

## Impact of Joint Audit on Audit Quality – An Indian Scenario

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**ABSTRACT:** Better audit quality gives stakeholders some reassurance that the auditee companies' financial statements accurately portray their current situation. This study examines the impact of joint audits on audit quality. It is inspired by the ongoing discussion where a government panel has recommended a mandatory joint audit regime for public interest companies in India. In April 2021, the Reserve Bank of India (RBI) mandated the use of joint audits for financial entities with assets size above INR 15,000 crore to improve the quality of audits. In this study, a new audit quality metric is evaluated, and it shows that joint audit enhances audit quality. Additionally, I find a negative impact of joint audits on audit quality using a common proxy for audit quality (ratio of audit fees to total fees). I, therefore, highlight those different measures of audit quality exhibit the opposite effects of a joint audit.

**Keywords:** Joint Audit, Audit Quality, Big N Auditor

### Introduction

In a joint audit, two or more audit firms are selected by a company to provide their assessment of the financial statements. Joint auditors coordinate with one another and split the auditing scope among themselves. The joint auditors are jointly and severally accountable for any undivided work. Joint audit mechanisms are thought to better manage the possibility of overstated accounts or organisations hiding their bad performance. It is an effective capacity-building strategy that improves auditor independence and contributes to the growth of a multi-player audit market, which in turn motivates new and local audit companies to invest in knowledge and geographic coverage.

Joint audits are common. Countries like Denmark, Germany, Switzerland, the United Kingdom, South Africa, and France all practiced it. From 1930 to 2004, listed and state-owned enterprises in Denmark had to undergo an audit by two auditors who were mutually independent of one another. However, Danish law did not outline how the costs for joint auditors were to be split or the allocation of audits. One audit firm billed more than 80% of the audit fees as a result, which led to conflict (Thinggaard and Kiertzner, 2008). A joint audit in Denmark was later abandoned because the expenditures were unnecessarily expensive. Since 1966, listed companies and unlisted companies with a share capital over a particular amount have been legally required to conduct joint audits in France (Audoussert-Coulier, 2008) However, since 1984, all businesses preparing consolidated financial accounts must

perform a joint audit. In France, the mandated joint audit regime has helped audit firms besides the Big Four expand their capabilities and get employment with major corporations. Compared to the UK, where alternative businesses make up only 20% of the market, France's audit market is made up of 40% of firms other than the Big 4. While Sweden mandated joint audits for the banking industry until 2004 and the insurance business until 2010, South Africa had a mandatory requirement for joint audits for the banking industry from 1990 to 2003.

A joint audit is not uncommon in India, although not required. The Indian accounting regulator supported implementing a system of "joint audits" for just major companies. However, several experts believed that joint audits should be required for all listed businesses, not just big ones. However, the Government of India rejected the ICAI's request for joint audits in significant corporations, claiming that it was not a practical strategy for advancing domestic audit businesses. Even if a joint audit is required, it cannot be guaranteed that only one small firm and one Big Four firm will do the audit. The finance ministry and the Reserve Bank of India (RBI) have also received a proposal from the ICAI for the adoption of joint audits.

The Companies Act of 2013 only gives shareholders the freedom to choose whether to have joint auditors perform their company's audit. It is frequently required of state-owned businesses by the regulator or the Indian office of the Comptroller and Auditor General. The Foreign Direct Investment (FDI) policy has recently been modified by the Indian government to include a requirement for joint audits of the Indian investee company. The Responsibility of Joint Auditors Standard on Auditing (SA) 299, issued by the ICAI, covers the division of labor, coordination, relationship, and reporting obligations among joint auditors.

Joint audits would have probably been more common if the two-man rule was superior to the one-man rule and if it costs more to buy off two firms than one. But in the top ten worldwide companies, single audits continue to be the norm. This puts a question on whether joint audit increases the accuracy and quality of audit. Based on a sample of 4638 firm-year observations, I find that joint audit improves the audit quality of a firm. My paper on the effect of joint audit on the audit quality of listed businesses in India is intriguing. The Big Four auditor, discretionary accruals, audit fees, accrual quality, going-concern views, and meeting or exceeding the quarterly earnings target have all been employed as proxies for audit quality in previous studies. In contrast to earlier studies, my methodology examines the impact of joint audits on audit quality while also using a novel measure of audit quality. Joint audits are voluntary in India, only 148 NSE-listed companies are practicing joint audits. These companies belong to ten different sectors. India's five largest audit firms managed as many as 310 assignments of Nifty500 companies in the financial Year 2023, or almost two out of every 3 audits, shows an analysis by PRIME Database Group. I have examined whether a joint audit promotes quality through the "four eyes principle" with the expertise of two firms, each having different corporate culture. Bisogno, M., and De Luca, R. (2016), confirm that joint audit does positively affect earnings quality and the reliability of firms' financial statements. It would be interesting to find out if the same holds for Indian companies as well.

I investigate how the auditing firm's audit quality is impacted by the "same partner signing the audit report." All public and designated private firms are required to comply with Section 139(2) of the Indian Firms Act 2013, with a few exceptions, to mandatorily change their audit firms after two terms

of 5 years each. After serving two terms back-to-back, the auditors are required to take a five-year vacation. Furthermore, businesses engaging in joint audits do not receive any further benefits. All listed firms, as well as unlisted public corporations with paid-up share capital of INR 100 million or more and unlisted private companies of INR 200 million or more, will need to comply with audits rotation. The remainder of the paper is organized as follows: Section II mentions the previous research on audit quality, the hypothesis derived, the new model used to study audit quality, and the variables used. The results are presented in section IV. Finally, section V presents the conclusions.

### **Joint Audit**

A joint audit is one in which two or more independent auditors, each from a different audit firm, are selected to examine the financial statements of the audit client. The audit entails developing the audit plan and carrying out the audit work jointly, as well as conducting periodic cross-examinations and quality checks with one another (Ratzinger-Sakel et al. 2013; Zerni et al. 2012; Baldauf & Steckel 2012). The idea of a joint audit is distinct from a double audit, which calls for a single auditor to complete the audit work twice (Alanezi et al., 2012; Ratzinger-Sakel et al., 2013); and a dual audit, which entails two independent auditors performing the audit and issuing separate reports that are then used by a third auditor who eventually reports on the entity.

To convey to the market a better degree of audit quality, certain businesses could favour joint audit. Divergent perspectives may also exist between Big Four and mid-tier audit firms (Lesage et al. 2012). Second-tier audit companies primarily focus on the possible improvement in audit quality whereas the Big Four audit firms contend that joint audit raises expenses. Thus, it appears that each group of auditors wants to safeguard their individual interests. Other stakeholders' opinions on a joint audit are a little ambiguous. Many investors, trade associations, and those who compile financial statements draw attention to the drawbacks of joint auditors, including the rise in audit fees, the absence of distinct lines of accountability between the joint auditors, and an overall lack of benefits.

The population of NIFTY-listed companies serves as the source of the study's sample. I choose 148 companies (1122 firm-year observations) from the initial sample of 1592 NSE listed companies for the financial year 2013–22 that were discovered to have conducted joint audits at least once in the prior ten years. As the control group for my analysis, I further chose 321 businesses (3516 firm-year observations) from the NSE 500 Index that had completed a single audit for the years 2008 to 2017 as part of the Nifty 500 Index. There are 15 sectors included in the final sample of 411 businesses.

### **Audit quality**

It is difficult to describe audit quality. The competence and willingness of an auditor to find and disclose major misstatements in financial accounts is often referred to as audit quality. Better audit quality lessens the information gap between management and shareholders, thereby advancing stakeholder interests. According to DeAngelo (1981), the standard of audit service is met when an auditor (a) finds a flaw in the client's accounting system and (b) notifies the customer of the flaw. It is up to auditors' expertise and experience to spot accounting fraud or misrepresentations. The determination to report such transgressions demonstrates the independence of auditors. I follow a novel approach to measuring audit quality. I disregard traditional measures of audit quality like Big Four auditor (Khurana and Raman 2004), audit fees to total fees (Frankel et al. 2002). High audit quality, according to Titman and Trueman (1986), would increase the accuracy of financial statement information and enable investors to more accurately estimate the firm's value. A better audit improves

financial statements' accuracy, reflecting a company's financial situation and operating results, as emphasized by Schauer (2000) and Clinch et al. (2008).

My audit quality measurement is built on the tenet that quality audit time equals quality audit results. It is not based on how many days or months were spent on any one audit task, but rather on the quality of the audit report. In that regard, this serves as a straightforward indicator of audit quality. According to audit literature, Auditor Size (DeAngelo, 1986), "Big four Auditor" (Francis, 2004), and "Ratio of audit fee to total fees" (Choi et al., 2008) are three widely used proxies of audit quality. While all of the proxies concern the standing and skill of the auditors, the third proxy also addresses the independence of the auditors. Large auditors maintain high standards of audit quality to prevent reputation risk because they would put their riches at risk in the event of litigation (Clinch et al., 2010). Large auditors' resources enable them to hire the best-qualified individuals for the task. Most people believe that because they put more effort into audit monitoring, large audit firms were able to demand higher audit fees. The complexity, customer size, and associated lawsuit risk are also recognised as important factors in determining audit fees (Turley et al. 2008).

It's possible to question the wisdom of utilising conventional proxies for audit quality. The quality of reported earnings shows that there is no difference between the audit quality offered by the Big Four auditor and other auditors (Joshy et al. 2015). In a similar vein, the Big Four audit firms' fee premiums are primarily attributable to product differentiation rather than monopoly pricing (Dominica 1996). Therefore, it is not required for well-known enterprises to demand a charge premium. Accounting companies contend that offering consulting services to audit customers results in knowledge transfer that boosts audit effectiveness and that it is, therefore, invalid to question auditors' independence in such circumstances (Simunic 1984). However, Frankel et al. (2002) note that proxies are positively associated with non-audit fees charged to audit clients. Eldyasty and Elamer (2023) also believed that joint audits did not increase the quality of the audit. Though, dual audits produced conflicting results, with implicit restatements positively correlated and explicit restatements negatively correlated.

I provide a new audit quality metric using qualitative data. I use pertinent terms from audit reports to determine the quality of the audit, drawing on the field of text analytics. Phrases used in audits aid in finding any errors, violations, or anomalies. Therefore, the language of any audit report should be clear, indicating whether the reporting auditor is expressing an opinion (calling attention to something, qualifying what they've found, releasing a report that disclaims their opinion, or passing judgment) or merely certifying that the legislation has been followed. The frequency with which key terms are used in the report serves as my yardstick for audit quality. 'We draw attention', 'attention is drawn', 'subject to', 'read with', 'qualify', 'qualified', and 'qualification' are a few examples of such expressions.

Text analysis is also used to look at sentiments in company filings as per finance and accounting literature (Loughran and McDonald, 2014). Goel et al. (2010) used the 'bag-of-words' approach to study the verbal content and presentation styles of qualitative portions of annual reports, and they hypothesise that textual data may contain information that is valuable for identifying fraud. Observing the sentiments indicated in text data are highly connected with profitability, trading volume, and unexpected results for public companies, Loughran and McDonald (2014) examined the tone of corporate annual reports. Earlier research (Li, 2008; Miller, 2010) expressed concern about the annual reports' readability. According to Li (2008), managers frequently use increasingly complex yearly reports to conceal the fleeting character of good news or the long-lasting nature of bad news.

My analyses of numerous audit reports of Indian firms reveal that a major portion of the text of any audit report remains unchanged from one year to the next. It is important to concentrate on a small portion of the audit report, which is different from the previous year. Therefore, one way of measuring auditors' attention is to concentrate on the portion of the audit report that is different from its past. I try to capture negative sentiments of audit reports as a measure of audit quality. I argue that an unqualified audit report is a default outcome and hence any audit report that contains expressions of negativity (qualification) demands greater auditor attention. An auditor will be more mindful while issuing qualified audit reports as it may result in a loss of future revenue for the audit firm.

I handpicked relevant negative phrases from the audit report and measured audit quality as:

$$\text{Audit Quality (AQ)} = \text{Number of words in relevant phrases in audit report} / \text{Total word count of the audit report.} \quad (1)$$

It was evident from the literature; there is no unanimity on whether joint audit improves audit quality. My first hypothesis (**H1**), therefore, is audit quality is independent of joint audit, auditor tenure, and the institutional shareholding in the firm.

## Results

### A. Descriptive statistics

**Table 1: Descriptive Statistics for Variables Used in Regressions  
Treatment Group (N=1122)**

<u>Variable</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Min</u>	<u>Max</u>	<u>Median</u>
<i>BIG FOUR</i>	0.1729	0.3783	0.0000	1.0000	0.0000
<i>AT</i>	0.6070	0.4886	0.0000	1.0000	1.0000
<i>AF</i>	0.4801	0.3112	0.0000	1.0000	0.5200
<i>DACC</i>	-0.2215	1.4788	-33.3515	16.1422	-0.1016
<i>INST_SHAREHOLDING</i>	0.1914	0.1368	0.0000	0.6850	0.1745
<i>SIZE</i>	10.9957	1.0413	5.6998	13.4733	10.9957
<i>ROA</i>	0.0343	0.0653	-0.5066	0.2860	0.0230

### Control Group (N=3516)

<u>Variable</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Min</u>	<u>Max</u>	<u>Median</u>
<i>BIG N</i>	0.3623	0.4807	0.0000	1.0000	0.0000
<i>AT</i>	0.9468	0.2244	0.0000	1.0000	1.0000
<i>AF</i>	0.5953	0.2122	0.0000	1.3600	0.6000
<i>DACC</i>	-0.2250	2.8352	-8.2553	101.1410	-0.2937
<i>INST_SHAREHOLDING</i>	0.2145	0.1549	0.0000	0.8859	0.1865
<i>SIZE</i>	10.4480	0.6768	6.2279	12.9364	10.4251
<i>ROA</i>	0.0799	0.1018	-0.8840	1.2862	0.0642

For each firm-year observation included in the regression, Table 1 compares firm characteristics between the treatment sample and the control sample. All of the firm years that have undergone joint audits make up the treatment sample. The control sample consists of all firm years that have

simultaneously undergone a single audit. When the indicator for the Big Four is 1, it indicates that the company employs a Big Four auditor. Overall I find, approximately 29 percent of the observations are audited by a Big Four Auditor. Similarly, for proxy variable *AT*, indicator 1, means the same auditor has signed the financial statements for more than 3 years. 14.68 percent of the treatment group and 71.77 percent of the control sample indicates a 1.

The mean value for discretionary accruals (*DACC*) of the treatment and control group is -0.2215 and -0.2250 respectively. The companies under the treatment group are, in general, financially healthy as the companies have average earnings of 0.44. The maximum earnings for the treatment group is 43.49 crore whereas, for the control group it is 34.65 crore. Higher earnings indicate the companies under the control group can keep their earnings at a good level while managing to keep expenses under control. Higher *RoA* (7.99 percent) represents the efficiency of the management in using its assets to generate earnings. The high proportion of institution shareholding (68.5 percent and 88.59 percent) establishes the fact that Institutional investors hold a significant position in the governance of the company, with the ability to oversee and affect the management in ways that align with the interests of shareholders. But, the average Institutional ownership is lower (19 percent and 21 percent).

### B. Joint Audit and Audit Quality

I have used the extant two audit quality proxies to find the effect of joint audit on the quality of audit; Big Four Auditor and Ratio of audit fee to the total fee.<sup>1</sup> Although the big four is one of the measures of AQ, I am not using the Big Four variable in this study. Overall 17 percent of the Big Four auditors are involved as one of the auditors in joint audits. Hence, I cannot use the Big Four variable to check the audit quality.

**Table 2: Analysis of Audit Quality using the proportion of Audit Fee to Total Fee  
Validating AF as a proxy of Audit Quality**

Variable	AF
<i>CONSTANT</i>	1.8979*
	(0.0449)
<i>JA</i>	-0.03871*
	(0.0080)
<i>GROWTH</i>	0.0029*
	(0.0011)
<i>RoA</i>	0.1175*
	(0.0347)
<i>SIZE</i>	-0.1302*
	(0.0043)
Model	OLS
No. of treatment observations	1117
Total no. of observations	4638
Firm and Time Fixed Effects	Yes
Adjusted R <sup>2</sup>	0.2091

Note: This table presents the estimates from OLS regression. Associated p-values are reported using \* representing significance at the 5% level. Standard errors are clustered by the firm, and they are presented in the brackets.

The effect of joint audits on audit quality is seen in Table 2. JA, if a corporation is subject to a joint audit, an indicator variable is set to 1. Joint auditing does not, in general, increase the quality of audits, according to the joint auditing coefficient, which is significant and negative (coefficient = - 0.03871). This

can be because there are no restrictions on the kind of firms that can participate in a joint audit system. As per SA 299<sup>2</sup>, 'joint auditors, when appointed should by mutual discussion, divide the audit work among them. The division of work is usually in terms of identifiable units or specified areas.' Joint auditors may occasionally fail to coordinate among themselves as a result of which topics of shared concern are missed. Poor audit quality could result from this. A reduction in audit fees may lead to a lower-than-usual audit quality, according to Blankley et al. (2012). The client's strong negotiation position throughout the bidding process can be blamed for the lower audit rates (Barnes 2004). If the price is less than typical, audit firms will adjust their audit efforts and limit their audit techniques (such as cutting the number of audit hours, hiring less experienced people, etc.) (Gregory and Collier 1996; Eshleman and Guo 2013).

To test the impact of joint audit on audit quality (using the novel measure), I have used the following regression:

$$AQ_{it} = \alpha + \beta_1 JA_{it} + \beta_2 AT_{it} + \beta_3 (AT*JA)_{it} + \beta_4 GROWTH_{it} + \beta_5 RoA_{it} + \beta_6 SIZE_{it} + FIRM \text{ and } TIME \text{ YEAR EFFECTS}_{it} + \varepsilon_{it}$$

Where,

$AQ_{it}$  = Audit quality factor i in period t,

$JA$  = a dummy variable that equals 1 if the company undergoes joint audit, else 0

$Big N$  = a dummy variable that equals 1 if the auditor is one of the Big N, else 0

$AT$  = a dummy variable that equals 1 if the same auditor has signed the financial statements for more than 3 consecutive financial years, else 0

$GROWTH$  (EBITDA/Sales),  $RoA$  (Return on Assets) and  $SIZE$  (Natural logarithm of total assets) are used as control variables.

**Table 3: Analysis of count of audit phrases to measure audit quality<sup>3</sup>**

Variable	AQ
<i>CONSTANT</i>	-0.0071* (0.0005)
<i>JA</i>	0.0009* (0.0001)
<i>GROWTH</i>	-0.0000 (0.0000)
<i>RoA</i>	-0.0040*

	(0.0004)
<i>SIZE</i>	0.0010*
	(0.0001)
Model	OLS
No. of treatment observations	1117
Total no. of observations	4638
Firm and Time Fixed Effects	Yes
Adjusted R <sup>2</sup>	0.1548

Note: This table presents the estimates from an OLS regression. The dependent variable *AQ* is the total number of words in relevant phrases divided by the total number of words in the audit report. This is used to proxy audit quality. Associated p-values are reported using \* representing significance at the 5% level. Standard errors are clustered by firm and they are presented in brackets.

Results of the impact of *JA* on a new proxy for *AQ* are shown in Table 3. Interestingly, I see a positive and significant association between *JA* and *AQ* (coefficient of *JA* = 0.0009). This implies that joint audit improves the audit quality of the firm. Improvement in the quality of the audit may be due to the reason that joint auditors can share expertise and take advantage of mutual consultation in conducting an audit. This results in a lower workload and better quality of performance.

**Table 4: Analysis of count of audit phrases to measure audit quality**

Variable	AQ
<i>CONSTANT</i>	-0.0027
	(0.0006)
<i>JA</i>	0.0025*
	(0.0002)
<i>AT</i>	-0.0003*
	(0.0001)
<i>JA*AT</i>	-0.0021*
	(0.0002)
<i>GROWTH</i>	-0.0001*
	(0.0000)
<i>RoA</i>	-0.0000*
	(0.000)
<i>SIZE</i>	0.0005*
	(0.0000)
Model	OLS
No. of treatment observations	1117
Total no. of observations	4638
Firm and Time Fixed Effects	Yes
Adjusted R <sup>2</sup>	0.2009

Note: This table presents the estimates from an OLS regression. The dependent variable *AQ* is the total number of words in relevant phrases divided by the total number of words in the audit report. This is used to proxy audit quality. Associated p-values are reported using \* representing significance at the 5% level. Standard errors are clustered by firm and they are presented in brackets.



Results of the impact of *JA* on a new proxy for *AQ* are shown in table 4. Interestingly, I see a positive and significant association between *JA* and *AQ* (coefficient of *JA* = 0.0025). But, I also find that *AT* has a negative and significant association (-0.0003) with audit quality. *JA* improves the quality of audit but the interaction of *JA* with *AT* shows a negative effect on the audit quality. This suggests that, when the same auditor signs the financial statements of the auditee for a continuous period of more than 3 years, there was a deterioration in the audit quality. In such a scenario, as a result of the relationship that develops between the auditor and the auditee, the auditor is reluctant to ask the right questions during the audit for fear of forgoing highly lucrative fees and audit work. As a result, the auditor's independence is compromised, which lowers the audit's quality.

Next, I see the impact of institutional shareholding on the firm's audit quality. According to agency theory, institutional ownership may be a component of efficient control. The most demanding parties in terms of regular financial information and prompt publication of financial statements are thought to be institutional investors. (Healy, 1985). Additionally, I investigate the impact of institutional shareholding patterns and joint audits on the firm's audit quality.

**Table 5: Effect of Institutional Shareholding on Audit Quality**

$$AQ_{it} = \alpha + \beta_1 JA_{it} + \beta_2 AT_{it} + \beta_3 (AT*JA)_{it} + \beta_4 (INST\_SHAREHOLDING * JA)_{it} + \beta_5 GROWTH_{it} + \beta_6 RoA_{it} + \beta_7 SIZE_{it} + FIRM\ and\ TIME\ YEAR\ EFFECTS_{it} + \varepsilon_{it}$$

Variable	AQ
CONSTANT	-0.0027*
	(0.0006)
JA	0.0025 *
	(0.0002)
AT	-0.0003 *
	(0.0001)
JA*AT	-0.0023*
	(0.0002)
JA*INST_SHAREHOLDING	-0.0004
	(0.0005)
GROWTH	-0.0000
	(0.0000)
RoA	-0.0040 *
	(0.0004)
SIZE	0.0005 *
	(0.0000)
Model	OLS
No. of treatment observations	1122
Total no. of observations	4638
Firm and Time-Fixed Effects	Yes
Adjusted R <sup>2</sup>	0.2010

Note: This table presents the estimates from an OLS regression. The dependent variable *AQ\_Count* is the total number of relevant phrases divided by the total number of words in the audit report. This is used to proxy audit quality. Associated p-values are reported using \* representing significance at the 5% level. Standard errors are clustered by firm and they are presented in brackets.

Gradually, I add another variable to the equation, to study the effect of JA's interaction with institutional shareholding on the audit quality. I do not use the *INST\_SHAREHOLDING* variable separately because of reverse causality. Instead of *INST\_SHAREHOLDING* affecting audit quality, it may be the other way around. JA has a positive and significant effect on audit quality (coefficient = 0.0025). Whereas, the presence of JA and *INST\_SHAREHOLDING* show a negative (-0.0004) and insignificant effect on the audit quality. Institutional ownership actively participates in the oversight and correction of managerial discretion as well as the regulation of the reporting procedure. Adjusted R<sup>2</sup> also marginally improved from 0.2009 to 0.2010 with the addition of the interaction of JA and the *INST\_SHAREHOLDING* variable. Sharma (2004) found that when the percentage of independent institutional ownership increases, the likelihood of fraud decreases. Institutional ownership and the firm's audit quality are usually thought to be positively correlated. Institutional investors are likely to expect a higher caliber auditor since they are active monitors. The average institutional shareholding, in this case, is merely 20.89 percent, which has no impact on the audit quality.

### Conclusion

I offer proof of the reliability of the most widely used substitute for audit quality in existing research—the ratio of audit fees to total fees. Since about 17% of the auditors shared the JA variable, I was unable to test Big N as a proxy. My empirical approach investigates the relationships between these audit quality proxies and the joint audit variable, together with auditor tenure and the percentage of institutional holdings, presuming that joint audit increases audit quality. I discover that there isn't a hugely persuasive substitute for audit quality. A negative correlation between joint audits and the ratio of audit fees to total fees is also evident.

The frequency of negative words in the audit report divided by the total number of words in the report served as my new proxy measure for auditing quality. My findings imply that the usage of pertinent phrases in the audit report is positively and significantly correlated with joint audits. With the 'new' proxy for audit quality, I looked at the effects of the auditor's tenure with the business and the percentage of institutional ownership. I discover that the auditor's tenure does not improve the quality of the audit when combined with a joint audit. The unfavorable correlation between institutional holdings and JA may be due to the minority condition of institutional shareholding. But the correlation is positive whenever Institutions can compel joint audits.

### Conflicts of Interest

There are no conflicts to declare.

### References

- [1] Alanezi, F., Alfaraih, M., Alrashaid, E., & Albolushi, S. 2012. Dual/joint auditors and the level of compliance with international financial reporting standards (IFRS-required disclosure): The case of financial institutions in Kuwait. *Journal of Economic and Administrative Sciences*, 28 (2), 109-129.
- [2] Audoussert-Coulier, S. 2008, Determinants of the voluntary disclosure audit fees and audit pricing in a joint audit setting], Ph.D. dissertation, HEC, Paris.
- [3] Baldauf, J., and Steckel, R. 2012. Joint Audit and Accuracy of the Auditor's Report. An empirical study. *International Journal of Economic Sciences and Applied Research*, 5, 7-42.

- [4] Barnes, P. 2004. The auditor's going concern decision and types I and II errors: the coase theorem, [5] Bisogno, M., and De Luca, R. 2016. Voluntary Joint Audit and Earnings Quality. Evidence from Italian SMEs. *International Journal of Business Research and Development*, 5, 1-22.
- [6] Blankley, A. I., Hurtt, D. N., & MacGregor, J. E. (2012). Abnormal audit fees and restatements. *Auditing: a journal of practice & theory*, 31(1), 79-96.
- [7] Choi. Jong-Hag, Bruce K. Behn and Tony Kang. 2008. Audit Quality and Properties of Analyst Earnings Forecasts. *The Accounting Review*, Vol. 83, No. 2, pp. 327-349.
- [8] Clinch, G., Fuller, D., Govendir, B., Wells, P., 2008. The accrual anomaly: Australian evidence. Working paper, University of Technology Sydney.
- [9] Clinch, G., Stokes, D.J. and Zhu, T. 2010, "Audit Quality and Information Asymmetry between Traders. Accounting and Finance, Forthcoming", *Accounting & Finance*, vol. 52, no. 3, pp.743-765.
- [10] DeAngelo, L. 1986. Accounting Numbers as Market Valuation Substitutes: A Study of Management Buyouts of Public Stockholders. *The Accounting Review*, 61(3), 400-420.
- [11] DeAngelo, L.E. 1981. "Auditor size and audit quality", *Journal of Accounting and Economics*, Vol. 3 No. 3, pp. 183-99.
- [12] Dominica Suk-yelee Lee. 1996. "Auditor Market Share, Product Differentiation and Audit Fees", *Journal of Accounting and Business Research*, Vol. 26(4).
- [13] Eldyasty, M. M., & Elamer, A. A. (2023). Audit (or) type and audit quality in emerging markets: evidence from explicit vs. implicit restatements. *Review of Accounting and Finance*.
- [14] Eshleman J.D., & Guo . P. 2013. Abnormal audit fees and audit quality: The importance of considering managerial incentives in tests of earnings management. *Audit J Pract Theory*.
- [15] Francis, J.R. 2004. "What do we know about audit quality?", *The British accounting review*,
- [16] Frankel, R. M., M. F., Johnson and K.K., Nelson, 2002. "The relation between auditors' fees for nonaudit services and earnings management", *The Accounting Review*, Vol. 35, No. 1, pp. 71–105.
- [17] Goel, S., J. Gangolly, S. Faerman, and O. Uzuner. 2010. Can linguistic predictors detect fraudulent financial filings? *Journal of Emerging Technologies in Accounting* 7(1): 25–46.
- [18] Gregory A, Collier P. 1996. "Audit fees and auditor change: an investigation of the persistence of fee reduction by type of change", *J Bus Finance Account*, vol.23, no.1, pp: 13–28.
- [19] Healy, P. 1985. The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, 7(1), 85–107.
- [20] Joshy J, Desai N, and Agarwalla S K. 2015. "Are Big 4 Audit Fee Premiums Always Related to Superior Audit Quality? Evidence from India's Unique Audit Market", IIM Ahmedabad Working Paper No. 2015-03-10.
- [21] Khurana, I. K. and K. Raman. 2004. "Litigation risk and the financial reporting credibility of Big 4 versus non-Big 4 audits: Evidence from Anglo-American countries." *The Accounting Review*, 79(2): 473-495.
- [22] Lesage, C., Ratzinger-Sakel, N., & Kettunen, J. (2012). Struggle over joint audit: on behalf of public interest? –Working paper
- [23] Li, F. 2008. Annual report readability, current earnings, and earnings persistence. *Journal of Accounting and Economics* 45 (2–3): 221–247.
- [24] Loughran, T., and B. McDonald. 2014. Measuring readability in financial disclosures. *The Journal of Finance* 69 (4): 1643-1671.
- [25] Miller, P. B. 2010. The effects of reporting complexity on small and large investor trading. *The Accounting Review* 85 (6): 2107–2143

- [26] Ratzinger-Sakel, N. V. S., Audoussert-Coulier, S., Kettunen, J. and Lesage, C. 2013. Joint Audit: Issues and Challenges for Researchers and Policy-Makers. *Accounting in Europe*, 10, 175-199.
- [27] Schauer, P. C. 2000. Differences in Audit Quality among Audit Firms: An Examination Using Bid-ask Spreads. Working Paper.
- [28] Sharma, V.D. 2004, "Board of Director Characteristics, Institutional Ownership, and Fraud: Evidence from .Australia", *Auditing*, Vol.23, No.2, pp.107-119
- [29] Simunic, D. A. 1984. "Auditing, Consulting, and Auditor Independence." *Journal of Accounting Research*, 22 (2): 679–702.
- [30] Thinggaard, F. and Kiertzner, L. 2008. Determinants of audit fees: evidence from a small capital market with a joint audit requirement, *International Journal of Auditing*, 12(2), pp. 141–158.
- [31] Titman, S., and B. Trueman. 1986. Information quality and the valuation of new issues. *Journal of Accounting and Economics* 8 (June): 159-172.
- [32] Turley .S. & Willekens .M. 2008. *Auditing, Trust and Governance: Regulation in Europe. 1st edition. Oxon, England: Routledge* vol. 36, pp. 345-368.
- [33] Zerni, M., Haapamaki, E., Järvinen, T., and Niemi, L. 2012. Do joint audits improve audit quality? Evidence from voluntary joint audits. *European Accounting Review*, 12, 731-765.



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