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Corporate Governance and Audit Management as Predictors for Return of Assets among Oil and Gas Companies in Libya

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Abstract: **Oil and Gas industry is one the mail industrial sectors in Libya, but it has some unique features associated with continuous struggles to survive based on the domestic security crisis in Libya. With these condition the possibility of financial reporting quality become questionable. However, studies in developed countries revealed that there are relations between corporate governance and audit quality in firms' financial performance. Understanding the factors of improving firms' performance in this important sector is important to provide an insight of how to develop this core sector. Therefore, this study is an exploration into the Libyan oil and gas companies to increase the knowledge regarding the firms' financial performance and its antecedents. Two theories contribute to the model relation; agency theory and stewardship theory. Bothe the two theories integrated together to provide an explanation for the connection between managers, shareholders, delegation authority, and firms performance. The target population of this study includes oil and gas companies in Libya for the period from 2012 until 2019, which have 14 companies and the researcher can find and collect a reliable data from annual reports. The statistical tool is suitable for regression analysis method and particularly for this study; ordinary least squares (OLS) regression analysis is used. Results of this study show that CEO duality relation with return on assets (ROA) is not significant. However, the other three variables, boards independent, audit committee, and external audit have a significant relationship with ROA.**

Keywords: **Libya, Oil and Gas, Financial Performance, ROA, board independent, CEO duality, Audit Committee, external audit.**

I. BACKGROUND

The primary aim of a company is profit and wealth maximization by considering the rights of its investors. Firm management's investment and finance decisions are carefully kept an eye on by main monetary market actors such as financial institutions, financiers and prospective investors. Lots of financial ratios indicate how well a firm is performing and whether firm resources are handled efficiently. In order to determine the efficiency of a firm financial management, Return-on-Assets (ROA) is among the most frequently used monetary ratios [1].

Return on Assets (ROA) is an indication of how lucrative a business is relative to its total possessions. ROA provides a manager, financier, or expert an idea regarding how efficient a business's management is at utilizing its properties to produce revenues. ROA is shown as a portion that takes into account a company's debt, unlike other metrics, such as Return on Equity (ROE). ROA is computed by dividing a business's net income by overall possessions[2]. As a formula, it would be revealed as the following:

$$Return\ on\ Assets = \frac{Net\ Income}{Total\ Assets}$$

The term audit usually refers to a monetary declaration audit. A monetary audit is an objective assessment and examination of the monetary statements of an organization to make certain that the financial records are a reasonable and accurate representation of the deals they claim to represent. The audit can be conducted internally by staff members of the organization or externally by an outside-certified firm [3].

Audits performed by outdoors agencies can be extremely practical in getting rid of any predisposition in evaluating the state of a business's financials. If there are any product misstatements in the monetary declarations, financial audits seek to identify. The professional and accurate auditor's opinion provides financial declaration users with self-confidence that the financials are both total and precise. External audits, for that reason, allow stakeholders to make better, more informed choices associated with the company being audited [4].

An audit committee is among the significant operating committees of a company's board of directors that is in charge of overseeing monetary reporting and disclosure. Publicly traded companies need to keep a qualified audit committee in order to be listed on a stock market. Committee members must be made up of independent outside directors, consisting of a minimum of one individual who qualifies as a financial expert. The audit committee's role consists of the oversight of financial reporting, the tracking of accounting policies, the oversight of any external auditors, regulative compliance and the discussion of risk management policies with management [5].

To the best of author's knowledge, previous studies on the association between corporate governance, audit management, and firm performance focused on the oil and gas industry in Libya are few and this domain need more exploration to reveal the related knowledge based in Libya industry characteristics. In addition, the results could be important especially with the absence of research in Libyan stock market due to market freeze status. Thus, there is a need for an empirical investigation that considers the impact of board independence, CEO duality, external audit, and audit committee on financial performance. The present research is also timely because the assessment of the code must take into consideration the adequate length of time to determine its effectiveness. Giving enough time allows the affected companies to adapt to the new system and for the impact to be seen.

Oil and Gas industry is one the mail industrial sectors in Libya, but it has some unique features associated with continuous struggles to survive based on the domestic security crisis in Libya. With these condition the possibility of financial reporting quality become questionable. However, studies in developed countries revealed that there are relations between corporate governance and audit quality in firms' financial performance. Understanding the factors of improving firms' performance in this important sector is important to provide an insight of how to develop this core sector. Therefore, this study is an exploration into the Libyan oil and gas companies to increase the knowledge regarding the firms' financial performance and its antecedents.

II. LITERATURE REVIEW

A. Oil and Gas Industry in Libya

TABLE I: OIL AND GAS COMPANIES IN LIBYA

SN	Company	Category
1	National oil corporation (NOC)	Sales and Marketing
2	Brega oil marketing company	Sales and Marketing
3	Azzawiya oil refining company	Manufacturing
4	Ras Lanuf oil and gas processing company	Manufacturing
5	Mellitan oil & gas company	Manufacturing
6	Waha oil company	Production
7	Sirte oil company	Production
8	Arabian gulf oil company	Production
9	Zuetina oil company	Production
10	Harouge oil operations company	Production
11	Akakus oil operations company	Production
12	Almabruk company for oil production	Production
13	Nafusah oil operations company	Production
14	Zallaf Libya oil and gas company	Production

The economy of Libya depends primarily on revenues from the petroleum sector, which represents over 95% of export earnings and 60% of GDP. These oil revenues and a small population have given Libya one of the highest nominal per capita GDP in Africa [6]. Libya is an OPEC member and holds the largest proven oil reserves in Africa. The oil and gas industry in Libya include three main categories, oil production, oil manufacturing, and marketing and sales services [7]. As seen in TABLE I, fourteen companies are allocated in Libya to provide three main services and products.

B. Related Theories

Two theories contribute to the model relation; agency theory and stewardship theory. Bothe the two theories integrated together to provide an explanation for the connection between managers, shareholders, delegation authority, and firms performance.

The agency theory has its genesis in the economic theory propounded by Adam Smith (who recognised agency problem) and Alchian and Demsetz (1972). It was later, progressed by Jensen and Meckling (1976) [8]. Within the theory, every agency relationship ia a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. If both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal. The relationship between agent and principle is termed as agency [9]. The problem with agency theory is the separation of ownership and control, which is often termed as agency problem. The modern organization is a complex structure. For the management of corporation, shareholders delegate control to the board of directors to run the company on their behalf [10].

The major problem that arises with the problem of Agency theory is the diversion of objective between managers and shareholders. This problem is solved by Stewardship theory. Stewardship theory has its genesis from psychology and sociology and is defined by Davis, et al (1997) as "a steward protects and maximises shareholders wealth through firm performance, because by so doing, the steward's utility functions are maximised" [11]. The theory treats managers as stewards who assimilate their aims as part of the organization's goals. It emphasizes on the role of executives to act with more autonomy so that the shareholders' returns are maximized. This will consequently reduce the costs intended at monitoring and controlling behaviours. Furthermore, this theory suggests uniting the role of the CEO and the chairman. When the CEO and chairman duality exist power and authority are both concentrated reducing the ambiguity; this in turn, benefits the organization in terms of unity of direction as well as strong command and control. This will help in reducing the agency costs and will yield improved role as stewards in the organization [8].

C. Conceptual Framework

Board independence refers to the proportion of independent directors on the board [12]. Recently, Fuzi et al. (2016) shows that a more independent board contributes towards restricting managers from using their power to make accruals in earning and improve the disclosed financial performance. Different recent studies explored this relation and revealed the significance of the relations in different contexts and setup; Bangladeshi listed companies [13], Jordanian listed companies from manufacturing sector [14], and Thai public non-life insurers [15]. Based on the above discussion of ownership concentration and its relations within the model, the following arguments are considered for exploration within this particular study:

- Board independence has a significant influence on return on assets (ROA)

CEO duality means one person acting as a CEO and as the chairman of board. CEO duality existence will give chances to power concentration, which can increase management discretion [16]. CEO Duality exists can make monitoring action less effective and could lead to high level of flexible accruals in financial reporting which can negatively affect the financial performance of firms [17]. Different recent studies explored this relation and revealed the significance of the relations in different contexts and setup; industrial listed firms on the Amman Stock Exchange [14], commercial banks operating in Turkish banking sector [18], and French CAC 40 listed firms [19]. Scholarship on the duality issue remains equally unsettled. Based on the above discussion, the following arguments are considered for exploration within this particular study:

- CEO duality has a significant influence on return on assets (ROA)

Audit committee is an internally controlled governance and monitoring group that connected directly to BOD. Committee members must be made up of independent outside directors, including a minimum of one person who qualifies as a financial expert. Audit committee on financial performance is mixed and inconclusive [20]. The higher levels of audit committee independence are associated with increasing the quality of financial reporting and improve ROA and financial performance [21]. Different recent studies explored this relation and revealed the significance of the relations in different contexts and setup; companies quoted on the Nigerian Stock Exchange [22], financial companies listed in Libya Stock Market [23], and non-financial public limited companies listed in Indian NSE 500 [24]. Based on the above discussion, the following arguments are considered for exploration within this particular study:

- Audit committee effectiveness has a significant influence on return on assets (ROA).

External audit is a third party agency that have a contract to act as an independence monitoring for company process and performance especially in the financial performance and there is a general assumption that external auditor ensures the reliability of the financial statements provided by the Board of Directors to the shareholders [25]. There is a positive relationship between professional audit and audit quality which affect the overall financial performance of firms [26]. Different recent studies explored this relation and revealed the significance of the relations in different contexts and setup; listed companies in Saudi stock exchange [27], and non-financial firms in Oman [28].Based on the above discussion, the following arguments are considered for exploration within this particular study:

- External audit has has a significant influence on return on assets (ROA)

Based on the above conceptual and relational elaboration, Figure 1 provides an infographic for the proposed model relations.

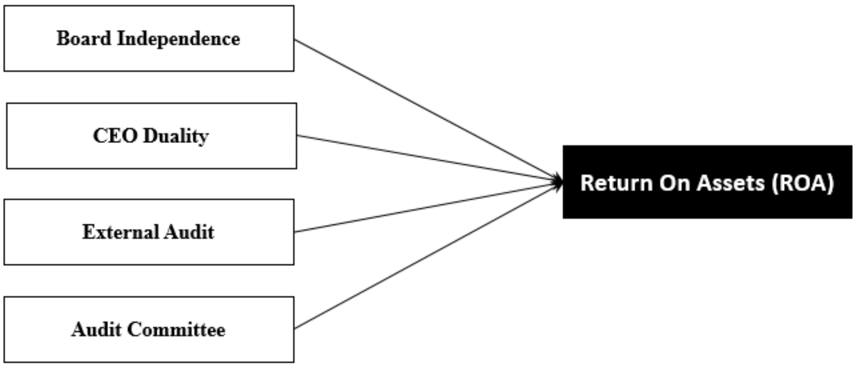

Fig 1. Conceptual Framework

III. METHODOLOGY

In order to achieve the research objective, a quantitative research approach has been applied whereby the study was conducted based on the analyzed numerical data. The data will be processed into information by analyzing statistical relationship between the antecedent variables and the outcome variable. In addition, quantitative methods are in numerical form and it contains the confirmatory and deductive approach. Secondary data is based on annual reports is chosen as the information in the annual report has its own credibility [29]. Furthermore, annual reports are approved documents and highly useful sources of information because managers of companies prepared it carefully at the most widespread and addition, annual reports are considered signal what is important through the reporting mechanism [30].

TABLE II: DATASET DESCRIPTION

Factor	Data Type	Comment
Return of Assets (ROA)	Number- Scale	Continuous number
External Audit (ExtAudit)	Number - Nominal	Have values of 1,2, or 3
Audit Committee (ComAudit)	Number - Ratio	Ration value between 0.0 to 1.0
Board Independence (BodI)	Number - Ratio	Ration value between 0.0 to 1.0
CEO Duality (CEOD)	Number - Nominal	Have values of 0 or 1

The target population of this study includes oil and gas companies in Libya for the period from 2012 until 2019, which have appropriate data and measures regarding all the proposed variables. The desired population is 14 companies and the selected period under review is seven-year period; 2012 to 2018, in which the researcher can find and collect a reliable data from annual reports.

Data in this study was analyzed by using the SPSS tools, which is known as statistical packages for social sciences. The statistical tool is suitable for regression analysis method and particularly for this study; ordinary least squares (OLS) regression analysis is used. The data set for this particular study is described in TABLE II.

IV. FINDINGS

This particular analysis is investigating four set of relations related to the assumption of "there is significant contribution made by corporate governance and audit variables on return on assets". Results in TABLES III and IV show that variance of return on assets can be statistically explained by the four predictors (F (4.97) = 10.517, p = 0.000). The four variables can explain 19.1% of the return on assets variance. The model is statistically significance at level 1% and the hypothesis is accepted.

TABLE III: MODEL SUMMARY OF RETURN ON ASSETS REGRESSION MODEL

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.437[a]	.191	.173	.0789286

TABLE IV: VARIANCE ANALYSIS OF RETURN ON ASSETS REGRESSION MODEL

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.459	7	.066	10.517	.000[b]
	Residual	1.944	312	.006		
	Total	2.402	319			

TABLE V shows the path coefficient results for the proposed relations in the model. The relation from CEO duality is rejected because of the non-fitted P value; significance level is higher than the threshold score of 0.05; which shows a non-acceptable relations with theses variables at level of 5%.

TABLE V: PATH COEFFICIENT ASSESSMENT OF RETURN ON ASSETS REGRESSION MODEL

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.273	.024		11.598	.000
	Board Independence	.069	.017	.212	4.128	.000
	CEO Duality	.010	.012	.043	.840	.401
	External Audit	.046	.007	.327	6.339	.000
	Audit Committee	.019	.008	.122	2.249	.025

The highest predictor and contributor to ROA is external audit (Beta = 0.327, t = 6.339, p = 0.000). Scores show that the increment of one unit of external audit will lead to decrement of 0.327 unit of ROA and the relation is a positive significance at 1% level. The second predictor and contributor to ROA is board independence (Beta = 0.212, t = 4.128, p = 0.000). Scores show that the increment of one unit of board independence will lead to decrement of 0.212 unit of ROA and the relation is a positive significance at 1% level. The third predictor and contributor to ROA is audit committee (Beta = 0.122, t = 2.249, p = 0.025). Scores show that the increment of one unit of audit committee will lead to decrement of 0.122 unit of ROA and the relation is a positive significance at 5% level. Thus, the variance of accrual earning management can be best predicted as the following model equation:

ROA = (0.212 * BodI) + (0.043 * CEOD) + (0.327 * ExtAudit) + (0.122 * ComAudit)

V. DISCUSSIONS

As seen in Figure 2, predictors of return on assets are three out of four variables proposed for this particular study. Board independence has significant relationship with ROA. Similar evidence from previous studies can be found, as example Hashim and Devi (2008) checked out whether the presence of a bulk of independent non-executive directors and the separation role in between chairman and CEO successfully constrains the occurrence of monetary management as determined by income-increasing and income-decreasing discretionary accruals. This study discovers a positive substantial outcome of board self-reliance when firms undershoot target revenues. The results of this research study called into question the idea that the independence of directors and the role separation in between the chairman and the CEO reduces the incidence of incomes management activity, specifically with extremely concentrated ownership as is normal in Malaysia [31]. Another studies examined the relation from board independence and Financial performance and revealed a positive influence in Palestine market [32], in Bahrain stock market [33], and in Amman stock exchange [34].

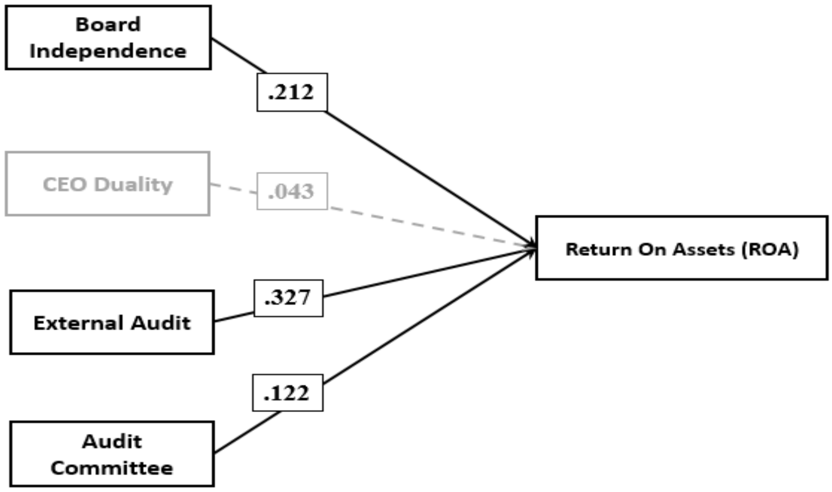

Fig 2. Path Coefficient Results

Thus, external audit relation with financial performance is mapped with previous studies in different environments; in Indonesia (Swastika, 2013); in Jordan [35]; and in UAE [35]. Moreover, audit committee relation with financial performance is mapped with previous studies in different environments; in Iran [36], in India [37], and in Pakistan [38].

VI. FUTURE STUDIES

This research was limited in terms of the nature of firms as the data are from firms belongs to one sector only. Future studies can consider multiple categories of the firms especially those listed in Libyan exchange market in order to determine whether there are differences in firms' performance practices among firms in different sectors. Future studies can expand the study by checking different oil and gas companies in other countries or by considering regional companies in order to determine whether geographical areas has impact of the firm performance.

Future studies can also contribute in building a wider critical success factors model by inclusion of extra variables from the data available from the market or via additional extracted data from content analysis of the reports such as corporate social responsibility or zakat disclosure.

Results show that CEO duality has no impact on firms' ROA and. Many other studies show different results; which encourage scholars to explain these findings in Palestine market by interviewing experts or any other qualitative tools.

REFERENCES

[1] F. Brigham, M. C. Ehrhardt, R. R. Nason, and J. Gessaroli, *Financial Managment: Theory And Practice, Canadian Edition*. Nelson Education, 2016.

[2] R. Moro Visconti, "Corporate Profitability: Return on Equity, Return on Investment, Modigliani & Miller Proposition II And Economic Value Added," *Return Investment, Modigliani Mill. Propos. II Econ. Value Added (March 20, 2018)*, 2018.

[3] J. Cohen, G. Krishnamoorthy, and A. Wright, "Enterprise risk management and the financial reporting process: The experiences of audit committee members, CFO s, and external auditors," *Contemp. Account. Res.*, vol. 34, no. 2, pp. 1178–1209, 2017.

[4] T. R. Robinson, *International financial statement analysis*. John Wiley & Sons, 2020.

[5] J. R. Fichtner, "The recent international growth of mandatory audit committee requirements," *Int. J. Discl. Gov.*, vol. 7, no. 3, pp. 227–243, 2010.

[6] M. L. Ross, *The oil curse: How petroleum wealth shapes the development of nations*. Princeton University Press, 2013.

[7] Hallett and D. Clark-Lowes, *Petroleum geology of Libya*. Elsevier, 2017.

[8] R. Kaur, "An Essay on Understanding Corporate Governance: Models, Theories and Global Evolution," *Focus J. Int. Bus.*, vol. 5, no. 2, pp. 93–104, 2018.

[9] S. P. Shapiro, "Agency theory," *Annu. Rev. Sociol.*, vol. 31, pp. 263–284, 2005.

[10] L. L. Lan and L. Heracleous, "Rethinking agency theory: The view from law," *Acad. Manag. Rev.*, vol. 35, no. 2, pp. 294–314, 2010.

[11] M. Waldkirch and M. Nordqvist, "the Case of stewardship theory," *Routledge Companion to Fam. Bus.*, p. 401, 2016.

[12] S. F. S. Fuzi, S. A. A. Halim, and M. K. Julizaerma, "Board independence and firm performance," *Procedia Econ. Financ.*, vol. 37, pp. 460–465, 2016.

[13] A. Rashid, "Board independence and firm performance: Evidence from Bangladesh," *Futur. Bus. J.*, vol. 4, no. 1, pp. 34–49, 2018.

[14] A. A. M. Qadorah and F. H. B. Fadzil, "The Effect of Board Independence and Board Meeting on Firm Performance: Evidence from Jordan," *J. Financ. Account. Vol*, vol. 6, pp. 105–109, 2018.

[15] P. Petchsakulwong and N. Jansakul, "Board of directors and profitability ratio of Thai non-life insurers," *Kasetsart J. Soc. Sci.*, vol. 39, no. 1, pp. 122–128, 2018.

[16] Wang, K. DeGhetto, B. P. Ellen, and B. T. Lamont, "Board antecedents of CEO duality and the moderating role of country-level managerial discretion: a meta-analytic investigation," *J. Manag. Stud.*, vol. 56, no. 1, pp. 172–202, 2019.

[17] M. X. Bao, X. Cheng, D. Smith, and P. Tanyi, "CEO pay ratios and financial reporting quality," *Glob. Financ. J.*, p. 100506, 2019.

[18] O. Isik, "The Dynamic Association between CEO-Duality and Bank Performance: The Moderating Role of Board Size," *Res. J. Bus. Manag.*, vol. 4, no. 4, pp. 460–468, 2017.

[19] A. Ahmadi and A. Bouri, "Board of directors' composition and performance in French CAC 40 listed firms," *Accounting*, vol. 3, no. 4, pp. 245–256, 2017.

[20] W. Hsu, Y. Huang, and G. Lai, "Reserve Management and Audit Committee Characteristics: Evidence from US Property–Liability Insurance Companies," *J. Risk Insur.*, vol. 86, no. 4, pp. 1019–1043, 2019.

[21] A. A. Oussii and N. B. Taktak, "Audit committee effectiveness and financial reporting timeliness," *African J. Econ. Manag. Stud.*, 2018.

[22] C. O. Olaoye, F. O. Olaoye, and I. A. Adebayo, "Impact of Audit Committees' Qualities on Return on Assets of CompaniesListed on the Stock Exchange (2003-2017): A Panel Approach," 2019.

[23] S. A. M. Alaswad and M. Stanišić, "Role of internal audit in performance of Libyan financial organizations," *Int. J. Appl. Res.*, vol. 2, no. 2, pp. 352–356, 2016.

[24] N. Bansal and A. K. Sharma, "Audit committee, corporate governance and firm performance: Empirical evidence from India," *Int. J. Econ. Financ.*, vol. 8, no. 3, p. 103, 2016.

[25] W. R. Knechel and S. E. Salterio, *Auditing: Assurance and risk*. Routledge, 2016.

[26] M. M. Elewa and R. El-Haddad, "The Effect of Audit Quality on Firm Performance: A Panel Data Approach," *Int. J. Account. Financ. Report.*, vol. 9, no. 1, pp. 229–244, 2019.

[27] A. Buallay, A. Hamdan, and Q. Zureigat, "Corporate governance and firm performance: evidence from Saudi Arabia," *Australas. Accounting, Bus. Financ. J.*, vol. 11, no. 1, pp. 78–98, 2017.

[28] E. M. Al-Matari, Y. A. Al-Matari, and S. A. Saif, "Ownership structure, audit quality and firm performance moderating and direct-effect models: An empirical study," *Corp. Board Role, Duties Compos.*, vol. 13, no. 1, pp. 28–35, 2017.

[29] N. Walliman, *Research methods: The basics*. Routledge, 2017.

[30] T. R. Johansen and T. Plenborg, "Company responses to demands for annual report changes," *Accounting, Audit. Account. J.*, 2018.

[31] A. Hashim and S. S. Devi, "Board independence, CEO duality and accrual management: Malaysian evidence," *AJBA*, vol. 1, no. 1, pp. 27–46, 2008.

[32] N. Abdelkarim and K. Zuriqi, "Corporate Governance and Earnings Management: Evidence from Listed Firms at Palestine Exchange," *Asian Econ. Financ. Rev.*, vol. 10, no. 2, pp. 200–217, 2020.

[33] B. Alareeni, "Does corporate governance influence earnings management in listed companies in Bahrain Bourse?," *J. Asia Bus. Stud.*, 2018.

[34] S. S. A. Nadi, "The Impact of Corporate Governance on Earnings Quality of Public Shareholding Companies listed in Amman Stock Exchange (ASE): Empirical Study," 2018.

[35] M. E. Nawaiseh, "Impact of external audit quality on earnings management by banking firms: Evidence from Jordan," *Curr. J. Appl. Sci. Technol.*, pp. 1–14, 2016.

[36] M. Khosheghbal, A. Amiri, and H. Ali, "Role of Audit Committees and Board of Directors in Reducing Earning Management of Companies Listed in Tehran Stock Exchange," *Int. J. Econ. Financ. Issues*, vol. 7, no. 6, p. 147, 2017.

[37] A. K. Singh, A. Aggarwal, and A. K. Anand, "Corporate governance mechanisms and earnings management in India a study of bse-listed companies," *Delhi Bus. Rev.*, vol. 18, no. 1, pp. 43–54, 2017.

[38] M. S. Rasheed, S. Fareena, and T. Yousaf, "CORPORATE GOVERNANCE AND REAL EARNINGS MANAGEMENT: EVIDENCE FROM PAKISTAN STOCK EXCHANGE," *Corp. Gov.*, vol. 21, no. 2, 2019.