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# The Auditor's Professional Skepticism in Times of Economic Uncertainty

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## Abstract

**Purpose:** The purpose of this article is to assess how contemporary conditions of economic uncertainty (the pandemic and post-pandemic periods, Russia's invasion of Ukraine, high inflation, cybercrime, manifestations of the environmental crisis) affect the importance of an auditor's professional scepticism.

**Methodology/research approach:** The main research method is an assessment of national auditing standards and professional studies and an in-depth review of the scientific literature. Data from the Web of Science database was used to carry out the bibliometric studies, while Biblioshiny for Bibliometrix software was used to present the results of the study. Methods of analysis and synthesis were used in the article.

**Results:** The article presents a positive and prescriptive approach to the auditor's professional scepticism in an audit of the financial statements of an entity operating in an environment of uncertainty, and the uncertainty exists across a range of business-relevant economic dimensions. In positive terms, the article demonstrates the importance of professional scepticism arising from changes in financial reporting in times of uncertainty. In normative terms, it identifies the applicable standards in the area under analysis, as well as the directions in which the importance of professional scepticism is changing.

**Research limitations/implications:** The research limitation is to infer from the findings presented in the scientific literature and professional studies. Supplementing these with the author's empirical research would allow for a deeper analysis, which may constitute a future research path. This is because the article serves to show the impact of uncertainty on the significance of professional scepticism in an ex-post perspective, showing changes to date, as well as ex-ante, i.e., in the perspective of



the evolution of the concept analysed. The research implications of the article are therefore both practical and theoretical.

**Originality/value:** The lack of comprehensive scientific research in the area identified above indicates a research gap, which the article partially fills. Contributes to understanding the impact of economic uncertainty on financial reporting and auditing, including the importance of professional scepticism. The findings presented may be useful for both the theory and practice of financial auditing.

**Keywords:** auditor, statutory auditor, financial audit, financial review, professional scepticism, inflation, uncertainty, pandemic, war

## Introduction

**C**urrent conditions of economic uncertainty are largely due to the shock to civilisation caused by the COVID-19 pandemic. In the aftermath of the pandemic, many developed economies experienced inflation of an intensity not seen in several decades. At the same time, Russia's invasion of Ukraine has contributed to limited predictability in the functioning of financial markets, disrupted supply chains, purchasing bubbles, and unstable energy supply conditions and prices. Economic uncertainty implies business uncertainty, limiting the financial security of business entities and, consequently, their ability to anticipate continuing operations. Recently, increasing uncertainty has affected the accountability of entities and their approach to accountability (*accountability*) for performance, and changes in financial reporting, as well as sustainability reporting, are to be expected (Zyznarska-Dworczak et al., 2023). At the same time, the crisis associated with uncertain business conditions contributes to a greater risk of manipulation of disclosed financial and non-financial results (Austin, 2022; Chen et al, 2022; Hsu, Yang, 2022; IESBA, CPA, 2020; Ozili, 2021; Zhu et al, 2021; Zyznarska-Dworczak, Rudzioniene, 2022).

The unpredictable and unstable future means that the assumptions underlying the content of financial statements can become more risky than originally anticipated (Zyznarska-Dworczak, 2023). Indeed, conditions of uncertainty can compound the risk of material misstatement that is new or exacerbated under the circumstances (IAASB, 2020). This implies a stronger role for the statutory auditor's professional scepticism, essentially serving to identify circumstances or conditions of management bias and to determine the type, timing and extent of appropriate audit procedures (para. A55 KSB 540).

Determining the direction of development of the concept of professional scepticism under the influence of changes in financial reporting requires an in-depth analysis the rationale for change in light of positive theories, as well as an analysis of normative solutions that contribute to providing external stakeholders with reliable financial statements and audit reports. The lack of comprehensive research in this research area indicates a research gap. The article partially bridges it, contributing to the understanding of the impact of economic uncertainty on financial reporting and auditing, including the importance of professional scepticism.

The purpose of this article is to assess how contemporary conditions of economic uncertainty (the pandemic and post-pandemic periods, Russia's invasion of Ukraine, inflation, cybercrime, manifestations of the environmental crisis) affect the importance of an auditor's professional scepticism. To achieve the goal, an analysis of the study's standards and an in-depth review of scientific literature and practical professional studies were used. A bibliometric study based on the Web of Science database was used in the holistic interpretation and categorisation of the literature. *Biblioshiny for Bibliometrix* software was used to present its results.

The findings presented herein may be useful in both theory and practice. In positive terms, the article demonstrates the importance of professional scepticism arising from changes in reporting of business entities in times of uncertainty. The article indicates the desired directions of change in the analysed area based on normative positions presented in the literature as well as in professional studies.

## **1. Impact of economic uncertainty on financial reporting and auditing**

Uncertainty is an inherent feature of accounting as well as of auditing. The Conceptual Framework for Financial Reporting issued by the International Accounting Standards Board (2018) refers to 'uncertainty' 83 times, mainly in the context of uncertainty of existence, uncertainty of result and uncertainty of measurement (Zyznarska-Dworzak, 2022, p. 164). In contrast, NSB 540 *Examination of Accounting Estimates and Related Disclosures* refers to uncertainty 131 times, mainly in the sense of estimation uncertainty.

The importance of uncertainty is highlighted by the European Securities and Markets Authority (ESMA), emphasising the obligation to ensure consistency between (ESMA, 2022):

- 1) the judgments and estimates adopted in the financial statements and the associated uncertainties, including information related to the carrying value of assets or liabilities at risk of material adjustment due to climate change, in accordance with paragraph 125(b) of IAS 1;

- 2) the information disclosed on climate risk and uncertainty in the management report and the statement on non-financial information.

Reflecting uncertainty in financial reporting primarily requires management's professional judgment regarding the basis for the entity's going concern as well as the assumptions underlying the estimation of balance sheet and performance values, including those related to (cf. para. A1 KSB 540):

- reserve calculations;
- employee benefit liabilities;
- write-downs of inventories;
- the method of depreciation of fixed assets and equipment
- valuation of financial instruments at fair value;
- financial assets at present value based on discounted future cash flows;
- assets based on probability-weighted expected future performance;
- assessing the results of pending litigation;
- settlement of revenues and expenses on long-term contracts.

Uncertainty in the estimation of these values is due to '*inherent knowledge or data limitations*', which can lead to '*inherent subjectivity and variability in measurement results*' (para. 2 KSB 540). This is because there is a risk of significant levels of management bias and opportunism in manipulating results around discretionary inputs for estimates (Lau, 2021).

The inherent uncertainty in reporting is now compounded by the economic and business uncertainty of operating business entities. According to ESMA (ESMA 2022), the simultaneous effects of a pandemic, inflation, rising interest rates, a worsening business climate, geopolitical risks and, more broadly, an uncertain future, require particular care in accounting for the impact, in financial reporting, of the macroeconomic environment, climate-related issues, and Russia's invasion of Ukraine. The current conditions of '*uncertainty*' are also highlighted by the Accounting Standards Committee (ASC) in its *Recommendations – Financial Statements and Management Report 2022 Under Uncertain Economic Environment* issued in January 2023 (ASC, 2023). It defines it as a condition caused by changes in the economic environment due to, among other things, increases in inflation and interest rates, significant changes in foreign currency exchange rates, rising costs of raw materials and labour, or the situation in the energy and heat markets, which may have a negative impact on the entity's operations, including the entity's ability to continue as a going concern. CRS notes that the uncertainty currently accompanying the activities of entities should be the premise of a particularly prudent assessment (cf. ESMA, 2022; CRS, 2023; Zyznarska-Dworczak, 2023) of the following:

- the company's remaining a going concern;
- the rationale for the risk of information distortion due to the use of simplified inventory methods and simplified valuation of goods and services;

- the circumstances determining the establishment of long-term provisions and factors affecting their valuation, including the discount rate and other actuarial assumptions;
- the impact of inflation and the macroeconomic situation on balance sheet valuation, including cash flow projections for the purpose of impairment testing of non-financial assets;
- an understanding of the functioning of information systems, including those operating in the IT environment;
- disclosures in the financial statements and management's report on operations, including those that enable assessment of the entity's exposure to interest rate risk, the risk of changes in commodity prices and the related risk of asset liquidity and ability to pay.

The current practice of Polish companies in the area of financial reporting may indicate the existence of a number of factors that limit the quality assurance of financial statements. Among them are such as (Kutera, Baklarz, 2022):

- lack of significant interest on the part of supervisory boards in the quality of financial reporting, including lack of communication with the auditor;
- entrusting bookkeeping to accounting firms while lacking internal controls;
- emphasis on fiscal bookkeeping as the primary task of an entity's accounting;
- low attention to mid-year reporting;
- being guided in the selection of an audit firm solely by the price for the audit service.

Uncertainty arising from contemporary conditions can increase the risk of materially distorting the presented results through intentional or unintentional management action (Zyznarska-Dworczak, 2023). Management may feel pressure to change or distort an entity's financial performance and financial picture in order for it to achieve its intentions, avoid bankruptcy or foreclosure, maintain its customer base, obtain financing in the form of debt or equity, or meet the criteria for obtaining government assistance (IESBA, CPA, 2020). In addition, shifting the attention of management and supervisors to the more pressing needs of the entity, such as financial and operational matters related to survival in a crisis, can result in a weakened control environment, which in turn creates more opportunities for fraudulent financial reporting or asset appropriation (IESBA, CPA, 2020).

Financial fraud in the pandemic and post-pandemic era is becoming more sophisticated and insidious (Zhu et al., 2021), as confirmed by empirical studies conducted internationally (Hsu, Yang, 2022; Susak, 2020; Zhu et al., 2021). Intentional manipulation applies to both financial and non-financial information (Zyznarska-Dworczak, 2022) and is intended to increase the value of reporting entities (Brooks et al., 2022; Fijałkowska, Zyznarska-Dworczak, 2017; Lee et al., 2023), expected by their stakeholders.

In the face of growing economic uncertainty, the International Auditing and Assurance Standards Board (IAASB) stresses the critical importance of maintaining professional scepticism when conducting audit procedures and urges auditors to be more aware of the potential for fraud or error in financial reporting (IAASB, 2020). Indeed, lack of sufficient professional scepticism is often cited as a reason why auditors fail to detect material misstatements (e.g., Beasley et al., 2001; Benston, Hartgraves, 2002; Quadackers et al., 2014).

## **2. Importance of professional scepticism according to national auditing standards**

Professional scepticism is one of the fundamental issues of auditing. A statutory auditor, when conducting an audit, providing attestation services other than audit or related services, acts in the public interest and observes the principles of professional ethics, in particular professional scepticism (Article 69 (1) of the Law of May 11, 2017, hereinafter referred to as the Law). This concept means such behaviour that involves the statutory auditor or audit firm being critical, alert to conditions that may indicate possible misstatement due to error or fraud, and critically evaluating the audit evidence gathered (Article 68(2) of the Law). Professional scepticism is supposed to characterise both the statutory auditor and the audit firm (Article 69, paragraph 2. Law) and imply a critical approach during the entire audit process, including the planning stage of the audit. In doing so, it should be borne in mind that there may have been circumstances, including error or fraud, which caused material misstatements in the audited financial statements. The statutory auditor's or audit firm's attitude, respecting professional scepticism, should not be influenced by previous experience regarding the honesty and integrity of the audited entity's management and those responsible for management, including its corporate governance (Article 69, paragraph 2. of the Act).

The professional scepticism of both the audit firm and the audit team member is also highlighted by the ethical requirements addressed to statutory auditors and contained in the *Code of Ethics for Professional Accountants* developed by The International Ethics Standards Board for Accountants – IESBA. In doing so, the code points out the conceptual interconnectedness of professional scepticism with the basic principles of auditing, such as integrity, objectivity, professional competence, due diligence, confidentiality and professional conduct (para. 120.13 A1, IESBA Code). In addition, in accordance with para. 120.12 A1 of the Code, maintaining professional scepticism is a prerequisite for both independence of mind and a statutory auditor's image.

In none of the above-mentioned regulations is there an explicit definition of 'professional scepticism of the audit firm', as critically discussed in the *Commentary*

to the *Law on Statutory Auditors* (Slebzak, 2018, Article 68). Also, the National Auditing Standards (NSB) does not indicate the term 'professional scepticism of the audit firm' and only uses the term 'professional scepticism of the statutory auditor'<sup>1</sup>. Article 7 KSB 200, indicates that the standards require the statutory auditor to exercise professional scepticism in planning and conducting the audit. The statutory auditor is expected to be guided by inquisitiveness, sensitivity to conditions that may indicate possible distortion due to error or fraud, and criticality in evaluating the examination evidence [para. 13(l) KSB 200]. In accordance with Article 15 KSB 200, the statutory auditor should be aware that there may be circumstances that cause a material misstatement of the financial statements (more in para. A20–A24) and should be sensitive to (para. A20), for example:

- contradictions in the audit evidence obtained;
- information that undermines the reliability of documents and answers to questions used as evidence in the study;
- various conditions that may indicate the possibility of fraud
- circumstances indicating the need for additional audit procedures in addition to those required by the standards (MSB/KSB).

Professional scepticism is essential in critically evaluating audit evidence and may involve legitimately questioning the evidence gathered for the audit, as well as responses to inquiries and other information obtained from the entity's head and supervisors (para. A22 KSB 200).

Today's conditions of uncertainty heighten the importance of professional scepticism. This is particularly noticeable during the audit itself, when the statutory auditor seeks to reduce risks (para. A21 KSB 200):

- overlooking unusual circumstances;
- overgeneralising when drawing conclusions based on observations collected during the audit;
- using inappropriate assumptions in determining the type, timing and scope of testing procedures and evaluating their results.

In addition, now that management's estimates relevant to assessing the audited entity's ability to continue as a going concern are subject to particularly high risks, the statutory auditor / audit firm should maintain professional scepticism toward estimates of (Article 69(3) of the Law) fair value and impairment of assets, reserves and future cash flows. Such a need arises primarily from the fact that the valuation

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<sup>1</sup> [Footnote of the Editorial Board]: The lack of definition of 'professional scepticism of the audit firm' may be due to the fact that scepticism as an attitude can only be an attribute of a person, just like all the ethical values. However, the audit firm is an environment in which 'professional scepticism' as an attitude of action of the people in it should be nurtured, due to the need to uphold the professionalism of its operation.

of the aforementioned categories can be particularly sensitive to the impact of uncertainty attributes in business operations and environment. In view of this, the mentioned areas require sharpening the attentiveness of the study, which translates directly into increased professional scepticism. This issue is particularly important for audit periods beyond 2020.

### **3. The importance of professional scepticism in scientific research from 1993 to 2023**

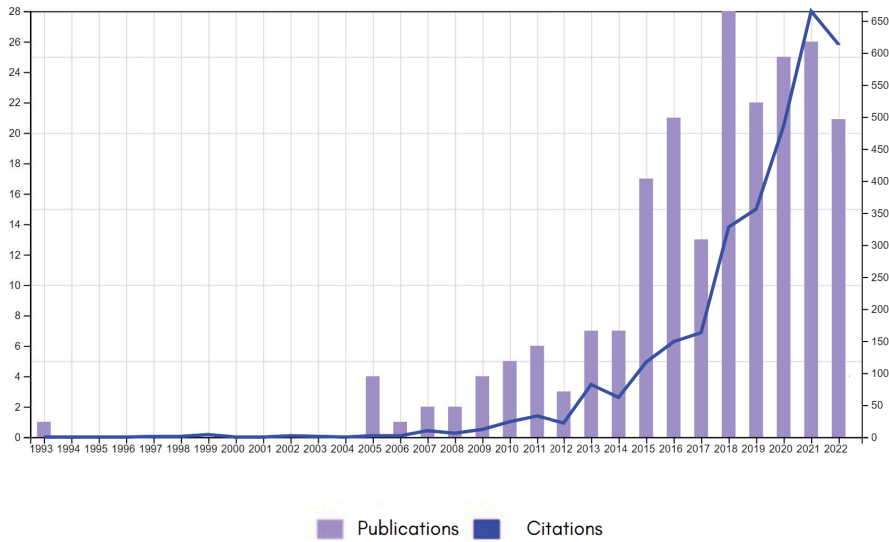
#### **3.1. Basic assumptions of the bibliometric study**

For the purposes of this publication, bibliometric analysis was used to assess changes in the importance of professional scepticism. For this purpose, a local database of articles available in the Web of Science database published between 1901 and 2022 was generated. Studies that meet the following criteria were accepted into the database: in one of the main subject areas, 'professional scepticism', research belongs to the scientific area of economics or to management. On this basis, 172 publications from 1993–2022 were obtained. The trend in publication and citation intensity is shown in Figure 1.

Three phases can be distinguished in the period presented, coinciding with the decades of the period analysed. The first decade saw single articles on professional scepticism being published, while the second decade saw several articles a year. The last decade of the period analysed was characterised by a significant increase in the interest in the issue analysed – both in terms of the number of the articles published (more than 80% of the articles published in the period analysed) and of the citations thereof. However, it is from 2017 onward that research on professional scepticism became most popular. In the period between 2017 and 2022, 60% of the articles on such research were published, as entered in the database of local articles published in 1993–2022.

The analysed articles were published in 74 journals, which means significant dispersion. The largest number of publications in the study area (43%) was published by six reputable journals specialising in accounting and financial auditing (see Table 1).





**Figure 1.** Analysis of publication trends and research citations in the statutory auditor’s skepticism from 1993 to 2022

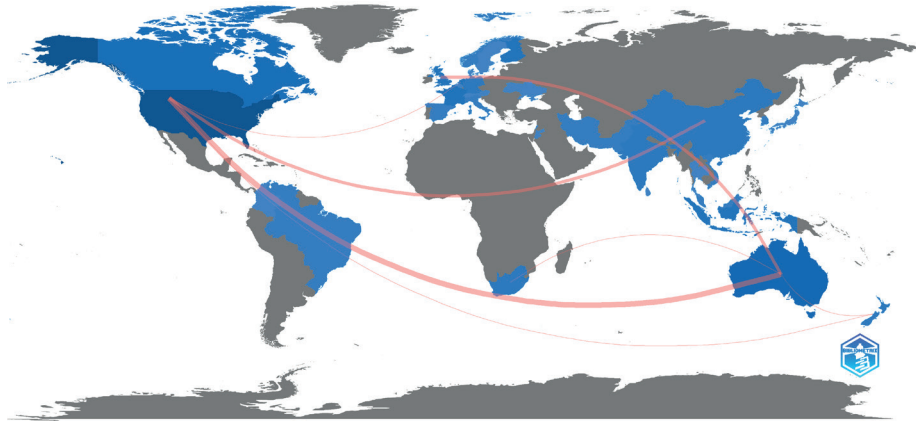
Source: Local database from *Web of Science*, data as of 28 March 2023

**Table 1.** Journals publishing the most research on professional auditor skepticism between 1993 and 2022

Magazine	Share of publications
<i>Auditing: A Journal of Practice Theory</i>	10.112%
<i>Contemporary Accounting Research</i>	9.551%
<i>Accounting Organizations and Society</i>	6.742%
<i>Behavioral Research in Accounting</i>	5.618%
<i>Managerial Auditing Journal</i>	5.618%
<i>Accounting Review</i>	5.056%

Source: Local database from *Web of Science*, data as of 28 March 2023

The largest number of publications on auditor professional scepticism comes from the United States (62%), Australia (13%), Canada (6%), France (4%), the United Kingdom (3%), Finland (3%), Indonesia (3%) and the Netherlands (3%). The local database does not include articles from Poland. This picture, with its juxtaposition of the characteristics of the economies of the countries mentioned and the risks involved, can be rich in various interpretations. However, they would require further complementary research, which will not be presented here. The geographic origin of articles on professional scepticism and their cross-citation is presented in Figure 2.



**Figure 2.** Geographical origin of articles on professional auditor scepticism and their cross-citation between 1993 and 2022

Source: Biblioshiny for Bibliometrics based on local database from Web of Science, data as of 28 March 2023

Citation statistics indicate a high interest in the topic of professional scepticism. The number of citations was 2516, and the average publication citation rate was 15 (see Table 2).

**Table 2.** Citation statistics for publications on professional scepticism from 1993 to 2022

Data	Number
Publications	172
Citations	2516
Average citation rate per publication	15
H-Index	29

Source: Local database from Web of Science, data as of 28 March 2023

Generalising the results of scientific research in the area of the statutory auditor's scepticism, it can be noted that they indicate the need for an in-depth analysis of this attitude in the audit study. The authors of the study not only seek, through a positive approach, to explore the mechanisms governing the use of this trait of statutory auditor behaviour in practice, but also, in large part, point to a normative belief in the need for adaptive changes in the understanding of this trait to the new operating conditions of the business entities studied.

### **3.2. A positive approach to professional scepticism in light of a bibliometric study**

The positive approach used in accounting science explains reality, that is to say, it serves to explain the facts and processes that occur in accounting practice. It answers the questions 'How is it?' and 'Why is it so?' It does so essentially by inductive reasoning. Obtaining answers to these questions is supposed to make it possible to predict economic volumes and the behaviour of accountants, investors or managers (Zyznarska-Dworczak, 2019, p. 113). In formulating conclusions – in the light of positive theory – empirical research is applied, consisting of making hypotheses and testing them on the basis of data obtained through surveys, interviews, controlled experiments and case analysis (Szychta, 1996, pp. 78–84). The bibliometric test of the publication carried out is within the instrumentarium of the positive approach in accounting science, and focused on the topic of professional scepticism, it allows us to identify key observations and conclusions that characterise the status quo of a problem important to the professionalism of statutory auditors.

The bibliometric analysis carried out indicates the following keywords ranked by frequency of occurrence in the analysed articles:

- *professional scepticism (scepticism)*,
- *model (English)*,
- *impact*,
- *estimates/evaluations (judgments)*,
- *achievement/achievement (performance)*
- *risk (risk)*,
- *information (information)*,
- *quality (quality)*,
- *experience (experience)*,
- *management (management)*.



**Figure 3.** Frequency of keywords in research on professional scepticism from 1993 to 2022

Source: *Biblioshiny for Bibliometrics* based on local database from *Web of Science*, data as of 28 March 2023

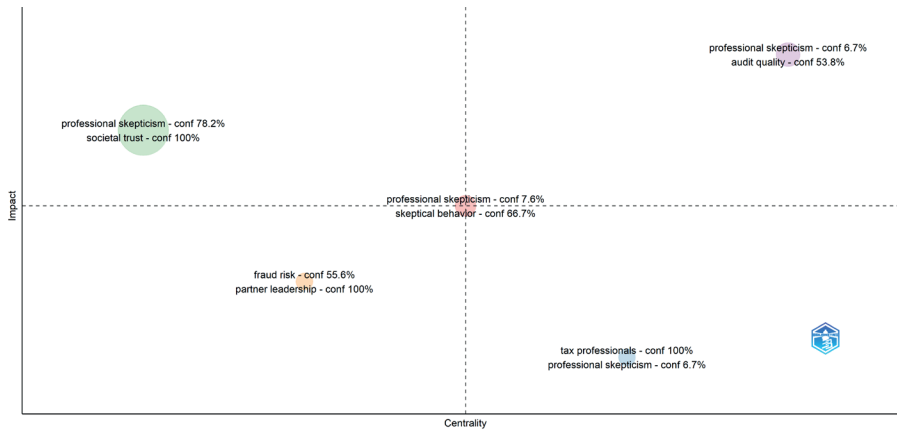
The listed keywords can be grouped into meaning groups, thus showing the interpretive perspective of the term ‘professional scepticism’ (see Figure 4). Three main groups of meanings of ‘professional scepticism’ were identified:

- 1) *societal trust*;
- 2) *skeptical behavior*;
- 3) *audit quality*;

*Partner leadership* as well as *tax professionals* also have an important meaningful connection.

The strongest meaningful relationship is with social trust, however, as the authors of the study emphasise (Ahn, Akamah, 2022), it can have both favourable and unfavourable effects in the conducting of financial statement audits. On the one hand, the statutory auditor solicits public trust, but ‘the low risk of litigation and the longevity of the auditor-management relationship mark the dark side of public trust’. Therefore, it is important to take into account the other groups of meanings, emphasising the provision of appropriate audit quality characteristics, as well as the proper behavioural approach of the auditor himself.

The importance of key words in the study area changes over time. Between 1993 and 2005, the only term associated with professional scepticism was ‘risk’. In the next decade, changes in financial markets, changes in reporting and auditing standards, but also the growing importance of estimation categories, have contributed to the growing power of terms such as model, estimation, performance and information. In the past four years, the research on the very meaning of (strictly) professional scepticism as well as that of model and risk, has apparently increased in importance.



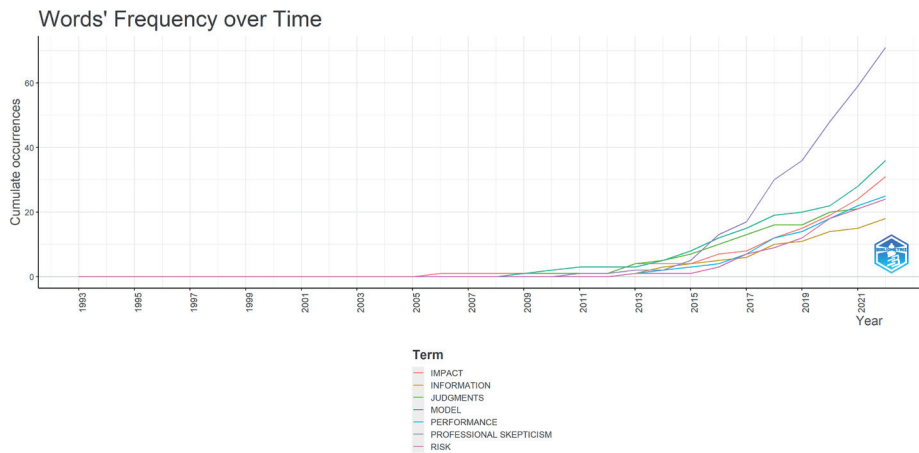
**Figure 4.** Meaning groups of the term ‘professional scepticism’ from 1993 to 2022

Source: Biblioshiny for Bibliometrics based on local database from Web of Science, data as of 28 March 2023

In the next decade, changes in financial markets and changes in reporting and auditing standards as well as the growing importance of estimation categories have contributed to the growing power of terms such as model, estimation, performance and information. In the past four years, the research on the very meaning of (strictly) professional scepticism as well as model and risk, has apparently increased in importance.

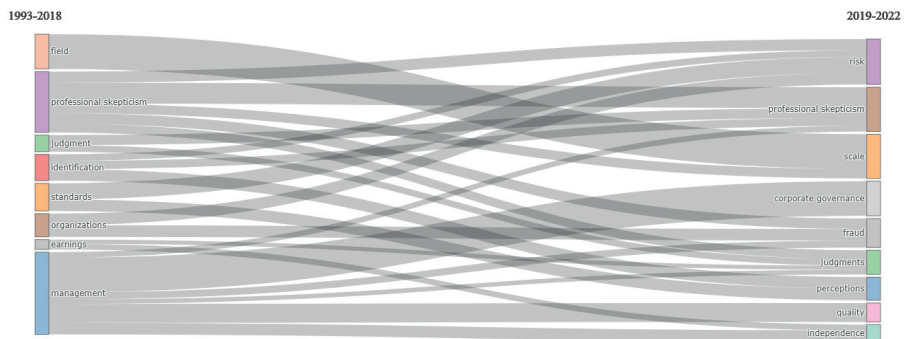
The continuing high importance of risk in professional scepticism research is indicated by the results of the analysis of variation in the formation of meaning groups over time, shown in Figure 6.

Within the three decades of published research on professional scepticism (1993–2022), the period of the last four years stands out significantly, due mainly to the scientific focus of researchers on the key problems of doing business under uncertainty. Research from this period focuses on risk, strictly professional scepticism, scale of operations, corporate governance, fraud, value estimation, as well as on perceptions of the reliability of financial reporting and customer risk assessment, financial statement quality and auditor independence. In the 25 years that preceded it, the research emphasis was on management, strictly professional scepticism, the field, and standards. Although there is now a strong regulatory influence on the way financial statements are audited and standard-setting bodies, regulators and researchers themselves advocate the continued reinforcement of an attitude of scepticism (Hurt, 2010), academic research in recent years has not focused on analysing standard norms relating to professional scepticism.



**Figure 5.** Variability of keyword frequencies in professional scepticism research from 1993 to 2022

Source: Biblioshiny for Bibliometrics based on Web of Science local database, data as of 28 March 2023



**Figure 6.** Variability of keyword meaning bundles in professional scepticism research from 1993 to 2022

Source: Biblioshiny for Bibliometrics based on the Web of Science local database, data as of 28 March 2023

In contrast, an analysis of the publications with the highest citation from 2019–2022 (cf. Table 3) indicates a strong semantic link between professional scepticism and the assurance of audit quality features, as well as the appropriate attitude of the auditor, i.e., his necessary substantive and psychological preparation. Also important is the development of Internet communication techniques, which, by technically supporting the auditor's work, can inhibit scepticism in the modern audit environment, affecting the quality of financial statements.

**Table 3.** Key findings of scientific research in the field of professional scepticism with the highest citation from 1993 to 2022

Publication	Capability of referencing	Research objective	Conclusions
Westermann, Cohen, Trompeter (2019)	70	Assessing the impact of PCAOB Public Company Accounting Oversight Board audits in the context of auditor professionalism, including professional scepticism.	<ul style="list-style-type: none"> <li>• A prerequisite for audit quality is a highly qualified staff, as well as a strong motivation to adhere to the standards of the profession.</li> </ul>
Nolder, Kadous (2018)	66	Conceptualising professional scepticism	<ul style="list-style-type: none"> <li>• A critique of the previous meaning of scepticism as 'being alert' to the possibility of deception, bias and contradictory evidence, and critical evaluation of evidence.</li> <li>• Professional scepticism as the lens through which evidence is interpreted.</li> </ul>
Bennett, Hatfield (2018)	34	Evaluate whether computer-mediated communication (CMC – <i>Computer-Mediated Communication</i> ) reduces auditor questioning during customer interactions compared to face-to-face communication (FTF – <i>Face-to-Face Communication</i> )	<ul style="list-style-type: none"> <li>• FTF interactions include more content and follow-up questions than CMC.</li> <li>• Auditors are more sceptical if the auditor showed non-verbal signals related to fraud than if these specific signals were not present or could not be observed during CMC.</li> <li>• Communication media with reduced channels (e.g., no audio or visual channels)</li> </ul>

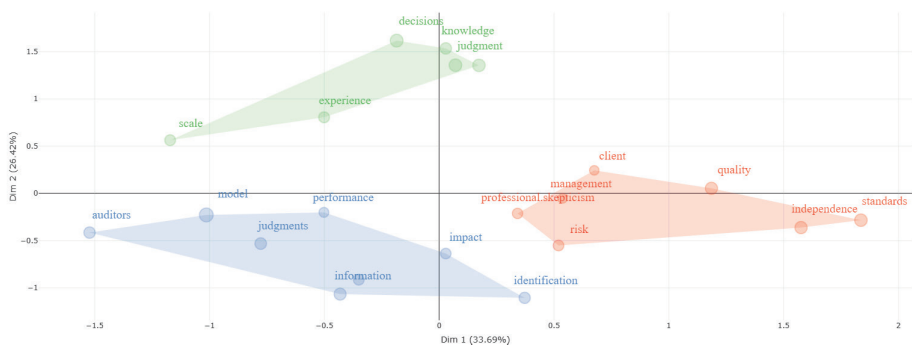
Publication	Capability of refer-encing	Research objective	Conclusions
			are less suitable for solving complex problems
Kadous, Zhou (2019)	25	Assessing how statutory auditors' intrinsic motivation for their work can improve their judgments about complex accounting estimates.	<ul style="list-style-type: none"> <li>Statutory auditors with the right intrinsic motivation deal with a broader set of information, process information more deeply and demand more relevant additional evidence.</li> </ul>

Source: Local database from Web of Science, data as of 28 March 2023

As Westermann et al. pointed out (2019), in an era of heavy regulation, it has become more important than ever to attract and retain a sufficient number of highly qualified and motivated statutory auditors who embody the ‘soul’ of the profession, maintaining professional scepticism, objectivity and due diligence, thus establishing the fundamental conditions for maintaining high-quality auditing.

### 3.3. A normative approach to professional scepticism in light of a bibliometric study

The broad interpretive possibility presented for the meaning of professional scepticism is confirmed by the cluster linkage analysis conducted with bibliographic coupling using Biblioshiny software (Figure 7).



**Figure 7.** Cluster linkages of professional scepticism publications from 1993 to 2022

Source: Biblioshiny for Bibliometrics based on local database from Web of Science, data as of 28 March 2023



The bibliographic coupling method<sup>1</sup> allowed quantitative selection and extraction of a sample of the most bibliographically coupled articles clustered in three research clusters:

- 1) Experience and knowledge as the basis for decisions and estimates in professional scepticism;;
- 2) Determinants of process modelling in professional scepticism activities, estimating and identifying the impact of information resulting from professional scepticism;
- 3) Client relationship management versus risk of not ensuring audit quality and independence required by standards in light of professional scepticism.

The cluster approach can determine the main areas of normative research on the meaning of professional scepticism under uncertainty. Basically, the normative approach in science answers the question 'How and what should be?' and 'What should be applied?', determines the recommended course of action and the desired method or procedure of proceeding, and as well indicates adherence to certain values or standards (Zyznarska-Dworczak, 2019, p. 151).

Cluster One indicates that the primary determinant for applying professional scepticism should be experience and knowledge. According to Henrizi et al. (2021), professional judgment is a skill that a statutory auditor acquires over time. It is only by combining experience and knowledge that judgments can be made, guaranteeing independence from other opinions or biases in the circumstances. In addition, research by Pinsker et al. (2009) emphasises the importance of keeping knowledge up to date and recommends keeping it up to date. Results obtained by Ta et al. (2022), on the other hand, show that factors such as knowledge, experience and incentives positively influence the use of professional scepticism, while workload and time pressure exert a negative influence. This approach is supported by the authors of the study by Donnelly et al. (2021) proving that work-exhausted auditors will adopt a less cognitively demanding strategy and make more sceptical judgments as a more acceptable and safer assessment.

Within the first cluster, studies have also identified a key condition for effective and efficient identification of relevant fraud risks and selection of appropriate audit procedures in the form of professional scepticism on the part of the audit partnership partner (Carpenter and Reimers, 2013). Moreover, the effectiveness of professional scepticism depends on its proper balance between a mild and conservative approach. As the results of McMillan and White's (1993) study indicate,

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<sup>2</sup> Bibliometric coupling assumes that the greater the number of common literature references (references) in two papers in a sample, the greater the similarity between them (Vogel and Guttel, 2013; Zupic and Cater, 2015). It provides a measure of similarity, based on an assessment of the frequency with which two publications have at least one common reference.

an overly conservative approach and a strong focus on error-related evidence can lead to unnecessary audit procedures and thus induce unnecessary costs, reducing the efficiency of the audit conducted. In contrast, according to Rowe's (2019) research, when estimation uncertainty is extreme, auditors feel more comfortable with more audit evidence. Conversely, in the face of moderate estimation uncertainty, auditors feel more comfortable with less audit evidence.

Another perspective on the analysis of the statutory auditor's work is shown by the results of Austin's (2022) study of the impact on this work of the audit processes implemented by various regulatory bodies. Audits lead auditors to focus too much on inspection risk, that is, they are less likely to detect fraud in high-risk areas of the report that are considered low inspection risk.

The findings of the research indicate that not only experience and knowledge, but also adequate dedication of time to the audit should be the basis for maintaining the auditor's professional scepticism. Its proper meaning is not built by a conservative approach, but by adaptation to the given circumstances of the study.

Cluster Two is concerned with modelling the processes of professional scepticism activities and estimating and identifying the impact of information resulting from professional scepticism. The authors of the study (Glover and Prawitt, 2014) call for recognition of the influence on the extent of professional scepticism of a group of factors, referred to by the study's authors as the structural levels of the statutory auditor's environment. These include: the individual qualities of the statutory auditor, the cooperation of the engagement team, the audit firm's quality assurance system, and in a broad sense, public confidence in the audit profession. Each level can simultaneously carry risks and factors that strengthen the quality of auditing. The need to take into account individual characteristics of the statutory auditor in assessing the effectiveness of professional scepticism is also demonstrated by the research of Ying et al. (2022). The authors proved that the impact on auditors' sceptical judgments is stronger for auditors who feel more pressure of social influence on the results of their work than those who do not feel such pressure as strongly or feel it on a much smaller scale. Vulnerability of auditors to environmental pressures is also taken up by research by Gates et al. (2009). The authors showed that auditors, like other professional groups, are not immune to information presented in the media, which is inconsistent with auditors acting in accordance with professional conduct and professional scepticism. They point out the need to educate and make auditors aware of this issue.

Also Eutsler et al. (2018), in line with social psychology research, indicate that an auditor's sceptical attitude depends on his personal characteristics. Auditors who score low on scepticism as an internal sense (sensitisation) are the least likely to identify control exceptions and recommend more detailed additional research be undertaken. Church (2020), in turn, emphasises, auditors' narcissistic

traits fuel competitiveness and emboldens them to be unwavering in negotiations, potentially lengthening the negotiation process but leading to more conservative negotiation outcomes. Narcissistic auditors are more likely to engage in negotiations that reach an impasse or take longer to resolve. Cluster Three relates to the risk of not assuring the quality and independence of the audit vis-à-vis the need for customer relationship management. Rennie et al. (2010) indicate that auditors consider their clients' trust in their work to be important. However, the statutory auditor's awareness of the existence of such trust in the relationship with his particular client should not impinge on limiting the application of professional scepticism in the audit of that client's reports. One way to ensure professional scepticism in such situations is through a rigorous audit process and adopting an independent stance. In their normative approach, Nolder and Kadous (2018) propose a dual conceptualisation of professional scepticism. The authors, in order to improve the predictive power of scepticism for evidence gathering, propose requiring the auditor to consider 'attitude' in addition to the sceptical mindset required by the standards to date. According to the authors, mindset drives the cognitive processing that gives way to critical thinking, which is an important part of professional scepticism and is required by the standards. The inclusion of a mindset component reflects the idea that scepticism involves not just doubt but the critical analysis of evidence. Attitudes, on the other hand, include affective and cognitive components to predict intentions and behaviour. Attitudes allow us to recognise the influence of social factors on evaluative judgments. Including this element expands the notion of evaluation to include auditors' feelings as well as their beliefs about risk and improves the predictive power of scepticism in auditors' evidence gathering (Nolder and Kadous, 2018).

In addition, according to a study by Asbahr and Ruhnke (2019), reporting value estimation as a key audit matter influences the statutory auditor's judgment on the estimate and the corresponding action. Actions of scepticism in the form of proposed adjustment amounts are much smaller when the estimate is cited as the key issue of the study. This approach limits the expected handling of the required procedures.

In summary, the normative approach in the presented scientific research in the field of professional scepticism of the statutory auditor indicates the need to view the importance of professional scepticism through the prism of the conditions that must be ensured for due diligence in the implementation of auditing. These include the experience and knowledge of the statutory auditor, the absence of time pressure during the audit, the professional scepticism of the audit firm partner, and the rejection of an extremely sceptical attitude. In turn, the assessment of the statutory auditor's retention of professional scepticism and its effectiveness should take into account a number of factors, including but not limited to the

impact on the audit process of online communication techniques and the need to model audit processes. Also important here is the observation that a statutory auditor's overly strong and long-lasting relationship with clients significantly increases the risk of not ensuring professional scepticism in the statutory auditor's work, and thus may be a premise for a lower quality audit.

### Summary

Professional scepticism is an important feature of auditing in practice and is an interesting area for research. The article outlines the importance of maintaining the statutory auditor's professional scepticism in auditing an entity's financial statements. It reinforces them by pointing to the functioning of both business entities and auditors themselves under the conditions of special economic and business uncertainty today. On the ground of practice, the problem of professional scepticism is presented in the light of legal regulations and professional studies. On the ground of science – two-pronged, i.e., in the light of empirical research conducted in the canons of positivist and normative approaches. In Poland, the basic legal act on the application of professional scepticism is the Act on Statutory Auditors, Audit Firms and Public Supervision of 11 May 2017, as well as national auditing standards. In particular, the analysis of the standards pointed to the importance of the auditor's professional scepticism in the face of growing uncertainty, implying an increased risk of fraud. The conclusions of professional studies presented indicate that uncertainty can increase the risk of material misstatement of financial statements through, among other things, a lack of interest on the part of boards in the quality of financial reporting, including a lack of communication with the auditor, a lack of adequate internal controls, bookkeeping geared firmly toward tax accounting, and the selection of an auditor according to the price criterion of his services. Awareness of these factors is important for professional – i.e., fulfilling the attribute of sceptical judgment of audited matters, documents and areas – behaviour of the statutory auditor, regardless of the trust relationship between him and the client.

In particular, the bibliometric method of bibliographic coupling was used to analyse the importance of professional scepticism in scientific research, thus highlighting the latest literature and revealing mainstream research. The analysis performed made it possible to identify publications whose quantitative selection (using *Biblioshiny for Bibliometrix* software) indicated trends in scientific research on the title issue (quantitative trend, geographic location of research, specification and intensity of use as knowledge carriers of specific journals and citations). The bibliometric test, in turn, also identified the main keywords related to professional scepticism, their

variability over time, as well as the possibility of combining into meaning groups. Publications over the past four years, however, indicate a strong semantic link between professional scepticism and the assertion of qualitative characteristics of activities in financial auditing. They reinforce the links between professional scepticism and the appropriate attitude of the auditor, his necessary substantive preparation and psychological characteristics.

With the help of the aforementioned bibliographic coupling survey tool, findings on professional scepticism were also rearranged in light of three research clusters. This analysis identified the conditions for effective professional scepticism: the auditor's experience and knowledge, the absence of time pressure during the audit, the professional scepticism of the audit firm's partner, and the rejection of an extremely conservative sceptical attitude. At the same time, key determinants of the statutory auditor's sceptical attitude were identified, and among them, such as the auditor's personality traits, disclosure of key audit matters, the relationship with the client, its duration.... The cluster perspective made it possible to outline a framework, pointing the way for future research directions of the concept under study.

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## **Acts, regulations and other guidelines**

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