A Different Perspective on Fraud for Sustainable Accounting: Bibliometric and Factor Analyses

Ilma Ilhami Budiman
Faculty of Economics, Garut University

Eti Kusmiati*
Faculty of Economics, Garut University

Marti Dewi Ungkari
Faculty of Economics, Garut University

ABSTRACT

The deliberate act of manipulating, concealing, falsifying, or altering financial statements by a person or organization to gain financial or non-financial gain is known as accounting fraud. This research aims to determine trends over the last ten years using bibliometric analysis with the VOSviewer tool. From the results of the bibliometric analysis, we then proceed with the Exploratory Factor Analysis (EFA) method. The results of the bibliometric analysis produced 5 clusters with 129 keywords, with the first cluster producing 50 items, the second cluster containing 37 items, the third cluster containing 29 items, and the fourth and fifth clusters containing 13 and 1 items, respectively. At the EFA stage, ten reduction factors comprised an individual response, time and experience, policy impact, corruption, audit effectiveness, profits, compliance, motivation, competence, and reliability of financial reports.

Keywords: Bibliometric Analysis, Fraud Accounting, VOSviewer, Exploratory Factor Analysis.

1. INTRODUCTION

Accounting fraud is becoming a global issue in business and accounting (Hess and Cottrell, 2016). Fraud accounting refers to deliberate actions by individuals or organizations to manipulate, hide, falsify, or change financial reports to obtain financial or non-financial benefits (Agbaje and Igbekoyi, 2018). In practice, accounting fraud seriously impacts companies, shareholders, and other related parties. Apart from being financially detrimental, this practice can also damage the company's reputation and undermine investor confidence.

Companies make financial reports to describe the financial situation, performance, and results of the company's operational activities for users of financial reports (Ginesti, Santonastaso, and Macchioni, 2023). History shows that quite a few companies, including large companies, have committed accounting fraud in their financial reports to look pleasing to external eyes or those needing financial reports (Hu and Basiglio, 2023). Even though fraud in financial reports has often occurred, it is not surprising that the academic world and government are becoming more observant in explaining the causes of accounting fraud committed to date (Ahn, 2022).

Research on fraud accounting has also been conducted previously by Nugroho and Diyanty (2022), who said, "The evolution of fraud theory has moved the current view of fraud far beyond simplicity, where it occurs regularly with the determinants of collusion or cooperation from various parties". Ehis, Okeke, Ifunanya, Offor and, David, Chukwunwike (2021) stated that fraud and professional errors in SMEs can result in financial losses, damage to trust and reputation, lawsuits, and employee demoralization. The most famous accounting fraud case in SMEs occurred in England in 2018, namely the case of Patisserie Valerie, a famous chain of cake shops and cafes in England. The discovery of a cash shortage of £40 million in its financial statements indicates manipulation and fraud in the company's financial reporting. Fake transactions in SMEs were also found to cover up cash shortages and the company's actual financial condition.

Accounting fraud also occurs in developing countries, one of the cases occurred in 2018 at PT Asuransi Jiwasraya in Indonesia. The accounting fraud cases involved allegations of criminal acts of corruption and manipulation of financial data that were detrimental to customers and the state. Fraudulent acts are caused by fake investments, manipulation of financial data, lack of internal supervision, and non-compliance with applicable regulations. The combination of these factors caused a liquidity crisis for the company and had a widespread loss impact on customers, policyholders, and the stability of the insurance industry in Indonesia.

Based on the many cases and research on fraud accounting, this research aims to provide a comprehensive review of trends and developments in fraud accounting research over the last decade. This research uses bibliometric analysis and continues with Exploratory Factor Analysis (EFA) as a testing tool. Bibliometric analysis helps identify areas that have been well-researched or even keywords that can still be developed for further research. Meanwhile, EFA aims to reduce the factors formed from bibliometric analysis into new factors or variables. EFA is a statistical method used to identify hidden patterns in data and group variables into reduced factors. This EFA process analyses factors that explain interrelated patterns through factor rotation to clarify interpretations. EFA helps reduce data's dimensionality by grouping interrelated variables and reducing them into a more structured form. The results of the analysis with EFA are expected to provide valuable insight into understanding the relationships between variables and optimize data analysis for more in-depth research (Watkins, 2018).

Ultimately, it is hoped that the results of this research will provide a better view of the future direction and focus of fraud accounting research. Making identifying the data obtained simpler can illustrate the sustainability of research. By understanding trends and developments in accounting fraud research, researchers, practitioners, and policymakers can be more effective in preventing and detecting accounting fraud and developing better strategies and tools to avoid accounting fraud.

2. LITERATURE REVIEW

2.1 Fraud

Errors are unintentional misstatements or omissions in financial reports, in which circumstances decision-makers can change their decisions (Kemi Yekini, Paschal Ohalehi, Ifeyinwa Oguchi, 2017). The following circumstances are included in the error criteria, namely, errors in the collection or processing of accounting data that form the basis for preparing financial reports, incorrect accounting estimates resulting from misinterpretation, and also errors in the application (application) of the principles accounting principles, which relate to amounts, classification, and methods of

presentation or disclosure (Wu, 2005). Fang, Huang, and Wang (2017) stated that cheating can be interpreted as the attitude of someone who wants something that he desires but does not want to try and work hard, so he prefers dirty shortcuts or uses any means to get it.

Fraud in the accounting context can certainly harm business entities financially, damage reputation, and violate the law. To prevent and identify fraud in accounting, it is essential to have a solid internal control system, adequate separation of duties, effective supervision, and high business ethics (Vanasco, 2006). According to Çollaku, Ramushi, and Aliu (2024) fraud, detecting fraud and recognizing signs of fraud or illegal activities in financial transactions and financial reports also requires investigations to investigate fraud that occurs or fraud in financial reports in the company's accounting practices.

2.2 Accounting

Accounting is valuable information for decision-makers, such as managers, investors, creditors, and the government, to evaluate the financial performance of an entity and make the right decisions (Lee and Azis, 2023). Rufino, Payabyab, and Lim (2018) revealed that accounting is important in managing financial information and helping make appropriate and efficient decisions. Accounting helps record transactions, classify and categorize financial information, financial reporting, and control an entity's finances (Rufino, 2014).

In practice, accounting encompasses a variety of components, including recording all business transactions involving sales, purchases, payments, and receipts. Recording uses generally accepted systems and methods, such as journals, ledgers, and specific accounts (Crawford, Brimble, and Freudenberg, 2024). Accounting involves a series of transactions into appropriate categories, such as assets, liabilities, equity, revenue, or expenses. Next, these measurements are carried out to determine the monetary value of each transaction or financial post. Reporting financial information to information users is required by interested parties such as business owners, investors, and parties who need the results of analyzed financial reports. In addition, accounting also involves analyzing financial information to understand financial performance and make appropriate business decisions.

3. METHOD

This research uses two stages of analysis: qualitative descriptive analysis using bibliometric analysis and quantitative analysis using exploratory factor analysis (EFA). The first stage aims to determine global trends regarding fraud accounting over the last decade, where the results of the first stage of clustering can be used as a reference for the next stage (Schreiber, 2021). The second stage uses a quantitative approach with the EFA method. This research is used to identify the main factor structure that influences the data set.

EFA aims to find patterns of relationships between observed variables without having a previous hypothesis about the relationship (Rogers, 2022). EFA observes the variables and factors whose relationship is most substantial (Haig, 2005). Even though bibliometrics and EFA are two different concepts, the two analyses can be related in the research context.

Data for the bibliometric analysis was obtained from the Scopus database by retrieving the keyword 'fraud accounting'. Bibliometric analysis summarizes large amounts of data to present the intellectual structure and emerging trends of a topic or research field (Donthu *et al.*, 2021). Obtaining bibliometric analysis of fraud accounting

requires big data to be able to process it into VOSviewer (Varma, Piedepalumbo, and Mancini, 2021).

The next step in this research uses quantitative methods, and samples are taken using incidental sampling. The EFA approach aims to identify complex data and help group interrelated variables into broader factors (Memon *et al.*, 2020). This research uses data collected directly from the field by sharing closed questions regarding the most popular keywords derived from testing with VOSviewer. Respondents in this research were active undergraduate students at universities in the Garut district. Respondents were taken as many as 100 people. The reasons for selecting respondents were their close connection to the field of science being studied, a more mature understanding, and involving the younger generation regarding fraud accounting, which could increase their awareness of the importance of maintaining integrity in accounting. EFA analysis will measure several indicators, such as the Kaiser-Meyer-Oikin Measure of Sampling Adequacy (KMO), Total Variance Explained, and Rotation Component Matrix. The results of this analysis can show the relationship between the variables and the factors that have been rotated.

4. RESULTS

Figure 1 shows documents based on "documents by affiliation" and "subject area" from the Scopus database. This analysis aims to understand the distribution of scientific documents based on the author's affiliated institution and the most dominant research subject.
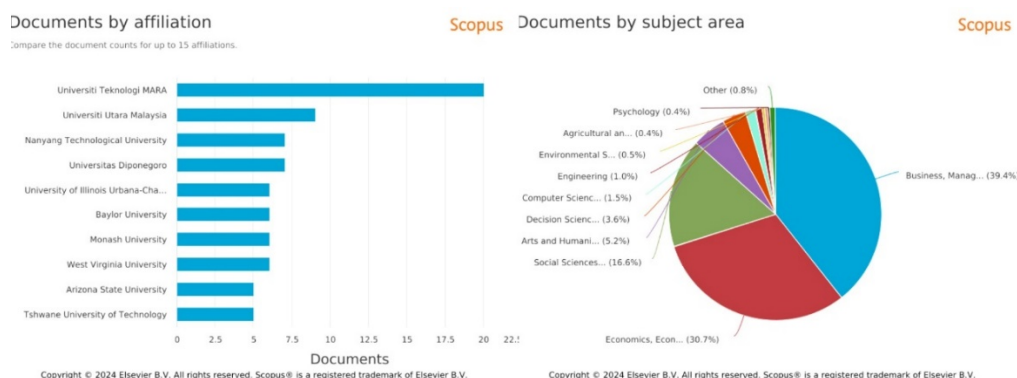

Figure 1. Documents by affiliation and subject area from Scopus

Research from 2013-2023 discusses accounting fraud, which has most affiliates from developing countries. Judging from the picture above, Universiti Teknologi MARA (Malaysia) has conducted the most Fraud Accounting research in the past decade. Developing countries often face challenges regarding corruption, fraud, and unethical financial practices. Developing countries may have a more pressing need to understand and address fraud accounting issues in their literature.

Business, Management, and Economics contributed the most to the subject area regarding fraud accounting, at 39.4% and 30.7%, respectively. Business Management has an important role in fraud accounting because it involves company management and

decision-making related to accounting. Meanwhile, economics, as it is known, involves economic analysis related to company financial decisions.
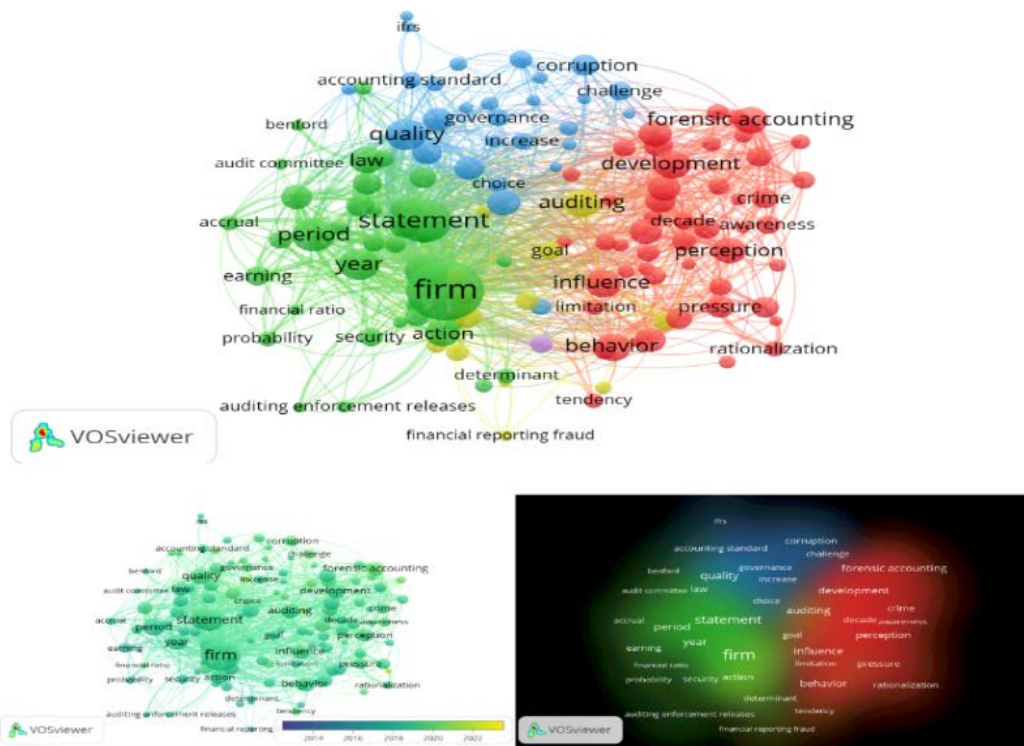
Figure 2. Network Visualization, Overlay Visualization, and Density Cluster from Fraud Accounting

In the last ten years, there have been 5 Fraud Accounting clusters. The cluster above consists of 129 items divided into different clusters. The data grouped by VOSviewer is divided into clusters to facilitate analysis and visualization so that the output produced in the development map is divided into several clusters. This grouping helps identify and understand patterns or themes in the analyzed data. In bibliometric analysis, clusters generated by VOSviewer can indicate different research topics.

Network visualization explains fraud accounting, producing 5 clusters with 129 items in the processing results. The first cluster produced 50 items (38.76%), the second cluster contained 37 items (28.68%), the third cluster contained 29 items (21.71%), and the fourth and fifth clusters contained 13 and 1 items, respectively (10.08% and 0.78%).

The five cluster mapping results from VOSviewer obtained the most popular keywords, which can be defined as factors closely related to the fraud accounting theme depicted in Table 1.

Table 1. Tabulation and Categorization of Dominant Clusters for Questionnaires

No.	Factors of dominant keywords from bibliometric analysis	Code
1	Quality	P1
2	Forensic Audit	P2
3	Perception	P3

4	Behavior	P4
5	Growth	P5
6	Training	P6
7	Corruption	P7
8	Influence	P8
9	Financial Audit	P9
10	Law	P10
11	Accounting Standards	P11
12	Pressure	P12
13	Experience	P13
14	Incentive	P14
15	Fraud Detection	P15
16	Period	P16
17	Security	P17
18	Manipulation	P18
19	Company	P19
20	Accrual	P20
21	Challenge	P21
22	Objective	P22
23	Chance	P23
24	Policy Maker	P24
25	Environment	P25
26	Awareness	P26
27	Conjecture	P27
28	Crime	P28
29	Profit	P29
30	Skills	P30

The tabulation results of the dominant factors in the output produced from VOSviewer were transformed into a closed questionnaire and distributed to respondents. The results of the data analysis show that the KMO is 0.681, indicating that this analysis can be continued to the next test.

Table 2. KMO and Bartlett's

Kaiser-Meyer-Olkin Measure of Sampling Adequancy		0.681
Bartlett's Test of Sphericity	Approx. Chi Square	951.915
	df	435
	Sig	0

Because the KMO value from the research results is 0.681, which means the KMO is greater than 0.5, which is in line with the provisions of the EFA (Watkins, 2018), the research is worth continuing to the subsequent analysis. A KMO value above 0.5 means it has a high loading factor. Conversely, if the loading factor is less than 0.5, the variable has a low correlation. Variables with low factor loadings must be deleted because they have minimal contribution to the latent factors to be identified (Schreiber, 2021).

Table 3. Total Variance Explained

Components	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.16	20,523	20,523	2.59	8,623	8,623
2	2.24	7,458	27,981	2.54	8,450	17,073
3	2.02	6,743	34,724	2.17	7,219	24,292
4	1.76	5,876	40,600	2.03	6,755	31,047
5	1.61	5,362	45962	1,890	6,301	37,347
6	1,280	4,268	50,229	1.81	6,037	43,384
7	1,250	4,165	54,395	1.69	5,616	49,000
8	1.2	3,992	58,387	1.67	5,571	54,571
9	1.11	3,685	62,072	1.66	5,539	60.109
10	1.04	3,455	65,527	1.63	5,417	65,527
11	0.97	3,247	68,774			
…						
30	0.16	0.539	100			

Extraction Method: Principal Component Analysis.

The next stage is to rotate the factors, which aims to facilitate data interpretation by making the resulting factors easier to understand and simpler. The factor rotation stages produce a Rotated Component Matrix, which is then carried out by a rotation process, which forms the Rotated Component Matrix. The Component Matrix results show that the rotation process has been reduced to become more transparent and more real.

In the table above, factor 1 consists of P4 (Behavior), which has a loading factor of 0.804; P3 (Perception), which has a loading factor of 0.771; P6 (Training) has a loading factor of 0.585; P8 (Influence) has a loading factor of 0.549. Factor 1 is named Individual Response. Factor 2, with the name Time and Experience, consists of P16 (Period) has a loading factor of 0.707; P13 (Experience) has a loading factor of 0.623; P20 (Accruals) has a loading factor of 0.532; and P19 (Company) has a loading factor of 0.511. Factor 3 consists of P26 (Awareness) with a loading factor of 0.781 and P24 (Policy Maker) with a loading factor of 0.717. Factor 3 is named Policy Impact.

Factors 4 and 6 each consist of only one variable. Factor 4, with Corruption (P7), has a loading factor of 0.807, and Factor 6, with Profit (P29), produces a value of 0.867. Factor 5, with the name audit effectiveness, consists of variable reduction. P5 (Growth) has a loading factor of 0.684, and P9 (Financial Audit) has a loading factor of 0.680. Factor 7 is named Compliance and consists of 2 factors, namely P17 (Security) with a loading factor of 0.673 and P10 (Legal) with a loading factor of 0.579. Factor 8 is named Motivation, consisting of P21 (Challenge) with a loading factor of 0.779 and P14 (Incentive) with a loading factor of 0.510. Factor 9 consists of P22 (Goals) with a loading factor of 0.765 and P30 (Skills) with a loading factor of 0.649. Factor 10, the Reliability of Financial Reports, consists of P2 (Forensic Audit) with a loading factor of 0.792 and P1 (Quality) with a loading factor of 0.608.

Table 4. Rotated Component Matrix

Compo nents	Commu nalities	Factor Loadings										Factor Name
		1	2	3	4	5	6	7	8	9	10	
P4	0.706	0.804										
P3	0.765	0.771										Individual Response
P6	0.750	0.585										
P8	0.742	0.549										
P16	0.727		0.707									
P13	0.723		0.623									Time and Experience
P20	0.719		0.532									
P19	0.706		0.511									
P26	0.705			0.781								Policy Impact
P24	0.699			0.717								
P7	0.686				0.807							Corruption
P5	0.646					0.684						Audit Effectiveness
P9	0.633					0.680						
P29	0.626						0.867					Profit
P17	0.580							0.673				Obedience
P10	0.576							0.579				
P21	0.566								0.779			Motivation
P14	0.565								0.510			
P22	0.550									0.765		Competence
P30	0.547									0.649		
P2	0.517										0.792	Reliability of Financial Reports
P1	0.513										0.608	

Note: Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization.

KMO 0.681

5. DISCUSSION

In Figure 1, the results of the data analysis show that Universiti Teknologi MARA (Malaysia) is the affiliate that has conducted the most research on fraud accounting, followed by Universiti Utara Malaysia. In this research, developing countries tend to be more active in producing literature related to fraud accounting. According to Tsegba and Upaa (2015), the most severe consequences of fraud in financial statements in developing countries are caused by fear of losing jobs and falling market capitalization, so they justify the rationalization for committing fraud in financial statements. Significant differences in views from stakeholders will continue to pose challenges regarding issues related to accounting fraud in financial statements (Tsegba and Upaa, 2015). According to Tawiah (2023), accounting fraud in financial reports or corruption can hinder economic development in developing countries. Therefore, to anticipate and suppress the occurrence of a larger spike in fraud, generally accepted accounting rules or standards must be created to implement best practices and control fraud so that the reliability of the information received can be accounted for. According to Siam and Abdullatif (2011), adopting IFRS (International Financial Accounting Standard) can strengthen global financial architecture and become a long-term solution to the lack of transparency in financial information. Accounting fraud issues in developed countries are considered

more relevant and do not interfere with reliability in most cases (Siam and Abdullatif, 2011). It is because developed countries have implemented much stricter codes of ethics. Even though these principles are implemented voluntarily, companies adhere to them (Romano and Guerrini, 2012).

Figure 1 also shows documents from various popular subject areas. Business management and economics are the subject areas most closely influenced by fraud accounting. It is because Business Management plays a role in managing the company and making decisions related to accounting (Melović *et al.*, 2021). Business Management and Economics are the subjects most discussed in fraud accounting because of their relevance to the business world. Research on fraud accounting tends to focus on aspects of Business Management and Economics because it provides a better understanding of the factors that influence fraud and how to prevent and detect it. Management plays a crucial role in implementing effective internal control, creating an ethical organizational culture, and adequately managing the risk of fraud (Pickett, 2006). Research data for accounting fraud on the subjects of Business Management and Economics has better access to data and research methodology relevant to accounting fraud.

The research results using EFA show that factor 1 is named Individual Response. Individual responses show that individuals with a high sense of integrity and understanding of the applicable code of ethics can prevent accounting fraud (Lynch and McCullagh, 2024). Alves, Gregório, and Lourenço (2023) stated that Time and Experience in factor 2 could be an important basis for them to avoid accounting fraud wisely. Factor 3, named Policy Impact, identifies policies that are firmly designed to reduce the occurrence of accounting fraud. Policies governed by strict rules create effective policies (International Federation of Accountants, 2008).

Corruption factor 4 states that corruption can occur at various levels, from small to large, and can damage the economy. Corruption is a form of accounting fraud detrimental to many parties (Valentini and Sriramesh, 2024). Factor 5, which has two variables, is called Audit Effectiveness. An effective audit can detect potential accounting fraud, evaluate internal controls, and provide confidence that the company and financial reports can be trusted (Ginesti, Santonastaso, and Macchioni, 2023). Factor 6 is named Profit. Accounting fraud to gain personal benefits for certain parties will provide inadequate benefits for many parties (Nasta, Magnanelli, and Ciaburri, 2024).

Factor 7 is named Compliance. Accountants or companies that comply with generally accepted rules can prevent companies and accountants from accounting fraud (International Federation of Accountants, 2008). Factor 8 is named Motivation. By identifying motivation, companies can take appropriate steps to prevent accounting fraud (Oboh, 2023). Factor 9 is named Competency. Developing accounting competence prevents accounting fraud by increasing knowledge, skills, and relevant training, and can avoid fraud accounting (Bešić, Hirt, and Rahimić, 2024). Finally, the 10 Reliability Factors of Financial Reports. Accounting fraud will not occur if financial reports are prepared according to generally accepted standards (Ochnio, 2024).

6. CONCLUSION

Accounting fraud still occurs in business entities today. Accounting fraud is most often found in developing countries. The subject areas of Business Management and Economics are the subjects most related to fraud accounting. It is because accounting fraud is usually found in business entity financial reports. Research findings also show that the global trends depicted in network visualization are divided into 5 clusters. Each

cluster contains the most keywords researched in the 2013-2023 period. The findings of Exploratory Factor Analysis (EFA) produced ten factors from thirty variables taken from the keyword bibliometric development map. It means that these ten factors are the most dominant factors that encourage/minimize the occurrence of accounting fraud.

ACKNOWLEDGEMENT

REFERENCES

[1]   Agbaje, W.H. and Igbekoyi, O.E. (2018) 'Payroll Fraud and Profit Performance: An Assessment of Small and Medium Enterprises (SME's) in Nigeria', *Research Journal of Finance and Accounting*, 9(6), pp. 85–93.

[2]   Ahn, J.H. (2022) 'The road not taken: A comparison of Accounting and Auditing Enforcement Releases and securities class actions', *Journal of Business Finance and Accounting*, 49(9–10), pp. 1489–1529. Available at: https://doi.org/10.1111/jbfa.12611.

[3]   Alves, I., Gregório, B. and Lourenço, S.M. (2023) 'Personality Characteristics, Preferences for Rewards, and The Propensity to Choose an Auditing Job* Personality Characteristics, Preferences for Rewards, and The Propensity to Choose an Auditing Job'. Available at: https://doi.org/10.1108/JAOC-04-2023-0080.

[4]   Bešić, A., Hirt, C. and Rahimić, Z. (2024) 'Contextualising employee engagement in crisis: a protective caring approach to employee engagement in the banking sector in Bosnia and Herzegovina', *Employee Relations*, 46(9), pp. 42–59. Available at: https://doi.org/10.1108/ER-12-2023-0623.

[5]   Çollaku, L., Ramushi, A.S. and Aliu, M. (2024) 'Fraud intention and the relationship with selfishness: the mediating role of moral justification in the accounting profession', *International Journal of Ethics and Systems* [Preprint], (May). Available at: https://doi.org/10.1108/IJOES-10-2023-0220.

[6]   Crawford, V., Brimble, M. and Freudenberg, B. (2024) 'Can work integrated learning deliver employability? International post-graduate accounting students', *Accounting and Finance*, 64(1), pp. 1061–1082. Available at: https://doi.org/10.1111/acfi.13182.

[7]   Donthu, N. *et al.* (2021) 'Forty years of the International Journal of Information Management: A bibliometric analysis', *International Journal of Information Management*, 57(September 2020), p. 102307. Available at: https://doi.org/10.1016/j.ijinfomgt.2020.102307.

[8]   Ehis, Okeke, S., Ifunanya, Offor, S. and David, Chukwunwike, O. (2021) 'Internal Control: Its Role in the Reduction of Fraud and Professional Misconduct among SMEs', *Asian Journal of Economics, Business and Accounting*, 21(19), pp. 57–66. Available at: https://doi.org/10.9734/ajeba/2021/v21i1930506.

[9]   Fang, V.W., Huang, A.H. and Wang, W. (2017) 'Imperfect Accounting and Reporting Bias', *Journal of Accounting Research*, 55(4), pp. 919–962. Available at: https://doi.org/10.1111/1475-679X.12170.

[10]   Ginesti, G., Santonastaso, R. and Macchioni, R. (2023) 'Family involvement in ownership and governance and internal auditing quality', *Corporate Governance*

(Bingley), 24(8), pp. 46–64. Available at: https://doi.org/10.1108/CG-10-2022-0405.

[11] Haig, B.D. (2005) 'Exploratory Factor Analysis, Theory Generation, and Scientific Method', *Multivariate Behavioral Research*, 40(3), pp. 303–329. Available at: https://doi.org/10.1207/s15327906mbr4003_2.

[12] Hess, M.F. and Cottrell, J.H. (2016) 'Fraud risk management: A small business perspective', *Business Horizons*, 59(1), pp. 13–18. Available at: https://doi.org/10.1016/j.bushor.2015.09.005.

[13] Hu, L. and Basiglio, A. (2023) 'A multiple-case study on the adoption of customer relationship management and big data analytics in the automotive industry', *TQM Journal*, 36(9), pp. 1–21. Available at: https://doi.org/10.1108/TQM-05-2023-0137.

[14] International Federation of Accountants (IFAC) (2008) 'The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements (ISA 240)', *International Federation of Accountants*, (February), pp. 1–41.

[15] Kemi Yekini, Paschal Ohalehi, Ifeyinwa Oguchi, J.A. (2017) 'Workplace fraud and theft in SMEs: Evidence from the mobile telephone sector in Nigeria Workplace theft in SMEs: Evidence from the mobile telephone sector in Nigeria'. Available at: https://doi.org/10.1108/JFC-03-2017-0025.

[16] Lee, C.W. and Azis, M.I. (2023) 'The Effect of Adopting International Accounting Standards on Corruption under Financial Reporting Basis', *Review of Integrative Business and Economics Research*, 12(1), pp. 40–55.

[17] Lynch, R. and McCullagh, O. (2024) 'Risk attitudes of tax practitioners and firm influence', *Meditari Accountancy Research*, 32(7), pp. 86–108. Available at: https://doi.org/10.1108/MEDAR-06-2023-2050.

[18] Melović, B. *et al.* (2021) 'Strategic business decision making: the use and relevance of marketing metrics and knowledge management', *Journal of Knowledge Management*, 25(11), pp. 175–202. Available at: https://doi.org/10.1108/JKM-10-2020-0764.

[19] Memon, M.A. *et al.* (2020) 'Sample size for survey research: Review and recommendations', *Journal of Applied Structural Equation Modeling*, 4(2), pp. i–xx. Available at: https://doi.org/10.47263/jasem.4(2)01.

[20] Nasta, L., Magnanelli, B.S. and Ciaburri, M. (2024) 'From profits to purpose: ESG practices, CEO compensation and institutional ownership', *Management Decision*, 62(13), pp. 93–115. Available at: https://doi.org/10.1108/MD-06-2023-0932.

[21] Nugroho, D.S. and Diyanty, V. (2022) 'Fraud Hexagon and Fraudulent Financial Statement: Comparison Between OMI and Beneish Model', *Proceedings of the International Conference on Economics, Management and Accounting (ICEMAC 2021)*, 207(Icemac 2021), pp. 1–10. Available at: https://doi.org/10.2991/aebmr.k.220204.001.

[22] Oboh, C.S. (2023) 'Emotional intelligence and fraud tendency: a survey of future accountants in Nigeria', *European Journal of Management Studies*, 28(1), pp. 3–22. Available at: https://doi.org/10.1108/ejms-05-2022-0038.

[23] Ochnio, A.H. (2024) 'Recent developments in EU anti-corruption strategy: the missing element of the return of corrupt assets to "victim countries"', *Journal of Money Laundering Control*, 27(7), pp. 1–12. Available at: https://doi.org/10.1108/JMLC-11-2023-0176.

[24] Pickett, K.H.S. (2006) *Managerial Auditing Journal*, *Managerial Auditing Journal*. Available at: https://doi.org/10.1108/maj.2006.05121daa.001.

[25] Rogers, P. (2022) 'Best Practices for Your Exploratory Factor Analysis: A Factor Tutorial', *Revista de Administracao Contemporanea*, 26(6). Available at: https://doi.org/10.1590/1982-7849rac2022210085.en.

[26] Romano, G. and Guerrini, A. (2012) 'Corporate governance and accounting enforcement actions in Italy', *Managerial Auditing Journal*, 27(7), pp. 622–638. Available at: https://doi.org/10.1108/02686901211246778.

[27] Rufino, H., Payabyab, R.G. and Lim, G.T. (2018) 'Competency Requirements for Professional Accountants: Basis for Accounting Curriculum Enhancement', *SSRN Electronic Journal*, 7(3), pp. 116–128. Available at: https://doi.org/10.2139/ssrn.3172508.

[28] Rufino, H.D. (2014) 'Management Accounting Practices (MAPs) of Small and Medium-sized Manufacturing Enterprises in The City of Tarlac', *Review of Integrative Business & Economics Research*, 4(1), pp. 55–74. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3172509.

[29] Schreiber, J.B. (2021) 'Issues and recommendations for exploratory factor analysis and principal component analysis', *Research in Social and Administrative Pharmacy*, 17(5), pp. 1004–1011. Available at: https://doi.org/10.1016/j.sapharm.2020.07.027.

[30] Siam, W. and Abdullatif, M. (2011) *Fair value accounting usefulness and implementation obstacles: Views from bankers in Jordan*, *Research in Accounting in Emerging Economies*. Emerald Group Publishing Ltd. Available at: https://doi.org/10.1108/S1479-3563(2011)0000011009.

[31] Tawiah, V. (2023) 'The impact of IPSAS adoption on corruption in developing countries', *Financial Accountability and Management*, 39(1), pp. 103–124. Available at: https://doi.org/10.1111/faam.12288.

[32] Tsegba, I.N. and Upaa, J.U. (2015) 'Consequences of Financial Statement Fraud : A Developing Country Perspective', 10(8), pp. 115–126. Available at: https://doi.org/10.5539/ijbm.v10n8p115.

[33] Valentini, C. and Sriramesh, K. (2024) 'Forms and strategies of personal influence in "public" relations practices: evidence from Italy', *Corporate Communications*, 29(7), pp. 39–57. Available at: https://doi.org/10.1108/CCIJ-02-2023-0018.

[34] Vanasco, R.R. (2006) 'Managerial Auditing Journal', *Managerial Auditing Journal*, 21(4). Available at: https://doi.org/10.1108/maj.2006.05121daa.001.

[35] Varma, A., Piedepalumbo, P. and Mancini, D. (2021) 'Big data and accounting: A bibliometric study', *International Journal of Digital Accounting Research*, 21(September 2020), pp. 203–238. Available at: https://doi.org/10.4192/1577-8517-v21_8.

[36] Watkins, M.W. (2018) 'Exploratory Factor Analysis: A Guide to Best Practice', *Journal of Black Psychology*, 44(3), pp. 219–246. Available at: https://doi.org/10.1177/0095798418771807.

[37] Wu, X. (2005) 'Firm Accounting Practices, Accounting Reform and Corruption in Asia', *Policy and Society*, 24(3), pp. 53–78. Available at: https://doi.org/10.1016/s1449-4035(05)70060-6.