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PRIMARY RESEARCH

Dynamics of audit market choices in Nigeria: Factor and principal component approaches

EGBUNIKE, Amaechi Patrick¹, OKORO, Godsday Edesiri^{2*}, SINEBE T. Michael³

- ¹Department of Accountancy, Faculty of Management Sciences, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria
- ^{2,3}Department of Accounting, Faculty of Management Sciences, Delta State University, Abraka, Delta State, Nigeria

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Abstract

The audit marketplace is immersed with numerous audit firms varying from big-4 to non big-4 audit firms, thus making the audit selection choice cumbersome for organizations. In this paper, based on the burdensome nature of the dynamics that determine the selection choice of audit firms, we investigated the most significant dynamics that determine audit market choice of quoted companies in Nigeria. The survey research design and questionnaire were used. Five dynamics of audit market choice were identified, namely auditor-client compatibility and mandatory audit firm rotation; market concentration and departure of international accounting firm; governance and accountability; audit fee; and organizational complexity. Data obtained were analyzed via descriptive (frequency count, simple percentages, mean and standard deviation, Pearson correlation and normality test) and inferential (factor analysis) statistical methods. Findings of the principal component analysis (PCA) revealed that the determinants explained about 80.6% of the total variance in audit market choice. The practical implication of the result is that corporate entities base selections of audit firms in the marketplace using audit fees; need to ensure accountability, audit firm rotation, audit-client compatibility and complexity of the organization. Having analyzed the situation of the dynamics determining audit market choice, we found that all the dynamics determine audit market selection choice; however, the factor analysis established that audit fees, accountability, mandatory audit firm rotation, and audit-client compatibility were the most significant dynamics that determine the reasons for the choice of the selection of auditor in the audit market in Nigeria.

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INTRODUCTION

The demise and failure of global companies like Worldcom, Enron, Xerox, Adelphia and a host of others, and in Nigeria, Oceanic, Skye, and Intercontinental Banks, etc., made audit an indispensable and mandatory input for publicly quoted firms globally and locally (Madu-Chimau, Egbunike, & Okoro, 2020; Akrawah, Anichebe, & Okunrobo, 2020) the foregoing thus informed the preponderance and rationale for audit firms' selection choices by companies (what is termed the 'big-4' audit firms and referred to audit firms such as Ernest and Young, Deloitte, KPMG and Price WaterhouseCoopers). Conceivably, the big-4 audit firms have dominated the audit marketplace while the 'non big-4 au-

dit firms experienced low selection choice by companies (Machmuddah, Pamungkas, et al., 2019) the dominance of the big-4 audit firms has thus provoked interests in the academic space and business environment as to why large size and multinational companies choose to make their selection among the big-4 audit firms.

In Nigeria, the big-4 audit firms handled most audit engagements, especially for most large and multinational companies while the non-big 4 audit companies are engaged in audit of small-sized firms. Because of the audit they conduct for large size as well as multinational companies, the exercise dominance in the audit market. According to Diab and Eissa (2023), similar situations in the audit marketplace for

[†]email: edesirioracle@yahoo.com



^{*}corresponding author: OKORO, Godsday Edesiri

the big-4 audit firms exist in both developed and developing countries. Hence, the processes by which firms (whether small, medium, large or multinational) make their audit selection choices and key audit matters (KAMs) have become convoluted (Altass, 2023; Ezejiofor & Okolocha, 2020; Hladika, Poljašević, & Grbavac, 2021; Sinebe et al., 2020; Tušek, 2015).

To other researchers (see (Sinebe et al., 2020; Knechel, Niemi, & Sundgren, 2008; Wang, Sewon, & Chu, 2014; Mohamad Nor & Abidin, 2015; Abidin, Beattie, & Goodacre, 2010; Knechel et al., 2008; McMeeking, 2006; Shu, 2000), the process by which companies select or make audit choice, is significantly determined by a number of dynamics which include but not limited to auditor-client compatibility and mandatory audit firm rotation; audit fee; market concentration and departure of international accounting firm; governance and accountability as well as organizational complexities.

A number of the dynamics inter-alia is perceptibly more germane than others for decisive audit-market selection choice and systems audit quality of firms (Lee et al., 2021; Mališ & Brozović, 2015). For instance, in a competitive audit marketplace, firms or those charged with governance responsibility may bring to bear, their buying-power by selecting the audit-provider that can best achieve their needs and those of the shareholders (Ezejiofor & Okolocha, 2020; Sinebe et al., 2020). This has however, made the audit market sternly competitive, especially for the non-big-4 audit firms.

The dynamics of audit market choice are the building blocks for selecting audit-client and we resolutely believe that the knowledge of the dynamics are needed by those charged with governance of firms (Martani, Rahmah, Fitriany, & Anggraita, 2021). The reason being that the primary responsibility of the auditors are to directly linked to the shareholders and satisfying this responsibility requires or demands an efficient selection of audit-client.

More worrisome is the fact that notwithstanding the pivotal role played by the dynamics of audit market choice interalia, there are hardly empirical evidences in this area in developing countries, Nigeria inclusive that had examined the burdensome nature of the dynamics that determine the selection choice of audit firms of publicly quoted companies in Nigeria; this perhaps leaves a lacuna in the auditing and accounting literature as to whether the selection of audit firms are driven by certain dynamics as well as the most significant dynamics that determine audit market choice of publicly quoted companies in Nigeria.

Furthermore, it appears that there are no empirical stud-

ies in both developed and developing countries that had investigated if certain variables are major dynamics or determinants of audit market choice. Diab and Eissa (2023) opined that corporate organization base their selection of audit firms on certain dynamics. Supporting the above assertion, (Kim, Kim, Lee, & Yoo, 2019; Yunawati & Zulkarnain, 2019) believed that certain dynamics in the audit marketplace are significantly perceived by corporate entities to influence the selection of audit firms.

These dynamics identified and employed in this study were auditor-client compatibility and mandatory audit firm rotation, audit fee, market concentration and departure of international accounting firm, governance and accountability and organizational complexities.

Given the dynamics that shape the audit market choice, this paper sought to assess the nature of the dynamics that determine the selection choice of audit firms and the most significant dynamics that determine audit market choice of publicly quoted companies in Nigeria. In line with the above theoretical proposition and discuss, the following research questions were raised to guide the study:

- (1) How are auditor-client compatibility and mandatory audit firms' rotation, dynamics of audit market choice of publicly quoted companies in Nigeria?
- (2) How are governance and accountability, major determinants of audit market choice of publicly quoted companies in Nigeria?
- (3) How are market concentration and departure of international accounting firms, major determinants of audit market choice of publicly quoted companies in Nigeria?
- (4) How is audit fee, a major determinant of audit market choice of publicly quoted companies in Nigeria?
- (5) How is organizational complexity, a major determinant of audit market choice of publicly quoted companies in Nigeria?

In addition, the practical implication of this study is that of ascertaining if corporate organizations base their selection of audit firms in the marketplace using audit fee, need to ensure accountability, audit firms' rotation, audit-client compatibility as well as organizational complexity. In line with the identified research questions of the study, we formulated five(5) research hypotheses which were stated in the subsequent part of this paper; the developed/formulated research hypotheses were expressed in their null forms.. The remaining part of the paper is sectioned as follows: literature review and hypotheses development, methods, results and discussion while the final part of the paper dealt with the conclusion and recommendations.



LITERATURE REVIEW AND HYPOTHESES DEVELOP-MENT

There exists a lacuna in the audit literature on the dynamics of audit market choices in developing country like Nigeria. We are aware that there are quite a number of studies on audit market choices in other countries (Altass, 2023; Cao & Feng, 2022; Huang, Chang, & Chiou, 2016) however, most studies in this area had focused on the competition in the audit market, auditor-client comparability, audit firm selection, audit market structure, fees and choices and a host of others (Knechel et al., 2008; McMeeking, 2006; Council, 2006; Dubaere, 2008; Abidin et al., 2010; Knechel et al., 2008; Wang et al., 2014; Mohamad Nor & Abidin, 2015) without due attentiveness on the dynamics of audit market, particularly in the Nigerian context.

More worrisome is the fact that there are uncommon studies that had investigated the most significant dynamics determining audit market choice using factor and principal component approach; again, empirical researches in this area are not forthcoming. For instance, it was shown that the expected variation in the consumer surplus arising from disappearance of one of the big-4 audit firms and implementation of mandatory audit firm rotation in the United States of America(USA) decreased from \$1.48billion for the disappearance of big-4 audit firms such as Deloitte-Touche and \$1.85billion for Price WaterhouseCooper. As regards the implementation of mandatory audit firm rotation, the study found large impact due to firms' loss of \$3.5billion in the consumer surplus if rotation were a requisite after ten (10) years and \$5.6billion if mandatory rotations were compulsory after only four (4) years.

Furthermore, Knechel et al. (2008) investigated the extent of compatibility of auditor-client and audit firms' selection using financial statements and non-financial disclosures. Finding supports that compatibility of auditor-client can be used as a forecast for auditor-client coalition. Practically, when compatibility is conical, clients are more likely to switch audit firms and are more likely to substitute an audit firm with comparatively high auditor-client fee (Diab & Eissa, 2023; Kim et al., 2019; Okere, Ogundipe, Lawal, Eluyela, & Ogundipe, 2018).

Consequently, inter-quartile variation in compatibility intensifies the likelihood of selecting an audit firm in the audit marketplace. Additionally, there are changes in the market share when there is mandatory audit rotation particularly where corporate organizations base their choices of auditors on compatibility. Owing to the fact that auditor-client compatibility and mandatory audit firms' rotation may increase or decrease the likelihood of audit firms' choice, we

hypothesized as follows:

Ho1: Auditor-client compatibility and mandatory audit firm rotations are not dynamics of audit market choice Perhaps, there are other views to the dynamics of audit market choice. For instance, a study by Abidin et al. (2010) offered empirical evidence on audit market concentration and auditor fee levels in the United Kingdom (UK). The study focused on the structural revolution occasioned by the demise of Anderson and the Price waterhouseCoopers' mergers and found significant increasing strain on audit fee since 2001 but only for less significant auditees. More so, audit fee for top-tier auditors in the UK showed insignificant variation while the number of auditees significantly fell; this perhaps may be due to a move towards larger and less risky clients (UNAMMA & EKWUEME, 2021; Martani et al., 2021). In addition, it was shown that the cumulative big audit-firm concentration ratio varies and this has been attributed to four (4) dissimilar reasons: leavers, net-joiners, changes in audit fee and non-par auditor switch. Remarkably, there is no empirical evidence to show that structural variations can result to anti-competitive pricing in the audit marketplace at the national and global levels. Consequent upon the above discuss, we hypothesized as follows:

Ho2: Governance and accountability are not determinants of audit market choice

Furthermore, one of the most contending concerns rocking the auditing profession is whether the level of audit concentration determines the choice of auditors in the audit marketplace. Prior studies support the notion that the level of audit concentration determines audit market choice while some studies refute the above assertion. Studies by Altass (2023), Ezejiofor and Okolocha (2020), McMeeking (2006) and Beattie and Fearnley (1998) contended that market concentration significantly contributes to the choice of audit selection. These studies inter-alia provides evidence that concentration ratio in the audit marketplace amplifies over time and the soaring concentration level in the audit marketplace may have negative effect on price competition. Regardless of the fact that the soaring concentration and the departure of international firms may have influenced the audit market choice in some countries, the same may not hold for developing country like Nigeria. Notably, evidence on audit market concentration in Croatia found that market shares established on total clients' assets, revenues, and audit market for listed firms is moderately to highly concentrated, with a decrease in the five-year period (2013 compared to 2008). Similarly, Dubaere (2008) finds that audit market concentration is determined by client characteristics, number of audit firms and the relative size of client



firms in Belgium. In line with the above, we hypothesized as follows:

Ho3: Market concentration and departure of international accounting firms are not determinants of audit market choice

Again, prior evidence suggests that audit fee plays a fundamental role in determining audit market choice. In China, Wang et al. (2014) find evidence that the two largest indigenous audit firms earn fee premiums than other indigenous firms after they bypass big-4 audit firms and become the top five (5) players in the audit market. On the other hand, audit fees charged by these two indigenous audit firms are still lesser than those of the big-4 audit firms.

By and large, it appears that structural change in Chinese audit market significantly influence pricing strategy for both big-4 audit firms and indigenous audit firms. In the same way, the findings of Mohamad Nor and Abidin (2015) suggests that there is slight variation in the audit market during the period 2008-2010 and that variation in the audit

market was occasioned by audit fee. Consequent upon the above, we hypothesized as follows:

Ho4: Audit fee is not a determinant of audit market choice. Several factors have been identified in the literature to influence audit market choice (auditor-client compatibility and mandatory audit firm rotation, governance and accountability, market concentration and departure of international accounting, audit fee). Aside these factors interalia, (Knechel et al., 2008; Ezejiofor & Okolocha, 2020; Martani et al., 2021) found that the level of complexity in the organization, to some extent determine audit market choice. Also, choice between a first-tier or second-tier audit firm may be connected with extent of debt-financing and concerns about disclosing proprietary information for competitors. It thus implies that, organizational complexity may determine audit market choice; this however, led to hypothesizing as follows:

Ho5: Organizational complexity is a determinant of audit market choice.

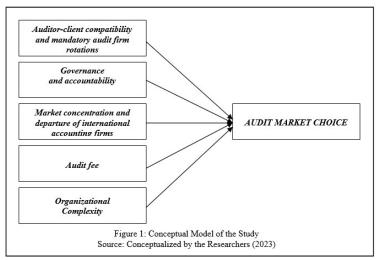


FIGURE 1. Figure 1: Conceptual model of the study source: Conceptualized by the researchers (2023)

METHODS

This paper aimed at assessing the determinants of audit market choice in Nigeria. The survey design via the use of questionnaire was employed. The population of study comprised of professional accountants and auditors of publicly quoted industrial and consumer goods companies in Nigeria which amounts to about six hundred (600). A sample of three hundred (300) professional accountants and auditors of the selected publicly quoted industrial and consumer goods companies were obtained through purposive sampling; purposive sampling was used in order to enable the researchers obtain relevant information on the investigation and eliminate research subjects that may not be eas-

ily accessible by the researchers

The major instrument of data collection was the questionnaire which was designed on a 5-point Likert scale of strongly agree (SA), agree (A), disagree (D), strongly disagree (SD) and undecided (UD). Besides, in order to ascertain the reliability of the research instrument, it was administered to thirty (30) respondents who are management staff of publicly quoted companies in Nigeria other than those employed in the study. A Cronbach Alpha of r=0.89, p<0.05 was obtained; thus suggesting that the instrument items have good reliability for the study. Data obtained in the field survey were analyzed using both descriptive (frequency counts, simple percentages, mean and standard



deviation, correlation and normality test) and inferential (principal and factor approaches) statistical approaches.

More importantly, the factors (i.e. determinants of audit market choice) used in the study consist of auditor-client compatibility and mandatory audit firm rotation (ACMAFR), governance and accountability of audit firms (GAAF), market concentration and departure of international accounting (MCDIA), audit fee (AUDF), and organizational complexity (ORGCOM). Approval for this research was obtained from management of the selected publicly

quoted industrial and consumer goods companies; this was to allow the researchers have access to the respondents and be willing to participate by way of responding to the questionnaire; also, respondents were treated with utmost confidentiality. The statistical analysis was carried out via STATA 13.0. A-priori expectation is such that the study factors(dynamics of audit market choice) should determine audit market choice of publicly quoted companies in Nigeria.

RESULTS

TABLE 1. Bio-data of the respondents

Ranks	Variables	Respondents	Frequency N=300	Percent(%)
1	Gender	Male	184	61%
		Female	116	39%
		Total	300	100%
2	Age	21-25years		
		26-30years		
		31-35years		
		36years and above		
		Total		
3	Marital Status	Single		
		Married		
		Others		
		Total		
4	Respondent Type	Professional Accountants		
		Professional Auditors		
		Total	28	9%
			97	32%
			108	36%
			67	22%
			300	100%
			81	27%
			189	63%
			30	10%
			300	100%
			156	52%
			144	48%
			300	100%

Source: Field Survey, 2023

The result as shown in Table 1 indicates that 184(61.0%) of the respondents are male while 116(39.0%) are female. 28(9.0%) of the respondents were within the age brack-

ets of 21-25years, 97(32.0%) 26-30years, 108(36.0%) 31-35years while 67(22.0%) 36years and above. It was found that 81(27.0%) and 189(63.0%) of the respondents



are single and married. 30(10.0%) represents other category of marital status such as divorced and separated. More importantly, it was shown that 156(52%) and 144(48%) of

the respondents are professional accountants and auditors respectively.

TABLE 2. Descriptive statistics of dynamics of audit market choice

Factors	Obs.	Mean	Stan-
			dard
			Dev.
ACMAFR	300	3.1160	0.4008
GAAF	300	3.2113	0.4112
MCDIA	300	3.0293	0.3601
AUDF	300	2.9747	0.5232
ORGCOM	300	3.0200	0.5665

Source: Field Survey, 2023

With regards to the dynamics of audit market choice (Table 2), all the dynamics of audit market choice (auditor-client compatibility and mandatory audit firm rotation: ACMAFR; governance and accountability of audit firms: GAAF; market concentration and departure of international accounting: MCDIA; audit fee: AUDF; organizational complexity:

ORGCOM) scored above a mean benchmark of 2.50, with GAAF being the highest scale value. The average respondent answered with a scale value of above 2.50, hence suggesting that the respondents perceive these dynamics as determinants of audit market choice.

TABLE 3. Correlation matrix

Factors	ACMAFR	GAAF	MCDIA	AUDF	ORGCOM
ACMAFR	1.0000				
GAAF	0.1145	1.0000			
MCDIA	-0.1031	-0.0446	1.0000		
AUDF	-0.0057	0.1070	0.2625	1.0000	
ORGCOM	0.1582	0.0507	0.0181	0.3334	1.0000

Source: Field Survey, 2023

Presented in Table 3 are the correlation coefficients of the dynamics determining audit market choice. The correlation matrix showed that the dynamics (ACMAFR, GAAF and ORGCOM) are carrying the right signs (positive) except MCDIA and AUDF that are carrying negative signs. This is an indication that the dynamics of audit market choice followed

a-priori expectation except MCDIA and AUDF. Besides, none of the correlation coefficients of audit market choice dynamics exceeded 0.8, thus implies the absence of multicollinearity problem among pairs of the dynamics of audit market choice.

TABLE 4. Eigenvalue of the factors

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Eigenvalue	0.61084	0.59191	0.51484	-0.21264	-0.29223

Source: Field Survey, 2023

The eigenvalue of the factors depict the strongly related fundamentals for gauging the dynamics predicting audit market choice. In this study, there were five (5) variables found with their eigenvalues (see Table 4). The first 3-factors (factor-1, factor-2 and factor-3) were found by using eigen-

value greater than one rule. These 3-factors with factor loading of 0.5 and above have been selected based on the suggestions of Black, Babin, and Anderson (2010) that factor loading above 0.5 are significant to assess the minimum loading required constituting an item.



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TABLE 5. Factor loading estimates

S/N	Factors	Factor	Factor
		1	2
1	Does questions ACMAFR2a-2d load on ACMAFR	0.1027	0.3381
2	Does questions GAAF 3a-3d load on GAAF	0.1416	0.1942
3	Does questions MCDIA4a-4d load on MCDIA	0.2609	-0.3208
4	Does questions AUDF5a-5d load on AUDF	0.5546	-0.0968
5	Does questions ORGCO6a-6d load on ORGCOM	0.4523	0.1662

Source: Field Survey, 2023

Presented in Table 5 are the factors loading estimates of the study. It was revealed that five (5) variables are strongly related with certain explicit factors and that this tremen-

dously indicates the extent to which those variables load on the factors.

TABLE 6. Measuring commonality

S/N	Factors	Uniqueness	Commonality Σ(loading)2 or 1(-uniqueness)%
1	ACMAFR	0.5752	42.48%
2	GAAF	0.6422	35.78%
3	MCDIA	0.529	47.1%
4	AUDF	0.3831	61.69%
5	ORGCOM	0.4678	53.22%

Source: Field Survey, 2023

Table 6 suggests that AUDF (61.69%), ORGCOM (53.22%), MCDIA (47.1%) and ACMAFR (42.48%) are the highest commonality variables while GAAF (35.78%) is the lowest commonality variable. Impliedly, audit market choice dy-

namics of AUDF and ORGCOM have much in common with other audit market choice dynamics of MCDIA, ACMAFR and GAAF taken together.

TABLE 7. Explained Variance

S/N Factors Proportion Explained Variance 1 Factor 1 0.4389 2 Factor 2 0.5921 0.806 3 Factor 3 -0.0098 or 4 Factor 4 -0.0229 80.60% 5 Factor 5 -0.1927				
2 Factor 2 0.5921 0.806 3 Factor 3 -0.0098 or 4 Factor 4 -0.0229 80.60%	S/N	Factors	Proportion	Explained Variance
3 Factor 3 -0.0098 or 4 Factor 4 -0.0229 80.60%	1	Factor 1	0.4389	
4 Factor 4 -0.0229 80.60%	2	Factor 2	0.5921	0.806
	3	Factor 3	-0.0098	or
5 Factor 5 -0.1927	4	Factor 4	-0.0229	80.60%
	5	Factor 5	-0.1927	

Source: Field Survey, 2023

From Table 7, it can be observed that factor-1, factor-2, factor-3, factor-4 and factor-5 have been explained by 80.6% of the total variance. The result implies that auditor-client compatibility and mandatory audit firm rotation (ACMAFR), governance and accountability of audit firms (GAAF), market concentration and departure of international accounting (MCDIA), audit fee (AUDF), and organizational complexity (ORGCOM) are dynamics determining audit market choice.

DISCUSSION

The fundamental issues facing most corporate entities in making audit choice remains a matter regarding governance and accountability of audit firms, auditor-client compatibility and mandatory audit firm rotation, audit fee ect. The implication is that when these dynamics are lower, clients are more likely to switch and replace auditors with moderately higher auditor-client fee. In this paper, we investigated the dynamics of audit market choice in Nigeria. The audit market choice dynamics employed in the investigation comprise auditor-client compatibility and mandatory audit firm rotation, governance and accountability,



market concentration and departure of international accounting firm, audit fee, and organizational complexity. Consequently upon the above, we hypothesized that these dynamics are deep-rooted factors determining audit market choice. Our findings have diverse implications for both researchers and accounting regulators. The results revealed that the dynamics explained about 80.6% of the total variance in audit market choice. Again, the dynamics determine the manner in which corporate entities make their audit selection choices in Nigeria. Findings of the study agrees with the results of Knechel et al. (2008), Wang et al. (2014), Mohamad Nor and Abidin (2015) who found that audit fee, complexity of the organization, audit firm rotation, audit-client compatibility, and the need to ensure accountability, are the determinants of auditors choices.

CONCLUSION

This study examined the dynamics determining audit choice in Nigeria and concludes that the certain dynamics determine the manner in which corporate entities make their audit selection choices in Nigeria. In light of the findings, it is recommended that the mandatory audit firm rotation should be done after only four (4) years. In addition, there should be reduction in the barriers to the growth of smaller audit firm; this will aim at promoting audit quality.

This study fills the gap in the auditing and accounting literature on what is known about the determinants of audit market choice. More so, the study contributes to the body of knowledge by establishing that corporate firms base their selection of audit firms more significantly on audit fees, the necessity to ensure accountability, audit firm rotations, audit-client compatibility and complexity of the client organization. The study was limited to only industrial and consumer goods companies in Nigeria; hence future researchers should consider investigating other companies/sectors such as agriculture, banking, insurance, etc, so as to see if the above results may remain unchanged.

REFERENCES

- Abidin, S., Beattie, V., & Goodacre, A. (2010). Audit market structure, fees and choice in a period of structural change: Evidence from the UK-1998--2003. *The British Accounting Review*, 42(3), 187-206.
- Akrawah, D. O., Anichebe, A. S., & Okunrobo, S. (2020). Determinants of auditor switching behaviour in Nigeria. *Global Journal of Accounting and Economy Research*, 1(2), 119-144.
- Altass, S. (2023). Auditor switching, tenure, and corporate performance: The Saudi evidence. *Quality-Access to Success*, 24(192), 13.
- Beattie, V., & Fearnley, S. (1998). Audit market competition: auditor changes and the impact of tendering. *The British Accounting Review*, 30(3), 261-289.
- Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis: A global. Pearson.
- Cao, Y., & Feng, Z. (2022). Do supply shocks in the audit partner labor market affect auditor choice? evidence from a quasi-natural experiment. *China Journal of Accounting Research*, 15(1), 100221. doi:doi.org/10.1016/j.cjar.2022 .100221
- Council, F. R. (2006). Competition and choice in the UK audit market. United Kingdom: Financial Reporting Council.
- Diab, A., & Eissa, A. M. (2023). ESG performance, auditor choice, and audit opinion: Evidence from an emerging market. Sustainability, 16(1), 124. doi:https://doi.org/10.3390/su1601012
- Dubaere, C. (2008). Concentration on the audti market. *Ghent University, Faculty of Economics Business Administration*, 1-73. Ezejiofor, R. A., & Okolocha, C. B. (2020). Effect of internal audit function on financial performance of commercial banks in Nigeria. *Journal DOI*, 6(7), 44-56.
- Hladika, M., Poljašević, J., & Grbavac, J. (2021). Assessment of transparency of audit reports based on presentation of key audit matters-The cases of Bosnia and Herzegovina and Croatia. *Ekonomski vjesnik: Review of Contemporary Entrepreneurship, Business, and Economic Issues*, 34(2), 459-470. doi:doi.org/10.51680/ev.34.2.16
- Huang, T.-C., Chang, H., & Chiou, J.-R. (2016). Audit market concentration, audit fees, and audit quality: Evidence from China. *Auditing: A Journal of Practice & Theory*, *35*(2), 121-145.
- Kim, S. M., Kim, S. M., Lee, D. H., & Yoo, S. W. (2019). How investors perceive mandatory audit firm rotation in korea. *Sustainability*, 11(4), 1089.
- Knechel, W. R., Niemi, L., & Sundgren, S. (2008). Determinants of auditor choice: Evidence from a small client market. *International Journal of Auditing*, *12*(1), 65-88. doi:10.1111/j.1099-1123.2008.00370.x
- Lee, Y., et al. (2021). Technology-based practical blockchain system audit maturity model. Tehnički vjesnik, 28(2), 576-586.



- Machmuddah, Z., Pamungkas, I. D., et al. (2019). The effect of auditor switching and managerial ownership on fraudulent financial statement. *WSEAS Transactions on Business and Economics*, *16*, 306-315.
- Madu-Chimau, L. C., Egbunike, A. P., & Okoro, E. G. (2020). Forensic auditing and fraud detection in Nigeria: Evidence from publicly quoted commercial banks. *Manag Econ Res J*, 6(4), 12.
- Mališ, S. S., & Brozović, M. (2015). Audit market concentration-Evidence from Croatia. *Ekonomski vjesnik/Econviews-Review of Contemporary Business, Entrepreneurship and Economic Issues*, 28(2), 339-356.
- Martani, D., Rahmah, N. A., Fitriany, F., & Anggraita, V. (2021). Impact of audit tenure and audit rotation on the audit quality: Big 4 vs non big 4. *Cogent Economics & Finance*, *9*(1), 1901395.
- McMeeking, K. P. (2006). Improving choice in the UK audit market. University of Exeter, Department of Accounting.
- Mohamad Nor, M. N., & Abidin, S. (2015). The structure of Malaysian audit market: From 2008 to 2010.
- Okere, W., Ogundipe, U., Lawal, Q., Eluyela, F., & Ogundipe, K. (2018). Auditors' choice and financing decision of selected quoted firms in Nigeria. *International Journal of Management, Accounting and Economics*, 5(2), 66-77.
- Shu, S. Z. (2000). Auditor resignations: Clientele effects and legal liability. *Journal of Accounting and Economics*, 29(2), 173-205.
- Sinebe, T., et al. (2020). Earnings management, IFRS adoption and corporate attributes: Evidence from Nigeria. *Multidisciplinary Journal of Management Sciences*, *2*(1), 209-222.
- Tušek, B. (2015). The influence of the audit committee on the internal audit operations in the system of corporate governance-Evidence from Croatia. *Economic Research-Ekonomska istraživanja*, 28(1), 187-203.
- UNAMMA, A. N., & EKWUEME, C. M. (2021). Auditor switch decisions and corporate performance of listed non-finance firms in Sub-Saharan Africa. *JALINGO JOURNAL OF SOCIAL AND MANAGEMENT SCIENCES*, 3(4), 45-58.
- Wang, K., Sewon, O., & Chu, B. (2014). Auditor competition, auditor market share, and audit pricing-evidence from a developing country. *Journal of Global Business Management*, 10(1), 1.
- Yunawati, S., & Zulkarnain, Z. (2019). The determinant factors of auditor switch (empirical studies to companies listed on Indonesian stock exchange). *International Journal on Advanced Science, Education, and Religion, 2*(2), 9-16.

