BIBLIOMETRIC ANALYSIS ON AUDITOR PERFORMANCE RESEARCH

Izzatul Jannah¹; Rindang Widuri²

Accounting Department, School of Accounting-Master of Accounting, Bina Nusantara University, Jakarta, Indonesia. 11480^{1,2}

Email: izzatul.jannah@binus.ac.id¹; rindangw@binus.edu²

ABSTRACT

Auditor performance is a general topic that has been extensively researched worldwide. However, of course, some aspects are still minimally discussed in previous research. Therefore, this study applied a bibliometric analysis to find out the overall picture and aspects or matters that were still rarely discussed about auditor performance. The data source is obtained from Scopus with a publication time span of 2013-2022 and the keyword "Auditor Performance". The number of studies that became the data in this study was 506 studies. These data were analyzed using the VOS Viewer software. Based on the results of the bibliometric analysis, it is concluded that the variable or aspect that has been widely studied in the auditor's performance keyword is audit quality. Then, the aspect or variable that can be a novelty idea is big data. Further researchers can explore or discuss more deeply related to big data and its relationship to auditor performance.

Keywords: Auditor Performance; Bibliometric Analysis

INTRODUCTION

For researchers or practitioners, finding new ideas in research is quite challenging. The greater the scientific literature, the more difficult it will be for the researcher or practitioner to find novelty. It is because, with a large amount of scientific literature, researchers will find it difficult to have a structured picture of relevant information (Rodrigues et al., 2014; Zhou et al., 2015). Meanwhile, before starting the research, the researcher needs to understand the information and development of the topic he wants to research (Susanti et al., 2022). Therefore, an analytical technique that can provide a macroscopic picture of much scientific literature is needed, namely bibliometric analysis (Nunen et al., 2018). Bibliometric analysis is a method used to assess the performance and research patterns of authors, journals, countries, and institutions (Wei & Zhao, 2015). From the performance and research patterns assessed, researchers can identify a variety of topics, including the latest topics. The bibliometric analysis can reveal the latest advances, research directions, and main topics in certain research fields (Wang et al., 2014). So, the results of the bibliometric analysis can be used as the basis for making decisions related to scientific research.

In this study, bibliometric analysis was applied on the research topic regarding auditor performance. One of the biggest accounting and auditing cases in the world is Enron case. This case involved auditor from one of the Big 5 public accounting firm in the world, Arthur Anderson. Arthur Anderson's auditor failed to produce a good quality audit report (Cuong, 2011). Besides Enron case, there are other companies have fallen due to the failure of an auditor to assess the credibility or fairness of the company's financial statements (Wigati, 2017), so researchers and practitioners become more interested and paying attention to the auditor performance study. Because of that, the number of publications on auditor performance research also increase, so the future author difficult to get a comprehensive picture to understand in-depth about auditor performance and to find new ideas for novelty. Therefore, through bibliometric analysis, this study is aim to find the topics that still need to be discussed and can contribute to find new ideas that can improve auditor performance.

DATA AND RESEARCH METHODS

Method is a method of work that can be used to obtain something. While the research method can be interpreted as a work procedure in the research process, both in searching for data or disclosing existing phenomena (Zulkarnaen, W., et al., 2020). The data in this study is obtained from the Scopus website with "Auditor Performance" keyword in the 2013-2022 publication period as shown in Figure 1. This study will see the growth trend of number of published studies related to auditor performance. Trend patterns are usually seen from charts that go up or down over a long period of time, such as 10 years (Budisantoso, 2017). So, it necessary to looking the data from 2013. By that reason, the data source syntax is "Auditor Performance" AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) LIMIT-TO OR (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014) OR LIMIT-TO (PUBYEAR, 2013)).

The search yielded 506 documents or studies whose titles, abstracts, and contents mentioned the auditor performance. Then, the 506 data will be examined in this study using the bibliometric analysis method with VOS Viewer software. The bibliometric analysis was carried out by looking at the number of published studies

trends during 2013-2022, identifying authors or researchers who are active in publishing research on auditor performance and collaboration among these authors, knowing which countries are actively publishing auditor performance research, and analyze the terms or aspects that are often discussed in the topic of auditor performance research.

RESULTS AND DISCUSSION

Publication Growth Trends

The publication growth trends from 2013-2022 can be seen in Graph 1. Graph 1 shows that if the number of publications is overall compared with the cumulative number of publications related to auditor performance, it shows that the output of publications in 2013-2022 follows a linear growth. The increasing number of publications indicates that more researchers are paying attention to the auditor performance topic. However, the number of publications in 2022 (n = 62) has decreased compared to the number of publications in 2021 (n = 80), which is decreasing around 22.5%. According to Price (1963), there are 4 phases in research growth, namely: 1) precursors' phase, when a small group of researchers start to publish a new field or topic, 2) the proper exponential growth, when more researchers are start to be interested and pay attention to the research topic to be explored, 3) a consolidation of the body of knowledge, 4) a decrease in the number of publications. The decline that occurred in 2022 needs to be questioned whether the following year will continue to decrease or not. However, if researchers understand more deeply about auditor performance topic, it is not impossible that new idea can still be explored in this topic.

Co-Authorship

Figure 2 shows a network visualization from the authors who discussed the topic related to auditor performance. The larger the circle, the more scientific research about auditor performance is published by that author. The various colors indicate the collaborative group of each author. Based on the results of data processing with VOS Viewer, Trotman, k.t. is the main author who often publishes research related to auditor performance and has a cooperative relationship with other authors with a red line as shown in Figure 3. Table 1 is the detail information about the Trotman, k.t.'s studies with other authors who have cooperation with him in the scope of auditor performance.

Other authors who often publish research related to auditor performance besides Trotman, k.t. are Brown, v.l. and Glover, s.m. They also have collaboration with other authors in the green and blue line as shown in Figure 4 & Figure 5. The detail information about Brown, v.l. and Glover, s.m.'s research in the scope of auditor performance and its collaboration with other authors is shown in Table 2.

Country/Territory

Graph 2 shows the top-10 countries/territory that productively published research about auditor performance. From Graph 2, it can be seen that United States placed in the top position (n = 195). Then followed by Indonesia (n = 84). Research related to auditor performance is dominated by countries in Asia, namely Indonesia, Malaysia, China, Taiwan, and Iran.

Term Analysis

Figure 6 is a term's network visualization that illustrates the number of studies whose titles and abstracts, discuss the terms related to auditor performance and the relationship between these terms. From Figure 6, it can be seen that research with the keyword "auditor performance" mostly discussed about audit quality. The audit quality has a relationship with several aspects, including accountability, audit judgment, professionalism, ethics, and others as shown in Figure 7.

Then, Figure 8 is a term's overlay visualization that displays the latest topics related to auditor performance. Based on Figure 8, aspects that are relatively new in research on auditor performance are emotional intelligence, audit teams, and professionalism. Then, the aspects that are rarely studied on auditor performance topic can be seen through the term's density visualization in Figure 9. Based on Figure 9, the aspects that are rarely investigated by researchers in the field of auditor performance, include professionalism, ethics, gender, leadership, big data, etc. These aspects can be new ideas or variables that can be explored by researchers in the future.

CONCLUSION

This study applies bibliometric analysis to scientific literature or research published in Scopus in 2013-2022 regarding auditor performance. This study is aim to find out the overall picture of the auditor performance research, so it can be seen what topics that still need to be discussed and can contribute to find new ideas that can improve auditor performance. Based on the results of bibliometric analysis, it can be concluded that overall, research using the "auditor performance" keyword has increased during 2013-2022. The country that is most active in publishing research on auditor

performance is United States, so that it will be a new point of view if further researchers can examine the performance of auditors in other countries. The author who is most active in discussing auditor performance is Trotman, k.t. Further researchers can study the results of Trotman's research related to auditor performance to have a deeper understanding. The variable or aspect that has been widely studied in the "auditor performance" keyword is audit quality. Although audit quality has been dominant in research on auditor performance, further researchers can explore the discussion of audit quality by relating it to variables that are still rarely studied, namely professionalism, ethics, gender, etc. Auditor performance research can also be explored by involving big data because currently technological advances are growing rapidly, so that the distribution of data is also widely increasing and complex. This can be a new idea and a new contribution for researchers in the scope of auditor performance.

REFERENCES

- Bauer, T. D., Humphreys, K. A., & Trotman, K. T. (2022). Group Judgment and Decision Making in Auditing: Research in the Time of COVID-19 and Beyond. *Auditing*, 41(1), 3–23.
- Boland, C., Brown, V. L., & Dickins, D. (2020). Standard-setting in Auditing: Insights from PCAOB Inspections. *Journal of Accounting and Public Policy*, 39(4).
- Brazel, J. F., Brown, V. L., & Sidgman, J. (2022). Can Your Audit Team Effectively Multitask? It Might Depend on How They Communicate. *Current Issues in Auditing*, 16(2), 17–23.
- Brown, Veena L., & Harris, E. E. (2022). The Association of Female Leaders with Donations and Operating Margin in Nonprofit Organizations. *Journal of Business Ethics*.
- Brown, Veena Looknanan, Coram, P. J., Dennis, S. A., Dickins, D., Earley, C. E., Higgs, J. L., Schaefer, T. J., & Tatum, K. W. (2019). Comments of The Auditing Standards Committee of The Auditing Section of The American Accounting Association on International Auditing and Assurance Standards Board Exposure Draft, Proposed International Standard on Auditing 315 (Revised): Identifying and . *Current Issues in Auditing*, *13*(1), C1–C9.
- Budisantoso, A. (2017). *Time Series: Data Juga Bisa Meramal*. Agungbudisantoso.Com. https://agungbudisantoso.com/time-series-data-juga-bisa-meramal/
- Chang, L. J., Cheng, M. M., & Trotman, K. T. (2013). The Effect of Outcome and Process Accountability on Customer-Supplier Negotiations. *Accounting, Organizations and Society*, 38(2), 93–107.
- Chen, W., Khalifa, A. S., Morgan, K. L., & Trotman, K. T. (2018). The Effect of Brainstorming Guidelines on Individual Auditors' Identification of Potential Frauds. *Australian Journal of Management*, 43(2), 225–240.
- Christensen, B. E., Glover, S. M., Omer, T. C., & Shelley, M. K. (2016). Understanding Audit Quality: Insights from Audit Professionals and Investors. *Contemporary Accounting Research*, 33(4), 1648–1684.

- onse: An Investigation into
- Cuong, N. H. (2011). Factors Causing Enron's Collapse: An Investigation into Corporate Governance and Company Culture. *Corporate Ownership & Control*, 8(3), 585–593.
- Durney, M., Elder, R. J., & Glover, S. M. (2014). Field Data on Accounting Error Rates and Audit Sampling. *Auditing*, *33*(2), 79–110.
- Glover, S. M., & Prawitt, D. F. (2014). Enhancing Auditor Professional Skepticism: The Professional Skepticism Continuum. *Current Issues in Auditing*, 8(2), P1–P10.
- Glover, S. M., Taylor, M. H., & Wu, Y.-J. (2019). Mind the Gap: Why Do Experts Have Differences of Opinion Regarding the Sufficiency of Audit Evidence Supporting Complex Fair Value Measurements? *Contemporary Accounting Research*, 36(3), 1417–1460.
- Kim, S., & Trotman, K. T. (2015). The Comparative Effect of Process and Outcome Accountability in Enhancing Professional Scepticism. *Accounting and Finance*, 55(4), 1015–1040.
- Nunen, K. van, Li, J., Reniers, G., & Ponnet, K. (2018). Bibliometric Analysis of Safety Culture Research. *Safety Science*, *108*, 248–258.
- Peecher, M., Solomon, I., & Trotman, K. T. (2013). An Accountability Framework for Financial Statement Auditors and Related Research Questions. *Accounting, Organizations and Society*, 38(8), 596–620.
- Price, D. J. S. (1963). Little Science, Big Science. Columbia University Press.
- Rodrigues, S. P., Eck, N. J. van, Waltman, L., & Jansen, F. W. (2014). Mapping Patient Safety: A Large-Scale Literature Review Using Bibliometric Visualisation Techniques. *BMJ Open*, 4(3), 1–8.
- Sidgman, J., Brown, V. L., & Brazel, J. (2022). The Multitasking Audit Environment: The Effect of Alternative Modes of Communication on Team Performance. *Journal of Information Systems*, 35(3), 155–175.
- Susanti, N. S., Amalia, S. S., Rachmawati, T., Simanjuntak, J. G. G. P., M.R.H, D. T., & Manuel, A. (2022). Identifying a Research Gap in Indonesian Governance. *The 3rd International Conference on Governance, Public Administration, and Social Science (ICoGPASS)*, 370–380.
- Trotman, K. (2014). Judgement and Decision Making. In *The Routledge Companion to Auditing* (pp. 200–218).
- Trotman, K. T., Bauer, T. D., & Humphreys, K. A. (2015). Group Judgment and Decision Making in Auditing: Past and Future Research. *Accounting, Organizations and Society*, 47, 56–72.
- Wang, B., Pan, S.-Y., Ke, R.-Y., Wang, K., & Wei, Y.-M. (2014). An Overview of Climate Change Vulnerability: A Bibliometric Analysis Based on Web of Science Database. *Nat Hazards*, 74, 1649–1666.
- Wei, L., & Zhao, Y. (2015). Bibliometric Analysis of Global Environmental Assessment Research in a 20-Year Period. *Environmental Impact Assessment Review*, 50, 158–166.
- Wigati, L. (2017). Pengaruh Role Stress dan Independensi terhadap Kinerja Auditor Internal dalam Prespektif Etika Kerja Islam (Studi pada Inspektorat Kota Bandar Lampung).
- Zhou, Z., Goh, Y. M., & Li, Q. (2015). Overview and Analysis of Safety Management Studies in The Construction Industry. *Safety Science*, 72, 337–350.
- Zulkarnaen, W., Fitriani, I., & Yuningsih, N. (2020). Development of Supply Chain Management in the Management of Election Logistics Distribution that is More

Appropriate in Type, Quantity and Timely Based on Human Resources Competency Development at KPU West Java. MEA Scientific Journal (Management, Economics, & Accounting), 4(2), 222-243. https://doi.org/10.31955/mea.vol4.iss2.pp222-243.

FIGURES, GRAPHICS AND TABLES

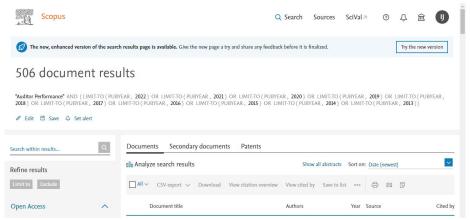
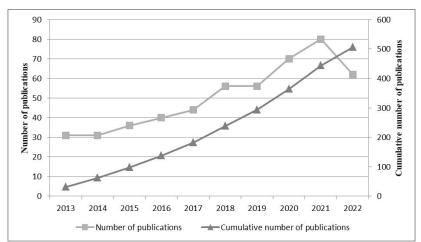


Figure 1. Data source



Graph 1. Number of Scopus research publications in 2013-2022 related to auditor performance

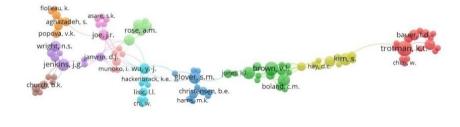


Figure 2. Co-authorship network visualization

A VOSviewer



Figure 3. Trotman, k.t.'s connection

Table 1. Detail Trotman, k.t.'s co-authorship

Authors	Journal Title
Bauer et al. (2022)	Auditing
Chen et al. (2018)	Australian Journal of Management
Kim & Trotman (2015)	Accounting and Finance
Trotman et al. (2015)	Accounting, Organizations and Society
Trotman (2014)	The Routledge Companion to Auditing
Peecher et al. (2013)	Accounting, Organizations and Society
Chang et al. (2013)	Accounting, Organizations and Society



Figure 4. Brown, v.l.'s connection

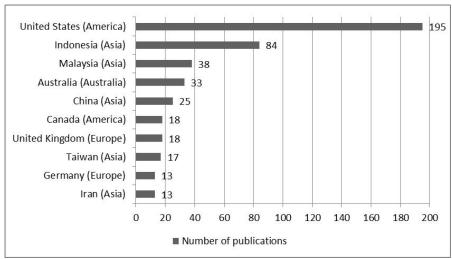


Figure 5. Glover, s.m.'s connection

Table 2. Detail Brown, v.l. and Glover, s.m.'s co-authorship

Authors	Journal Title
Brazel et al. (2022)	Current Issues in Auditing
Sidgman et al. (2022)	Journal of Information Systems
Brown & Harris (2022)	Journal of Business Ethics
Boland et al. (2020)	Journal of Accounting and Public Policy
Glover et al. (2019)	Contemporary Accounting Research
Brown et al. (2019)	Current Issues in Auditing

Authors	Journal Title
Christensen et al. (2016)	Contemporary Accounting Research
Glover & Prawitt (2014)	Current Issues in Auditing
Durney et al. (2014)	Auditing



Graph 2. Top-10 of most productive country/territories publishing on auditor performance research

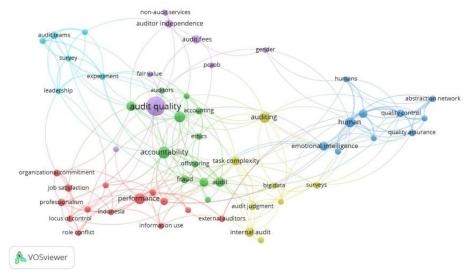


Figure 6. Term's network visualization

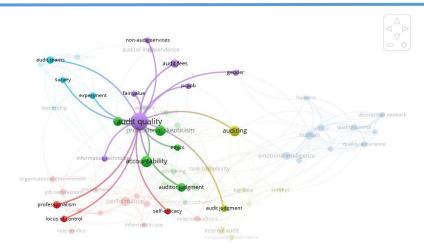


Figure 7. Audit quality connection

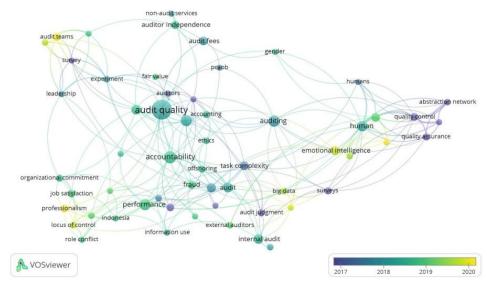


Figure 8. Term's overlay visualization

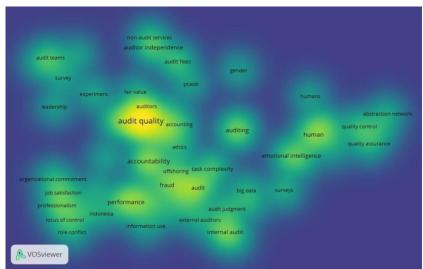


Figure 9. Term's density visualization