

# The global landscape of audit committee studies: A bibliometric review

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## Abstract

This research aims to try to find the latest issues related to the audit committee studies such as the use of technology, social dan environmental responsibility, so that this research can be expand the literature related to audit committee studies. This research design uses a Systematic Literature Review (SLR) with a bibliometric approach to identify research trends related to audit committee studies. In line with the results of this research, audit committee studies have increased since 2022. More than 50 percent of publications classified as "article" and "journal" describe the highest source type. The USA is the most active country in conducting research related to audit committee studies. University Utara Malaysia is the most active institution that has published publications related to audit committees. This research conducted studies on audit committees, published for 17 years in the Scopus database.

Keywords: Audit committee, literature review, bibliometric

## **INTRODUCTION**

Audit committees have been important in corporate governance since their founding in the early 1940s (Verschoor, 2015). Many people have advocated the audit committee as a deterrent to financial statement fraud. The National Commission on Fraudulent Financial Reporting recommended that the Securities and Exchange Commission (SEC) require public companies to maintain the existence of an audit committee (Menon & Deahl Williams, 1994).

Accounting scandals and concerns about the quality of financial reports have led to many calls for improving the effectiveness of audit committees (Bronson et al., 2009). The existence of an audit committee is expected to improve audit quality and governance (Nik Abdul Majid et al., 2022). Audit committee responsibilities have increased significantly in recent years due to uncertainty arising from changes in statutes, regulations, laws, and the risk environment for companies, directors, and officers, as well as the accounting and audit substance of the audit committee's work (Jr et al., 2010).

International corporate failures and scandals have led to regulatory changes to the function and composition of audit committees (Martinov-Bennie et al., 2015). Scandals involving companies such as Enron, HealthSouth, and WorldCom led to the creation of the Sarbanes-Oxley Act in 2002. This law has been called the most significant change in public corporate governance since the passage of the securities laws in the mid-1930s (Verschoor, 2015).

After the passing of the Sarbanes-Oxley (SOX) Act in 2002 in the United States, this had an impact on corporate responsibility and supervision. The act took steps to improve audit quality and auditor independence by requiring an independent audit committee instead of management to make decisions about the appointment, dismissal, and compensation of auditors and the approval of most non-audit services (Hoitash, 2009).

The audit committee's role is to stand objectively between management, external auditors, and shareholders to ensure they receive complete, timely, and accurate financial information subject to appropriate oversight (Jr et al., 2010). Audit committees are recognized globally as an important governance mechanism for ensuring the integrity of financial reporting and audit processes (DeZoort et al., 2002). In addition, the audit committee can play a role in helping the board to pay adequate attention

to tax risk management because financial and risk-related matters are usually handled at the audit committee level before being brought to the attention of the board of commissioners (Deslandes, 2020). Given the history of the development of audit committees, most duties stipulated by law tend to relate to financial affairs, especially the preparation and audit of financial reports. Today, the audit committee's duties have evolved to include direct and exclusive responsibility for external auditors' selection, retention evaluation, and performance monitoring. The audit committee's function also includes monitoring the company's financial reports to the public, evaluating the effectiveness of internal control, and reporting thereon, and compliance with laws and regulations (Verschoor, 2015).

The audit committee is only one of four internal characteristics of the board of directors, but the audit committee plays an important role in internal control and external auditor services. SOX and The Governance Rules of the Listing Firm of China emphasize the critical role of audit committees in overseeing internal controls and coordinating external audit services (Zheng et al., 2019). The audit committee is important in external oversight (Hoitash, 2009). Many view audit committees as an important governance mechanism with the potential to significantly improve corporate financial reporting quality, thereby ensuring greater transparency for financial markets and individual shareholders (Ghafran, 2013).

The new audit committee system was developed in China from late 2007 to 2008. In January 2002, the China Securities Regulatory Commission (CSRC) and the National Economic and Trade Commission jointly issued a guideline stating that the board of directors of listed companies can establish an audit committee by shareholder conference decisions. On December 17, 2007, the CSRC issued "guidelines for the content and format of information disclosure of companies issuing public securities," emphasizing that directors must also include audit committee performance reports. Slowly but surely, as of December 31, 2008, 60.8 percent of registered companies had formed audit committees (Zheng et al., 2019).

Much research has been conducted on audit committees, including audit committee characteristics (Abbott et al., 2003, 2004; Carcello & Neal, 2003; Deslandes, 2020), audit committee quality (Krishnan, 2005; Zhang, 2007), audit committee effectiveness (DeZoort et al., 2002), and others. This research tries to expand the literature related to audit committee studies, in addition it aims to try to find the latest issues related to the audit committee such as the use of technology, social and environmental responsibility by conducting bibliometric analysis by formulating the following research questions:

RQ1: What are the current trends and impact of publications in audit committee studies?

RQ2: Which countries, institutions, and authors have been the most productive and influential in audit committee studies?

RQ3: Which audit committee research themes are most common among researchers?

RQ4: Which articles have had the most influence on audit committee studies?

This article is divided into four parts consisting of research methodology, results, and discussion, as well as a discussion of various complex considerations and problems in answering research questions. This research aims to gain a deeper understanding and propose recommendations for future research related to audit committee studies.

### **RESEARCH METHODS**

This research uses the Scopus database to analyze the publications collected by applying the words "audit committee" in the title and keyword columns. This research analyzes all types of publications published from 2006 to 2023. Scopus is a multidisciplinary database containing citations and abstracts from peer-reviewed articles, journals, books, patent records, and conference publications. Currently, the Scopus database contains more than 3,062 peer-reviewed journals, 53,102 books, and 14,995 web pages.

This study used a defined search query to collect all types of publications from the Scopus database. Bibliometric analysis was carried out as of June 2023 on the Scopus database. The search term "audit committee" was applied to the title and keyword fields to search for relevant publications released in any language related to audit committee research. This study excludes erratum, retracted, and duplicate publication types to avoid counting duplicate or incorrect publications.

Microsoft Excel 2013 was used to calculate each publication's frequency and percentage and create appropriate graphical representations. VOS viewer version 1.6.18 was used to create and visualize the bibliometric network, and Harzing Publish, or Perish was used to calculate citation metrics. Figure 1 is presented below to show the research search strategy.

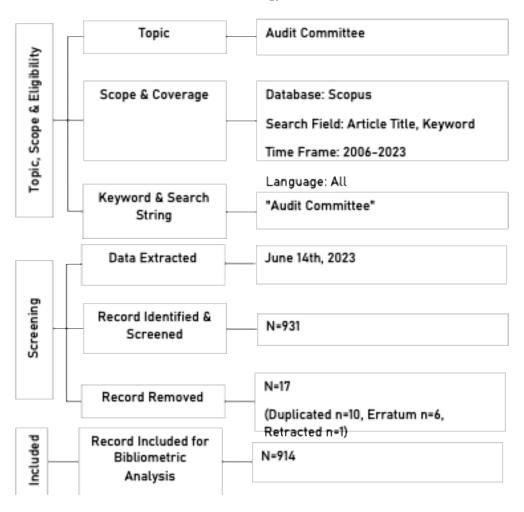


Figure 1. Flow Diagram of The Search Strategy Source: Processed data

## **RESULTS AND DISCUSSION**

This section presents the results obtained from the bibliometric analysis to solve the problem raised in the research. This research aims to answer the trends and impact of publications in audit committee studies, to find out the most productive and influential countries, institutions, and authors in audit committee studies, to find out the most common themes among researchers, and to find out the most influential articles in audit committee studies. Analysis for academic works extracted in the search process is based on the following attributes:

- a. Annual growth of publications;
- b. Type and source of publication;
- c. Language, subject area, and keyword analysis;
- d. Distribution of publications by country;
- e. Author's analysis;
- f. Title and abstract analysis; and
- g. Quote analysis.

Annual growth data until June 2023 is also presented, including frequency and percentage. To understand the current trend and impact of publications in audit committee studies, an analysis was carried out by dividing the total publications by year, country, journal, Author, and institution to analyze publication trends.

## Publication trends per year

Table 1 summarizes the audit committee research publications from 2006 to 2023. As can be observed in the table, most of the publications were carried out in 2022, namely 118 publications or 12.91 percent. Publications released in 2009 were the most cited publications, with 1,919 citations, and the average citations per publication was 68.54. Publications published in 2009 related to issues such as auditor independence (Bronson et al., 2009; Magilke et al., 2009), characteristic of audit committees (Persons, 2009; Rahmat et al., 2009), internal control (Goh, 2009; Naiker & Sharma, 2009), as well as other topics such as earning management, quality of financial reporting, and others. It can be observed in Table I that research on audit committee studies continues to increase from 2020 to June 2023, reaching 41 publications (Figure 2). In addition, issues related to audit committee research are also growing such as the issue of audit committee attributes (Alshirah et al., 2020; Arif et al., 2020; Buallay & Al-Ajmi, 2020; Raimo et al., 2021), the quality of financial statement (Alzeban, 2020; Omer et al., 2020), gender (Chijoke-Mgbame et al., 2020; Oradi & Izadi, 2020), audit committee structure (Nguyen, 2022), audit committee and sharia committee (Nguyen, 2021), and many other.

After identifying the annual publication growth, the types of documents and sources related to audit committee studies were analyzed.

## Document types and sources

The document type represents "article, review, conference paper" and others, while the source type represents the document source such as "conference paper, journal, book" and others. The collected data is evaluated to determine the document type and its source. Publications related to audit committee studies have been grouped into eight categories of document types, as listed in Table 2.

Table 2 shows 826 publications were classified as "articles," or 90.4 percent. Then, as many as 42 publications were classified as "conference papers," or 4.6 percent. Meanwhile, "editorial," "book," and "letter" are types of documents that are classified as less than 5 percent of all publications. The results showed that audit committee studies are still growing large to be published with document types such as "conference papers, editorial, book, and letter."

Furthermore, publications in this research are divided into four types of sources, namely "conference paper, journal, book series, and book." It can be observed in Table 3 that the source type "journal" represents the highest source type, namely 826 publications or 90.4 percent. Meanwhile, the source type "book series" has the minor contribution, namely 17 publications or 1.9 percent of the total publications.

After identifying the document and source type, the next step is identifying the Language. Analyzing the Language of publications aims to identify in which country languages the maximum research has been published.

Years	Total	(%)	NCP	TC	C/P	C/CP	b	g
	Publications							U
2006	24	2,63	19	1.327	55,29	69,84	11	24
2007	28	3,06	23	1.682	60,07	73,13	16	28
2008	21	2,30	16	973	46,33	60,81	10	21
2009	28	3,06	26	1.919	68,54	73,81	18	28
2010	27	2,95	26	1.106	40,96	42,54	15	29
2011	37	4,05	34	1.259	34,03	37,03	17	35
2012	36	3,94	34	1.019	28,31	29,97	15	31
2013	33	3,61	30	1.045	31,67	34,83	16	32
2014	49	5,36	44	1.526	31,14	34,68	18	38

Table 1. Growth of Publication by Year

Years	Total	(%)	NCP	TC	C/P	C/CP	b	g
	Publications							
2015	47	5,14	45	1.164	24,77	25,87	20	33
2016	44	4,81	39	731	16,61	18,74	14	26
2017	44	4,81	39	827	18,80	21,21	17	28
2018	76	8,32	70	1.284	16,89	18,34	22	32
2019	68	7,44	54	744	10,94	12,78	16	24
2020	95	10,39	78	939	9,88	12,04	19	24
2021	98	10,72	73	482	4,92	6,60	11	17
2022	118	12,91	73	310	2,63	4,25	10	13
2023	41	4,49	9	18	0,44	2,00	2	3
Total	914	100%	732	18.355	502	579	267	466

**Notes**: TP: Total number of publications, NCP: Number of cited publications, TC: Total citations, C/P: Average citations per publication, C/CP: Average citation per cite publication. Source: Processed data



Figure 2. Total Publications and Citations by Year Source: The authors

<b>Table 2.</b> Type of Documents	Table	2. Type	e of Documents
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Type of Documents	Total Publications	(%)
Article	826	90,4
Conference Paper	42	4,6
Review	18	2,0
Book Chapter	17	1,9
Note	5	0,5
Editorial	2	0,2
Book	2	0,2
Letter	2	0,2
Total	914	100%

Source: Processed data

## Research publication language

The data presented in Table 4 presents data on the languages most frequently used in publications. Table 4 shows that English is the most frequently used Language and represents 98 percent of the total

publications. Some publications also use languages such as Spanish, Korean, German, French, Portuguese, Czech, and Arabic, which represent less than 1 percent of the total publications. English is the most commonly used international language in academic and professional fields, this can allow researchers from different countries who have different cultural backgrounds and languages can access the information without language barriers. In addition, the publication in English allows the researcher to reach a larger audience at a global level, so that the audience can capture the information conveyed in the research and develop it by conducting a study on the audit committee. In the end, research on the audit committee can be wider and deeper.

Type of Documents	<b>Total Publications</b>	(%)
I	826	90,4
Journal	42	4,6
Conference Proceeding Book	29	3,2
Book Series	17	1,9
Total	914	100%

Table 3.	Type	of Documents
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Source: Processed data

## Subject area

Subject area analysis categorizes published documents depending on the subject area. It can be observed in Table 5 that 16 subject areas of audit committee study were identified, 79.5 percent of which were publications in the subject area "Business, Management, and Accounting," followed by the subject area "Economics, Econometrics, and Finance," with 97 publications or 10. 6 percent. Other subject areas such as "Health Profession," "Medicine," and "Pharmacology, Toxicology, and Pharmaceutics" also contributed less than 1 percent to audit committee studies.

However, the study showed that the audit committee was also discussed in other unexpected fields such as "Engineering and Technology" (Garba & Mohamed, 2018; Manurung et al., 2018; Zaitul & Ilona, 2018), "Environmental and Sustainability" (Salleh et al., 2022; Tkachenko & Pervukhina, 2020), and other subject areas such as "Art and Humanities" (Nguyen, 2021).

Language	Total Publications	(%)
English	896	98,0
Spanish	6	0,7
Korean	5	0,5
German	3	0,3
France	1	0,1
Portugues	1	0,1
Czech	1	0,1
Arabic	1	0,1
Total	914	100%

Table 4. Language

Source: Processed data

Having ascertained the current trends and impact of publications in audit committee studies, the next step is to analyze the most productive and influential countries, institutions, and authors on audit committee studies to answer the second question of this research.

#### Publications by country

This section focuses on identifying the most productive countries in audit committee studies. Sixty-nine countries have contributed by publishing publications related to audit committees (Table 6). Table 6 presents data on the 20 countries most active in publishing audit committee studies.

Subject Area	ТР	(%)
Business, Management and Accounting	727	79,5
Economics, Econometrics and Finance	97	10,6
Social Sciences	20	2,2
Multidisciplinary	18	2,0
Engineering and Technology	14	1,5
Computer Sciences	8	0,9
Environmental and Sustainability	8	0,9
Health Profession	5	0,5
Medicine	4	0,4
Earth and Planetary Sciences	3	0,3
Information Systems	3	0,3
Decision Sciences	2	0,2
Pharmacology, Toxicology and Pharmaceutics	2	0,2
Chemistry	1	0,1
Mathematics and Statistics	1	0,1
Arts and Humanities	1	0,1

Table 5. Subject Area

The USA was ranked first as a country that was active in contributing, with a total of 188 publications, followed by Malaysia and Indonesia, ranked second and third with 95 and 69 publications, respectively. Regarding citations, the USA ranks first in the most cited publications with 6,551 citations, Australia ranks second with 1,461 citations, and the UK ranks third with 1,406 citations.

The Enron, HealthSouth and WorldCom scandals prompted the formation of the SOX Act 2002 and led to the most significant changes in public corporate governance (Verschoor, 2015). After SOX Act 2002 was passed in the United States, there were major changes in terms of responsibility and supervision of companies (Hoitash, 2009). It is not surprising that studies on audit committees are widely conducted in the United States and research originating from that country is widely cited because these scandals have made the United States a beacon of study related to audit committees.

After identifying the Distribution of publications by country, the next step is identifying authors to determine the state of collaboration and the most active authors in audit committee studies.

#### Author's analysis

Author analysis will focus on identifying the authors most active in audit committee studies. Table 7 shows the most active authors with at least five publications in the field of audit committee studies. Velte, P. and Aljaaidi, K. S. are among the eight most influential authors of audit committee studies and have published more than five publications.

Country	ТР	NCP	ТС	C/P	C/CP
USA	188	170	6.551	34,85	38,54
Malaysia	95	67	1.322	13,92	19,73
Indonesia	69	41	318	4,61	7,76
Australia	53	50	1.461	27,57	29,22
UK	46	41	1.406	30,57	34,29
China	42	36	742	17,67	20,61
Canada	28	27	1.101	39,32	40,78
Spain	28	24	589	21,04	24,54
Saudi Arabia	24	15	168	7,00	11,20
Nigeria	20	17	73	3,65	4,29
Germany	19	13	151	7,95	11,62
South Korea	18	14	115	6,39	8,21
Tunisia	17	15	353	20,76	23,53

Table 6. Publications by	y Countries
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Country	ТР	NCP	ТС	C/P	C/CP
Taiwan	16	14	105	6,56	7,50
New Zealand	16	15	340	21,25	22,67
Jordan	15	9	47	3,13	5,22
Bahrain	12	9	59	4,92	6,56
Iran	11	9	112	10,18	12,44
Georgia	11	10	450	40,91	45,00
France	10	7	209	20,90	29,86
Notes: TP: Total number of	publications, N	NCP: Numbe	r of cited p	ublications,	TC: Total

citations, C/P: Average citations per publication, C/CP: Average citation per cite publication.

Source: Processed data

Sultana, N. is the Author who received the highest number of citations, namely 246 citations, followed by Alzeban, A. with 114 citations. Sultana's most cited study is titled "Audit Committee Characteristic and Audit Report Lag" (Sultana, 2015) with a total of 111 citations, where this study aims to determine whether the composition features of audit committees are related to the timeliness of financial reporting by companies in Australia.

Next, the analysis relates to institutions to identify which universities are more active in responding to issues regarding audit committees.

#### Most active institutions

Institutional analysis is the final part of answering the second research question. This analysis will focus on identifying institutions that are active in responding to issues within the scope of the audit committee study. Table 8 shows that University Utara Malaysia is a university active in audit committee studies with 22 publications. University of Technology MARA is the second-highest university, followed by Kennesaw State University in third place.

Author's	Affiliation	Country	Т	NC	TC	C/	C/C	
Name		•	Р	Р		Р	Р	
Velte, P.	Universitat Hamburg	Germany	7	7	107	15,3	15,3	
Aljaaidi,	Prince Sattam bin Abdulaziz	Saudi	6	3	18	3,0	6,0	
K.S.	University	Arabia	0	5	10	5,0	0,0	
Alzeban, A.	King Abdulaziz University	Saudi	5	5	114	22,8	22,8	
mzeban, m.	King Abdulaziz Oniversity	Arabia	5	5	114	22,0	22,0	
Bala, H.	Kaduna State University	Nigeria	5	4	16	3,2	4,0	
Salleh, Z.	Universiti Malaysia	Malaysia	5	5	75	15,0	15,0	
Ganeri, Z.	Terengganu	111111119514	5	5	15	15,0	15,0	
Song, B.	Gachon University	South	5	1	5	1,0	5,0	
bolig, D.	Gaenon Chiversity	Korea	5	1	5	1,0	5,0	
Sori, Z.M.	Universiti Putra Malaysia	Malaysia	5	2	9	1,8	4,5	
Sultana, N.	Curtin University	Australia	5	5	246	49,2	49,2	
Notes: TP: T	Notes: TP: Total number of publications, NCP: Number of cited publications, TC: Total							
citations, C/I	P: Average citations per publication	tion, C/CP: A	verage	citatio	n per o	ite		
publication.								

Table 7.	Authorship	Analysis

Source: Processed data

University Utara Malaysia is very active in conducting various research on audit committee related to various issues such as financial reporting (Abdullah, 2006; Ismail, 2011), audit committee characteristics (Saleh, 2007), professionalism of audit committee (Badara, 2014), and other. After discussing all the issues related to the second research question, the next step is to identify the audit committee study themes that are most common among scholars. This analysis also answers the third question in this research.

## Keyword analysis

Keyword analysis and co-occurrence analysis were carried out to answer the third research question using VOS viewer software. VOS viewer is used to visualize the bibliometric network to map the keywords provided in each publication (Figure 3). Figure 3 displays an image of the strength of the connection between keywords, which can be observed in the connecting lines' color, circle size, font, and thickness. The keywords mentioned are often classified into the same color. Based on the analysis, five clusters in the audit committee study have been developed based on the Author's keywords. For example, audit committee characteristics are often associated with firm performance, Nigeria, moderating effect, empirical study, and financial performance, which are colored blue, are closely related, and often appear together.

At the same time, after removing the core keywords specified in the search query, namely audit committee, words such as role, director, expertise, and corporate governance are some of the most frequently occurring keywords (co-occurrence) (Table 9).

After conducting keyword analysis, the next step is to conduct citation analysis to understand common themes among scholars better.

Institution	Country	ТР	NCP	TC	C/P	C/CP
Universiti Utara Malaysia	Malaysia	22	19	205	9,3	10,8
Universiti Teknologi MARA	Malaysia	19	13	428	22,5	32,9
Kennesaw State University	Georgia	10	9	420	42,0	46,7
University of Sfax	Tunisia	10	9	178	17,8	19,8
Xi'an Jiaotong University	China	9	6	41	4,6	6,8
Universitas Indonesia	Indonesia	9	4	13	1,4	3,3
Universiti Putra Malaysia	Malaysia	8	4	75	9,4	18,8
Universiti Malaysia Terengganu	Malaysia	8	5	75	9,4	15,0
Prince Sattam bin Abdul Aziz University	Saudi Árabia	8	4	21	2,6	5,3
University of Newcastle	Australia	7	7	204	29,1	29,1
Ferdowsi University of Mashhad	Iran	7	5	81	11,6	16,2
Universitat Hamburg	Germany	7	6	48	6,9	8,0
University of Bahrain	Bahrain	7	4	29	4,1	7,3
Covenant University	Nigeria	7	6	29	4,1	4,8
University of Tennessee	ŬŠA	6	5	368	61,3	73,6
Florida International University	USA	6	5	319	53,2	63,8
Massey University	New Zealand	6	6	197	32,8	32,8
Univ. of Economics Ho Chi Minh City	Vietnam	6	6	110	18,3	18,3
Universitas Airlangga	Indonesia	6	3	44	7,3	14,7
Universitas Diponegoro	Indonesia	6	5	41	6,8	8,2
Notes: TP: Total number of publications, NCP: Number of cited publications, TC: Total citations,						
C/P: Average citations per publication, C/CP: Average citation per cite publication.						

Table 8	Most Active	Institution
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Source: Processed data

## Quote analysis

Table 10 summarizes audit committee study citation metrics from 2006 to 2023 in the Scopus database. Citation metrics show that over 17 years (2006-2023), were 18,355 citations cited for 914 publications, with an average of 1,079.7 citations per year.

To answer the question of the most influential publications in audit committee studies, an analysis of 914 publications was carried out by referring to total citations. Table 11 shows that the article by Beasley (2009) entitled The Audit Committee Oversight Process is the most cited publication with 394 citations. The following analysis aims to answer the final research question: the most influential articles in audit committee studies. To further explore common publication themes among scholars, titles and abstracts were analyzed to clarify common themes in audit committee studies.

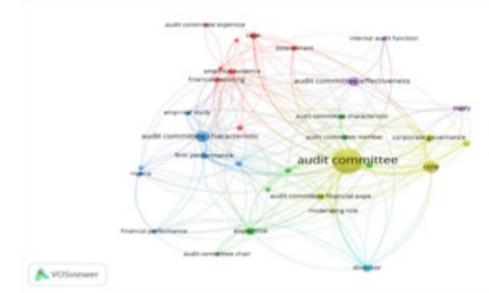


Figure 3. Network Visualization of The Author Keywords Source: The authors

Author Keywords	Total Publications	(%)
Role	89	18,2
Director	38	7,8
Expertise	37	7,6
Corporate governance	35	7,1
Case	27	5,5
Firm performance	27	5,5
Âuditor	25	5,1
Earnings quality	24	4,9
Study	23	4,7
Association	21	4,3
Empirical evidence	20	4,1
Determinant	18	3,7
Empirical Study	16	3,3
External auditor	14	2,9
Nigeria	14	2,9
Internal audit function	13	2,7
Moderating role	13	2,7
Financial performance	13	2,7
Internal audit	12	2,4
Economy	11	2,2

Table 9. Top 20 Keywords

Source: Processed data

### Title and abstract analysis

Title and abstract analysis were used to examine the titles and abstracts of publications collected based on the number of co-occurrences and co-occurrences simultaneously. This analysis uses a binary calculation method in building a co-occurrence network.

Metrics	Data
Reference date	June 14, 2023
Publication years	2006-2023
Citation years	17 (2006-2023)
Total number of papers	914
Total citations	18.355
Citations per year	1.079,7
Citations per paper	20,1
Citations per Author	0,99
Hirsch <i>b</i> -index	66
Egghe g-index	107

Table 10. Citations Metrics

Source: Processed data

We can observe in Figure 4 a visualization of the term co-occurrence network based on the title and abstract, where at least ten terms appear. The size of the nodes indicates the severity of item occurrence, and the density of connecting lines indicates the strength of connections between items. Linked words with the same color appearance often appear together. For example, Figure 4 shows that auditor, Sarbanes Oxley Act, audit fee, and other terms marked in blue are closely related and often appear simultaneously. The results of the VOS viewer analysis in Figure 4 produce three different colors, where these three colors represent 302 terms.

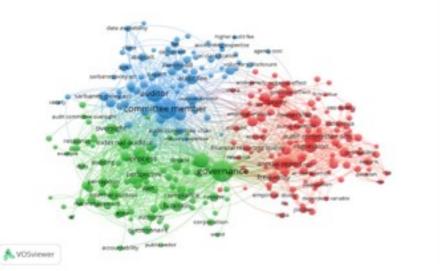


Figure 4. VOS viewer visualization of a term co-occurrence network based on title and abstract fields Source: The authors

Lastly is co-occurrence analysis based on document titles (Figure 5). These findings reveal various research views on audit committees, especially in the form of certain research groups. It can be observed in the figure that the words "expertise" and "role" are used as keywords in the publication of the audit committee as the main node of the entire network. The size of the nodes indicates the severity of the visual items, and the density of the connecting lines indicates the strength of the connections between the items. Words shown in the same color usually appear together; for example, it can be observed in the image that the words "external auditor, role, expertise, and earnings quality" marked in blue are closely related and often appear at the same time. VOS viewer analysis based on the title and abstract has produced six different colors.

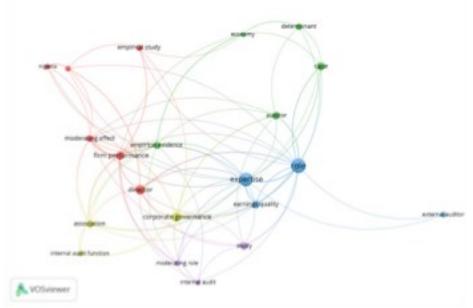


Figure 5. Visualization of a term co-occurrence network based on title fields Source: The authors

## DISCUSSION AND CONCLUSION

This research tries to expand the literature related to audit committee studies, in addition it aims to try to find the latest issues related to the audit committee such as the use of technology, social and environmental responsibility by conducting bibliometric analysis. This research collects all publications from the Scopus database related to audit committee studies from 2006 to 2023 using the keyword "audit committee." This research uses a defined search query to collect 914 publications from the Scopus database.

Most of the publications were carried out in 2022, namely 118 publications or 12.91 percent. Publications released in 2009 were the most cited publications, with 1,919 citations, and the average citations per publication was 68.54. Publications published in 2009 related to issues such as auditor independence (Bronson et al., 2009; Magilke et al., 2009), characteristic of audit committees (Persons, 2009; Rahmat et al., 2009), internal control (Goh, 2009; Naiker & Sharma, 2009), as well as other topics such as earning management, quality of financial reporting, and others.

Author	Title	Year	TC
Beasley (2009)	The audit committee oversight process	2009	394
Rahman (2006)	Board, audit committee, culture, and earnings management: Malaysian evidence	2006	373
Zhang (2018)	Audit committee quality, auditor independence, and internal control weaknesses	2007	368
Dhaliwal (2010)	The association between accruals quality and the characteristics of accounting experts and mixed expertise on audit committees	2010	352
Krishnan (2008)	Does the SOX definition of an accounting expert matter? The association between audit committee directors' accounting expertise and accounting conservatism	2008	338

Table 11. Top Cited Publications in Audit Committee

#### The global landscape of audit committee studies: A bibliometric review

Author	Title	Year	TC
Allegrini (2013)	Corporate boards, audit committees, and voluntary disclosure: Evidence from Italian listed companies	2013	287
Badolato (2014)	Audit committee financial expertise and earnings management: The role of status	2014	249
Goh (2009)	Audit committees, boards of directors, and remediation of material weaknesses in internal control	2009	192
Carcello et al. (2011)	CEO involvement in selecting board members, audit committee effectiveness, and restatements	2011	161
Krishnan (2011)	Legal expertise on corporate audit committees and financial reporting quality	2011	158

Source: Processed data

Eight hundred twenty-six publications, or 90.4 percent, were published as journals. This finding indicates that other types of documents such as "conference paper", "editorial", and "letter" still have a considerable chance of being published. Of the 69 countries detected, 896 publications (98 percent) were published in English. English is the most commonly used international language in academic and professional fields, this can allow researchers from different countries who have different cultural backgrounds and languages can access the information without language barriers. In addition, the publication in English allows the researcher to reach a larger audience at a global level, so that the audience can capture the information conveyed in the research and develop it by conducting a study on the audit committee. In the end, research on the audit committee can be wider and deeper.

America, Malaysia, and Indonesia are the top three countries in the ranking of countries with different contributions to audit committee studies. Research related to audit committee studies is most widely published in business, management, and accounting. This shows that audit committee studies in other fields, such as social sciences and environmental and sustainability, are still interesting to research.

After SOX Act 2002 was passed in the United States, there were major changes in terms of responsibility and supervision of companies (Hoitash, 2009). It is not surprising that studies on audit committees are widely conducted in the United States and research originating from that country is widely cited because these scandals have made the United States a beacon of study related to audit committees.

Citation matrix analysis is used to analyze the impact of publications in audit committee studies. In this article, it has been explained that over 17 years (2006-2023), there have been 914 audit committee studies published and more than 18,355 citations. At least publications related to audit committee studies collected from the Scopus database have been cited with 1,079.7 citations per year, 20.1 citations per paper, and 0.99 authors per paper.

Next is the analysis of keywords, titles, and abstracts produced by VOS viewer, which are used to analyze the audit committee study themes that are most common among scholars. As illustrated in Table 9, keywords such as role, director, expertise, corporate governance, and others are the most frequently used in audit committee studies.

The results of this research are not 100 percent ideal. Therefore, this research can be developed by adding or using other databases such as Google Scholar, Web of Science, etc. Despite these limitations, this study can add to knowledge by providing current research trends on audit committee studies. This research also contributes by applying bibliometric methods to expand knowledge about the audit committee study literature.

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