, managers), since the implementation of internal control until now is carried out in procedures and elements that fall under its competence. Neuralgic departments such as the pharmacy, the procurement department, material management, operating theatres and clinics are not

formally and effectively audited except on the initiative of the auditor and after consultation with the hospital management. In addition, the questionnaires were given to hospital managers within Attica. There is no sample from provincial hospitals beyond the reporting done by the internal auditor appointed by small hospitals in the region. This is partly due to the difficulty of communication with hospitals in the province and the workload of the employees, as many departments in the province are understaffed, and partly because we took it as an assumption that a large hospital in Athens, which concentrates more cases, has a higher volume of transactions, a higher budget and human resources, can provide more information and knowledge about the implementation of internal control to date.

### **5.3 Suggestions for future research**

This research is qualitative. It was based on interviews with executives, internal auditors and a manager in an attempt to cover the range of people involved in the audit process so far. With the implementation of the new law and the expansion of the audit to more departments, the research can be quantified. The sample may involve employees from all departments of the hospital and once the audit procedures are documented, universal and uniform for all departments and hospitals, the questions can be made even more specific. The inquiry will be entirely concerned with the new bill, its contribution to the quality of services provided and to cost containment in public hospitals. In conclusion, another research proposal could be a case study in which all public hospitals adopt a single computerized system, to which the Ministry of Health would also have access in order to monitor in real time the execution of their budgets, the transactions carried out, their outstanding commitments and other financial data which are currently monitored through a specific form on the Ministry of Health's website (bi forms).

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## **Appendix 1: Structured Interview Details**

For each respondent, the following details are provided:

1st Interview:

1. Name of Institution: Public hospital
2. Position/Function: Deputy Director of the Financial Service
3. Place of Interview: Remote interview
4. Date of Interview: June, 2022

2nd Interview:

1. Name of Institution: Public hospital of the 2nd Health Region
2. Position/Function: Head of Finance Department
3. Place of Interview: Remote interview
4. Date of Interview: June, 2022

3rd Interview:

1. Name of Institution: Public hospital
2. Position/Function: Head of Financial Service
3. Place of Interview: Remote interview
4. Date of Interview: June, 2022

4th Interview:

1. Name of Institution: Public hospital
2. Position/Function: Deputy Director of Financial Service
3. Place of Interview: Remote interview
4. Date of Interview: June, 2022

5th Interview:

1. Name of Institution: Public hospital
2. Position/Function: Administrator of a public hospital
3. Place of Interview: Remote interview
4. Date of Interview: June, 2022

6th Interview:

1. Name of Institution: Public hospital
2. Position/Function: Internal auditor in regional hospitals
3. Place of Interview: Remote interview
4. Date of Interview: June, 2022

7th Interview:

1. Name of Institution: Public hospital
2. Position/Function: Internal auditor in hospitals of Athens
3. Place of Interview: Remote interview
4. Date of Interview: June, 2022

## **Appendix 2: Interview Questions**

The interview questions aimed to delve into the following aspects:

1. The ease of integrating the internal audit service into the hospital and its perception by employees as a consultative body.
2. The adaptability of internal auditors to the hospital's processes, their familiarity with computer systems, monthly accounting procedures, and the reports subject to audit.
3. The perceived adequacy of the current audit scope, including whether any departments should be subject to internal audit but are not.
4. Identification of obstacles or gaps in internal auditor responsibilities, and whether the audit program led to confusion or duplication of duties.
5. Discovery of audit findings pointing to ineffective processes susceptible to errors or fraud, and the extent to which they were conveyed to relevant departments and hospital management. Additionally, the measures taken to enhance these processes.
6. Evaluation of the perceived independence of internal auditors from the standpoint of their experiences.
7. Examination of the hospital's progress in establishing an internal audit unit and the development of a manual encompassing procedures, risks, and safeguards in accordance with the Court of Audit's requirements outlined in Law 4795/2021.
8. Identification of any weaknesses encountered during the implementation of Law 4795/2021.
9. Recognition of improvements introduced by the new regulatory framework, specifically in areas/functions associated with internal control.

## Interna revizija u javnim bolnicama: slučaj Grčke

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**Sažetak:** Unutarnja kontrola od iznimne je važnosti za učinkovito korporativno upravljanje, posebno u javnim bolnicama koje teže modernizaciji u grčkom okviru. Funkcije interne revizije povećavaju transparentnost, provode odgovornost i osiguravaju usklađenost s društvenim vrijednostima, jačajući povjerenje javnosti. Ova rad bavi se provedbom interne kontrole u grčkim javnim bolnicama, uzimajući u obzir čimbenike poput veličine, strukture i složenosti rada. Istražujemo regulatorni okvir, postupke, opseg i ciljeve, te intervjuiramo revizorske stručnjake radi uvida u izazove i prilike. Nalazi otkrivaju proceduralnu dominaciju u trenutnoj provedbi Zakona. Usredotočenost na računovodstvo zanemaruje ključne funkcionalne odjele. Uloga i sastav odbora za reviziju izaziva zabrinutost glede neovisnosti. Nedostatak osoblja dodatno otežava rad. Značajna slabost javlja se u neovisnosti revizije. Unutarnji revizori odgovaraju upravitelju bolnice i sudjeluju u revizijskom odboru. Imenovanje i nagrađivanje revizora ne temelji se na stručnosti i podobnosti revizora, već na osnovi troškova. Stoga se postavlja pitanje obavlja li revizor svoju dužnost objektivno i nepristrano u skladu sa standardima Međunarodnog instituta internih revizora. Nadalje, kada je riječ o istraživačkom pitanju o ulozi internog revizora i pristupu reviziji, došlo je do značajnog poboljšanja što je vidljivo iz odgovora ispitanika.

**Ključne riječi:** Unutarnja revizija, javni sektor, grčke javne bolnice, regulatorni okvir, prakse upravljanja

**JEL klasifikacija:** I18, I10, M42, H83