

ISSN Online: 2162-2086 ISSN Print: 2162-2078

# Thriving through Crisis: Unraveling Internal Auditing's Role in Value Creation

# Georgios L. Thanasas\*, Spyridon Lampropoulos

Department of Management Science and Technology, University of Patras, Patras, Greece Email: \*thanasasgeo@upatras.gr

How to cite this paper: Thanasas, G. L., & Lampropoulos, S. (2023). Thriving through Crisis: Unraveling Internal Auditing's Role in Value Creation. *Theoretical Economics Letters*, *13*, 1322-1340.

https://doi.org/10.4236/tel.2023.135074

Received: August 7, 2023 Accepted: October 27, 2023 Published: October 30, 2023

Copyright © 2023 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

http://creativecommons.org/licenses/by/4.0/





#### **Abstract**

As a result of the relentless competition in the current economic environment, internal audit is often called upon by organizations to assess and control risks. There have been numerous papers discussing the importance of internal auditing (IA). It is intended to add value to an organization through independent, objective assurance and advisory services related to internal control systems, risk management, and governance. The purpose of this paper is to analyze and present: 1) the ways that internal auditing can be regarded as a value-adding lever for the organizations and 2) the known ways of measurement of the additional created corporate value. Our systematic literature review and critical analysis of how internal audit contributes to value creation allowed us to present all the research streams and measures of value creation that are available. Following this literature review a subsequent econometric analysis of the relationship between internal audit characteristics and added value in the context of a panel of companies will be conducted.

#### **Keywords**

Internal Audit, Creation of Value, Added Value, Literature Review

#### 1. Introduction

There has been a variety of challenges faced by companies in recent years, such as a growing economy, increased regulation requirements, and technological advancements that have led to a multitude of new challenges. In comparison with the past, today's political and economic crises tend to have a much greater impact on the global economy and they are occurring at a much greater frequency than in the past. A result of the financial crisis, according to Ruud (2003), investors, creditors, and other groups that are interested in corporate governance structures began to put more emphasis on corporate governance

structures than they previously had. There is a growing concern among organizations regarding the design and implementation of effective and efficient internal control systems and guidelines for risk management, as well as ensuring that their policies and procedures are being implemented on time and efficiently. Besides the corporation's governance processes, risk management, and internal control systems, internal auditing (IA) is considered to be an essential element for the effective operation of the company (Anderson et al., 2012).

In spite of the fact that IA has evolved, there have been a number of critical debates regarding its role and its value. As defined by the Institute of Internal Auditors (IIA), internal auditing is characterized by providing assurance and auditing services that aim to add value to an organization and make its operations more efficient (IIA, 2020). It is possible to improve the efficiency of the firm, reduce overhead costs, and prevent loss of capital and operational risks by performing effective Internal Audit (Alaswad & Stanišić, 2016). Carcello et al. (2011), Odoyo et al. (2014), and Bhana (2013) agree that companies should be able to add value to their Internal Audit Function (IAF) by evaluating and improving risk management and operations through a systematic, disciplined approach instead of relying solely on traditional approaches. As argued by Ege (2015), internal auditors should provide prudent advice (independent, objective assurance and consulting activities) to support the board and management, contributing to business stability and enabling business performance, and thereby creating value by enhancing existing business processes and operations. An organization's resources must be exploited in a dynamic and competitive environment in order to create value for its owners and stakeholders. Therefore, shareholders must create value by offering a return greater than the cost of investment (Cherif & Dubreuille, 2005). The creation of value can only occur when the company adopts a governance system that promotes the achievement of its goals. In terms of stakeholder interests, the role and position of IA are quite complicated. Lenz and Sarens (2012) note that there are varied and sometimes unclear expectations and needs placed on IA. There are numerous different objectives pursued by IA stakeholders, which require specific activities on the part of IA.

In this context, we may ask the following questions: "Can internal auditing be regarded as a value-adding lever for the organizations?" and "In what ways can we measure the additional created corporate value that arises through the implementation of the internal audit?" This prompted the researchers to explore into the additional value that firms can obtain from having an Internal Auditing Function.

The paper is structured as follows. Following the introduction, the second chapter presents the methodology, the third chapter presents the literature review, and the fourth chapter discusses different approaches for calculating added value. A discussion of the relationship between internal audit and added value will be presented in the fourth chapter. The fifth chapter concludes the article by summarizing and providing conclusions.

# 2. Methodology: Systematic Literature Review

#### 2.1. The Literature Review Protocol

To reduce research bias, as recommended by Tranfield et al. (2003) and Kitchenham (2004) in any systematic review, we established a review protocol as guidance in the SLR development (Busalim & Hussin, 2016). This helped us to formulate the survey, the research question, the search strategy, the selection process, the quality evaluation, the extraction of data and the synthesis of the extracted data (Kitchenham & Charters, 2007; Busalim & Hussin, 2016). With this method, we ensured the reliability of our results (Massaro et al., 2016). Figure 1 presents the review protocol for this study.

#### 2.2. The Literature Search Strategy

Considering the literature search strategy that we followed, for the implementation of the research paper, the approach that was used, was the one suggested by de Geus et al. (2020), Nguyen et al. (2020) and Street & Hermanson (2019) with our main aim being to present and highlight all those different approaches to measure the added value (from 2000-2023), that comes from the implementation of the internal audit function.

In the first step, based on credibility in terms of size and quality of publication, we used "Google scholar", "Scopus", "Web of Science", "Academia", "Emerald", "Research Gate", "SSRN" and "Springer" as major electronic sources to ensure that we recognize all qualifying studies (Nguyen et al., 2020). We performed Boolean search using the keywords "Internal auditing", "internal audit function", "value", "Economic Value Added (EVA)" and "Added Value Indicator", "corporate governance" etc. (Street & Hermanson, 2019). This generated a number set of papers.

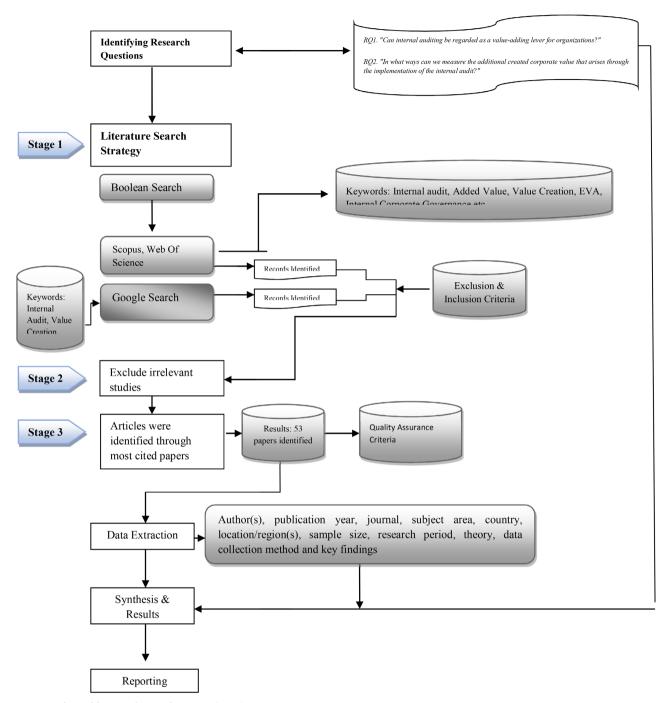
In the second phase, we reviewed the names, abstracts, keywords, etc. we omitted irrelevant research and languages other than English. The outcome was a compilation of a reasonable number of papers. We excluded any duplicated papers and retained the studies that matter the most from our point of view. The final collection of papers consisted of 53 studies performed at national and international level between 1996 and 2023.

#### 2.3. Quality Assessment (QA)

To evaluate the quality of primary studies, a quality assessment is critical (Kitchenham & Charters, 2007). A quality assessment is based on quality instruments. These instruments may be checklists of factors or questions to be applied to every study (Bandara et al., 2011; Kitchenham & Charters, 2007). For the purpose of evaluating the quality of each study, we develop four quality assessment criteria.

We have outlined these criteria below:

• QA1. Is the topic addressed in the paper related to internal audit and its overall contribution to the creation of value?



Source: Adapted by Busalim and Hussin (2016).

Figure 1. Review protocol.

- QA2. Is the research methodology described in the paper?
- QA3. Is the data collection method described in the paper?
- QA4. Are the data analysis steps clearly described in the paper?

To enhance our confidence in the credibility of the selected studies, the four QA Criteria presented above were applied to the primary collected studies. Using three levels of quality schema (high, medium, low) (Nidhra et al., 2012), each

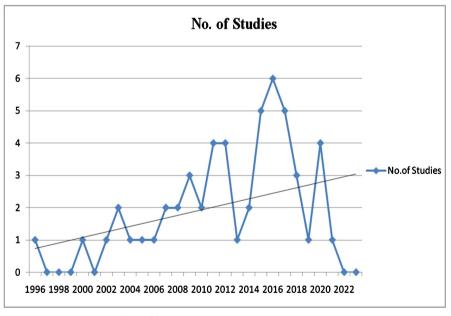
study is graded according to its loading score. A study that fulfills the criterion will receive a 2; a study that partially fulfills the criterion will receive a 1; and a study that does not fulfill the criterion will receive a 0. High-scoring studies are those that score above 5; medium-scoring studies are those that score below 4; and low-scoring studies are those that score below 4. A final selection of 53 studies, all listed in the bibliography, was made after applying the QA. These criteria also confirm that these 53 studies are impartial and credible and can provide accurate observations from different countries.

In general, from the literature research, that was implemented we drew the conclusion, that there is a continuing academic interest in the role of internal audit, when it comes to identifying, and highlighting all those different approaches to measure the added value, that comes from the proper implementation of the internal audit function in businesses worldwide. The research was conducted, by using a deep and critical analysis review literature method (Figure 2).

#### 3. Literature Review

### 3.1. Definition, Roles and Prior Research of IA

According to the IIA (2020), Internal Audit is a process that evaluates and improves processes related to risk management, control, and governance. It ensures that an organization achieves its objectives in a methodical and disciplined way. Furthermore, Internal Audit helps achieve a higher level of effectiveness and efficiency in governance, risk management, and control processes, thus adding value to the organization. According to the IAA mission statement, risk-based assurance provides objective advice and insight to protect organizational



Source: Own Processing (2023)

Figure 2. No. of publications (1996-2023).

value (IIA, 2020).

#### 3.2. Identifying the Added Value

# 3.2.1. Development of the Corporate Governance Framework and Methods through Internal Auditing

Besides the definition from the professional regulator, the literature offers a wide range of possible benefits of the IAF, and therefore possible definitions of value. Gramling et al. (2004) outline the value of IA within the development of corporate governance frameworks as a tool for monitoring and improving corporate governance. In their research papers in 2006, Goodwin-Stewart highlights the same perception of internal audit added value (Goodwin-Stewart & Kent, 2006). According to Sarens and Abdolmohammadi (2011), information asymmetries between the audit committee and management can be eliminated by IA's monitoring role within company governance. The purpose of this literature circulation is to track the responsibilities of the IA since neither the audit committee nor senior management are capable of auditing and monitoring all governance-related activities. In this way, internal auditing provides impartiality and goal support.

## 3.2.2. Performance Improvement through Internal Auditing

A study by Al-Jaifi et al. (2017), looked at how Malaysia's stock market liquidity is related to corporate governance strength and discovered that firms with strong internal audit and corporate governance had a positive impact on their stock market liquidity.

According to Mihret (2014), internal audit is a control mechanism that adds value by raising return on capital, as opposed to the conventional perspective. According to Prawitt et al. (2009), internal audit decreases earnings management, in which accounting manipulating techniques are used to produce financial statements that depict a company's overall financial situation and financial activities in a way that is overly positive. A true picture of the financial performance of the business can be obtained through the internal audit function, he concluded. The research by Carcello et al. (2017), contrary to Lin et al. (2011), found that IA improves overall risk management. They note in their research that IA improves internal control. The effectiveness of internal control systems is improved by IA, according to Oussii and Taktak (2018). In this stream of research, internal auditing is viewed through a "cost center" lens that results in the creation of new value in a variety of areas.

# 3.2.3. Internal Auditing and Fraud Detection

The additional value of IA work is derived largely from assurance activities and the impact they have on fraud. Thus, internal auditing is beneficial from the point of view of the company for fraud prevention and detection (Drogalas et al., 2017). As part of this additional value, Ma'ayan and Carmeli (2016) discovered that internal audits can be used directly to prevent and detect fraud through

promoting moral culture within organizations in order to prevent and detect fraud. A positive correlation was also found between IA, fraud detection, and strengthened internal controls systems by Coram et al. (2008).

Research on internal audit and fraud is largely based on the traditional concept of internal auditors. An organization's internal auditors look for irregularities committed by fraudsters. While internal audits aim to detect and prevent fraud, the topic is relevant to organizations all over the world.

#### 3.2.4. Internal Auditing and Value Creation via ESG

A There has been a rapid shift in sustainability conversations and focus, categorized under environmental, social and governance (ESG) issues. From activist investors to curious regulators, some are pushing barriers to change, while others struggle to understand and embrace it. Organizations are being forced to make public commitments to sustainability and provide routine updates to ESG policies, goals, and metrics that are accurate and relevant in these new risk areas. Internal audit's primary role and mission is to provide independent and objective assurance and advice, which makes its involvement in ESG reporting vital (IIA, Internal Audit's Role in ESG, 2021). In light of the increasing importance of ESG factors in decision-making, directors must have reliable assurances about the effectiveness of ESG risk management, including ESG reporting. Internal audit should provide this assurance (IIA, Internal Audit's Role in ESG, 2021).

IIC recommends the following components as assurance that an internal audit function can provide an ESG report (IIA, Internal Audit's Role in ESG, 2021):

- Reporting metrics should be relevant, accurate, timely, and consistent. An
  organization's ESG efforts must be accurately described in all public sustainability reports. Auditing ensures accuracy, relevance, completeness, and timeliness of reported data. As regulatory oversight increases, this is especially
  crucial.
- Ensure compliance with official financial disclosures. Regulations and investors will pay attention to any information that contradicts formal financial information in sustainability reports.
- ESG reporting materiality or risk assessment. This can be problematic for organizations as it can be difficult to define what «material» is. Materiality is defined by the International Accounting Standards Board as follows: "Misstatements, including omissions, are considered material if they could influence a reasonable user's judgment based on the financial statements." Organizations leave a lot of room for interpretation and judgment. Sustainability efforts that scale to material level must be understood by organizations if they are to achieve the Sustainable Development Goals.
- As a final point, ESG should be included in the audit plan. According to the 2021 North American Internal Audit Pulse, ESG and sustainability-related tasks account for about 1 percent of most internal audit programs. As organizations become increasingly aware of ESG risks and risk management, this

needs to change.

An independent and well-funded internal audit function in consulting ensures (IIA, Internal Audit's Role in ESG, 2021):

- Establishing an ESG management environment. In order to mitigate ESG risks, a competent internal audit function should include basic elements of an effective control environment, such as recommended frameworks (e.g. COSO's Internal Controls—Integrated Framework). A competent internal audit can also assist with the design of specific ESG reporting controls.
- Statistic reporting is recommended. In the context of ESG reporting risk management, the issue of what to report is crucial. Through internal audits, organizations are able to determine which types of data (quantitative and qualitative) accurately reflect their sustainability efforts.
- ESG management consulting. It is possible for internal audit to drive ESG
  management because it has a comprehensive view of risks across the organization. The unique perspective it offers can help define roles and responsibilities and provide training on internal controls.

A growing number of companies view ESG as a necessity. An organization's well-being goes beyond its financial strategies. Metrics and strategies that reflect environmental, social, and governance aspects are most valuable (IIA, Internal Audit's Role in ESG, 2021). By integrating ESG considerations into their business strategy and risk management practices, companies can communicate how these considerations affect their business and have a positive impact on stakeholders (IIA, Internal Audit's Role in ESG, 2021). Internal controls for accounting, reporting, and communication play an important role in an organization's ability to do this. By measuring, verifying, managing and reporting relevant sustainability information with the same systematic rigor as financial reporting, corporate investor and stakeholder trust will be improved, as well as organizational value and market efficiency (IIA, Internal Audit's Role in ESG, 2021).

Internal audit can provide independent and objective assurance to this response, as it does to financial statements. Long-term value can be created through this holistic approach (IIA, Internal Audit's Role in ESG, 2021).

#### 3.2.5. Internal Auditing and Added Value

Organizational needs, technology, and the complexity of business and system operations have changed the nature of the services internal auditors provide over time. By providing value-added assurances and advisory services, businesses can reduce their risk exposure, achieve objectives, and improve their operational performance.

Research on the role of the internal auditor in creating added value of the company is less extensive than that of internal audit and financial performance. The first study to examine how the attributes of a value-added internal audit department differ from one organization to another and how these attributes may be influenced by different organizational processes was conducted by Mihret and

Woldeyohannis (2008). The researchers conducted a case study on the only provider of telecommunication services in Ethiopia, a large government-owned telecommunications company, as their research case study.

In this study, it was found that the characteristics of value-added internal audit services are often determined by the risk environment in which the organization operates, so high-risk organizations may seek to promote internal audit consulting services. As part of the study, some key internal audit activities, such as strategic planning and marketing of internal audit services, are also examined. By better collaborating between the auditee and management, internal auditing can facilitate the internal auditor's ability to create value. Several limitations exist in this research, such as the absence of several clear value creation variables that could better explain the characteristics of internal audit.

Barac and Van Staden (2010) examined how the internal audit departments of 30 South African public companies contributed to the creation of added value. The variables measured included risk management, staffing, internal audit function status, and the effectiveness of recommendations. The added value proxy was measured using a Likert scale. It is evident from the study's findings that internal auditing can add value to an organization. It may be difficult to generalize these results due to the small number of companies involved in the study.

In their study, D'Onza et al. (2015) examined how internal audit activities can add value and identified the critical components of these activities. Over 1800 internal auditors' answers to questions were analyzed to evaluate this contribution. Internal auditing's value added is positively related to four variables, according to the survey. It includes independence, objectivity, adherence to the Code of Ethics of the Institute of Internal Auditors, and its assessment of the effectiveness of internal controls and risk management. This study has a few limitations, among others. Firstly, the methods for determining value added are based on respondents' perceptions, which may differ from reality or may be influenced by internal auditors' overly optimistic self-evaluations. This study did not consider all potential influences on internal audit's ability to add value.

As a preliminary investigation, Shahimi et al. (2016) explored the types and scope of consulting work performed by internal auditors, and the factors that affect the adoption of such a role as a value addition. The study examined 13 publicly traded companies, one publicly funded university, and one for-profit professional organization in Malaysia. Results showed that internal auditors' training, certification, and prior experience are crucial factors for generating value for organizations. The demand for consulting services is also increasing.

Newman and Comfort (2018) studied 40 employees in leadership positions in the audit and finance department of a Zimbabwe-based hotel management company to investigate the role of internal auditors in adding value. A major finding of the study was that the internal audit function positively impacts an organization's financial performance and adds value through its assurance and advisory functions. There was also a positive relationship between internal audit

size, competence, and experience. Qualifications for internal audits are cited as having a negative impact. A significant limitation of this study is its use of return on assets to calculate added value. Adding value should not be measured by assets.

#### 4. Results-Discussion

The Existing literature identifies and discusses various ways to define and measure IA's added value. Different determinants can be systematically classified using quantitative and qualitative factors.

#### 4.1. Measurability of the Quantitative Factors

The In order to assess the value creation and efficiency of the IA department, a performance measurement system can be used. Several metrics are used in the system to determine the efficacy and efficiency of IA's actions, as well as its value creation (Rupšys & Boguslauskas, 2007). There are numerous key performance indicators (KPIs) discussed in the literature (Eulerich & Lenz, 2020).

Firstly, the number of completed IA actions, i.e. IA performance can be evaluated using audits and audit reports (Soh & Martinov, 2011; Ziegenfuss, 2000). IA performance is also measured by the implementation of IA recommendations to senior management, according to Soh & Martinov (2011); Ziegenfuss (2000). Depending on the observation period and the method of interpretation, both indicators can be used to compare planning and actual numbers (Boţa & Palfi, 2009; Savčuk, 2007; Soh & Martinov, 2011).

IA generates added value primarily through the training and technical competence of its auditors. As a result, auditors' expertise can be assessed based on the number of certifications they hold (Boţa & Palfi, 2009) or by measuring the average amount of time they spend in training. Rupšys & Boguslauskas (2007) propose these two measures as useful benchmarks.

In addition to the factors listed above, value creation is also related to senior management's demand for IA services, resulting in an increase in activity for the IA department (Rupšys & Boguslauskas, 2007). Additionally, Roussy and Brivot (2016) and Soh & Martinov (2011) indicate the department's value creation through proactive management of risks and process improvements. The effectiveness of the IA department's operational work can also be measured by actual fieldwork hours (Rupšys & Boguslauskas, 2007). As part of the report, a detailed time schedule for administrative tasks, audits, etc., is outlined (Boţa & Palfi, 2009).

To measure value creation, Lenz and Hahn (2015) also examine the impact of ROI activities on standard KPIs like EBITDA, liquidity ratios and EVA.

The link between internal audit and financial performance is a topic of debate among researchers who support or disagree with the idea. Eden conducted a study in 1996 (Eden & Moriah, 1996) to determine whether internal audit contributed to organizational effectiveness. Researchers tracked the performance of 224 bank branches that were randomly selected to be put under experimental

conditions (either audited or unaudited) for a full year. A audited entity is able to produce better results than an unaudited entity, according to their findings. Their conclusion was that internal audit could enhance the performance of banks. There are, however, some limitations to the study, such as that it only examined the banking sector, not other sectors. It also takes into account management indicators, such as accounting results, rather than relying heavily on recent performance indicators.

An analysis conducted by Awdat (2015) identified the role of internal audit in enhancing the financial performance of 13 Jordanian commercial banks. A questionnaire based on a "likert scale" was administered to 65 accountants. Financial performance can be enhanced by internal auditing, according to the study. It poses a limitation of the study that the interviewees were internal auditors, rather than auditees, who would be better suited to discuss the additional benefits internal auditing can bring.

In a similar vein to the aforementioned survey, Alaswad and Stanišić (2016) examined the impact of internal audit on the effectiveness of organizations in Libya. Internal audit variables, including audit committee size, independence, auditor qualifications, and auditor experience, were examined for their effects on financial performance. Although the other variables correlated significantly with financial performance, the size of the internal audit committee did not show a significant relationship. Despite promising results, this study has a number of limitations. No consideration was given to internal auditing in any of the cases.

Based on consensus in the literature, internal audit functions have certain qualities that make them valuable. The ROA index, which excludes the company's cost of capital, is also unable to accurately represent financial performance. An analysis of 113 businesses in the financial and non-financial sectors in the Republic of Serbia, however, claims that internal audit, through its recommendations, positively impacts financial performance. A similar study on Amman Stock Exchange-listed industrial firms was conducted by Alqadi (2017). The research was primarily focused on internal audit's independence and objectivity. In the study, the ability of the internal auditor to monitor financial performance was linked to its independence and objectivity.

Tapang & Ibiam (2019) investigated the use of internal audit as a lever for commercial banks' financial performance. Financial performance was measured using ROA and ROE in relation to internal audit's effectiveness in detecting fraud. As a result of the findings of this study, internal auditing is found to help prevent fraud, which in turn helps improve financial performance. The role of internal audit in enhancing Cameroonian public company performance was also examined by Boubakary (2020). By using a Likert 5-point scale based on a sample of 80 companies using a binomial logistic regression, the researcher tested the effect of internal audit-specific variables (principal officer qualifications, size and qualifications, level of experience, and independence) on financial performance. While the other variables significantly and positively influenced performance.

mance, the qualifications of the principal officer were not a distinguishable factor.

However, other authors have rejected these findings. According to Dianita (2015), internal audit function and corporate governance had a positive effect on listed banks' financial performance. An internal auditor's influence on the financial performance of Indonesian banks was not positive and significant in this study. A similar study by Muchiri and Jagongo (2017) examined the effect of internal audit on financial performance of a large Kenyan firm by using ROI as a dependent variable and independent variables related to internal audit function. Researchers found no significant correlation between financial performance and internal audit functions.

Hajiha and Farhani's (2012) study stands out as the most comprehensive in terms of the variables used to measure added value. Studying whether internal audit functions contribute to economic value added (EVA) was the purpose of this study. This study examined 80 manufacturing companies listed on the Tehran Stock Exchange between 2005 and 2009. Several independent variables were examined, including the existence of internal auditors, the age of internal auditors, the independence of internal auditors, the size of internal audit departments, the knowledge of internal auditors, their experiences, and the experiences of managers with internal auditors. Based on the findings of the study, internal audit is positively correlated with added value in Iranian companies. Due to the lack of consideration of other industries, such as manufacturing companies, and the lack of adjustments to the EVA calculation, this study is limited.

#### 4.2. Measurability of the Qualitative Factors

Metrics do not capture all determinants or data, so a different approach is needed. A number of techniques can be used to obtain information about qualitative determinants, including interviews, post-engagement surveys, and 360-degree feedback.

It is crucial for adding value for IA to work with the audit committee (AC) and senior management, according to Soh & Martinov (2011). Ideally designed reporting lines and support offered to IA are crucial to IA's success. This helps IA conduct audits in a timely manner and ensures that the department is adequately equipped for audits by reviewing and approving audit plans, audit budgets, and audit goals. Additionally, Soh & Martinov (2011) emphasize the otherwise isolated role of the Chief Audit Executive (CAE) and the impact of AC support on the IA department as a whole.

Researcher Erasmus in 2018 (Erasmus & Coetzee, 2018) examined the perception of the IA department among ACs and senior management, as well as the factors that affect the department's performance. In the eyes of senior management, IA's success depends on the freedom of its work. It is impossible for IA to fulfill its assigned role and potentially uncover fraudulent behavior without access to human and other resources within a company. IA can fulfill its as-

signed role and uncover fraudulent activity if it has access to these resources. Furthermore, a professional attitude and the competence of the auditor is considered crucial to IA's performance (Erasmus & Coetzee, 2018). Research also shows that the role assigned to IA as well as its proper positioning within the organization is crucial for the success of the department. By optimizing IA's positioning, the department is respected by the organization, which is important, as it ensures that IA's activities are suited appropriately to the organization's needs (Erasmus & Coetzee, 2018).

An internal audit ambition model (IIA Netherlands, 2016) was developed by a working group from the IIA Netherlands to meet the needs of various stakeholders. The model is a great way for the IA department to reflect on its performance, to validate compliance internally, and to determine the level of ambition it has. As well as improving communication with the Board of Directors, and particularly with the AC, it measures both the level of achievement and the level of ambition (IIA Netherlands, 2016). Additionally, CAEs can use the data for benchmarking if they are willing to share it. The IA AM covers six topics: "Services and role of IA", "Professional processes", "Performance measurement and accountability", "Personnel Management", "Organization and relations", and "Governance structures". IA's performance will therefore ultimately be determined by how effectively it measures, conducts, and controls its activities (IIA Netherlands, 2016). Audit plan objectives, budget, and alignment with the organization's strategy are included in this (IIA Netherlands, 2016). In December 2010, the IIA (2010) published a new IPPF Practice Guide entitled "Measuring Internal Audit Effectiveness and Efficiency" which updates the original scorecard approach and discusses the benefits and challenges of the implementation. A toolkit for practitioners that can help to transfer the IIA scorecard approach to their companies is offered by the IIA Netherlands (2016) in their report "Measuring the effectiveness of the internal audit function".

As an IA function, it can be challenging to satisfy diverse stakeholders' needs and comply with standards. To ensure quality, every audit must follow a formal and structured process. Professional diligence and competencies should be used in the audit process, as well as continuous refinement. Because of these considerations, the International Professional Practice Framework (IPPF) of the IIA (IIA, 2020) focuses on this issue in Standards 1300 to 1312. As a result of adhering to suggested professional standards, the alignment process of audit charters, policies, and procedures, and its contribution to improving governance, risk management, and internal controls, internal audit is able to fulfill its main quality feature. It consists of all the above-mentioned aspects and is called the Quality Assurance and Improvement Program (IIA, 2012). A consideration of professional expertise also comes into play when it comes to proper positioning, since Soh & Martinov (2011) claim that professional expertise is an important factor. An IA department's performance is positively influenced by knowledge in the areas of accounting and IT (Staden & Steyne, 2009).

# 4.3. Incorporating Different Approaches

As part of their approach to combine quantitative and qualitative determinants that impact IA's value creation in 2007, Rupsys and Boguslauskas created a balanced scorecard. This approach developed, combines quantitative as well as qualitative factors, such as the input-process-output scheme, which enables IAs to categorize their work into three distinct phases: input (e.g. experience, knowledge, skills), process (e.g. audit planning, fieldwork, reports), and output (e.g. satisfaction, inquiries).

A balanced scorecard that is applicable to IA was developed by Frigo (2002) in partnership with the IIA Research Foundation in line with the balanced scorecard for corporate management. There are four dimensions to his approach: the AC's view of IA, the processes within the function, innovation and capacity, and the auditees' view. A flexible and easy-to-use instrument is also introduced, which combines different perspectives into one framework (Rupšys & Boguslauskas, 2007).

#### 5. Conclusion

The management and control of risks, along with the internal control systems of each organization, are paramount in a competitive market. Through its assurance and advisory roles, internal audit can play an important role in increasing, preserving, and creating new value for the entities. Creating added value is an important component of corporate governance and internal auditing. The purpose of this literature review is to illustrate possible dimensions of how internal audit can create added value through its services.

The literature review suggests that internal auditing add value on a multidimensional level. By handling business risks properly and strengthening corporate governance, internal auditing creates new value for its stakeholders, thus strengthening the integrity of the company overall. By doing so, optimization potentials and strengthening corporate governance are implemented, and so the company's integrity will be strengthened. On the basis of these theoretical foundations, numerous research studies have examined internal audit's contribution to organization value creation.

To determine the new value added, we conducted both qualitative and quantitative analyses. Among the qualitative metrics used in the studies, the majority emphasized the use of a questionnaire that measured perceived added value or profitability indicators like ROA, ROI or EVA. Among the many performance indicators available, EVA is the most effective in measuring value. When it comes to qualitative determinants, interviews, post-engagement surveys, or 360 degree feedback are some of the main methods used to measure the value creation of IA. An emphasis was placed on the degree of implementation of the audit plan in particular, and on the competence and satisfaction of internal audit stakeholders. Incorporating the identified determinants into an overall control and evaluation system, combinations of approaches like the balanced scorecard,

IA ambition model, or IPPF external assessment were discussed.

Ultimately, internal auditing is essential to effective corporate governance because it creates value in areas such as internal controls, risk management, and governance. A further benefit of IAF advisory activities is the enhancement of processes and information to support management decision making. It can be concluded from this empirical study that internal audit is viewed as a key lever in the added value process for every organization. As a result of its missions and expertise, it formulates recommendations that can change the orientation of governance bodies in order to create value.

The limitation of our study is the lack of available literature about the added value of internal auditing for several years (1997-1999, 2001, 2022-2023).

A key contribution of this paper is that it presents and structures all the available research streams as well as practical discussions regarding the added value of internal auditing to the current discussion.

It is likely that, given the increasing focus of organizations on evaluating their functions based on their value creation, the discussion of value creation through internal auditing will continue to be studied in the future, both by academics and companies, which will provide new research opportunities. In the coming step, it will be necessary to conduct an econometric analysis of the relationship between internal audit characteristics and added value in the context of a panel of companies, considering the limitations of previous research, as mentioned.

# Acknowledgements

The funding program "MEDICUS" of the University of Patras has supported the publication of this article.

#### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

Alaswad, M., & Stanišić, M. (2016). Role of Internal Audit in Performance of Libyan Financial Organizations. *International Journal of Applied Research*, *2*, 352-356.

Al-Jaifi, H. A., Al-rassas, A. H., & AL-Qadasi, A. A. (2017). Corporate Governance Strength and Stock Market Liquidity in Malaysia. *International Journal of Managerial Finance*, 13, 592-610. https://doi.org/10.1108/IJMF-10-2016-0195

Alqadi, F. S. (2017). The Role of Internal Auditing in Controlling the Performance for Jordanian Industrial Companies: Empirical Evidence. *International Journal of Business and Management, 12,* 186-186. <a href="https://doi.org/10.5539/ijbm.v12n9p186">https://doi.org/10.5539/ijbm.v12n9p186</a>

Anderson, U., Heim Christ, M., & Johnstone, M. (2012). A Post SOX Examination of Factors Associated with the Size of Internal Audit Functions. *Accounting Horizons*, *26*, 167-191. <a href="https://doi.org/10.2308/acch-50115">https://doi.org/10.2308/acch-50115</a>

Awdat, A. (2015). The Impact of the Internal Audit Function to Improve the Financial Performance of Commercial Banks in Jordan. *Research Journal of Finance and Ac-*

- counting, 6, 217-225.
- Bandara, W., Miskon, S., & Fielt, E. (2011). A Systematic, Tool-Supported Method for Conducting Literature Reviews in Information Systems. In M. Rossi, & J. Nandhakumar (Eds.), *Proceeding of 19th European Conference on Information Systems* (pp. 1-13). AIS Electronic Library (AISeL)/Association for Information Systems.
- Barac, K., & Van Staden, M. (2010). The Correlation between Perceived Internal Audit Quality and Defined Corporate Governance Soundness. *African Journal of Business Management*, *3*, 946-958.
- Bhana, L. (2013). The Changing Role of Internal Audit: Moving Away from Traditional Internal Audits. Delloite.
- Boţa, A., & Palfi, C. (2009). Measuring and Assessment of Internal Audit's Effectiveness. *Economic Science Series, 3,* 784-790.
- Boubakary, B. (2020). Audit interne et performance des entreprisespubliques et parapubliques au Cameroun. *Journal of Economics and Management Research*, 1, 81-104.
- Busalim, A., & Hussin, A. (2016). Understanding Social Commerce: A Systematic Literature Review and Directions for Further Research. *International Journal of Information Management*, *36*, 1075-1088. https://doi.org/10.1016/j.ijinfomgt.2016.06.005
- Carcello, V., Eulerich, M., Masli, A., & Wood, D. (2017). Are Internal Audits Associated with Reductions in Operating, Financial Reporting, and Compliance Risk? *Accounting Horizon*, 9, 1-41. <a href="https://doi.org/10.2139/ssrn.2970045">https://doi.org/10.2139/ssrn.2970045</a>
- Carcello, V., Hermanson, D., & Ye, Z. (2011). Corporate Governance Research in Accounting and Auditing: Insights, Practice Implications, and Future Research Directions. Auditing: A Journal of Practice & Theory, 30, 1-31. https://doi.org/10.2308/ajpt-10112
- Cherif, M., & Dubreuille, S. (2005). *Création de valeur et capital-investissement* (pp. 67-98). Pearson Education France.
- Coram, P., Ferguson, C., & Moroney, R. (2008). Internal Audit, Alternative Internal Audit Structures and the Level of Misappropriation of Assets Fraud. *Accounting and Finance*, 48, 543-559. <a href="https://doi.org/10.1111/j.1467-629X.2007.00247.x">https://doi.org/10.1111/j.1467-629X.2007.00247.x</a>
- D'Onza, G., Selim, G., Melville, R., & Allegrini, M. (2015). A Study on Internal Auditor Perceptions of the Function Ability to Add Value. *International Journal of Auditing,* 19, 182-194. https://doi.org/10.1111/ijau.12048
- de Geus, C. J. C., Ingrams, A., Tummers, L., & Pandey, S. K. (2020). Organizational Citizenship Behavior in the Public Sector: A Systematic Literature Review and Future Research Agenda. *Public Administration Review*, 80, 259-270. https://doi.org/10.1111/puar.13141
- Dianita, M. (2015). Role of the Internal Auditor Influence and Good Corporate Governance in Banking Financial Performance against State Owned Corporation. *International Journal of Business and Administrative Studies, 1,* 176-179. https://doi.org/10.20469/ijbas.10006-4
- Drogalas, G., Pazarskis, M., Anagnostopoulou, E., & Papachristou, A. (2017). The Effect of Internal Audit Effectiveness, Auditor Responsibility and Training in Fraud Detection. *Journal of Accounting and Management Information Systems*, 16, 434-454. <a href="https://doi.org/10.24818/jamis.2017.04001">https://doi.org/10.24818/jamis.2017.04001</a>
- Eden, D., & Moriah, L. (1996). Impact of Internal Auditing on Branch Bank Performance: A Field Experiment. *Organizational Behavior and Human Decision Processes, 68*, 262-271. https://doi.org/10.1006/obhd.1996.0104
- Ege, M. (2015). Does Internal Audit Function Quality Deter Management Misconduct?

- The Accounting Review, 90, 495-527. https://doi.org/10.2308/accr-50871
- Erasmus, L., & Coetzee, P. (2018). Drivers of Stakeholders' View of Internal Audit Effectiveness. *Managerial Auditing Journal*, *33*, 90-114. https://doi.org/10.1108/MAJ-05-2017-1558
- Eulerich, L., & Lenz, R. (2020). *Defining, Measuring and Communicating the Value of Internal Auditing.* The Institute of Internal Auditors.
- Frigo, M. (2002). A Balanced Scorecard Framework for Internal Auditing Departments. Institute of Internal Auditors Research Foundation.
- Goodwin-Stewart, J., & Kent, P. (2006). Relation between External Audit Fees, Audit Committee, Characteristics and Internal Audit. *Accounting and Finance, 46*, 387-404. https://doi.org/10.1111/j.1467-629X.2006.00174.x
- Gramling, A., Malleta, M., & Schneider, A. (2004). The Role of the Internal Audit Function in Corporate Governance: A Synthesis of the Extant Internal Audit Literature and Directions for Future Research. *Journal of Accounting Literature*, 23, 194-244.
- Hajiha, F., & Farhani, M. (2012). An Investigation on the Relationship between Internal Audit Quality and Economic Value Added: Evidence from Iran. *Journal of Basic and Applied Scientific Research*, 2, 6872-6881.
- IIA (2010). Practice Guide: Measuring Internal Audit Effectiveness and Efficiency. The Institute of Internal Auditors.
- IIA (2012). Quality Assurance and Improvement Program. Institute of Internal Auditors.
- IIA (2020). *International Professional Practices Framework (IPPF)*. The Institute of Internal Auditors.
- IIA (2021). *Internal Audit's Role in ESG* (pp. 1-14). The Institute of Internal Auditors.
- IIA Netherlands (2016). *Measuring the Effectiveness of the Internal Audit Function.* Institute of Internal Auditors Netherlands.
- Kitchenham, B. (2004). *Procedures for Performing Systematic Reviews*. <a href="https://www.inf.ufsc.br/~aldo.vw/kitchenham.pdf">https://www.inf.ufsc.br/~aldo.vw/kitchenham.pdf</a>
- Kitchenham, B., & Charters, S. (2007). *Guidelines for Performing Systematic Literature Reviews in Software Engineering*.
  - https://www.elsevier.com/ data/promis misc/525444systematicreviewsguide.pdf
- Lenz, R., & Hahn, U. (2015). A Synthesis of Empirical Internal Audit Effectiveness Literature Pointing to New Research Opportunities. *Managerial Auditing Journal*, 30, 5-33. https://doi.org/10.1108/MAJ-08-2014-1072
- Lenz, R., & Sarens, G. (2012). Reflections on the Internal Auditing Profession: What Might Have Gone Wrong? *Managerial Auditing Journal*, *27*, 532-549. https://doi.org/10.1108/02686901211236382
- Lin, S., Pizzini, M., Vargus, M., & Bardhan, R. (2011). The Role of Internal Audit in the Disclosure of Material Weaknesses. *The Accounting Review, 86,* 287-323. https://doi.org/10.2308/accr.00000016
- Ma'ayan, Y., & Carmeli. A. (2016). Internal Audits as a Source of Ethical Behavior, Efficiency, and Effectiveness in Work Units. *Journal of Business Ethics*, *137*, 347-363. https://doi.org/10.1007/s10551-015-2561-0
- Massaro, M., Dumay, J., & Gurthie, J. (2016). On the Shoulders of Giants: Undertaking a Structured Literature Review in Accounting. *Accounting, Auditing & Accountability Journal*, 29, 767-801. https://doi.org/10.1108/AAAJ-01-2015-1939
- Mihret, G. (2014). How Can We Explain Internal Auditing? The Inadequacy of Agency

- Theory and a Labor Process Alternative. *Critical Perspectives on Accounting, 25*, 771-782. <a href="https://doi.org/10.1016/j.cpa.2014.01.003">https://doi.org/10.1016/j.cpa.2014.01.003</a>
- Mihret, G., & Woldeyohannis, Z. (2008). Value-Added Role of Internal Audit: An Ethiopian Case Study. *Managerial Auditing Journal*, *23*, 567-595. https://doi.org/10.1108/02686900810882110
- Muchiri, N., & Jagongo, O. (2017). Internal Auditing and Financial Performance of Public Institutions in Kenya. *African Journal of Business Management, 11,* 168-174. https://doi.org/10.5897/AJBM2017.8267
- Newman, W., & Comfort, M. (2018). Investigating the Added Value of Internal Audit and Its Impact on Company Performance. *Academy of Entrepreneurship Journal*, 24, 1-21.
- Nguyen, V. et al. (2020). Generation and Characterization of *keap1a* and *keap1b*-Knockout Zebrafish. *Redox Biology, 36*, Article 101667. https://doi.org/10.1016/j.redox.2020.101667
- Nidhra, S., Yamanamadala, M., Afzal, W., & Torkar, R. (2012). Knowledge Transfer Challenges and Mitigation Strategies in Global Software Development—A Systematic Literature Review and Industrial Validation. *International Journal of Information Management*, 33, 333-355. <a href="https://doi.org/10.1016/j.ijinfomgt.2012.11.004">https://doi.org/10.1016/j.ijinfomgt.2012.11.004</a>
- Odoyo, F., Omwono, G., & Okiniyi, O. (2014). An Analysis of the Role of Internal Audit in Implementing Risk Management—A Study of State Corporations in Kenya. *International Journal of Business and Social Science*, *5*, 169-176.
- Oussii, T., & Taktak, B. (2018). The Impact of Internal Audit Function Characteristics on Internal Control Quality. *Managerial Auditing Journal*, *33*, 450-469. https://doi.org/10.1108/MAJ-06-2017-1579
- Prawitt, F., Smith, J., & Wood, D. (2009). Internal Audit Quality and Earnings Management. *The Accounting Review, 84,* 1255-1280. https://doi.org/10.2308/accr.2009.84.4.1255
- Roussy, M., & Brivot, M. (2016). Internal Audit Quality: A Polysemous Notion? Accounting, Auditing & Accountability Journal, 29, 714-738. https://doi.org/10.1108/AAAJ-10-2014-1843
- Rupšys, B., & Boguslauskas, V. (2007). Measuring Performance of Internal Auditing: Empirical Evidence. *Engineering Economics*, *55*, 9-15.
- Ruud, F. (2003). The Internal Audit Function: An Integral Part of Organizational Governance. In A. Bailey et al. (Eds.), *Research Opportunities in Internal Auditing* (pp. 73-96). The Institute of Internal Auditors.
- Sarens, G., & Abdolmohammadi, M. (2011). Monitoring Effects of the Internal Audit Function: Agency Theory versus Other Explanatory Variables. *International Journal of Auditing*, 15, 1-20. https://doi.org/10.1111/j.1099-1123.2010.00419.x
- Savčuk, O. (2007). Internal Audit Efficiency Evaluation Principles. *Journal of Business Economics &Management*, 8, 275-284. https://doi.org/10.3846/16111699.2007.9636180
- Shahimi, S., Mahzan, D., & Zulkifli, N., (2016). Value Added Services of Internal Auditors: An Exploratory Study on Consulting Role in Malaysian Environment. *International Journal of Management Excellence*, 7, 720-735. https://doi.org/10.17722/ijme.v7i1.829
- Soh, D., & Martinov, N. (2011). The Internal Audit Function: Perceptions of Internal Audit Roles, Effectiveness and Evaluation. *Managerial Auditing Journal*, *26*, 605-622. https://doi.org/10.1108/02686901111151332

- Staden, V., & Steyne, B. (2009). The Profile of the Chief Audit Executive as a Driver of Internal Audit Quality. *African Journal of Business*, *3*, 918-925.
- Street, D., & Hermanson, D. (2019). How Do Restatements Affect Outside Directors and Boards? A Review of the Literature. *Journal of Accounting Literature*, *43*, 19-46. https://doi.org/10.1016/j.acclit.2019.07.001
- Tapang, A., & Ibiam, O. (2019). Internal Audit and Financial Performance of Micro Finance Banks in Nigeria. *International Journal of Social Sciences and Management Research*, 5, 95-107.
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Academy of Management*, 14, 207-222. https://doi.org/10.1111/1467-8551.00375
- Ziegenfuss, D. (2000). Developing an Internal Auditing Department Balanced Scorecard. *Managerial Auditing Journal*, 15, 12-19. https://doi.org/10.1108/EUM000000005305