

Multi-dimensional Conceptual Approaches to Risk in Statutory Audit

*Andrada-Mihaela STOICA, PH. D. Student,
Bucharest University of Economic Studies, Romania,
e-mail: stoicaandrada17@stud.ase.ro*

Abstract

Given the rapid advancement of technology, the growing interconnection of global economies, and the evolving challenges faced by contemporary independent auditors, the topic of audit risk has gained increasing attention and significance. From this perspective, the objective of the present research is to identify and analyze, from a multidimensional standpoint, the conceptual approaches to risks in statutory audit. By conducting a bibliometric analysis of articles published in the Scopus database between 1987 and 2024, the study identifies the main research directions in the specialized literature, the frequency and relevance of the topics addressed, as well as the authors and works with significant impact. The results highlight the growing interest in audit risks and their critical importance in the context of financial reporting. Considering both the role of risk in the audit process and its influence on the auditor's opinion, this study makes a substantial contribution to the existing body of literature. Furthermore, the dynamic nature of the current economic environment underscores the continued need for research focused on audit-related risks.

Key words: statutory audit; audit risk; academic literature; bibliometric analysis; Scopus;

JEL Classification: M42, M48

To cite this article:

Stoica, A.-M. (2025), Multidimensional Conceptual Approaches to Risk in Statutory Audit, *Audit Financiar*, vol. XXIII, no. 3(179)/2025, pp. 617-635, DOI: 10.20869/AUDITF/2025/179/020

To link this article:

<http://dx.doi.org/10.20869/AUDITF/2025/179/020>

Received: 5.05.2025

Revised: 8.05.2025

Accepted: 15.07.2025

Introduction

Audit risk research is a vital component of the audit process, serving as a fundamental mechanism for assessing and managing the risks that organizations face in their operations. This research aims to provide a comprehensive overview of the subject, integrating general explanations and conceptual clarifications with the analysis of relevant phenomena and significant scholarly studies. In addition, the study includes a rigorous bibliometric analysis, focused on identifying and examining research on audit risks selected from an accredited scientific database.

Auditing, as a professional practice, is closely intertwined with the concept of risk. In this context, risk refers to the potential occurrence of events that may negatively impact an organization's ability to achieve its objectives. Auditors – tasked with examining financial statements and ensuring their accuracy and reliability – must possess a thorough understanding of the real risks present within the entities they audit. Consequently, risk analysis has emerged as a specialized discipline within auditing, focused on identifying, assessing and addressing vulnerabilities that could affect an entity's financial health, operational efficiency and overall sustainability.

A critical analysis of audit risk involves a comprehensive examination of various facets inherent in the auditing process. This includes an in-depth evaluation of the methods and techniques employed by auditors to assess risk, the effectiveness of the risk management strategies implemented by organizations, but also the impact of identified risks on financial reporting and decision-making. It also explores the auditor's role in providing assurance regarding the adequacy and effectiveness of internal controls designed to mitigate risks. Furthermore, the analysis considers the evolution of the regulatory framework governing risk management practices and its influence on auditing standards and procedures.

The field of audit risk is characterized by dynamic developments and diverse approaches that influence both practice and outcomes. These include globalization, technological advancements, the increasing complexity of the business environment, regulatory reforms and the growing interconnectedness of financial markets. In this context, auditors face numerous challenges, such as identifying emerging risks, evaluating the sufficiency of risk-related information and integrating data analytics and

artificial intelligence into the audit processes to enhance risk assessment capabilities.

Research conducted to date has significantly contributed to understanding audit risk and its implications for stakeholders. Over time, studies have addressed a range of topics, from the effectiveness of risk assessment methodologies to the influence of audit committees on risk management. Empirical research has also underscored the relationship between risk disclosures in financial statements and organizational performance, offering valuable insights for practitioners, regulators and decision-makers. Nonetheless, several aspects remain underexplored, highlighting the need for continued research to strengthen both the theoretical foundations and methodological approaches within the domain of audit risk.

The literature reflects a wide range of perspectives and approaches to audit risk. For instance, Martinov-Bennie (1998) and Dobler (2003) highlight the challenges and limitations of current auditing practices, with Dobler placing particular emphasis on regulatory concerns. Peters (1989) and Allen (2006) explore the process of inherent risk assessment, with Allen even advocating for its reconsideration. Meanwhile, Schultz (2010) and Khwaja (2011) focus on the integration of business risk into the audit process – Khwaja through the lens of risk-based tax audits and Schultz by emphasizing the value of a strategic, systems-based approach. Lastly, Steele (1995) and Vitalis (2012) examine how business risk and auditing intersect, offering broader insights into the evolving nature of the field.

The main aim of this paper is to explore the conceptual approaches to identifying risks in the audit of economic entities, using bibliometric analysis to review literature indexed in the Scopus database from 1987 to 2024. Through this analysis, the study seeks to highlight the main research trends in audit-related risks, the most frequently discussed topics, the journals most receptive to these issues and the authors who have made significant contributions to advancing this area of study.

This research builds on existing work in the field of audit risk, offering a more in-depth understanding of key concepts in today's dynamic context. It also serves as a foundation for future investigations into how audit risks affect financial reporting and decision-making.

The paper is structured as follows: the first section presents a review of the relevant literature; the second

outlines the research methodology. The third section discusses the findings and provides a detailed analysis. Finally, the last section includes the conclusions, highlights the study's limitations and suggests directions for future research.

Audit Risks in Light of the International Standards on Auditing (ISAs)

Audit risk can be briefly defined as the risk that the auditor assumes when issuing an erroneous opinion on the audited financial statements. The identification and effective assessment of the risk factors that characterize the three components of audit risk – inherent risk, control risk and detection risk – directly contributes to rigorous audit planning.

Out of the need to determine a relationship between the main components of risk, the Accounting Principles and Auditing Standards proposed in 1988 a mathematical model, still well-known to contemporary auditors (Arens & Loebbecke, 2003):

$$\text{Audit Risk} = \text{Inherent Risk} \times \text{Control Risk} \times \text{Non-Detection Risk.}$$

In practice, it is recommended that the audit risk acceptance threshold not exceed 5%. Considering that the level of assurance (LoA) is inversely proportional to audit risk, the assurance level should therefore exceed 95% (ICAS & CAFR, 2019). Collecting a large volume of audit evidence, assigning the engagement to competent and experienced professionals and thoroughly monitoring the audit team's activities are among the key factors that can reduce audit risk.

Inherent risk represents the vulnerability of financial statements to material misstatements, even in the absence of internal control deficiencies. This risk depends on factors such as the nature of the entity's activities and the complexity of its economic operations. According to the existing literature, inherent risk refers to the susceptibility that a transaction class or account balance contains material misstatements – either individually or in combination with other balances or transactions – assuming that no related internal controls are in place (IAASB, 2018: ISA 200).

Control risk arises when internal control mechanisms fail to prevent or detect material misstatements in the financial statements. An ineffective internal control system can expose the entity to accounting errors and even fraud. It is

important to note that the internal audit function plays a crucial role in enhancing the effectiveness of corporate governance and management processes, particularly in managing internal control risk. The financial auditor may obtain information from the internal audit department regarding risks of material misstatement due to error or fraud (ISA 610).

Detection risk refers to the possibility that the auditor may fail to identify material misstatements during the audit process. This risk can be influenced by the use of inappropriate audit procedures or by the auditor's lack of experience.

In addition to the risks mentioned above, an essential aspect of the audit process is the **risk of fraud**. Fraud poses a major threat to the integrity of the audit, typically involving the intentional manipulation of financial information.

Review of the specialized literature

Financial auditing plays a key role in ensuring the transparency and accuracy of accounting information. However, the audit process involves risks that can affect the objectivity and quality of financial reporting. This article examines the main types of audit risks, the factors that influence them and the methods by which they can be effectively mitigated.

Although the profession of auditing, in its current form, was not known in early historical periods, similar practices can be traced back to Antiquity. Archaeological discoveries from ancient Babylon and Egypt attest to the use of supporting documents for commercial transactions, thus enabling an early form of verification and accounting record-keeping (Bogdan, 2005).

As trade developed, the need to monitor transactions became increasingly urgent, prompting a shift from rudimentary methods to much more systematic and complex approaches. Advancements in the field of accounting and financial oversight facilitated the management of economic activities but also created opportunities for fraud and manipulation aimed at gaining unjustified advantages. In response, state authorities implemented control mechanisms designed to oversee the use and flow of financial resources.

Over time, these mechanisms have diversified and improved, laying the foundation for advanced financial control techniques applied to assets, liabilities, equity,

expenses and revenues. Auditors, as independent experts representing the interests of shareholders, are responsible for ensuring the accuracy and compliance of financial statements prepared by management – thus assuming a particularly significant responsibility (Rodgers et al., 2019). Today, audit reports provide more detailed information to stakeholders compared to earlier formats.

Risk auditing involves identifying potential risks, analyzing their likelihood and impact, developing control measures to mitigate them and monitoring the effectiveness of these measures over time (Arens et al., 2017). This process includes both risks associated with financial reporting and those related to the operational aspects of organizations (Fleming, 2014).

A particularly important component is the identification of risks, which are reflected in audit reports as Key Audit Matters (KAMs) (Grosu, Robu & Istrate, 2020). Risk assessment, a fundamental element of modern audit practices, continues to evolve to address the dynamic nature of organizational risks. According to Arens et al. (2017), it is a structured process aimed at analyzing and managing the risks inherent in an organization's activities, with the goal of ensuring the achievement of strategic objectives and the protection of assets and resources. This definition highlights the proactive nature of risk auditing, emphasizing the importance of identifying, assessing and mitigating risks before they escalate into major threats.

Risk assessment holds a special place in the audit process due to its critical importance. One of the most debated challenges auditors face during engagements is audit risk. According to the specialized literature, the auditor's primary concern should be the proper assessment of audit risk. To evaluate the extent to which a company's financial statements fairly reflect its financial position and performance, the auditor must gather sufficient appropriate evidence to support the formation of an opinion. Effective management of the audit process requires an accurate assessment of audit risk, as this is an essential step in determining the methods, techniques, nature and extent of the procedures to be applied. "This approach begins in the early stages of planning, immediately after obtaining an understanding of the client and evaluating the internal control system" (Horomnea, 2014).

In the literature, the decision to accept and retain clients is considered a key aspect of the risk management process within audit firms. Johnstone (2000) proposes a

conceptual model in which client acceptance is viewed as a dual process, involving both risk assessment and adaptation to those risks. Auditors evaluate factors such as financial viability and the quality of internal controls to estimate the likelihood that the audit firm might incur losses, whether through reduced engagement profitability or through future litigation. The model outlines three risk response strategies: selecting clients based on their risk profile, assessing the potential loss to the firm, and – at least theoretically – implementing proactive measures such as fee adjustments or changes to audit planning. However, empirical research suggests that audit partners, in practice, tend to favor risk avoidance over proactive adaptation.

This trend is confirmed by further research conducted by Johnstone and Bedard (2004), which examine client acceptance and continuance decisions in a large audit firm, providing clear evidence of systematic risk-avoidance behavior. The results show that the firm actively rejects clients deemed riskier and accepts new clients with lower risk profiles, leading to an increasingly conservative portfolio. Risk differences are more pronounced between retained and rejected clients than between retained and newly accepted ones.

The study also highlights that audit-related risk factors – such as the risk of material misstatement or control risk – play a more critical role than financial factors in client portfolio decisions. Interestingly, after controlling for risk and other client characteristics, audit fees do not significantly influence acceptance or retention decisions. This evidence suggests that audit firms adopt a conservative approach, largely oriented toward risk avoidance, both at the individual level (i.e., audit partners) and at the institutional level (i.e., portfolio strategies), reflecting an organizational culture marked by strong risk aversion (Johnstone, 2000; Johnstone & Bedard, 2004).

The risks identified during the audit primarily serve as the basis for directing the auditor's efforts toward those areas where potential misstatements could distort the true and fair view of the financial statements. In essence, acceptable audit risk reflects the extent to which the auditor is willing to accept the possibility of material misstatements in the financial statements, even after issuing an unqualified audit opinion. Given the inherent limitations of any audit process, a certain level of risk is inevitable. However, the auditor must keep this risk as low as possible to ensure that the level of assurance provided by the audit opinion remains high. This objective can be

achieved through accurate identification of risk factors and by focusing audit procedures on areas with the highest likelihood of errors or fraud (Grosu & Mihalciuc, 2021).

It is generally accepted that as external users place greater reliance on audited financial statements, auditors should accept a lower level of audit risk. This implies that when the entity's going concern status is uncertain and management's competence and integrity are questionable, auditors must provide a higher level of assurance by reducing acceptable audit risk (Muñoz-Izquierdo, 2019).

According to the theoretical framework, several studies have explored the relationship between audit fees and subsequent financial statement restatements in the post-Sarbanes-Oxley (SOX) era, considering the substantial changes the Act imposed on audit practice. After evaluating internal control quality, research has shown a negative correlation between abnormal audit fees and the likelihood of subsequent restatements (Blankley, A.I., Hurt, D.N., & MacGregor, J.E., 2012). This finding contradicts earlier studies, which reported a positive association between audit fees and future financial adjustments (Hoitash, R., Hoitash, U. & Bedard, J.C., 2008).

This discrepancy suggests that higher audit fees may not reflect a rigorous risk assessment but instead may indicate additional effort by auditors. Conversely, restatements may point to insufficient risk assessment in prior periods. From this perspective, the findings align with the hypothesis that financial statement revisions are not necessarily the outcome of improved risk assessment, but rather the result of low audit effort or risk underestimation in previous years.

These findings have significant implications for audit practice. They suggest that auditors should allocate greater time and resources to evaluating fraud and misstatement risks – especially in volatile economic conditions. Furthermore, they underscore the importance of transparency in audit fee determination and may prompt regulatory reforms to strengthen oversight of fee-setting practices (Blankley, A.I., Hurt, D.N., & MacGregor, J.E., 2012).

The assessment of inherent risk is a critical step in the overall development of the audit plan. If the auditor concludes that there is a significant likelihood that the internal control system is deficient, they will consider inherent risk to be high. This conclusion directly impacts

the extent of audit evidence that must be gathered, implying additional effort within the audit engagement.

Factors the auditor should consider when assessing inherent risk include results of previous audits; comparisons between initial engagements by former auditors and their outcomes; the degree of professional judgment required to establish account balances and record transactions; and the presence of unusual or complex transactions. Other considerations include assets susceptible to embezzlement, the structure and size of the population and sample, the nature of the entity's operations, changes in management and the entity's reputation. The auditor must also consider the nature of the data processing environment and the use of modern communication technologies.

Before assessing inherent risk, auditors should perform a comprehensive analysis of the entity's operating environment and identify the specific characteristics of its transactions. Evaluating the factors mentioned above enables the auditor to determine the inherent risk associated with each transaction cycle, account, and audit objective. Auditors generally express inherent risk quantitatively after completing a questionnaire based on both factual responses and professional judgment.

Professional judgment is fundamental to the assessment of inherent risk, as it allows the auditor to estimate factors influencing risk level – both at the financial statement level and at the level of specific accounts and transaction categories.

Inherent risk can be classified as general inherent risk or specific inherent risk. For financial statements, the auditor should consider factors such as management integrity, any changes in management during the audit period, unusual pressures faced by management, the nature of the entity's operations and broader industry-related risks. General inherent risk refers to these broader factors, while specific inherent risk pertains to the more detailed considerations outlined below.

When assessing account balances and transaction categories, the auditor evaluates which financial statement elements may be susceptible to misstatement, the complexity of major transactions, events requiring expert opinion, the degree of judgment applied in determining account balances, susceptibility to asset loss or misappropriation and the nature and purpose of highly complex or unusual transactions.

The literature also includes experimental studies assessing the extent to which the audit risk model reflects actual planning decisions, particularly regarding resource allocation and fee determination. The results suggest that when the probability of error is high, the audit risk model significantly influences investment decisions, and audit fees typically do not include a risk premium. However, when the probability of irregularities (e.g., fraud) is high, business risks become the primary factor in planning decisions, and audit fees often include an additional cost in the form of a risk premium.

These findings indicate that the usefulness of the audit risk model in explaining auditor behavior – and the tendency to include a risk premium in fees – depends on the nature of the identified risks. In the presence of errors, the model adequately explains auditor decision-making, while in cases of fraud or irregularities, it appears insufficient (Houston, R.W., Peters, M.F., & Pratt, J.H., 1999).

The preliminary assessment of control risk refers to the evaluation of the effectiveness of an entity's accounting and internal control systems in preventing and detecting material misstatements. It is generally understood that control risks are inherent, given the limitations of any internal control system. In this preliminary assessment, auditors typically assume a high control risk – unless they can identify relevant controls related to key assertions that can prevent or detect and correct material misstatements, or if they intend to perform and rely on tests of controls to support a lower assessed level of risk.

There is an inverse relationship between the combined level of inherent and control risk and detection risk. Thus, when inherent and control risks are high, detection risk must be kept low to ensure that overall audit risk remains within an acceptable range. A low assessment of inherent and control risk does not eliminate the auditor's obligation to perform substantive procedures. The auditor must perform substantive procedures on significant account balances and classes of transactions, regardless of the assessed levels of inherent and control risk. The higher the assessment of these risks, the greater the amount of audit evidence required from substantive procedures. When both inherent and control risks are high, the auditor must determine whether substantive procedures alone can provide sufficient audit evidence to reduce detection risk – and consequently, overall audit risk – to an acceptably low level.

As previously noted, the audit risk model provides a framework for understanding the relationship among overall audit risk, inherent risk, control risk, and detection risk. Research in the specialized literature seeks to determine whether this model accurately reflects real-world auditing practices. According to a 2008 study, audit fees tend to be significantly higher for companies with internal control deficiencies, even after controlling for variables such as company size, financial risk, and profitability. Moreover, fee levels appear to correlate with the severity of the identified control issues, suggesting a direct relationship between control risk and the additional effort required by the auditor. These findings indicate that audit firms adjust their fees in line with identified risks, thereby aligning with the audit risk model (Hogan & Wilkins, 2008).

Auditors must remain vigilant for red flags, such as unjustified changes in accounting policies or suspicious transactions. In today's environment, technological advancements have both enabled fraudulent activity and empowered auditors to detect irregularities more effectively. This dual effect has prompted auditors to investigate fraud risks more closely and pushed organizations to strengthen their internal control systems.

Recent studies highlight various emerging trends and challenges in risk auditing. Like other professions in the digital era, accounting professionals have integrated artificial intelligence (AI) into their workflows. Advances in data analytics and predictive modeling have significantly transformed how risks are identified and assessed. By leveraging big data technologies and advanced analytics, auditors can process large volumes of structured and unstructured data to detect patterns, trends, and anomalies that may indicate risk (Jones et al., 2022). For example, machine learning algorithms can uncover suspicious transactions, detect fraud, and predict future risk events with increased accuracy and efficiency (Zhang & Wang, 2023). This data-driven approach enables auditors to identify hidden risks that might go undetected through traditional audit techniques.

Another key theme in recent literature concerns the influence of disruptive technologies on audit risk – both at the audited entity level and within audit firms. A study conducted on companies in the FTSE 100 index and their corresponding Big Four auditors (2015–2020) revealed a strong correlation between the adoption of disruptive technologies and a reduction in audit risk. The findings show that such technologies contribute to lowering both

inherent and control risks, as well as detection risk. These benefits were consistently observed across various industries, suggesting broad applicability and high potential for enhancing audit efficiency (Elnahass, Jia, & Crawford, 2024).

In parallel, Smith et al. (2023) emphasize the growing impact of technological risks – such as cyber threats and data breaches – on the modern business landscape. This underscores the need for auditors to adapt their risk assessment methods to manage these evolving threats effectively and safeguard organizational assets. At the same time, data analytics and AI have proven effective in enhancing risk assessment and detecting anomalies (Jones & Wang, 2022).

A notable example is Deloitte, one of the Big Four audit firms, which has been a pioneer in integrating AI into the audit process. Since 2016, Deloitte has used its proprietary "Deloitte Financial Robot" to optimize processes, reduce data processing time, lower labor costs, increase efficiency, and improve the understanding of client-specific financial risks (Müller & Bostrom, 2016). This integrated approach continues to evolve, offering auditors a deeper understanding of how different risk factors interact and affect organizational goals.

Leveraging advanced analytics allows auditors to rapidly analyze large datasets, identify trends and flag deviations from expected patterns – enabling more proactive risk management. Beyond technological advances, recent research also highlights the growing importance of incorporating Environmental, Social, and Governance (ESG) factors into risk auditing (Prodanova et al., 2023). As organizations face increasing pressure to demonstrate sustainability and corporate responsibility, auditors must assess how ESG risks affect organizational performance and reputation. This requires a holistic risk auditing approach that integrates both financial and non-financial risks, with substantial implications for long-term sustainability.

Fraud is one of the main causes behind numerous high-profile financial scandals in recent years, making it a key area of interest for financial stakeholders. In the modern era, technological advancements have facilitated the emergence of fraudulent activities within organizations. This evolution has simultaneously compelled auditors to investigate irregularities by applying risk identification and assessment methods, implementing internal control techniques, and performing substantive procedures to

assess fraud risk, while also encouraging organizational management to establish effective control systems.

Fraud risk refers to the probability that an entity's financial statements contain material misstatements resulting from intentional acts of fraud. As an essential component of audit risk, it demands heightened attention from auditors, as fraud can severely undermine the credibility and reliability of financial reporting. In the literature, fraud risk is often evaluated through two principal lenses: inherent risk and control risk – both of which reflect the vulnerability of the accounting system and internal controls to deliberate manipulation or omission of relevant information.

In this context, the Fraud Triangle – comprising pressure, opportunity, and rationalization – serves as a foundational conceptual framework for understanding fraudulent behavior. However, modern approaches have extended this model by incorporating factors such as organizational culture, the degree of digitalization, and the dynamics of governance. Effectively assessing fraud risk thus requires not only a strong theoretical grasp of the phenomenon but also the application of rigorous audit procedures to detect red flags and evaluate the potential impact on financial statements.

Recent literature reexamines the Fraud Triangle, offering contemporary perspectives and contributions from the professional community to develop a meta-model of fraud – a tool that supports both academic research and educational training. Although the Fraud Triangle remains fundamental, it is now considered only one component of a broader framework for assessing audit risk (Dorminey, J., Fleming, A.S., Kranacher, M., & Riley, R.A., 2012).

Professional standards issued by the AICPA and PCAOB (2010) clearly emphasize the auditor's responsibility to identify risks of material misstatement due to fraud, in accordance with assurance service requirements. Therefore, identifying fraud risk is not merely a procedural step, but a critical element that necessitates the use of explanatory models aligned with current understandings of fraudulent behavior.

To further understand the motivations behind fraudulent actions and support the professional community in preventing, detecting, investigating, and addressing fraud, researchers and practitioners have expanded upon the conceptual foundations of the Fraud Triangle. These efforts are synthesized into a meta-model, which offers a robust theoretical base for educators and researchers

engaged with fraud-related topics. This model holds significant didactic value in academic settings and empirical relevance in scientific investigations.

The COVID-19 pandemic has served as a major catalyst for reshaping risk auditing approaches, highlighting the need for auditors to revise their methodologies in response to global systemic disruptions (Noch, M.Y., 2024). It underscored the high degree of interconnection among supply chain risks, operational processes, and financial markets, reinforcing the importance of developing resilient risk management systems to mitigate systemic vulnerabilities.

In this evolving context, risk auditing is becoming a dynamic field, continually shaped by emerging trends and global economic challenges. Integrating classical audit principles with contemporary research empowers auditors with a consolidated framework for identifying, assessing, and managing risks effectively. However, sustaining the relevance and effectiveness of audit practices requires continuous innovation and adaptability to support organizational resilience and protect long-term strategic objectives.

Research methodology

To achieve the research objectives, we employed bibliometric analysis to identify and structure conceptual approaches related to audit risks. We analyzed articles indexed in the SCOPUS database, published between 1982 and 2024, with the intention of ensuring the study's relevance while acknowledging that auditing is a relatively young and continuously evolving field. Although SCOPUS includes sources dating back to 1982, we found that the first article referencing audit risk appeared in 1987. Therefore, the selected timeframe for our study spans 1987 to 2024. The current year (2025) was excluded from the final analysis due to an insufficient number of publications, which rendered it statistically irrelevant for a study considering full calendar-year data.

To identify relevant articles, we used the search filter phrase "audit risk", which yielded 914 results. After narrowing the document type to include only peer-reviewed journal articles, the dataset was reduced to 722 sources. The final filtering step involved selecting the relevant subject areas – "Business, Management and Accounting" and "Economics, Econometrics and Finance" – and limiting the results to articles published in English.

As a result, a total of 598 scientific research articles, published between 1987 and 2024, were selected for inclusion in the bibliometric analysis. The selection criteria are detailed in **Table no. 1**.

Table no. 1. Search criteria and results obtained

| Search criteria | Result |
|-----------------------------------|--|
| Search key | Audit Risk |
| Time period | 1987 – 2024 |
| Area of interest | Accounting, Business, Economics, Finance |
| Document type | Scientific article |
| Language | English |
| No. of documents before filtering | 914 |
| No. of documents after filtering | 598 |

Source: author's projection

The stages of bibliometric analysis include determining a literature review plan, centralizing the extracted data using preset search filters, graphically presenting the obtained data and, finally, detailing them.

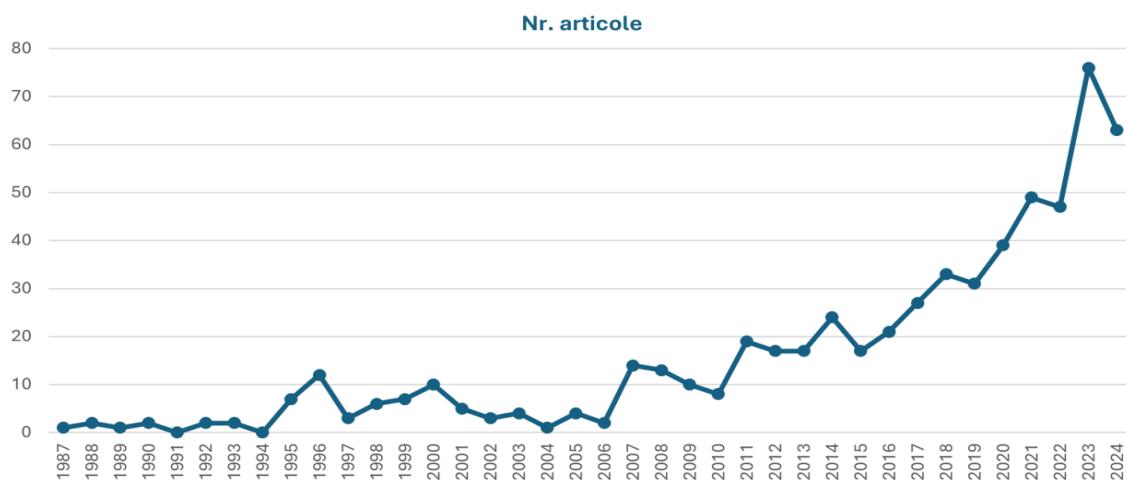
Results and discussion

The chronological evolution of publications on audit risk serves as an important indicator of the topic's relevance and growing academic interest. The distribution of articles published during the selected timeframe is illustrated in **Figure no. 1**, which shows a total of 598 articles published between 1987 and 2024, the reference period of this study.

The upward trend in the number of publications over time demonstrates the increasing significance of audit risk as a research topic. This growth reflects the subject's ongoing relevance and importance within the economic and financial fields, fueling both the demand for in-depth analysis and a heightened interest among researchers.

It is noteworthy that, at the beginning of the reference period, only one article was published on audit risk. By contrast, in 2024, the number of relevant publications has risen to over 60, highlighting a substantial increase in scholarly attention to this area.

Figure no. 1. Number of articles published in the selected range

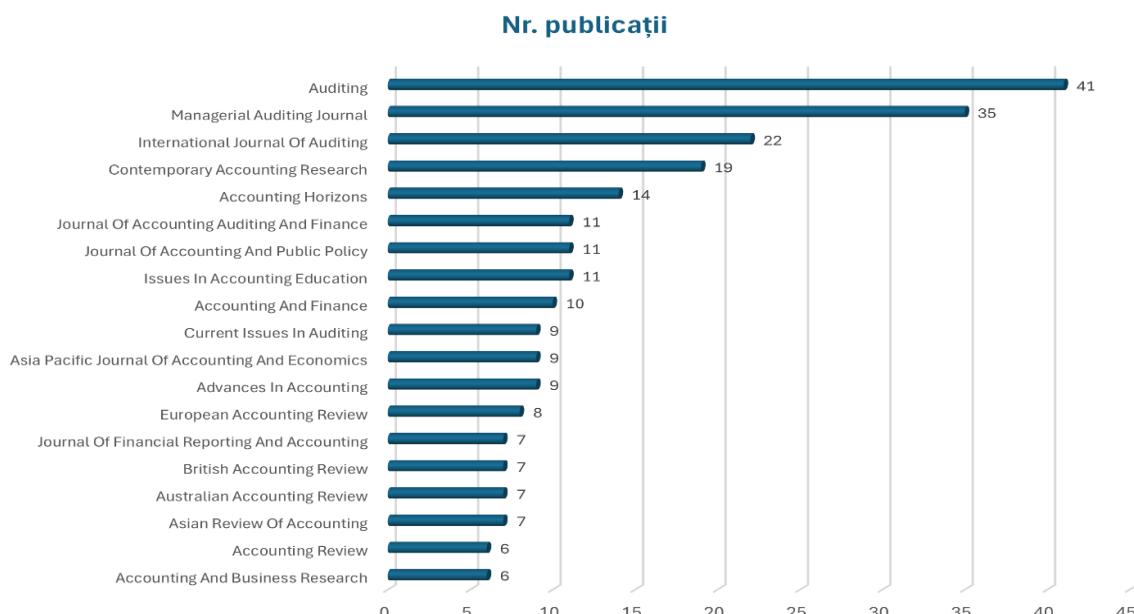


Source: author's projection

The initial part of the selected period shows an almost linear trend in publication volume, indicating minimal fluctuation and limited early interest in audit risk as a research topic. A noticeable increase begins around 1995, continuing into the 2000s – a time when the U.S. economy

was affected by global financial crises in Mexico, Asia, Russia, and Argentina. This period also coincided with the technological boom, which introduced new challenges for auditors and contributed to a heightened focus on audit-related risks.

Figure no. 2. Journals in which articles on audit risk were published



Source: author's projection

In the years leading up to the 2008 global financial crisis, the trend becomes relatively stable but slightly downward, corresponding to a pre-recession phase during which awareness of audit risk began to grow again.

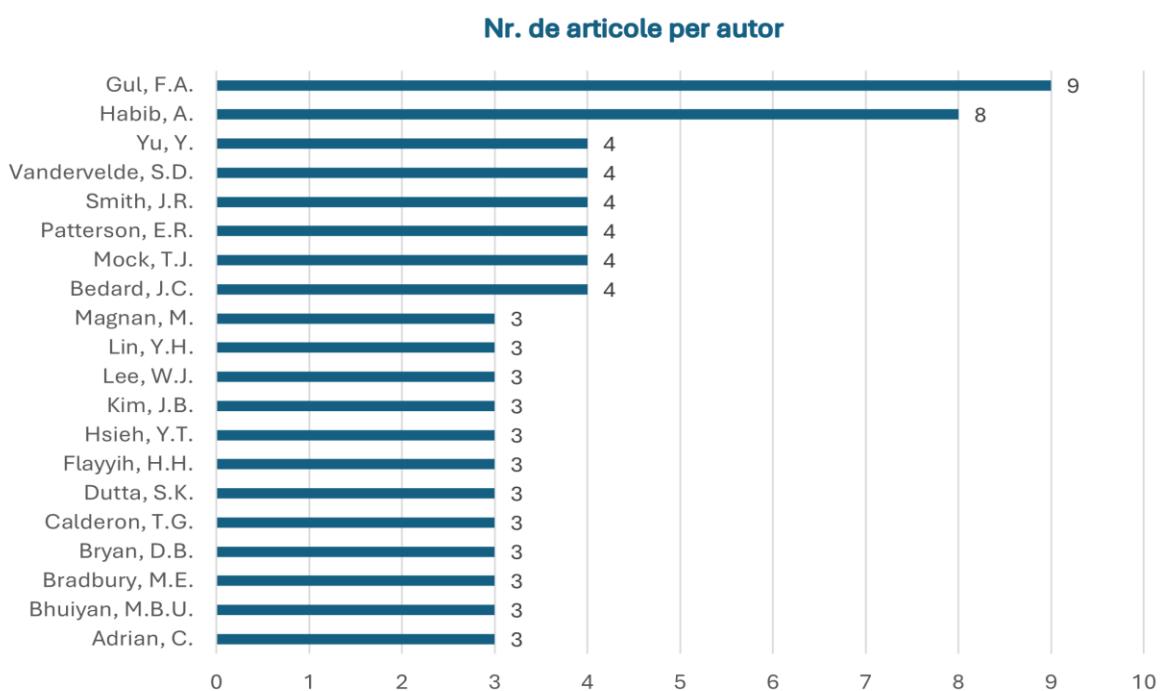
In the years that followed, a generally upward trend is observed, with only minor fluctuations. This growth aligns with ongoing technological advancements and the increasing complexity of the global business environment. As such, the rising volume of publications confirms the growing attention of the academic community to audit risk, highlighting the continued relevance and importance of this field in contemporary research.

The bibliometric analysis of publications by journal reveals that most articles on audit risk are published in auditing-specific journals, as well as in journals focused on finance

and accounting. The most prominent journals featuring audit risk research include *Auditing: A Journal of Practice & Theory*, *Managerial Auditing Journal* and the *International Journal of Auditing* – all of which specialize in auditing-related scholarship. In addition, journals such as *Contemporary Accounting Research*, *Accounting Horizons*, and the *Journal of Accounting, Auditing & Finance* also publish relevant articles, reflecting the intersection between auditing and broader accounting topics (Figure no. 2).

The most frequently represented journal is *Auditing: A Journal of Practice & Theory*, with 41 articles, followed closely by the *Managerial Auditing Journal*, which accounts for 35 articles.

Figure no. 3. Authors who have published articles on the topic of risks

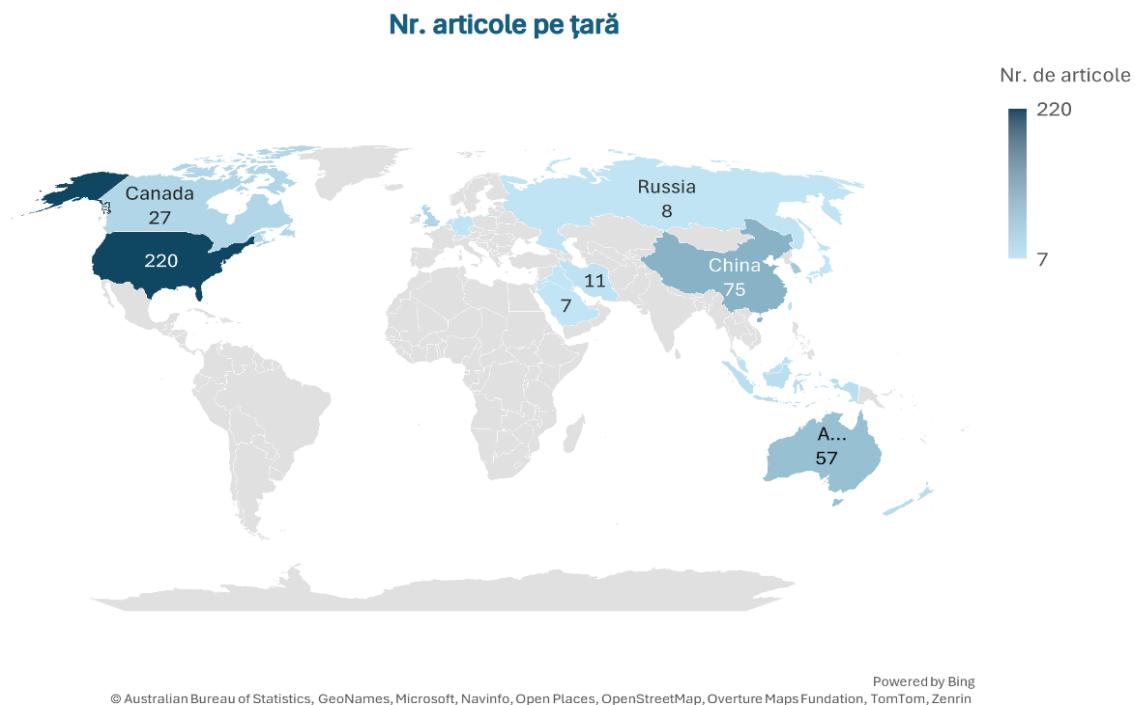


Source: author's projection

Figure no. 3 presents the authors who have published the most extensively on the topic of audit risk. The most prolific contributor is Gul, F.A., with 9 published articles, followed closely by Habib, A. A second tier of contributors

includes six authors, each with four publications on the subject. Based on this data, and maintaining the same ranking order, it can be concluded that Gul, F.A. demonstrates the highest level of academic interest and output on audit risk.

Figure no. 4. Origin countries of journals featuring audit risk articles



Source: author's projection

Table no. 2. Most cited articles addressing audit risks

| No. of documents | Article title | Author | Year of publication | Number of citations |
|------------------|---|---|---------------------|---------------------|
| 1 | Evidence on the audit risk model: Do auditors increase audit fees in the presence of internal control deficiencies? | Hogan CE; Wilkins MS | 2008 | 411 |
| 2 | The evolution of fraud theory | Dorminey J.; Scott Fleming A.; Kranacher M.-J.; Riley RA, Jr. | 2012 | 256 |
| 3 | Abnormal audit fees and restatements | Blankley Al; Hurt DN; MacGregor JE | 2012 | 235 |
| 4 | Client-acceptance decisions: Simultaneous effects of client business risk, audit risk, auditor business risk, and risk adaptation | Johnstone, K.M. | 2000 | 235 |
| 5 | Audit firm portfolio management decisions | Johnstone Karla M.; Bedard, Jean C. | 2004 | 186 |

| No. of documents | Article title | Author | Year of publication | Number of citations |
|------------------|---|--|---------------------|---------------------|
| 6 | The audit risk model, business risk and audit-planning decisions | Krishnan G.; Visvanathan G. | 1999 | 185 |
| 7 | Internal control quality and audit pricing under the Sarbanes-Oxley Act | Hoitash R.; Hoitash U.; Bedard JC | 2008 | 181 |
| 8 | Do auditors value the audit committee's expertise? The case of accounting versus non-accounting financial experts | Krishnan G.; Visvanathan G. | 2009 | 138 |
| 9 | The effects of firm-initiated claw back provisions on earnings quality and auditor behavior | Chan LH; Chen KCW; Chen T.-Y.; Yu Y. | 2012 | 138 |
| 10 | Fear and risk in the audit process | Guénin-Paracini H.; Malsch B.; Paillé AM | 2014 | 135 |

Source: author's projection

In terms of the country of origin of the journals analyzed (**Figure no. 4**), the majority of articles were published in the United States (220 articles), highlighting the strong interest of the American academic community in audit risk research. Following the U.S., the leading countries are China (75 articles), Australia (57 articles), South Korea (45 articles), and Canada (27 articles).

Within the European Union, the most prominent countries of origin for journals publishing on audit risk are the United Kingdom (28 articles), Germany (9 articles), and the Netherlands (7 articles). This geographic distribution of journal origins demonstrates notable diversity, underscoring the global significance of audit risk as a research topic.

Table no. 2 presents the articles with the highest number of citations according to the Scopus database. The article entitled *“Evidence on the Audit Risk Model: Do Auditors Increase Audit Fees in the Presence of Internal Control Deficiencies?”* stands out with the highest number of citations. It analyzes how audit firms respond to deficiencies in internal control systems, specifically investigating whether such deficiencies lead to increased audit fees.

Ranked second is *“The Evolution of Fraud Theory”*, which examines the impact of disruptive technologies on audit risk levels – both within organizations and audit firms.

Following this is *“Abnormal Audit Fees and*

Restatements”, which explores the relationship between audit fees and subsequent financial statement restatements in the years following the enactment of the Sarbanes-Oxley Act of 2002 (SOX).

The article *“Client-Acceptance Decisions: Simultaneous Effects of Client Business Risk, Audit Risk, Auditor Business Risk, and Risk Adaptation”* develops and tests a model that characterizes client acceptance as a process involving both risk assessment and adaptation. The model posits that auditors evaluate risks associated with client financial viability and internal control quality to estimate potential exposure to losses – whether from unprofitable engagements or future litigation.

This is followed by *“Audit Firm Portfolio Management Decisions”*, which provides empirical evidence on client acceptance and retention strategies employed by a large audit firm, emphasizing the deliberate use of risk-avoidance techniques in portfolio management.

Additional influential works include *“The Audit Risk Model, Business Risk, and Audit-Planning Decisions”*, which identifies the conditions under which the audit risk model does or does not explain investment and pricing decisions, and *“Internal Control Quality and Audit Pricing Under the Sarbanes-Oxley Act”*, which builds on previous research by examining how internal control deficiencies influence audit pricing in the context of financial reporting.

| Table no. 3. Word frequency | |
|-----------------------------|-------------|
| Word | Coincidence |
| Audit risk | 214 |
| Audit fees | 153 |
| Quality Audit | 41 |
| Corporate Governance | 39 |
| Audit fee | 28 |
| Audit Effort | 27 |
| Audit Pricing | 25 |
| Auditing | 20 |
| Risk Assessment | 18 |
| Audit Risk Model | 18 |
| Earnings Management | 16 |
| Audit Planning | 16 |
| auditor | 16 |
| Business Risk | 15 |
| Internal Control | 13 |
| Audit Committee | 13 |

Source: author's projection

The final three articles in the ranking address themes related to audit fees in conjunction with various accounting concepts, as well as how perceptions of risk and auditor judgment interact in the audit process. Regarding the co-occurrence analysis presented in **Table no. 3**, five-word clusters were identified from the total set of keywords extracted after filtering the articles. The analysis was conducted using VOSviewer, which applies a minimum threshold of five occurrences per keyword, meaning that only terms appearing at least five times were included in the final analysis. Based on this criterion, a total of 49 keywords were identified, resulting in 694 co-occurrence links.

Each keyword cluster corresponds to one of the five identified thematic groups, representing distinct research directions within the audit risk framework. These word groups were constructed to facilitate analysis within the context of this study and will be examined both semantically and conceptually. Based on their content, a contextual interpretation of the conceptual approaches in the selected articles will be developed.

As shown in **Figure no. 5**, the five clusters are visually represented. For the purposes of analysis, the most frequently occurring and contextually relevant keywords from each group were selected and discussed.

Group 1: Audit Risk and Fees includes terms such as audit risk, audit fee, and global financial crisis, indicating a clear link between audit risk and financial aspects. An increase in audit risk often leads to higher audit costs for entities. Factors such as financial risk, tax avoidance, and political connections can influence the fees charged by auditors. Both inherent risk and control risk have been shown to positively affect audit fees (Xue & O'Sullivan, 2023).

Group 2: Audit Effort and Fees focuses on the relationship between audit fees and the level of effort exerted by auditors, as well as the factors that influence the cost and workload of an audit engagement. Fees are affected by the complexity and risk associated with the audit and tend to increase proportionally with auditor effort. High-risk companies typically pay higher audit fees. For companies with litigation risk, auditor effort intensifies, while firms with strong corporate social responsibility (CSR) policies may incur lower audit fees.

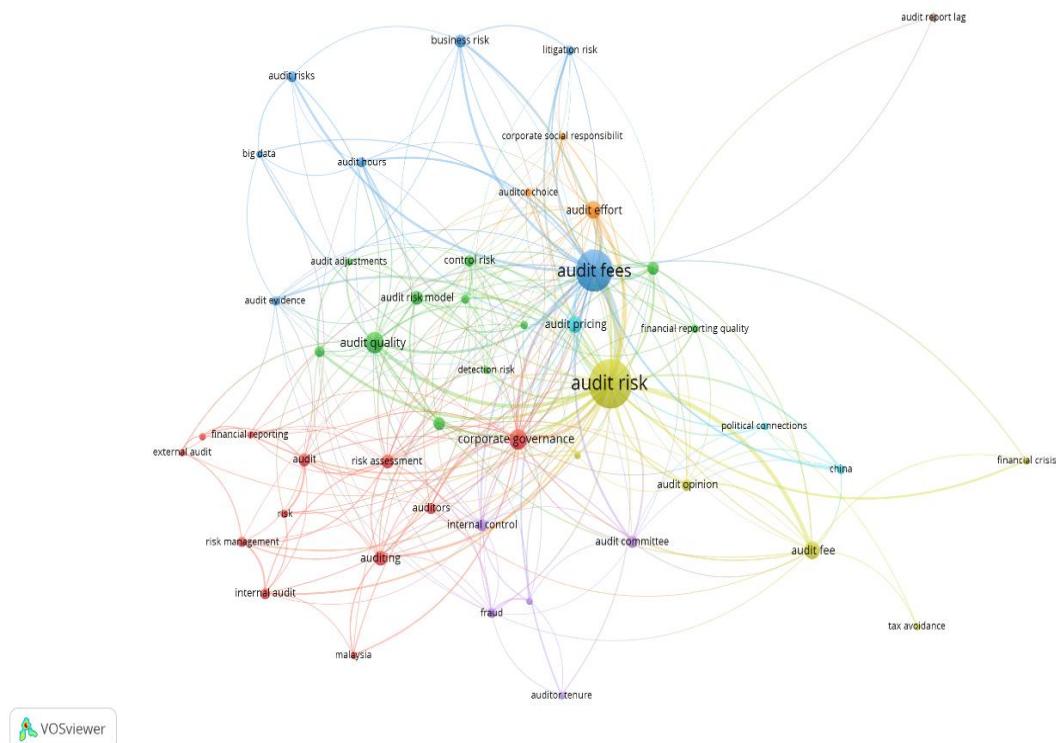
Group 3: Audit Quality and Financial Reporting brings together two foundational components of a robust financial system. A high-quality audit enhances the credibility, transparency, and compliance of an organization's financial reporting with legal and accounting standards. Simultaneously, financial reporting serves as the primary means by which entities communicate their financial performance and position. The literature confirms a strong link between professional skepticism and audit quality; however, the association between audit planning and audit quality is less consistent, as outcomes are influenced by audit risk (Sujana & Dharmawan, 2023).

Group 4: Audit and Corporate Governance relates to both the audit process and the broader governance mechanisms that companies implement to enhance performance and ensure accountability. This includes the role of the board of directors, the integrity of financial statements, and the effectiveness of risk management systems. During client acceptance, auditors place significant emphasis on corporate governance factors, particularly in an international context (Cohen et al., 2002). Additionally, the literature highlights the importance of the audit committee as part of corporate governance, emphasizing its contribution to transparency and financial responsibility (CAFR, 2020).

Group 5: Fraud and Internal Controls includes two core concepts in risk management and organizational integrity. Internal controls consist of systems and procedures designed to safeguard assets, ensure operational integrity, and prevent fraud and error. Effective internal controls are essential for fraud detection and prevention, providing a framework that limits opportunities for

undetectable misconduct. The Sarbanes-Oxley Act of 2002, which aimed to strengthen audit oversight and internal controls, succeeded in promoting stronger systems to reduce fraud risk. However, this does not necessarily imply a higher frequency of control testing (Patterson & Smith, 2007).

Figure no. 5. Coincidence of words and data groups



Source: author's projection

In the context of addressing fraud in auditing, **Table no. 4** presents the selected articles that, in addition to audit risk, also examine critical aspects of fraud and its impact on financial reporting.

The first three articles in **Table no. 4** address the impact of fraud risk on audit processes, particularly within the context of contemporary regulations such as the Sarbanes-Oxley Act (SOX), and the strategies auditors use to assess and manage such risks. These studies examine the role of auditing in detecting and preventing fraud, the regulatory influence of SOX on internal control testing and audit risk, and the effect of auditor tenure on audit strategy.

Dorminey et al. (2010) review and expand the Fraud Triangle model, a foundational tool in assessing fraud risks in audit practice. While the Fraud Triangle – comprising pressure, opportunity, and rationalization – remains central, it is viewed as only one component of a broader fraud risk assessment framework. In line with guidance from the AICPA and PCAOB (2010), the authors reaffirm that auditors have a clear responsibility to identify the risk of material misstatement due to fraud. Their proposed “meta-model of fraud” enhances the theoretical understanding of fraud motivation and strengthens auditors’ ability to detect and respond to fraudulent behavior, drawing on recent academic contributions.

Table no. 4. Most cited articles addressing fraud risk

| No. of documents. | Article title | Author | Year of publication | Number of citations |
|-------------------|--|---|---------------------|---------------------|
| 1 | The evolution of fraud theory | Dorminey J.; Scott Fleming A.; Kranacher M.-J.; Riley RA, Jr. | 2012 | 260 |
| 2 | The effects of Sarbanes-Oxley on auditing and internal control strength | Patterson ER; Smith JR | 2007 | 52 |
| 3 | The effects of auditor tenure on fraud and its detection | Patterson ER; Smith JR; Tiras SL | 2019 | 27 |
| 4 | The joint influence of the extent and nature of audit evidence, materiality thresholds, and misstatement type on achieved audit risk | Budescu DV; Peecher ME; Solomon I. | 2012 | 25 |
| 5 | Are auditors sensitive enough to fraud? | Makkawi B.; Schick A. | 2003 | 18 |
| 6 | Evidence of fraud, audit risk and audit liability regimes | Patterson E.; Wright D. | 2003 | 17 |
| 7 | Corporate employment, red flags, and audit effort | Cao J.; Luo X.; Zhang W. | 2020 | 17 |
| 8 | Satyam fraud: A case study of India's enron | Brown VL; Daugherty BE; Persellin JS | 2014 | 13 |
| 9 | "Problem" directors and audit fees | Habib A.; Bhuiyan MBU; Rahman A. | 2019 | 11 |
| 10 | Detecting asset misappropriation: A framework for external auditors | Kassem R. | 2014 | 11 |

Source: author's projection

Patterson and Smith (2002) present a theoretical model analyzing the effects of SOX on audit intensity and internal control strength. Their findings suggest that while SOX successfully promoted stronger internal control systems and reduced fraud, it did not necessarily result in increased control testing. Interestingly, their research indicates that audit risk actually rose post-SOX due to the added complexity and volume of required control procedures, despite improvements in internal controls.

Patterson, Smith, and Tiras (2019) explore how auditor tenure influences audit strategy and managers' likelihood of committing fraud. While prior studies suggest longer

tenure improves audit quality, critics argue it may impair auditor independence. This study finds that fraud risk – the likelihood that fraud exists and goes undetected – is lower when audits are performed by continuing auditors compared to newly appointed ones. This implies that auditor-client continuity enhances risk identification and fraud mitigation.

Budescu, Peecher, and Solomon (2012) challenge the assumption that expanding audit testing automatically reduces audit risk. Their study shows that under certain conditions, increased testing may even raise audit risk, highlighting the need for a more nuanced, context-

dependent approach to audit planning. Understanding internal control quality not only improves audit integration but also helps form more accurate judgments regarding evidence reliability and the likelihood of being misled by client management.

In another study, Makkawi and Schick (2003) investigate how auditors adjust audit programs when faced with increased risk of financial fraud. Their findings indicate that auditors must re-evaluate audit procedures in high-fraud-risk situations, balancing audit efficiency and effectiveness. This underscores the importance of strategic responsiveness, especially during periods of economic or industry-specific volatility.

Patterson and Wright (2003) explore the effects of different legal liability regimes on fraud and audit risk. Their study suggests that a proportional liability system – which reduces auditors' marginal liability – can lower audit risk, but only when auditors invest sufficient effort. When auditors must also assess evidence quality, however, the benefits of such liability limitations diminish, illustrating the complexity of legal and strategic factors in audit decisions.

Cao et al. (2019) examine how abnormal employment changes can signal accounting irregularities and fraud. Their research reveals that sharp declines in hiring are correlated with a higher likelihood of financial restatements, irregularities, and litigation, all of which increase audit workload, audit fees, and delays in audit reporting. This highlights the importance of monitoring operational metrics as early fraud indicators.

Brown et al. (2014) focus on the challenges of auditing in a globalized environment, using the Satyam scandal as a case study. The authors emphasize the importance of collecting and validating audit evidence, particularly in confirming cash balances and receivables. The case raises broader issues of quality control and cultural differences, reinforcing the need for enhanced planning and fraud risk assessment in international audit settings.

In another study, Habib et al. (2019) explore the relationship between "problem directors" – individuals with questionable reputations serving on boards or audit committees – and audit fees. Their findings suggest that the presence of such directors leads to higher audit fees, as auditors perceive increased audit risk. The study underscores the need for organizations to carefully evaluate director appointments due to the associated implications for audit complexity and cost.

Kassem (2014) addresses a less frequently discussed fraud risk: "asset proximity" fraud. Focusing on the Egyptian context, the study proposes a framework for external auditors to better assess and respond to this specific risk area. Through a combination of questionnaires and semi-structured interviews, the research highlights the importance of identifying red flags and tailoring auditor responses to localized fraud risks.

Overall, the reviewed literature highlights the evolving challenges auditors face in managing fraud risk and financial irregularities. These studies emphasize the importance of context-aware risk assessments, strategic audit planning, and the incorporation of both operational and behavioral factors into audit procedures. As organizational structures and management behaviors evolve, auditors must adapt their strategies and pricing models to remain effective in identifying and mitigating risk.

Conclusions

The research findings confirm that audit risk remains a subject of significant interest among scholars in the field of economics. The existing literature presents a wide range of perspectives, from analyses of economic, social, and governance frameworks to issues related to the implementation or enhancement of corporate governance structures – particularly through the introduction of more robust internal controls to minimize risk and prevent fraud.

Furthermore, given the rapid evolution of technology, notable progress has been made in the audit process. Risk assessments are becoming more comprehensive, incorporating a wider range of factors about the audited entity and assisting auditors in efficiently gathering and analyzing data.

Audit risks have a direct impact on the quality and credibility of financial reporting. By managing these risks through appropriate strategies and methodologies, auditors play a crucial role in strengthening confidence in financial information. In light of increasing economic complexity and technological advancement, it is essential that audit practices continue to evolve to uphold high standards of transparency and compliance.

The literature confirms that the Fraud Triangle remains a foundational tool for assessing fraud risk. However, recent research calls for a deeper understanding of the motivations behind fraudulent behavior and how these evolve over time. The implementation of the Sarbanes-

Oxley Act (SOX) has improved internal control systems, yet it has also added complexity to the audit process, which may have increased overall audit risk compared to prior periods.

Studies examining auditor tenure suggest that long-term auditor-client relationships can enhance fraud detection and improve audit risk management, especially when compared to frequent auditor rotations, which may hinder continuity and institutional knowledge.

The body of research underscores the importance of dynamic and continuous fraud risk assessment, highlighting the influence of regulations, auditor-client relationships, and advancements in internal control testing techniques.

The bibliometric analysis also sheds light on major financial events that have spurred scholarly interest. The early 21st century saw a rise in economic scandals, which led to new regulatory standards for boards of directors and auditing firms. This was followed by the 2007–2008 global financial crisis, which catalyzed a surge in research focused on audit risk.

Given the ongoing changes in the global economy and rapid technological developments, the focus on audit risk

analysis is expected to maintain its upward trajectory. Audit engagements are not linear processes with uniform outcomes; they are shaped by the auditor's expertise and the unique characteristics of each audited entity. Continued research and deeper investigation into audit risk can uncover methodological gaps and contribute to the refinement of audit practices.

This study also shows that audit risk research has a global reach. While the highest volume of publications originates from the United States, notable and diverse contributions are also observed across Asia and Europe.

One of the primary limitations of this research is that the bibliometric analysis relied on a single database (Scopus). Nevertheless, given the substantial number and relevance of the selected articles, this limitation is not deemed to have a significant impact on the validity of the findings.

Looking ahead, future research should continue to expand on audit risk assessment, especially in the context of financial instability, technological disruption, and geopolitical uncertainty, as these factors increasingly shape the modern audit landscape.

Bibliography

- Allen, R. D., Hermanson, D. R., Kozloski, T. M., & Ramsay, R. J. (2006). Auditor Risk Assessment: Insights from the Academic Literature. *Accounting Horizons*, 20(2), 157–177. <https://doi.org/10.2308/acch.2006.20.2.157>
- American Institute of Certified Public Accountants. (2010). *Statement on Auditing Standards No. 122: Statements on Auditing Standards: Clarification and Recodification*. AICPA. <https://www.aicpa.org>
- Arens, A. A., Elder, R. J., Beasley, M. S., & Hogan, C. E. (2017). Auditing and assurance services (16th ed.). Pearson.
- Arens, A., Loebbecke, K., Audit: O abordare integrată, Editura Arc, Chișinău, 2003.
- Blankley, A. I., Hurt, D. N., & MacGregor, J. E. (2012). Abnormal audit fees and restatements. *Auditing: A Journal of Practice & Theory*, 31(1), 79–96. <https://doi.org/10.2308/ajpt-10210>
- Bogdan, A. M. (2005). Financial audit in the context of harmonization with international accounting standards. *Universitaria Publishing House*, Craiova.
- Brown, V. L., Daugherty, B. E. & Persellin, J. S. (2014). Satyam Fraud: a case study of India's Enron. *Issues in Accounting Education*, 29(3), 419–442. <https://doi.org/10.2308/iaec-50735>
- Budescu, D. V., Peecher, M. E., & Solomon, I. (2012). The joint influence of the extent and nature of audit evidence, materiality thresholds, and misstatement type on achieved audit risk. *Auditing: A Journal of Practice & Theory*, 31(2), 19–41. <https://doi.org/10.2308/ajpt-10239>
- CAFR (2020), Corporate Governance – The Role of the Audit Committee, Professional Research. https://www.cafr.ro/wp-content/uploads/2020/04/Cercetare-profesionala-CAFR_Guvernanta-Corporativa.pdf

10. Cao, J., Luo, X., & Zhang, W. (2019). Corporate employment, red flags, and audit effort. *Journal of Accounting and Public Policy*, 39(1), 106710. <https://doi.org/10.1016/j.jaccpubpol.2019.106710>
11. Dobler, M. (2003). Auditing the risk management process. *Managerial Auditing Journal*, 18(6/7), 504–511 <https://doi.org/10.1108/02686900310480820>
12. Dorminey, J., Fleming, A. S., Kranacher, M., & Riley, R. A. (2012). The evolution of fraud Theory. *Issues in Accounting Education*, 27(2), 555–579. <https://doi.org/10.2308/iaec-50131>
13. Elnahass, M., Jia, X., & Crawford, L. (2024). Disruptive technology and audit risks: Evidence from FTSE 100 companies. *Emerging Markets Review*, 63, 101218. <https://doi.org/10.1016/j.ememar.2024.101218>
14. Fleming, M. (2014). Risk auditing: Concepts and applications. *Wiley*.
15. Grosu, M., & Mihalciuc, C. C. (2021). Audit Risk Assessment and Influence on the Auditor's Opinion. *Audit Financiar*, 19(163), 528–543. <https://doi.org/10.20869/auditf/2021/163/017>
16. Grosu, M., Robu, I. B., & Istrate, C. (2020). The quality of financial audit missions by reporting the key audit matters. *Audit Financiar*, 18(157), 182–195. <https://doi.org/10.20869/auditf/2020/157/005>
17. Habib, A., Bhuiyan, M. B. U., & Rahman, A. (2019). "Problem" directors and audit fees. *International Journal of Auditing*, 23(1), 125–143. <https://doi.org/10.1111/ijau.12150>
18. Hogan, C. E., & Wilkins, M. S. (2008). Evidence on the audit risk model: Do auditors increase audit fees in the presence of internal control deficiencies? *Contemporary Accounting Research*, 25(1), 219–242. <https://doi.org/10.1506/car.25.1.9>
19. Hoitash, R., Hoitash, U., & Bedard, J. C. (2008). Internal Control Quality and Audit Pricing under the Sarbanes-Oxley Act. *Auditing: A Journal of Practice & Theory*, 27(1), 105–126. <https://doi.org/10.2308/aud.2008.27.1.105>
20. Horomnea, E. (2014). Financial Audit. Concepts. Standards. Norms, Ed. *TipoMoldova*, Iași, 129.
21. Institute of Chartered Accountants of Scotland & the Romanian Association of Chartered Certified Accountants (2019). *Guide to a quality audit. Assistance in developing and documenting audit procedures*. Bucharest: CAFR.
22. International Auditing and Assurance Standards Board. (2013). *ISA 610 (Revised 2013): Using the work of internal auditors*. International Federation of Accountants. <https://www.ifac.org/>
23. International Auditing and Assurance Standards Board. (2018). *ISA 200 (Revised): Overall objectives of the independent auditor and the conduct of an audit in accordance with International Standards on Auditing*. International Federation of Accountants. <https://www.ifac.org/>
24. Johnstone, K. M. (2000). Client-Acceptance decisions: simultaneous effects of client business risk, audit risk, auditor business risk, and risk adaptation. *Auditing: A Journal of Practice & Theory*, 19(1), 1–11. <https://doi.org/10.2308/aud.2000.19.1.1>
25. Johnstone, K. M., & Bedard, J. C. (2004). Audit firm portfolio management decisions. *Journal of Accounting Research*, 42(4), 659–690. <https://doi.org/10.1111/j.1475-679x.2004.00153.x>
26. Jones, P., & Wang, T. (2022). Leveraging data analytics and artificial intelligence in risk auditing: Implications for practice and research. *Accounting Horizons*, 36(3), 61–78. <https://doi.org/10.2308/acch-52857>
27. Júnior, E. D. A., & Galdi, F. C. (2019). The informational relevance of key audit matters. *Revista Contabilidade & Finanças*, 31(82), 67–83. <https://doi.org/10.1590/1808-057x201908910>
28. Kassem, R. (2014). Detecting asset misappropriation: a framework for external auditors. *International Journal of Accounting Auditing and Performance Evaluation*, 10(1), 1–18. <https://doi.org/10.1504/ijaaape.2014.059181>
29. Khwaja, B. (2011). Integrating business risk into audit risk assessments. *International Journal of Auditing*, 15(1), 23–33. <https://doi.org/10.1111/j.1099-1123.2010.00452.x>
30. Makkawi, B., & Schick, A. (2003). Are auditors sensitive enough to fraud? *Managerial Auditing Journal*, 18(6/7), 591–598. <https://doi.org/10.1108/02686900310482722>

31. Martinov-Bennie, N. (1998). Risk management in the audit practice. *Managerial Auditing Journal*, 13(3), 152-158. <https://doi.org/10.1108/02686909810206923>
32. Morariu A., Suciu G. & Stoian F. (2011). Financial Audit, ASE Publishing House, Bucharest.
33. Müller, V. C., & Bostrom, N. (2016). Future progress in Artificial Intelligence: A survey of expert opinion. In *Synthese Library/Synthese library* (pp. 555–572). https://doi.org/10.1007/978-3-319-26485-1_33
34. Noch, M. Y. (2024). A Critical Analysis of Risk Auditing: An Auditor's Approach. *Golden Ratio of Auditing Research*, 4(1), 01–13. <https://doi.org/10.52970/grar.v4i1.383>
35. Patterson, E. R., & Smith, J. R. (2007). The effects of Sarbanes-Oxley on auditing and internal control strength. *The Accounting Review*, 82(2), 427–455. <https://doi.org/10.2308/accr.2007.82.2.427>
36. Patterson, E. R., Smith, J. R., & Tiras, S. L. (2019). The effects of auditor tenure on fraud and its detection. *The Accounting Review*, 94(5), 297–318. <https://doi.org/10.2308/accr-52370>
37. Patterson, E., & Wright, D. (2003). Evidence of fraud, audit risk and audit liability regimes. *Review of Accounting Studies*, 8(1), 105–131. <https://doi.org/10.1023/a:1022652023592>
38. Peters, G. F. (1989). Using analytical procedures in audit risk assessment: The influence of tacit knowledge. *Accounting, Organizations and Society*, 14(1/2), 79-96. [https://doi.org/10.1016/0361-3682\(89\)90036-2](https://doi.org/10.1016/0361-3682(89)90036-2)
39. Prodanova, N., Tarasova, O., & Sotnikova, L. (2023). ESG audit and its fundamental concepts. *E3S Web of Conferences*, Vol. 402, p. 13025. <https://doi.org/10.1051/e3sconf/202340213025>
40. Public Company Accounting Oversight Board. (2010). *Auditing Standard No. 7: Engagement Quality Review*. PCAOB. <https://www.pcaobus.org>
41. Rodgers, W., Guiral, A., Gonzalo, J. A. (2019). Trusting/Distrusting Auditors' Opinions. *Sustainability*, 11(6), 1666. <https://doi.org/10.3390/su11061666>
42. Schultz, J. J. (2010). The influence of strategic-systems-audit approach on financial audit planning: A research note. *International Journal of Auditing*, 14(3), 243-256. <https://doi.org/10.1111/j.1099-1123.2010.00410.x>
43. Smith, J., & Johnson, M. (2023). Integrated risk assessment frameworks: Enhancing risk auditing effectiveness in dynamic business environments. *Journal of Risk and Financial Management*, 16(5), 1–20. <https://doi.org/10.3390/jrfm16050191>
44. Steele, A. L. (1992). A Bayesian approach to statistical auditing. *The Statistician*, 41(2), 241-252. <https://doi.org/10.2307/2348435>
45. Stoian, F., & Morariu, A. (2010). Financial Audit: Concepts and Applications. Bucharest: Economica Publishing House.
46. Sujana, E., & Dharmawan, N. a. S. (2023). Audit Quality improvement and the role of risk: Audit as a moderator. *Australasian Accounting Business and Finance Journal*, 17(4), 213–228. <https://doi.org/10.14453/aabfj.v17i4.14>
47. Vitalis, A. (2012). Integrating business risk into audit risk models. *Managerial Auditing Journal*, 27(5), 438-458. <https://doi.org/10.1108/02686901211230585>
48. Xue, B., & O'Sullivan, N. (2023). The determinants of audit fees in the alternative investment market (Aim) in the UK: Evidence on the impact of risk, corporate governance and auditor size. *Journal of International Accounting Auditing and Taxation*, 50, 100523. <https://doi.org/10.1016/j.intaccaudtax.2023.100523>
49. Zhang, L., & Smith, A. (2023). Emerging technologies and their impact on risk auditing methodologies: Implications for practice. *Journal of Accounting, Auditing & Finance*. Advance online publication. <https://doi.org/10.1177/0148558X23162789>.