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Enhancing Internal Control Mechanisms in Local Government Organizations: A Crucial Step towards Mitigating Corruption and Ensuring Economic Development

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Abstract: Corruption poses a significant challenge to economic development and governance worldwide, with its detrimental effects permeating various levels of society. In the context of Greece, where corruption has been a longstanding issue, the role of internal audit mechanisms within local government organizations (LGOs) emerges as paramount. This paper presents a comprehensive analysis of the internal control landscape within LGO revenue departments, focusing on factors influencing its effectiveness and proposing strategies for improvement. Drawing upon survey data and regression analyses, this study highlights the crucial role of robust internal control mechanisms in combating corruption and fostering economic development. The findings underscore the importance of competent personnel, legislative compliance, interdepartmental collaboration, and technology utilization in enhancing internal control practices. Despite existing legislation, gaps in internal control implementation persist, including understaffing, inadequate procedures, and limited access to information. This study emphasizes the transformative potential of effective internal audit measures in mitigating corruption at the local level, thereby contributing to broader economic growth and societal well-being. Recommendations for strengthening the internal control structures within LGOs include the formal establishment of internal audit functions, adherence to professional standards, and the promotion of information system utilization. By addressing the corruption and inefficiencies within LGOs, this research underscores the pivotal role of institutional effectiveness in promoting transparency, accountability, and sustainable economic progress.

Keywords: internal audit; public administration; financial fraud; corruption; local government

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1. Introduction

In times of global crises, the specter of financial fraud and corruption in public administration looms large, reaching alarming proportions during periods of turmoil. The Hellenic Republic, navigating a tumultuous landscape marked by successive crises since 2010—ranging from the debt crisis and the reverberations of the COVID-19 pandemic to unfolding geopolitical events—has encountered unprecedented challenges. Against this backdrop, the study at hand delves into the critical arena of the internal audit, recognizing its pivotal role in combating corruption and fortifying the effectiveness of public administration.

The effectiveness of internal control mechanisms within local government revenue departments is significantly challenged due to fragmented procedures, inadequate human resources, and deficiencies in internal audit practices. These issues potentially hinder financial transparency and operational efficiency, raising concerns about the integrity of financial operations. To address these challenges and enhance the effectiveness of internal control mechanisms, it is imperative to thoroughly investigate the impact of the fragmentation of these control procedures, the inadequate human resources, and the deficiencies in internal audit practices on the overall effectiveness of the internal control within local government revenue departments. By understanding the extent of these challenges and their implications, strategies can be formulated and implemented to improve financial transparency and operational efficiency, thereby strengthening the governance framework within local government entities.

This study delves into the critical role of institutional frameworks, specifically focusing on local government revenue departments, in shaping economic development. It examines how the efficacy of the internal controls and organizational structures within these institutions can significantly influence the broader economic landscape.

This research specifically focuses on the evaluation of the recently implemented internal audit institution at the local authority level in Greece. To methodically gauge its effectiveness, we conducted two meticulously designed surveys in 2022, including 98 employees from various local authorities in the first survey and 117 employees in the second. The systematic assessment undertaken in this study not only provides nuanced insights into the unique challenges faced by Greece but also extends its purview to provide broader implications for global economic development.

While the scope of this empirical study may seem narrow in comparison to the broader themes mentioned in this paper, it does serve to address specific challenges faced by LGOs in maintaining financial transparency and operational efficiency. The link between these surveys and broader themes such as corruption, economic development, and crises lies in their implications for the overall governance framework within LGOs. By examining the intricacies of revenue control and the effectiveness of internal control systems, the study seeks to shed light on the factors influencing financial transparency and operational efficiency, which are crucial for addressing issues related to corruption, fostering economic development, and navigating crises within LGOs. Thus, while this empirical study may seem focused on specific questions, its findings have implications for the broader themes introduced in this section, thereby contributing to a deeper understanding of the challenges and opportunities facing LGOs in the context of governance and economic development.

As the deleterious effects of financial misconduct continue to impede economic progress, our findings cast a spotlight on the potential impact of robust internal audit measures in mitigating corruption. Beyond mere oversight, the enhancement of the public administration efficiency through these measures emerges as a catalyst, fostering an environment conducive to sustainable economic growth. In a world grappling with multifaceted challenges, the outcomes of our study assume practical significance, offering valuable insights for the design and implementation of antifraud policy measures.

Moreover, by honing in on the local level, our findings contribute substantively to the broader discourse on economic development. They underscore the indispensable role of institutional effectiveness in championing transparency and accountability and, ultimately, in paving the way for sustainable economic progress. Through this exploration of the intricate interplay between internal audit, corruption mitigation, and economic growth, our study seeks to inform and guide initiatives aimed at fortifying the foundations of robust governance globally.

As we navigate the intricate landscape of the internal audit within Greek local government, this study unfolds in subsequent sections. First, it delves into the historical and contextual background, exploring the key literature on internal control challenges. Then, the methodological framework is outlined, encompassing the survey design and data analysis. Accordingly, the survey results are revealed and discussed, shedding light on human resources, legislative impacts, and collaboration dynamics. Finally, practical recommendations and conclusions are offered, paving the way for future research on and interventions in the realm of internal control effectiveness.

2. Literature Review

Addressing the evolving societal and political transformations, the literature underscores the importance of internal control as a management tool that is vital for local government organizations (LGOs), especially in the midst of technological, political, regulatory, and economic changes. In particular, internal control, deemed crucial by Jorge and Costa (2009), serves as a management tool that is particularly vital amid the technological, political, regulatory, and economic changes affecting LGOs. Drogalas et al. (2015) stress its dynamic nature and the absence of a consensus on the most effective framework. The Government Finance Officers Association of the United States and Canada (2020) advocates a formal internal audit function in high-risk activities, urging its consideration, even if this audit is not independent.

Simultaneously, global economic crises amplify the relevance of internal control in organizational settings. Organizations navigate financial complexity, regulatory demands, and technological advancements, with crises heightening the focus on corporate governance. LGOs face revenue challenges influenced by economic, technological, and demographic shifts. With decreased state funding and increasing demands for quality services, internal control emerges as a key tool in optimizing the revenue flows for autonomous municipalities.

Finally, the United Nations emphasizes the role of local government in protecting human rights. Local governments are considered crucial in delivering and securing human rights, and their role has been further underscored by the COVID-19 pandemic. The text mentions the concept of "Human Rights Cities" (United Nations 2019) and the World Cities Human Rights Forum as important events for fostering dialogue and sharing experiences between local governments, civil society organizations, and other international actors in promoting human rights.

As we shift our focus from the broader challenges confronting LGOs worldwide to a more specific examination of the Greek context, it becomes imperative to delve into the unique landscape within which Greek LGOs operate. In this section, we will specifically concentrate on LGOs in Greece, exploring the legal and constitutional framework that governs their operations under Laws 3852/2010 and 4555/2018. By doing so, we aim to provide a nuanced understanding of the intricacies and distinctive factors shaping the internal control landscape in Greek LGOs. The Greek Constitution outlines the role of LGOs, emphasizing their administrative and financial autonomy. It also discusses the models of local government governance and the modern role of LGOs in addressing market and government failures.

The role of LGOs in promoting sustainable development, especially in environmental matters, is explored. Four roles that LGOs play in sustainability—Minimalist, Implementer, Entrepreneur, and Regional Champion—are discussed. LGOs in Greece participating in the Sustainable Greece 2020 initiative (Sustainable Greece 2022) are highlighted.

Local government revenues in Greece are governed by Law 1828/1989 and the Code of Municipalities and Communities No. 3463/2006. Local government revenues are categorized into regular and extraordinary, encompassing various sources, such as property taxes, compensatory fees, royalties, and income from loans and donations. The traditional theory of fiscal federalism emphasizes a limited tax base for local governments, primarily relying on property tax. Reforms aimed at streamlining local government taxes may lead to revenue losses, as seen in the example of Tanzania.

LGOs play a crucial role in fostering both political engagement and socio-economic growth within their communities (Akudugu 2012). These entities are tasked with the important mission of driving development, a goal that inherently requires substantial financial resources. As noted by Baltaci and Yilmaz (2006), the effectiveness of local governments in fulfilling their roles largely hinges on the extent of the fiscal or financial decentralization they experience. Recognizing the financial demands of these developmental objectives, central governments in various countries regularly allocate funds to local authorities to empower them to perform their duties. Moreover, district assemblies are legally empowered to generate revenue locally to supplement these central transfers. To ensure the efficient use of these funds, the principle of fiscal decentralization is closely tied to accountability measures. It is argued that without strict accountability from local government officials regarding the use of financial resources, the anticipated benefits of fiscal decentralization are unlikely to materialize.

Internal control units have become increasingly critical in the public sector, driven by the need to safeguard public interest and preserve government assets. This emphasis largely mirrors the significance of public funds, which are fundamental to a country's stability and prosperity. As a result, internal control units have emerged as the primary safeguard for protecting and managing government assets. They play a crucial role in preventing manipulation and corruption, which are common challenges within the government sector (Al-Hawatmeh and Al-Hawatmeh 2016). Internal control adds significant value to LGOs by monitoring risks, identifying control weaknesses, facilitating enterprise risk management, and contributing to the development and enhancement of corporate culture (Goodwin and Yeo 2001; Sarens and De Beelde 2006; Arena and Azzone 2009; Eulerich and Eulerich 2020).

While enhancing the efficiency of carrying out public duties in entities in the public finance sector is important, management control remains critical. This concept encompasses a range of activities designed to ensure that goals and tasks are achieved legally, effectively, economically, and on time. A key component within the management control framework is the internal audit. This involves independent advisory and verification efforts aimed at improving the organization's operations and delivering additional value. The significance of internal auditing experienced a notable increase following recent legislation. According to the updated legislation, internal auditing now predominantly focuses on evaluating the management control system's performance, shifting away from the traditional emphasis on financial control, which was mainly concerned with the financial operations of an entity (Gołębiowska et al. 2022).

An internal audit is an independent and objective assurance and consulting activity designed to enhance organizational operations (The Institute of Chartered Accountants of India 2019; Eulerich and Eulerich 2020). Its primary objectives include assessing the accuracy and reliability of financial and business information, identifying and minimizing risks, ensuring compliance with regulations and internal policies, and evaluating the achievement of the organizational objectives (Pantelidis et al. 2011; Drogalas et al. 2012). It adds value by systematically evaluating and improving the risk management, control, and governance processes. The multifaceted nature of the internal audit is highlighted by its involvement in areas such as internal control, risk management, resource utilization, legal compliance, and management information systems (Kester et al. 2013; Vasilleiou et al. 2017; Eriotis et al. 2019). This multi-layered contribution underscores the importance of internal control in the effective functioning of LGOs.

The significance of the internal audit in LGOs cannot be overstated, especially considering its evolving role from merely ensuring financial compliance to significantly influencing organizational effectiveness and change. Recent studies have shed light on how internal audit functions not only provide critical oversight of financial practices but also drive organizational learning and positive change within local governments (Handoyo 2024).

Roussy et al. (2020) presented a conceptual model that highlights the transformation of the role of the internal audit from focusing solely on effectiveness to becoming a cornerstone of organizational significance. This transition is achieved by leveraging the so-called "effectiveness building blocks" that catalyze organizational learning, thereby fostering an environment of continuous improvement and adaptation. The study emphasizes that an internal audit should not only concentrate on its immediate tasks but should also aim at creating a lasting impact on the organizational culture and operational excellence.

The internal audit is of paramount importance for local authorities in Greece, serving as a critical tool for enhancing transparency, accountability, and governance effectiveness within the public sector. As Greece grapples with the historical challenges related to corruption and financial mismanagement, the role of the internal audit is becoming increasingly pivotal in safeguarding public resources and ensuring the efficient delivery of services. The internal audit function within local government organizations (LGOs) plays a multifaceted role, encompassing the evaluation of financial controls, risk management processes, and compliance with legal and regulatory frameworks (Ncgobo and Malefane 2017). Through systematic reviews and assessments, internal auditors help identify weaknesses in internal control systems, thereby enabling authorities to mitigate risks, prevent fraud, and optimize their operational efficiency (Rosdini et al. 2019). Moreover, internal audit activities contribute to enhancing the public trust and confidence in governmental institutions, which are crucial for promoting citizen engagement and fostering socio-economic development (Muchiri and Jagongo 2017). By adhering to professional standards and best practices, internal audit functions in Greek LGOs can serve as indispensable mechanisms for promoting good governance, integrity, and ethical conduct in public administration (Ayagre 2015). However, the absence of established, staffed, organized, and operationally effective internal control units in the Greek public sector poses the risk of managerial issues, thereby hindering the enhancement of the public sector's efficiency and effectiveness (Toudas et al. 2024). Moreover, the quality of an internal audit is affected by various factors, such as culture (Alzeban 2015), the audit reputation, and the independence of the moderating audit (Avakian et al. 2023; Abbott et al. 2016).

It is noteworthy that the literature has recognized both the importance and role of internal control in enhancing public administration efficiency, as supported by various scholars (Enofe et al. 2013; Baharud-din et al. 2014; Ayagre 2015; Menza et al. 2019; Saeed et al. 2020; Dwamena and Ofori 2021; Hamawandy et al. 2021). The present study highlights challenges in revenue collection, including a poor administrative capacity, tax evasion, corruption, and political pressure. Kounadeas et al. (2022) analyze the factors affecting tax evasion in Greece. Martinez (2015) emphasizes the significance of accountability and good governance in managing local government revenues.

In particular, we would like to underline the importance of internal auditing in public organizations as a way to detect and reduce corruption. Corruption severely undermines the development process, as it is negatively related to fiscal space (Katuka and Mudzingiri 2023), productivity (Borovic and Radicic 2023), and subjective well-being (Ma et al. 2022). Jeppesen (2019) argues that "commercial and political corruption leads to misstatements in the financial statements of both the corruption giver's and the corruption receiver's organizations". In addition, Asiedu and Deffor (2017), in their empirical study, conclude that the "full implementation of Act 658, the size of the internal audit department and the independence of the audit department significantly affect the effectiveness of the internal audit function which impacts negatively on corruption".

The reciprocal association between corruption and the quality of financial statements within public organizations is nuanced. Beyond corruption, political pressure emerges as a pivotal determinant influencing the standard of the financial reporting in such entities. This intricate interplay is exemplified in the Canadian Sponsorship Program, as demonstrated by Neu et al. (2013), who underscore how political considerations intricately shape, permeate, and manifest in audit judgments. Further enriching the risk analysis, Brezis (2023) stresses the significance of an "abuse of power"—a legal yet ethically questionable phenomenon—in shaping the landscape of the potential risks and compromises associated with financial statements. Moreover, Hall and O'Hare (2023) argue for a pronounced temporal correlation, asserting that increased government revenue leads to a sustained enhancement of governance. This observed virtuous circle suggests that additional government revenue significantly impacts the achievement of the Sustainable Development Goals beyond prior assessments.

In light of these challenges, empirical studies have been conducted to investigate the practical implications and effectiveness of the internal control in various LGOs. However, as Nerantzidis et al. (2022) mention, most of the studies "are single country–focused, and particularly on emerging markets". The fiscal health of a municipality has a profound impact on the long-term economic trajectory of a region and stands as a pivotal instrument for the effective delivery of public services (Ali et al. 2007). However, the competence of the human resources significantly impacts the quality of financial statements, thereby emphasizing the pivotal role of human resource competency in elevating the standards of local government financial reporting (Sumaryati et al. 2020).

Tackie et al. (2016) investigated the factors influencing the internal audit effectiveness in the decentralized Ghanaian local government administrative systems. Focusing on the Ashanti region, which harbors the largest number of Metropolitan, Municipal, and District Assemblies (MMDAs) in Ghana's structured local government system, the study revealed that a majority of the internal audit staff in the Ashanti region possess the necessary professional competence. Contrary to the perception of compromised audit quality in the public sector, the research demonstrated a high standard of audit work, attributed to compliance with both international auditing standards and local audit legislation. The study identified professional competence, organizational independence, and career advancement as factors with statistically significant positive relationships to internal audit effectiveness, while top management support showed no effect on the internal audit effectiveness.

Papcunová et al. (2020) conducted a comparative analysis of the local government revenue generation mechanisms in Slovakia and the Czech Republic, underscoring the reliance on state revenues, particularly on tax-based sources. Yurniwati and Rizaldi (2015) delved into the control environment within the government internal control system in Indonesia, stressing the imperative of fostering a positive and transparent control environment for successful implementation.

Examining West Java's local governments, Rosdini et al. (2019) scrutinized the roles of government internal auditors, emphasizing their effectiveness in risk management. In Ghana, Akudugu (2012) focused on financial accountability at the local government level, shedding light on the "who" aspect and the imperative of raising awareness regarding financial management responsibilities.

Assessing the impact of the internal audit system on revenue collection in Uganda, Okidi et al. (2021) found that control activities significantly influence revenue collection. Eton et al. (2022) delved into the role of internal control in financial accountability in Uganda's Lira District, highlighting the significant effects of the control environment and monitoring. Thyaka and Kavale (2021) evaluated the internal control system of the Kenyan Revenue Authority, revealing positive significant effects on revenue collection.

Suwanda (2015) conducted a comprehensive examination of factors influencing the quality of financial statements in Indonesian local governments. The study concluded that the government accounting standards, human resource quality, internal control, organizational commitment, and IT utilization significantly impact the quality of financial reports. Aswar et al. (2021) analyzed the impact of internal control, internal auditing, and information technology on the financial statement quality in North Sumatera, Indonesia, uncovering significant effects.

Muchiri and Jagongo (2017) explored the effect of corporate governance and audit committees on the financial performance of a Kenyan government agency, underscoring the importance of an independent and competent internal audit function. Linnas (2008) scrutinized the internal control in small local government units in Estonia, arguing that an internal audit operating without optimal integration may lack the capabilities to fulfill the expected responsibilities, thereby hindering assistance to local decision-makers.

Sepsey (2011) delved into internal auditing in Hungary, highlighting the frequent shortcomings in the implemented internal controls by local governments, leading to ineffective management. Gyüre's (2012) examination of the internal control in Hungarian local government organizations revealed deficiencies in basic controls, incomplete asset management decision processes, and an inadequate assessment of the financial risks.

Jorge and Costa (2009) studied the internal audit procedures in Portuguese municipalities, noting their absence due to a lack of technical and human resources. Christopher et al. (2009) investigated the independence of the internal audit function in Australia, identifying threats related to its relationship with management and the audit committee.

Pilcher's (2014) report on Australian local government emphasized the complexity and risks introduced by internal audits, potentially leading to the manipulation of financial figures.

Onumah and Krah (2012) delved into the role of the internal audit function in the Ghanaian public sector, citing limitations such as low professional competence and insufficient management support. Unegbu and Kida (2011) focused on internal audits in Kano State, Nigeria, demonstrating its effectiveness in controlling fraud. Jones and Beattie (2015) reported on local government councils' compliance with internal control in Australia, highlighting their reliance on guidelines for good governance.

In conclusion, the framework of internal control is integral to the governance and operational success of the LGOs in Greece. Its multifunctional role and dynamic adaptation to organizational changes underscore its significance in ensuring accountability, risk mitigation, and efficient resource utilization within LGOs. This study investigates the intricate relationship between internal control and revenue management in LGOs, addressing factors such as organization, human resources, and information systems. This research aims to provide insights into enhancing revenue processes and internal controls, acknowledging the challenges, and proposing avenues for further exploration. It suggests that a reliance on external revenue sources may diminish accountability improvements in local governments. In the realm of LGOs in Greece, the framework of internal control plays a pivotal role in ensuring effective governance, risk management, and operational efficiency.

3. Methodology

In this study, we employed a mixed-method approach to analyze the data collected from two distinct sample surveys. Both surveys were conducted electronically in 2022 using Google Forms, and anonymity was secured. Participants used the Likert scale to assess the survey questions (presented in the Supplementary Material). The first survey focused on revenue control within local government organizations (LGOs), involving 98 participants employed in LGO revenue departments in 2022. The second survey evaluated the efficacy of implementing an internal control system within LGOs, with 117 participants, including officials from grades A and B of the LGOs, as well as decentralized administration officials. The evidence obtained was synthesized to present a comprehensive analysis of the internal control landscape in LGOs, focusing on factors influencing its effectiveness and proposing strategies for improvement.

To elucidate the data, we employed both descriptive statistics and econometric methods, and specifically linear regression analysis. Descriptive statistics were utilized to provide a comprehensive overview of the survey responses, while linear regression analysis allowed us to explore the relationships between the dependent variables, "revenue confirmation effectiveness" for the Revenue Control survey and "internal audit processes" for the Internal Control System survey, and the independent variables identified in each survey.

Understanding the Variables

Internal audit serves as a management tool that informs and assists it. It intervenes to examine a process or activity within the organization and provides a diagnosis that more or less confirms its proper functioning, a prognosis to alert the responsible parties and the central administration, and a remedy aimed at ensuring the organization's interests, the reliability of information, the effectiveness of actions, and competitiveness. The internal auditors primarily listen, observe, and analyze. Then, they compile their observations and make deductions to formulate solutions, essentially reconstructing the management. Finally, they produce a report and distribute their findings (Gyüre 2012). Internal audit is the control organized within the economic unit and conducted by its employees.

From a business perspective, adopting a strong and stable internal control system prevents opacity, suspicion, and corruption (Drogalas et al. 2015). For public entities, establishing an internal control framework, with respect to international standards and audit principles, strengthens fiscal consolidation, debt reduction, and the rationalization of public spending (Asaolu et al. 2022).

Reforms in certain countries have opened up the public sector to scrutiny (Johnsen 2019). Especially in recent years, internal auditing has become a significant part of the reforms implemented in many developing countries. This is attributed to its role in improving public services and contributing to sound governance (Alzeban and Gwilliam 2014). Consequently, the impact and added value that internal auditing provides to organizations have garnered attention in the public sector in recent years (Chang et al. 2019).

Internal auditing in local government organizations functions as an organized set of control processes aimed at achieving effective operation, strategic objectives, and the elimination of operational risks (Gramling et al. 2004).

The presence of an audit mechanism is deemed essential because, in Greece, corruption in public administration is identified as a pervasive issue stemming from a dysfunctional public sector (Zacharakis et al. 2017). Under these circumstances, the state apparatus is highly inefficient and results in negative impacts at the economic and fiscal levels. Internal audit services aim to ensure an organization's transparency, offering protection to both the interests of the management and the employees, while simultaneously facilitating the process of external auditing (Papastathis 2014).

Following their research into some of the largest audit bodies in Greece, Lois et al. (2020) attempted, among other objectives, to identify the factors that play a role in continuous auditing and the techniques that assist in its implementation. Their research found that it is crucial to adapt existing established procedures to the new digital era through the digitization of processes and the creation of a digital control system that enhances the protection of these processes.

Jeppesen (2019) analyzed the role and significance of various types of audits in relation to corruption elimination. According to her findings, both commercial and political corruption introduce ambiguities into the financial data of both the private and public sectors. It becomes clear, therefore, that audit standards must include corruption within the definition of fraud if the audit is to be a significant part of the fight against corruption. Simultaneously, to detect corruption in the most effective way, collaboration between auditors of private and public organizations is deemed necessary, as well as the adoption of measures to prevent corruption.

The independent variables considered in the Revenue Control survey included "revenue department organization"; "human resources"; "legislation"; "collaboration"; "control"; and "use of information systems". For the Internal Control System survey, the independent variables comprised factors related to internal audit processes and organizational components. Below, we provide the theoretical background for each variable to contextualize our analysis within the existing literature:

Revenue department organization: The organization of the revenue departments within local government organizations (LGOs) plays a crucial role in shaping their operational efficiencies and effectiveness. Studies such as Tu et al. (2023) have emphasized the importance of the organizational structure in enhancing revenue collection and management processes. Factors such as the size of the department, the clarity of staff duties, and the level of cooperation with other municipal departments have been identified as significant determinants of the revenue department performance (Kloot and Martin 2000; Simiyu 2012). Additionally, research by Mikeladze (2023) suggests that a well-defined organizational structure with clear lines of authority and responsibility is essential for promoting transparency and accountability in the revenue management practices within LGOs;

Human resources: The quality and quantity of the human resources within LGOs have been widely recognized as critical factors influencing their organizational effectiveness and performance. Studies by Darnell et al. (2013) and Goodman et al. (2015) have highlighted the importance of recruiting and retaining skilled personnel in local government departments to ensure the efficient delivery of public services. Furthermore, research by Cohen (2010) suggests that investing in employee training and development programs can enhance the competency levels of staff members, thereby improving the overall organizational performance. Additionally, the allocation of sufficient human resources to revenue departments is essential for ensuring timely and accurate financial reporting, as well as compliance with regulatory requirements (Khan 2018);

Legislation: Compliance with legislation and regulatory requirements is fundamental to the functioning of the revenue departments within LGOs. Research by Christiaens et al. (2015) and Grembi et al. (2016) has emphasized the need for local government organizations to comply with relevant laws and regulations governing revenue collection, expenditure, and financial reporting. Legislative changes can have a significant impact on revenue department operations and may necessitate adjustments to internal control processes and procedures. Therefore, maintaining awareness of legislative developments and ensuring compliance with legal requirements are essential aspects of effective revenue department management within LGOs;

Collaboration: Collaboration between revenue departments and other municipal departments, as well as with external stakeholders, is essential for promoting coordination and synergy in local government operations. Studies by Ammons and Roenigk (2015) and Lee (2019) have highlighted the benefits of interdepartmental collaboration in improving the service delivery and resource utilization within LGOs. Furthermore, fostering partnerships with community organizations and private sector entities can enhance the revenue generation and expand the resource bases of local governments. Therefore, promoting a culture of collaboration and partnership is crucial for enhancing the effectiveness and efficiency of the revenue department operations in LGOs;

Control: Effective control mechanisms are essential for ensuring accountability, transparency, and compliance within the revenue departments of LGOs. Research by Baltaci and Yilmaz (2006) and Yao et al. (2017) has emphasized the importance of implementing robust internal control systems to mitigate risks and safeguard organizational assets. Control mechanisms, such as the segregation of duties, authorization procedures, and regular monitoring and supervision, are essential for preventing fraud, errors, and the mismanagement of resources within revenue departments. Therefore, establishing and maintaining effective control measures is critical for promoting the integrity and reliability of the financial operations in LGOs.

Use of information systems: The utilization of information systems can significantly enhance the efficiency and effectiveness of the revenue department operations within LGOs. Research by Chen and Gant (2001), Kumta (2011), and Shaw (2012) has highlighted the benefits of adopting modern technologies, such as enterprise-resource-planning (ERP) systems and electronic payment platforms, in streamlining revenue collection, processing, and reporting processes. Information systems enable real-time access to financial data, facilitate automated workflows, and enhance the decision-making capabilities within revenue departments (Kamalahmadi and Parast 2016). Therefore, investing in information technology infrastructure and promoting the use of digital solutions are essential strategies for modernizing the revenue department operations and improving the overall organizational performance in LGOs.

4. Results

The Results Section reveals a detailed analysis derived from the two distinct surveys conducted in this study. The ensuing findings are presented through a combination of descriptive statistics and econometric methods, with a specific focus on linear regression for data elucidation. Our application of linear regression analyses aims at assessing the impact of these factors on the planning and execution of the internal audit activities outlined in each hypothesis. This multifaceted approach enhances the depth and robustness of our investigation into the intricate dynamics of internal audit processes and their associations with key organizational components.

4.1. Revenue Control within LGOs

4.1.1. Descriptive Analysis of Survey Responses

The findings derived from the first survey reveal notable patterns in the organizational structures and operational practices within the revenue departments of local government organizations. A significant proportion of respondents, specifically 36.7%, indicated that the majority of revenue departments consist of two–three employees, followed closely by departments with four–five employees (32.7%), while a smaller percentage oversees more extensive teams exceeding six individuals (30.6%). Furthermore, a moderate extent of organizational clarity is observed, with 27.6% affirming the clear separation of staff duties and a corresponding percentage acknowledging the recorded description of the job duties within the revenue department.

Additionally, a noteworthy 29.6% of the respondents reported a limited recording of the immovable property of the municipality, highlighting potential gaps in asset management. Disparities in perceptions emerged concerning the maintenance of the debtors register, with 23.5% expressing no maintenance, and an equal percentage reporting robust maintenance practices. The survey also underscores the significance of professional development, as 25.5% indicated that revenue department employees participate extensively in seminars related to their field.

Furthermore, opinions diverged on the sufficiency of the staffing levels within the revenue departments, with 24.5% considering them moderately sufficient. Cooperation and communication within and outside the municipality revealed varying degrees, such as limited cooperation with the cash service (22.4%) and a lack of collaboration with other municipal departments (24.5%). Additionally, respondents expressed differing perspectives on the level of cooperation with the administration, ranging from "on a small scale" to "too much".

This study illuminates the intricacies of audit processes, revealing a small number of collection audit updates by the Court of Auditors (27.6%). Conversely, the very large number of considerations and implementations of the recommendations from Audit Reports (22.4%) underscores a commitment to operational improvement. The findings also shed light on the utilization of information systems, with 24.5% affirming a comprehensive coverage of departmental needs. The certification of various revenue sources, including real estate tax (TAP), municipal fees, and taxes on gross income, reflects varying degrees of updates and adherence to procedural standards within the revenue departments.

4.1.2. Regression Analysis

The investigation employed both correlation tests with the Pearson coefficient and linear regression analyses to explore the relationships between the dependent variable, "revenue confirmation effectiveness", and the independent variables, "revenue department organization", "human resources", "legislation", "collaboration", "control", and "use of information systems". These independent variables were derived from the averaged responses to the questions within their respective areas.

The correlation analysis revealed a statistically significant negative correlation, at the $\alpha = 0.01$ level of significance, between the effectiveness of income certification and the use of information systems. Specifically, the results indicated that, as the use of information systems increases, the effectiveness of income certification tends to decrease.

The subsequent linear regression analysis, as summarized in Table 1 below, demonstrated that the independent variables collectively explain only 10.3% of the variance in the dependent variable. Notably, it was established that the use of information systems emerged as a crucial determinant with a significant influence on the effectiveness of income certification. This finding underscores the importance of information system utilization in shaping the overall effectiveness of the revenue confirmation process, thereby highlighting the need for further exploration and potential interventions in this domain.

Table 1. Revenue control—model fit statistics and summary of regression analysis results.

R	R^2		Adjusted R^2	Std. Error of the Estimate	
0.322	**0.103**		**0.044**	**0.55793**	
	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	Beta	**Std. Error**	**Beta**		
(Constant)	3.529	0.574		6.146	0.000
Revenue Department Org.	0.022	0.090	0.025	0.248	0.804
Human Resources	0.052	0.058	0.090	0.889	0.376
Legislation	−0.008	0.056	−0.015	−0.143	0.887
Collaboration	−0.027	0.080	−0.035	−0.334	0.739
Control	−0.020	0.059	−0.035	−0.341	0.734
Use of Information Systems	−0.189	0.062	−0.308	−3.034	0.003

These findings collectively contribute to our understanding of the factors influencing revenue confirmation effectiveness, suggesting the pivotal role of information systems due to their observed significance.

4.2. Effectiveness of Internal Control within LGOs

4.2.1. Descriptive Analysis of Survey Responses

In the analysis of the findings from the second survey concerning the characteristics of employers, it was observed that a predominant portion of participants, comprising 70%, primarily hold positions in the first- and second-degree LGOs. Most respondents, at 29.9%, are employed in sectors with 0–50 employees, while the highest hierarchical level in their respective organizations is general management, as reported by 31.65% of the participants. Diverging opinions emerged regarding the operation of the financial, administrative, technical, and legal service units based on the available resources, with varying proportions indicating levels ranging from “very bad” to “very good” in each category.

A notable proportion, 63.2%, reported the absence of internal manuals and procedures for use as management tools, while 94% affirmed the existence of internal circulars and codes of ethics. Respondents expressed varying degrees of satisfaction with the hierarchical approval processes and the determination of employee responsibilities. The absence of a system for recording and managing complaints was acknowledged by 53% of the participants. A majority, 61.55%, believed that the addition of a functional internal control group to the organization would be of significant value. Additionally, 50.4% reported the absence of job descriptions within their organizations.

Regarding the presence of an internal control group in local governments, the majority (58.1%) indicated the absence of such units. Those with internal audit teams expressed diverse perceptions of adequacy, with 25.6% perceiving excessive staffing. The average number of staff for internal audit teams is approximately 11 employees. A noteworthy 53% of respondents reported limited access to their unit’s information by internal audit teams. External partners are utilized in internal audit activities, according to 54.7% of the participants. Concerns were raised about the sufficiency and consistency of internal auditors, with 52.1% expressing reservations.

In the context of internal control implementation, the responses indicate the limited execution of planned general controls (27.4%) and unscheduled general controls (27.4%). Ad hoc audit controls are also infrequently conducted (26.5%). A majority, 53%, noted the absence of procedures for preserving audit evidence. Similarly, 50.4% indicated the lack of a designated supervisor for internal control plan execution. While procedures for accepting findings and corrective action recommendations vary, a significant portion, 54.7%, noted the absence of an annual report for internal audits conducted in the last three years.

Furthermore, 51.3% reported a lack of monitoring progress in implementing improvement actions resulting from the control process.

4.2.2. Regression Analysis

This study delves into a comprehensive examination of the following research hypotheses, aiming to elucidate the intricate relationships between internal audit processes and various organizational components:

Hypothesis 1. *Correlation Between Internal Audit and Key Processes.*

There is a correlation between the internal audit and the processes of preserving evidence and the audit results for subsequent actions, the designation of a supervisor by the administration or a designated body for the execution of the internal audit plan, as well as the processes of accepting findings and corrective action recommendations from the audited agency;

Hypothesis 2. *Dependencies of Planned General Audit.*

The planned general audit depends on approved internal procedures for the operation of the internal audit unit, approved internal procedures for determining the risks of the organization, and a specific and approved risk management plan by the management;

Hypothesis 3. *Dependencies of Unscheduled General Audit.*

The unscheduled general audit depends on approved internal procedures for the operation of the internal audit unit and for determining the risks of the organization, in addition to a specific and approved risk management plan by the management;

Hypothesis 4. *Dependencies of Ad Hoc Audit.*

The ad hoc audit depends on approved internal procedures for the operation of the internal control unit and for determining the risks of the organization, in addition to a specific and approved risk management plan by the management.

We initiated our investigation by testing Hypothesis 1. Our analysis, utilizing the Pearson correlation coefficient, revealed a statistically significant positive correlation between the unscheduled general audit and the presence of a documented supervisor designated by the management for the execution of the internal audit plan ($p < 0.05$), as presented in Table 2 below.

Subsequently, we extended our analysis, employing regression techniques to rigorously assess Hypotheses 2–4. Evaluating Hypothesis 2, our findings, as presented in Table 3 below, indicate that the independent variables collectively account for only 2.7% of the variability in the dependent variable. Furthermore, the absence of a statistically significant linear relationship between the dependent variable and the independent variables is observed ($p = 0.377 > 0.05$). This suggests that, in the context of planned general audits, none of the considered variables emerges as a significant determining factor. The lack of statistical significance underscores the complexity and potential multifaceted nature of the factors influencing planned general controls within the organizational framework.

Continuing with the examination of Hypothesis 3, our regression analysis, as presented in Table 4 below, reveals that the independent variables explain only 0.2% of the variability in the dependent variable. Additionally, upon evaluating the statistical significance of the variables, it is discerned that none of the considered variables emerges as a significant determining factor of the unscheduled general audit (p-value > 0.05). This lack of statistical significance emphasizes the intricate and potentially nuanced nature of the factors influencing the occurrence of unscheduled general audits within the organizational context. The limited explanatory power of the independent variables suggests that additional variables, perhaps not included here, may contribute to the dynamics of unscheduled general audits.

Table 2. Correlations of variables.

		Scheduled General Audit	Unscheduled General Audit	Ad Hoc Audit
There is a procedure for safeguarding the audit evidence and the results to be used for subsequent actions.	Pearson Correlation	−0.143	0.088	0.066
	Sig. (2-tailed)	0.125	0.344	0.481
	N	117	117	117
There is a documented supervisor designated by the administration, person, or body for the execution of the internal control plan.	Pearson Correlation	0.230	−0.028	−0.028
	Sig. (2-tailed)	0.012	0.764	0.768
	N	117	117	117
There is a procedure for accepting the findings from the audited agency.	Pearson Correlation	−0.051	−0.061	−0.143
	Sig. (2-tailed)	0.589	0.511	0.123
	N	117	117	117
There is a procedure for accepting corrective action recommendations from the audited agency.	Pearson Correlation	0.028	−0.099	−0.125
	Sig. (2-tailed)	0.764	0.289	0.179
	N	117	117	117

Table 3. Effectiveness Hypothesis 2—model fit statistics and summary of regression analysis results.

R	R^2		Adjusted R^2	Std. Error of the Estimate	
0.164	**0.027**		**0.001**	**1.418**	
	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	Beta	**Std. Error**	**Beta**		
(Constant)	3.343	0.708		4.719	0.000
Are there approved internal procedures for the operation of the internal control unit?	−0.396	0.265	−0.139	−1.494	0.138
Are there approved internal procedures for determining the organization’s risks?	−0.088	0.263	−0.031	−0.334	0.739
Is there a specific and approved risk management plan from the management?	0.231	0.263	0.082	0.880	0.381

Table 4. Effectiveness Hypothesis 3—model fit statistics and summary of regression analysis results.

R	R^2		Adjusted R^2	Std. Error of the Estimate	
0.047	**0.002**		**−0.024**	**1.464**	
	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	Beta	**Std. Error**	**Beta**		
(Constant)	2.460	0.732		3.363	0.001
Are there approved internal procedures for the operation of the internal control unit?	−0.004	0.274	−0.001	−0.015	0.988
Are there approved internal procedures for determining the organization’s risks?	0.086	0.271	0.030	0.315	0.753
Is there a specific and approved risk management plan from management?	0.102	0.271	0.036	0.378	0.706

Concluding our analysis with Hypothesis 4, the regression results presented in Table 5 below indicate that the independent variables explain only 0.6% of the variability in the dependent variable. Furthermore, upon assessing the statistical significance of the variables, it is evident that none of the considered variables emerges as a significant determinant of ad hoc audits (p-value > 0.05). This outcome underscores the challenges in identifying specific factors that significantly influence the occurrence of ad hoc audits within the organizational context. The limited explanatory power of the independent variables implies that additional, potentially unexplored factors may contribute to the dynamics of ad hoc audits. These findings collectively highlight the complexity of the relationship between the organizational variables and the conducting of ad hoc audits.

Table 5. Effectiveness Hypothesis 4—model fit statistics and summary of regression analysis results.

R	**R^2**		**Adjusted R^2**	**Std. Error of the Estimate**	
0.074	**0.006**		**−0.021**	**1.541**	
	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	Beta	**Std. Error**	**Beta**		
(Constant)	2.467	0.770		3.203	0.002
Are there approved internal procedures for the operation of the internal control unit?	0.120	0.288	0.039	0.416	0.678
Are there approved internal procedures for determining the organization's risks?	0.194	0.285	0.064	0.680	0.498
Is there a specific and approved risk management plan from the management?	−0.028	0.285	−0.009	−0.097	0.923

5. Discussion

This study has uncovered valuable insights into the factors influencing the effectiveness of internal control within the context of local government. In accordance with prior research (Ayagre 2015; Muchiri and Jagongo 2017; Asiedu and Deffor 2017; Dwamena and Ofori 2021), this study suggests that internal control may encounter obstacles that limit its impact on the efficiency of public services. Notably, the human resource quality and quantity, along with a clear definition of responsibilities, emerge as crucial determinants (Suwanda 2015; Muchiri and Jagongo 2017; Rosdini et al. 2019; Eulerich and Eulerich 2020; Rahayu and Rahayu 2020; Sutaryo et al. 2022).

Legislative changes were found to directly affect the revenue department, emphasizing the significance of legal support (Yurniwati and Rizaldi 2015; Ncgobo and Malefane 2017; Okidi et al. 2021). Limited cooperation between the revenue department and other entities underscores the importance of collaboration in organizational effectiveness (Lee and Feiock 2020).

The study indicates that the Court of Auditors' control over collections is limited, yet its recommendations are taken very seriously. Internal audit activities play a crucial role, covering department needs, but are underutilized (Goodwin and Yeo 2001; Sarens and De Beelde 2006; Arena and Azzone 2009; Ncgobo and Malefane 2017; Eulerich and Eulerich 2020; Thyaka and Kavale 2021).

Concerns were raised about the effectiveness of income certification, with information systems identified as a significant determinant. The absence of an internal control unit and deficiencies in internal audit practices point to organizational challenges (Linnas 2008; Jorge and Costa 2009). A lack of professional competence among auditors and fragmented control procedures further hinder the internal control effectiveness (Cohen and Sayag 2010; Turetken et al. 2020).

This study identifies issues in the control environment, cooperation–communication, and the full utilization of information system capabilities. To address these challenges and enhance the effectiveness of revenue certification, several recommendations are proposed.

These include the establishment of cooperation networks, the promotion of information system utilization, and the creation of an appropriate control environment.

Practical proposals encompass the formal establishment of the internal audit function, the adoption of professional standards, the requirement of appropriate qualifications for internal auditors, transparency through the availability of internal auditors' reports, and the implementation of a monitoring and evaluation system for corrective actions resulting from internal audit findings.

The statistical analysis emphasizes the importance of information systems and the control environment, information, and communication. However, the study acknowledges limitations, such as the small and non-representative sample size of LGO executives. In light of the regression analysis results showing limited explanatory power, it is imperative to draw nuanced insights from the study findings. Despite the challenges in fully elucidating the relationships between the variables, this study offers valuable insights into the complexities of revenue control and the implementation of internal control systems within local government organizations (LGOs). While the regression models may not capture all the variation in the dependent variable, they shed light on important factors influencing organizational practices and policies.

Moving forward, future research can delve into interpreting the observed trends in the regression coefficients, exploring potential reasons behind the relationships, and identifying areas for further investigation. By contextualizing the findings within the existing literature and the practical implications, the discussion underscores the significance of the study's contributions. Furthermore, the Conclusion Section emphasizes the importance of addressing the gaps and challenges identified in the revenue control and internal control practices within LGOs, paving the way for future research endeavors and policy interventions aimed at enhancing the organizational effectiveness and transparency.

It is also recommended that future research be undertaken with larger and more diverse samples, including a focus on LGO executives and internal auditors. This study also suggests the inclusion of qualitative approaches, such as interviews or focus groups, to explore participant perspectives more deeply. This research lays the foundation for future investigations and interventions aimed at strengthening the internal control structures within local government revenue departments. Strategies to enhance human resources, improve legislative compliance, foster cooperation, maximize the information system potential, and streamline income certification processes are imperative for efficient and transparent financial management within local government units. Future research endeavors should explore tailored interventions and strategies to fortify the internal control landscape.

6. Conclusions

This research presents a comprehensive exploration of the internal control landscape within local government revenue departments. The findings highlight crucial facets influencing the effectiveness of internal control mechanisms, revealing both strengths and weaknesses in the current framework.

This study directly links the effectiveness of institutional structures, specifically within local government revenue departments, to broader economic development. It underscores the pivotal role of robust internal control mechanisms and competent personnel in shaping the economic trajectory of a region. In demonstrating how inefficiencies and gaps in internal audit practices can impact economic outcomes, the profound influence that governance structures and organizational efficiency have on economic development is highlighted. These findings reinforce the notion that solid and well-structured institutions are fundamental to fostering sustainable economic development, underscoring the essential connection between the health of institutional frameworks and the overall economic development of a society.

This study demonstrates that local revenue departments generally maintain an adequate number of employees, specifically within the range of two–three individuals. However, the quality and quantity of the human resources emerge as pivotal factors influencing the effectiveness of the internal control. Clear definitions of responsibilities and roles are crucial for organizational success, which is in accordance with the existing literature.

Legislation compliance is notable, with changes effectively reaching revenue departments. Despite this, limited cooperation within the revenue departments poses challenges for a collaborative working environment. Strengthening interdepartmental collaboration is crucial for achieving the cohesive and efficient operation of local government.

This research underscores the practical significance of audit recommendations, emphasizing their role in shaping and improving internal control practices. However, the underutilization of information systems poses a significant gap in harnessing technology for enhanced internal control. Maximizing the potential of information systems can contribute to more efficient and transparent control mechanisms.

The examination of income certification processes reveals potential limitations in certain revenue streams due to partial updates and a lack of certification. This raises concerns about the overall financial implications for local governments, particularly given their reliance on diverse income sources.

The absence of an internal control unit, or its perceived understaffing, is a notable gap. This study also identifies deficiencies in internal audit practices, including limited access to information, the absence of internal procedures, and infrequent audit activities. These factors collectively diminish the effectiveness of internal control.

Despite the existence of relevant legislation, the internal control framework within local government units is either absent or implemented in a fragmented manner. The shortcomings identified encompass fragmented functions, incomplete elements crucial to internal control, and a lack of clear organizational structures and procedures. Professional competence, access to information, fragmented control procedures, and the absence of a monitoring process emerge as critical factors influencing the effectiveness of the internal control. These findings reinforce the broader literature emphasizing the pivotal role of competent personnel, well-defined processes, and robust control mechanisms in ensuring effective internal control.

In conclusion, this study sheds light on the multifaceted landscape of the internal control mechanisms within local government revenue departments in Greece. The findings underscore the critical importance of robust internal control structures in ensuring the integrity and efficiency of financial operations. However, several limitations must be acknowledged. Firstly, the reliance of the study on survey data from a limited sample of local government officials may restrict the generalizability of the findings. Additionally, the cross-sectional nature of the study limits our ability to establish causality between the factors identified and the effectiveness of the internal control mechanisms. Future research endeavors should aim at addressing these limitations by employing larger and more diverse samples and utilizing longitudinal research designs to capture changes over time.

Based on the survey results, several recommendations can be proposed to strengthen the internal control mechanisms within local government revenue departments. Firstly, there is a need for enhanced collaboration and coordination among various departments to streamline processes and improve information sharing. Investing in employee training and development programs can also bolster the competency levels of staff members, thereby enhancing the overall effectiveness of internal control practices. Furthermore, leveraging information technology solutions can optimize data management processes and facilitate the real-time monitoring of financial transactions.

A more detailed examination of the survey results reveals some notable insights. The limited effectiveness of internal control mechanisms can be attributed to various factors, including inadequate human resources, fragmented control procedures, and deficiencies in internal audit practices. These findings highlight the need for comprehensive reforms to address systemic issues and enhance the overall governance framework within local government revenue departments.

The evaluation of the hypotheses provides valuable insights into the factors influencing the effectiveness of internal control mechanisms. However, a deeper examination of these findings is warranted to elucidate the underlying reasons for such outcomes. For instance, the lack of statistical significance in certain variables may be indicative of complex interdependencies and contextual factors that were not adequately captured in the analysis. Future research endeavors should explore these nuances in greater detail to inform evidence-based policy interventions and organizational reforms.

Finally, such studies are often based on a single LGO, but research could be expanded to include more. The study of the dimensions of internal control and its impact on the effectiveness of achieving transparency has sparked interest in investigating all issues related to the effective conduct of internal control, specifically within local government entities. The dimensions of this study could also include the impact of the municipality's size on the allocation of resources and internal control issues. Furthermore, future examinations could assess the responsiveness and capacity of the human resources in this specific application. Additional research on combined assurance and the role that internal control can play in local government organizations could also prove invaluable for further advancing the correct strategy for its implementation.

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References

Abbott, Lawrence J., Brian Daugherty, Susan Parker, and Gary F. Peters. 2016. Internal audit quality and financial reporting quality: The joint importance of independence and competence. *Journal of Accounting Research* 54: 3–40. [CrossRef]

Akudugu, Jonas Ayaribilla. 2012. Accountability in local government revenue management: Who does what? *Information and Knowledge Management* 2: 22–32.

Al-Hawatmeh, Omar Mohammad, and Zaid Mohammad Al-Hawatmeh. 2016. Evaluation of internal control units for the effectiveness of financial control in administrative government units: A field study in Jordan. *European Scientific Journal* 12: 225–56. [CrossRef]

Ali, A. Md, Juergen Dieter Gloeck, A. Ali, A. Ahmi, and Mohd Hadafi Sahdan. 2007. Internal audit in the state and local governments of Malaysia. *Southern African Journal of Accountability and Auditing Research* 7: 25–57. [CrossRef]

Alzeban, Abdulaziz, and David Gwilliam. 2014. Factors affecting the internal audit effectiveness: A survey of the Saudi public sector. *Journal of International Accounting, Auditing and Taxation* 23: 74–86. [CrossRef]

Alzeban, Abdulaziz. 2015. The impact of culture on the quality of internal audit: An empirical study. *Journal of Accounting, Auditing & Finance* 30: 57–77. [CrossRef]

Ammons, David N., and Dale J. Roenigk. 2015. Benchmarking and interorganizational learning in local government. *Journal of Public Administration Research and Theory* 25: 309–35. [CrossRef]

Arena, Marika, and Giovanni Azzone. 2009. Identifying organizational drivers of internal audit effectiveness. *International Journal of Auditing* 13: 43–60. [CrossRef]

Asaolu, Taiwo Olufemi, Johnson Kolawole Olowookere, Aderemi Olalere Adebayo, and Tajudeen Ayofe Kareem. 2022. Audit Committee Characteristics and Sustainable Growth Among Selected Listed Non-Financial Firms in Nigeria. *Iranian Journal of Accounting, Auditing and Finance* 6: 1–13. [CrossRef]

Asiedu, Kofi Fred, and Eric Worlanyo Deffor. 2017. Fighting corruption by means of effective internal audit function: Evidence from the Ghanaian public sector. *International Journal of Auditing* 21: 82–99. [CrossRef]

Aswar, Khoirul, Meilda Wiguna, Eka Hariyani, and Ermawati Ermawati. 2021. Quality of Financial Statements in Indonesian Local Governments: An Empirical Investigation. *Journal of Asian Finance, Economics and Business* 8: 993–99. [CrossRef]

Avakian, Karampet Karolos, Kanellos Toudas, and Paraskevi Boufounou. 2023. The relationship between audit quality and auditor reputation. A case from Listed Companies in North America 2015–2020. Paper Presented at the HFAA, Athens, Greece, December 15–16; Available online: http://www.hfaa.gr/wp-content/uploads/2023/12/program-HFAA__2023.pdf (accessed on 23 November 2023).

Ayagre, Philip. 2015. Internal Audit Capacity to Enhance Good Governance of Public Sector Organisations: Developing Countries Perspective. *JGD* 11: 39–60. Available online: https://e-journal.uum.edu.my/index.php/jgd/article/view/13522 (accessed on 23 November 2023).

Baharud-din, Zulkifli, Alagan Shokiyah, and Mohd Serjana Ibrahim. 2014. Factors that Contribute to the Effectiveness of Internal Audit in Public Sector. *IPEDR* 70: 126–132.

Baltaci, Mustafa, and Serdar Yilmaz. 2006. *Keeping an Eye on Subnational Governments: Internal Control and Audit at Local Levels*. Washington, DC: World Bank Institute.

Borovic, Zoran, and Dragana Radicic. 2023. Productivity Gap between the "New" and "Old" Europe and Role of Institutions. *Economies* 11: 254. [CrossRef]

Brezis, Elise S. 2023. Regulating the Revolving Door of Regulators: Legal vs. Ethical Issues. *Economies* 12: 5. [CrossRef]

Chang, Yutzu, Hanchung Chen, Rainbow K. Cheng, and Wuchun Chi. 2019. The impact of internal audit attributes on the effectiveness of internal control over operations and compliance. *Journal of Contemporary Accounting and Economics* 15: 1–19. [CrossRef]

Chen, Yu Che, and Jon Gant. 2001. Transforming local e-government services: The use of application service providers. *Government Information Quarterly* 18: 343–55. [CrossRef]

Christiaens, Johan, Christophe Vanhee, Francesca Manes-Rossi, Natalia Aversano, and Philippe Van Cauwenberge. 2015. The effect of IPSAS on reforming governmental financial reporting: An international comparison. *International Review of Administrative Sciences* 81: 158–77. [CrossRef]

Christopher, Joe, Gerrit Sarens, and Philomena Leung. 2009. A critical analysis of the independence of the internal audit function: Evidence from Australia. *Accounting, Auditing and Accountability Journal* 22: 200–20. [CrossRef]

Cohen, Aaron, and Gabriel Sayag. 2010. The effectiveness of internal auditing: An empirical examination of its determinants in Israeli organisations. *Australian Accounting Review* 20: 296–307. [CrossRef]

Cohen, Elaine. 2010. Employee training and development. In *CSR for HR*. London: Routledge, pp. 153–62. ISBN 9781351278607.

Darnell, Julie, Susan Cahn, Bernard Turnock, Christine Becker, Joshua Franzel, and Danielle Miller Wagner. 2013. *Local Health Department Workforce Recruitment and Retention: Challenges and Opportunities*. Washington, DC: Center for State and Local Government Excellence.

Drogalas, George, Panagiotis Pantelidis, Paraskeui Zlatinski, and Dimitris Paschaloudis. 2012. The role of internal audit in bank's M&As. *Global Review of Business and Economic Research* 8: 147–55. Available online: https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=c1505624307e4d658f1053c4fc97dc6a2edf052a (accessed on 23 November 2023).

Drogalas, George, Theofanis Karagiorgos, and Konstantinos Arampatzis. 2015. Factors associated with Internal Audit Effectiveness: Evidence from Greece. *Journal of Accounting and Taxation* 7: 113–22. [CrossRef]

Dwamena, Richard Ofosu, and Nicholas Yaw Ofori. 2021. The Roles and Status of Internal Auditors in Public Sector Organizations. *Finance & Management Engineering Journal of Africa* 3: 1–22. Available online: https://damaacademia.com/fmeja/2022/01/06/the-roles-and-status-of-internal-auditors-in-public-sector-organizations/ (accessed on 23 November 2023).

Enofe, Augustine O., Chijioke Mgbame, Violet E. Osa-Erhabor, and Abraham J. Ehiorobo. 2013. The Role of Internal Audit in Effective Management in Public Sector. *Research Journal of Finance and Accounting* 4: 162–68.

Eriotis, Nikolaos, Theodoros Kounadeas, Konstantinos Liapis, and Evangelos Poutos. 2019. The Impact of IFRS Adoption by Greek Listed Companies on the Earnings Quality: An Empirical Investigation. Available online: https://www.um.edu.mt/library/oar/handle/123456789/73413 (accessed on 23 November 2023).

Eton, Marus, Mwosi Fabian, and Patrick Ogwel Benard. 2022. Are internal controls important in financial accountability? Evidence from Lira District Local Government, Uganda. *International Journal of Financial, Accounting, and Management* 3: 359–72. [CrossRef]

Eulerich, Anna Katharina, and Marc Eulerich. 2020. What is the value of internal auditing?—A literature review on qualitative and quantitative perspectives. *Maandblad voor Accountancy en Bedrijfseconomie* 94: 83–92. Available online: https://ssrn.com/abstract=3582579 (accessed on 23 November 2023). [CrossRef]

Gołębiowska, Anna, Dariusz Prokopowicz, and Agnieszka Wolańczyk. 2022. Internal audit and management control in units of the public finance sector. *Zeszyty Naukowe Szkoły Głównej Służby Pożarniczej* 82: 115–40. [CrossRef]

Goodman, Doug, P. Edward French, and R. Paul Battaglio, Jr. 2015. Determinants of local government workforce planning. *The American Review of Public Administration* 45: 135–52. [CrossRef]

Goodwin, Jenny, and Teck Yeow Yeo. 2001. Two factors affecting internal audit independence and objectivity: Evidence from Singapore. *International Journal of Auditing* 5: 107–25. [CrossRef]

Government Finance Officers Association of the United States and Canada. 2020. Internal Audit Function. Available online: https://www.gfoa.org/materials/internal-audit-function (accessed on 23 November 2023).

Gramling, Audrey A., Mario J. Maletta, Arnold Schneider, and Bryan K. Church. 2004. The role of the internal audit function in corporate governance: A synthesis of the extant internal auditing literature and directions for future research. *Journal of Accounting Literature* 23: 194–244. [CrossRef]

Grembi, Veronica, Tommaso Nannicini, and Ugo Troiano. 2016. Do fiscal rules matter? *American Economic Journal: Applied Economics*, 1–30. Available online: https://www.jstor.org/stable/24739127 (accessed on 23 November 2023). [CrossRef]

Gyüre, Lajosné. 2012. The Role of Systematic Internal Control and Audit in Reducing Management Risk at Hungarian Local Governments. *Public Finance* 2: 173–83. Available online: https://unipub.lib.uni-corvinus.hu/8986/ (accessed on 23 November 2023).

Hall, Stephen, and Bernadette O'Hare. 2023. A Model to Explain the Impact of Government Revenue on the Quality of Governance and the SDGs. *Economies* 11: 108. [CrossRef]

Hamawandy, Nawzad Majeed, Abdul Jalil Omer, Houshyar Abdulrahman Salih, Ranjdar MustafaAli, Zaito Awla Abubakr, Diyar Abdulmajeed Jamil, and Dana Dlawar Heayyiz. 2021. Role of Internal Audit in the Public Sector in Kurdstan Recion of Iraq. *Journal of Contemporary Issues in Business and Government* 27: 3046–57. Available online: https://cibgp.com/au/index.php/1323-6903/article/view/771 (accessed on 23 November 2023).

Handoyo, Sofik. 2024. Mapping the landscape of internal auditing effectiveness study: A bibliometric approach. *Cogent Business & Management* 11: 2289200. [CrossRef]

Jeppesen, Kim K. 2019. The role of auditing in the fight against corruption. *The British Accounting Review* 51: 100798. [CrossRef]

Johnsen, Åge. 2019. Public sector audit in contemporary society: A short review and introduction. *Financial Acc & Man* 35: 121–27. [CrossRef]

Jones, Greg, and Claire Beattie. 2015. Local government internal audit compliance. *Australasian Accounting, Business and Finance Journal* 9: 59–71. [CrossRef]

Jorge, Susana, and Anabela Costa. 2009. Internal auditing amongst Portuguese municipalities. *Revista Enfoques: Ciencia Política y Administración Pública* 8: 303–61. Available online: http://www.revistaenfoques.cl/index.php/revista-uno/article/view/170 (accessed on 23 November 2023).

Kamalahmadi, Masoud, and Mahour Mellat Parast. 2016. A review of the literature on the principles of enterprise and supply chain resilience: Major findings and directions for future research. *International Journal of Production Economics* 171: 116–33. [CrossRef]

Katuka, Blessing, and Calvin Mudzingiri. 2023. Impact of output gap, COVID-19, and governance quality on fiscal space in Sub-Saharan Africa. *Economies* 11: 256. [CrossRef]

Kester, Lydia, Georgios Georgakopoulos, Petros Kalantonis, and Paraskevi Boufounou. 2013. The Impact of Board of Directors' Turnover on the Association between Financial Restatements and Audit Fees. *Journal of Applied Finance & Banking* 3: 53–75. Available online: http://www.scienpress.com/journal_focus.asp?main_id=56&Sub_id=IV&volid=68 (accessed on 23 November 2023).

Khan, Yusuf. 2018. Strategic human resource practices and its impact on performance towards achieving organizational goals. *Business Ethics and Leadership* 2: 66–73. [CrossRef]

Kloot, Louise, and John Martin. 2000. Strategic performance management: A balanced approach to performance management issues in local government. *Management Accounting Research* 11: 231–51. [CrossRef]

Kounadeas, Theodoros, Nikolaos Eriotis, Paraskevi Boufounou, and Sofia Donta. 2022. Analysis of the Factors Affecting Tax Evasion in Greece. *International Journal of Economics and Business Administration* 10: 140–58. [CrossRef]

Kumta, Gita A. 2011. E-Government and ERP: Challenges and Strategies. In *Enterprise Information Systems: Concepts, Methodologies, Tools and Applications*. Pennsylvania: IGI Global, pp. 112–27. [CrossRef]

Lee, Hyung Woo. 2019. The cost and benefit of interdepartmental collaboration: An evidence from the US Federal Agencies. *International Journal of Public Administration* 43: 294–302. [CrossRef]

Lee, Robert E., and Richard C. Feiock. 2020. Local government roles in filling the sustainability policy vacuum: Insights from local government managers. *State and Local Government Review* 52: 266–76. [CrossRef]

Linnas, Raivo. 2008. Audit in Small Local Government Units: The Case of Estonia. *Kunnallistieteellinen Aikakauskirja* 1: 65–82. Available online: https://digikogu.taltech.ee/et/Download/3862d48e-2200-43e5-89c5-b7338c8f2d76 (accessed on 23 November 2023).

Lois, Petros, George Drogalas, Alkiviadis Karagiorgos, and Kostantinos Tsikalakis. 2020. Internal audits in the digital era: Opportunities risks and challenges. *EuroMed Journal of Business* 15: 205–17. [CrossRef]

Ma, Jiazheng, Bin Guo, and Yanghang Yu. 2022. Perception of Official Corruption, Satisfaction With Government Performance, and Subjective Wellbeing—An Empirical Study From China. *Frontiers in Psychology* 13: 748704. [CrossRef]

Martinez, Luis R. 2015. Sources of Revenue and Local Government Performance: Evidence from Colombia. Available online: https://economia.uniandes.edu.co/sites/default/files/seminariocede/Sources-of-Revenue-Colombia-JMP-Luis-R-Martinez.pdf (accessed on 23 November 2023).

Menza, Solomon Kebede, Abraham Aga, and Wondwossen Jerene. 2019. Determinants of Internal Audit Effectiveness (IAE) in the Ethiopian Public Enterprise, Case of Southern Region. *Journal of Resources Development and Management* 52: 22–36. [CrossRef]

Mikeladze, Aleksandre. 2023. Financial management role for NGOs. *European Journal of Economics and Business Studies* 7: 78098. [CrossRef]

Muchiri, Nelius Wangui, and Ambrose Jagongo. 2017. Internal auditing and financial performance of public institutions in Kenya: A case study of Kenya Meat Commission. *African Journal of Business Management* 11: 168–74. [CrossRef]

Ngcobo, Portia, and Shepherd R. Malefane. 2017. Internal controls, governance and audit outcomes-case of a South African municipality. *African Journal of Public Affairs* 9: 74–89.

Nerantzidis, Michail, Michail Pazarskis, George Drogalas, and Stergios Galanis. 2022. Internal auditing in the public sector: A systematic literature review and future research agenda. *Journal of Public Budgeting, Accounting & Financial Management* 34: 189–209. [CrossRef]

Neu, Dean, Jeff Everett, and Abu Shiraz Rahaman. 2013. Internal auditing and corruption within government: The case of the Canadian Sponsorship Program. *Contemporary Accounting Research* 30: 1223–50. [CrossRef]

Okidi, Mike, Judith Abal Akello, and Bonny Charles Opio. 2021. Internal Control System and Revenue Collection in Local Governments. A Case Study of Lira District Local Government. *Research Journal of Finance and Accounting* 12: 47–56. [CrossRef]

Onumah, Joseph M., and Redeemer Yao Krah. 2012. Barriers and Catalysts to Effective Internal Audit in the Ghanaian Public Sector. In *Accounting in Africa (Research in Accounting in Emerging Economies, Vol. 12 Part A)*. Edited by Venancio Tauringana and Musa Mangena. Bingley: Emerald Group Publishing Limited, pp. 177–207. [CrossRef]

Pantelidis, Panagiotis, George Drogalas, Euaggelia Ioannidou, and Evanthia Kesisi. 2011. Major Studies of Internal Auditing: Greece in Conjunction with Europe. Paper Presented at the New Horizons in Industry, Business and Education (NHIBE2011), Chios, Greece, August 25–26; pp. 416–21.

Papastathis, Pantelis. 2014. *Contemporary Internal Audit and Its Practical Implications*. Athens: Politeia Editions. (In Greek)

Papcunová, Viera, Jarmila Hudáková, Michaela Štubňová, and Marta Urbaníková. 2020. Revenues of municipalities as a tool of local self-government development (Comparative study). *Administrative Sciences* 10: 101. [CrossRef]

Pilcher, Robyn. 2014. Role of Internal Audit in Australian Local Government Governance: A Step in the Right Direction. *Financial Accountability and Management* 30: 206–37. [CrossRef]

Rahayu, Sri, and Yudi Rahayu. 2020. Internal auditors role indicators and their support of good governance. *Cogent Business & Management* 7: 1751020. [CrossRef]

Rosdini, Dini, Fury K. Fitriyah, Prima Yusi Sari, and Cahya Irawady. 2019. The Roles of Internal Audit in Risk Management at Local Governments in West Java Province. *Opcion* 35: 2899–921. Available online: https://dialnet.unirioja.es/descarga/articulo/8348509.pdf (accessed on 23 November 2023).

Roussy, Mélanie, Odile Barbe, and Sophie Raimbault. 2020. Internal Audit: From Effectiveness to Organizational Significance. *Managerial Auditing Journal* 35: 322–42. [CrossRef]

Saeed, Sherzad, Nawzad Majeed Hamawandy, and Raqeeb Omar. 2020. Role of internal and external audit in public sector governance. A case study of Kurdistan regional government. *International Journal of Advanced Science and Technology* 29: 1452–62. Available online: http://sersc.org/journals/index.php/IJAST/article/view/12528 (accessed on 23 November 2023).

Sarens, Gerrit, and Ignace De Beelde. 2006. The relationship between internal audit and senior management: A qualitative analysis of expectations and perceptions. *International Journal of Auditing* 10: 219–41. [CrossRef]

Sepsey, Tamás. 2011. Internal Audits at Local Governments. *Public Finances* 4: 411–28. Available online: https://unipub.lib.uni-corvinus.hu/9003/ (accessed on 23 November 2023).

Shaw, Bryan T. 2012. Exploring the Factors of an Enterprise Resource Planning System in a Local Government Organization. Ph.D. dissertation, Walden University, Minneapolis, MN, USA.

Simiyu, Alice Nanjala. 2012. Performance Contract as a Tool for Improving Performance in Local Authorities in Kenya. Ph.D. dissertation, Jomo Kenyatta University of Agriculture and Technology, Juja, Kenya. Available online: http://hdl.handle.net/123456789/1642 (accessed on 23 November 2023).

Sumaryati, Anna, Eka Praptika Novitasari, and Zaky Machmuddah. 2020. Accounting information system, internal control system, human resource competency and quality of local government financial statements in Indonesia. *The Journal of Asian Finance, Economics and Business* 7: 795–802. [CrossRef]

Sustainable Greece. 2022. Local Government Organizations. Available online: https://sustainable-greece.com/?lang=en (accessed on 23 November 2023).

Sutaryo, Sahari, Salawati Binti, Shaharudin Bin Jakpar, and Sophee Sulong Bin Balia. 2022. Timeliness of Local Government Budgeting in Indonesia: Do Internal Audit Function and Political Factors Matter? *International Journal of Economics and Management* 16: 65–81.

Suwanda, Dadang. 2015. Factors Affecting Quality of Local Government Financial Statements to Get Unqualified Opinion (WTP) of Audit Board of the Republic of Indonesia (BPK). *Research Journal of Finance and Accounting* 6: 139–57.

Tackie, George, Edward Marfo-Yiadom, and Sampson Oduro Achina. 2016. Determinants of Internal Audit Effectiveness in Decentralized Local Government Administrative Systems. Available online: http://hdl.handle.net/123456789/4549 (accessed on 23 November 2023).

The Institute of Chartered Accountants of India. 2019. What Is an Internal Audit. Available online: https://kb.icai.org/pdfs/PDFFile5b28ea7a453463.98959865.pdf (accessed on 23 November 2023).

Thyaka, Felix Vundi, and Stanley Kavale. 2021. Effects of internal controls on revenue collection; A case of Kenya Revenue Authority. *The Strategic Journal of Business & Change Management* 8: 347–63. Available online: https://www.strategicjournals.com/index.php/journal/article/view/1919 (accessed on 24 November 2023).

Toudas, Kanellos, Nikolaos Kanaliotis, Paraskevi Boufounou, and Georgios Georgakopoulos. 2024. Evaluating Audit Controls and Public Spending Efficiency of the Hellenic Court of Audit. In *Honorary Volume Prof Sorros*. Edited by Panagiotis Artikes, Vassilios Zisis and Georgios Papanastasopoulos. Piraeus: J. Univ. of Piraeus Publications, *accepted for publication*.

Tu, Chaoyang, Zhenyu Chen, Zheng Peng, and Yasir Habib. 2023. The Efficiency of Rural Public Finance Inputs in Promoting Rural Revitalization: Empirical Analysis Based on Henan Province, China. *Review of Economic Assessment* 2: 73–86. [CrossRef]

Turetken, Oktay, Stevens Jethefer, and Baris Ozkan. 2020. Internal audit effectiveness: Operationalization and influencing factors. *Managerial Auditing Journal* 35: 238–71. [CrossRef]

Unegbu, Angus Okechukwu, and Mohammed Isa Kida. 2011. Effectiveness of internal audit as instrument of improving public Sector management. *Journal of Emerging Trends in Economics and Management Sciences* 2: 304–9. Available online: https://hdl.handle.net/10520/EJC134333 (accessed on 23 November 2023).

United Nations. 2019. Local Governments for Human Rights: A Debate with the UN. Available online: https://www.ohchr.org/sites/default/files/2022-05/report-ohchr-local-gov-meeting-june-2019.pdf (accessed on 23 November 2023).

Vasilleiou, Dimitrios, Nikolaos Eriotis, Marios Menexiades, and Dimitrios Balios. 2017. *Internal Audit for Corporates and Institutions*. Athens: Rossili Editions. ISBN 978-618-513-132-6. (In Greek)

Yao, Peter Lartey, Kong Yusheng, and Fatoumata Binta Maci Bah. 2017. A critical examination of internal control systems in the public sector, a tool for alleviating financial irregularities: Evidence from Ghana. *Research Journal of Finance and Accounting* 8: 94–110.

Yurniwati, and Afdhal Rizaldi. 2015. Control Environment Analysis at Government Internal Control System: Indonesia Case. *Procedia Social and Behavioral Sciences* 211: 844–50. [CrossRef]

Zacharakis, Giorgos, P. Antonopoulou, Antonios Travlos, and George Kipreos. 2017. Corruption and Illegal Payments in Greece. *Journal of Public Management Research* 3: 29. [CrossRef]