International Journal of Innovative Research and Scientific Studies, 8(2) 2025, pages: 3088-3098

ISSN: 2617-6548

URL: www.ijirss.com

Audit report lag in banks: A comparison between Islamic and conventional banks

Noora Yusuf[1*], Salwa Abdelhameed[2], Mohamed Janahi[3]

[1,2,3]*Department of Accounting, College of Business Administration University of Bahrain, Sakheer, Bahrain*.

Corresponding author: Noora Yusuf (*Email: naahmed@uob.edu.bh*)

Abstract

The purpose of this study is to empirically examine whether bank type matters in determining audit report lag (ARL). The study also aims to identify factors that determine audit report lag in Islamic banks and conventional banks. The study uses a sample of 297 bank-year observations from Islamic and conventional banks operating in Gulf Cooperation Council (GCC) countries during the years 2014–2021. Banks' annual reports were used to gather the data. The findings show that Islamic banks have shorter audit delays than conventional banks. The findings also provide evidence on the relation between ARL and some corporate governance and bank characteristics (board of directors and audit committee size). Given the accelerated growth demonstrated by the Islamic banking industry, an examination of whether bank type (conventional or Islamic bank) and corporate governance mechanisms matter in determining ARL is warranted. This study extends the comparative literature (Islamic vs. conventional banks), being one of the first attempts to examine the role of bank type in determining ARL. The findings of this study could be beneficial to Islamic banks, conventional banks, external auditors, and regulators of banking institutions in the GCC, who seek enhanced financial reporting quality through the timely dissemination of information.

Keywords: Audit committee, Audit report lag, Board of directors, Conventional banks, Corporate governance, Islamic banks.

DOI: 10.53894/ijirss.v8i2.5952
Funding: This study received no specific financial support.
History: Received: 25 February 2025 / **Revised:** 26 March 2025 / **Accepted:** 28 March 2025 / **Published:** 4 April 2025

Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.
Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.
Publisher: Innovative Research Publishing

1. Introduction

One key element in the quality of corporate financial reporting is how promptly businesses release their financial information. Previous literature has documented evidence for a link between the financial reporting timeliness and its informational value, which positively affects firm value [1, 2]. Hence, timely financial reporting has been prioritized by standard-setting bodies, regulatory authorities, and researchers for many years [3-5]. The importance of the provision of timely financial information has been strongly advocated by both the Financial Accounting Standards Board (FASB) in the United States and the International Accounting Standards Board (IASB), which sets international accounting standards. These international bodies, through their respective conceptual frameworks, explicitly emphasize timeliness as a critical attribute enhancing the usefulness of financial information for investors, creditors, and other stakeholders. Moreover, the need for timely financial data extends beyond external users. Internal users, such as managers, also require up-to-date information to control, evaluate, and make strategic decisions [6, 7]. A dual challenge involving the trade-off between information relevance and reliability has long been faced by auditors and business organizations. Research indicates that the quality of the information may be compromised if it is not provided on time, as it allows "well-informed" users to exploit private information at the expense of "less-informed users." While the provision of financial information quickly is desired by the business community, releasing financial statements and related disclosures without proper verification hinders the value of timely reporting and may result in unreliable information [8, 9]. Consequently, external auditors face pressure to finalize the audit and release the audited financial statements promptly. In a complex business community, investors place significant trust in audited financial statements as a primary source for evaluating the reliability and accuracy of a firm's reported financial performance. These statements, which are independently verified by external auditors, provide assurance that the reported information reflects the firm's true financial position and performance. To enhance transparency and, in turn, confidence in financial reporting, a high-quality and independent audit is needed [10]. To enable investors to allocate their resources rationally, timely audit reports must be provided by audit firms to the investment community [11]. A delay in releasing the audit report creates several problems. It diminishes financial information quality, worsens information asymmetry between managers and investors, and reduces confidence in the capital markets. Such delay hinders timely access to reliable financial information, adversely affecting organizational transparency and market perceptions [12].

Several previous studies have explored the factors that influence audit report lag (ARL), analyzing various elements that contribute to variations in this timeframe [2, 13-15]. However, the effect of bank type (conventional or Islamic bank) in determining ARL has not been examined. A substantial amount of research has developed examining the financial reporting process within religiously oriented institutions, such as Islamic banks. This field of research acknowledges the unique context in which these institutions operate, as religious principles and guidance play a significant role in shaping corporate management. Several studies have indicated that religious beliefs and ethical norms can influence various aspects of corporate decision making [16], including financial reporting practices, such as corporate misreporting [17] and the extent of earnings management [18]. Given that the Islamic banking sector has experienced substantial global expansion, an examination of whether bank type (conventional or Islamic bank) and corporate governance mechanisms matter in determining ARL is warranted. This study examines whether bank type matters in determining ARL. It also aims to identify factors that determine ARL in Islamic and conventional banks. Using a sample of Islamic and conventional banks listed in GCC countries, we find evidence that Islamic banks have shorter audit delays than conventional banks. We also provide empirical evidence on the relationship between ARL and some corporate governance attributes, as well as bank-specific characteristics.

This study extends the comparative literature (Islamic vs. conventional banks), being one of the initial attempts to investigate the role of bank type in determining ARL. The study's findings offer practical feedback for auditors, policymakers, and regulators seeking to enhance the timeliness – and consequently the quality – of financial reporting by banks.

2. Theoretical Framework

The body of literature that examines the timeliness of corporate financial reporting has predominantly centered around agency theory. This theory focuses on the dynamics and interactions between principals (typically the owners or shareholders of a company) and agents (usually the managers or executives running the organization). In such a relationship, owners delegate their management authority to the agents, and this authority delegation creates possible disputes arising from competing interests between both parties [19, 20]. The disputes stem from the differing goals among the parties involved. In addition, each party has varying levels of access to information about the entity. Consequently, the issue of information asymmetry arises, which intensifies the agency problem, as it becomes challenging for shareholders to effectively monitor and assess managers' behavior. To control managerial decisions, owners pay monitoring costs to observe managerial behavior and undertake any actions needed to curb opportunistic behavior. The cost of preparing and auditing financial reports is an example of monitoring costs intended to align owners' interests with managers' interests [21]. Moreover, to ensure high-quality financial reporting, timely audited financial statements are expected to be available as these, in turn, ensure effective control over managerial behavior.

In addition to agency theory, signaling theory has been used to explain variations in audit report lags. According to signaling theory, management takes actions to signal information about a company's performance and position. Accordingly, firms with good performance (good news) will convey a positive signal by accelerating the completion and publication of their audited financial statements. These firms encourage external auditors to finalize the audit process on time. The timely dissemination of positive financial results leads to a more favorable market valuation, as it allows for more informed decisions by stakeholders. In contrast, firms with lower financial performance (bad news) will attempt to avoid the negative impact of such information by slowing down the process of financial statement publication. These firms may deliberately delay the release of audited financial statements as a means of avoiding immediate scrutiny from investors, creditors, and the broader market. According to Abdillah et al. [22], this strategy serves as a short-term buffer, allowing companies to prepare explanations and implement corrective measures to manage the anticipated adverse reactions to the bad news.

3. Literature Review and Hypotheses Development

3.1. ARL in Islamic Banks

The ARL has been used as a critical metric to measure the timeliness of a firm's financial reporting process. According to Knechel and Payne [23], ARL quantifies the time duration, measured in calendar days, that elapse between the conclusion of a company's fiscal year and the date on which the external auditor officially signs the audit report. Although various studies have analyzed the factors that influence ARL in developed countries [14, 15, 24] as well as developing countries [13, 22], few empirical studies have examined ARL in banking institutions [25]. To the best of our knowledge, this study represents an initial empirical attempt to examine determinants of ARL in Islamic and conventional banks.

In contrast to their conventional counterparts, Islamic banks operate under a fundamentally distinct paradigm, due to their unique constrained business model, as they are expected to operate in accordance with Shari'ah principles and adhere to social norms derived from these principles. Thus, the moral accountability within Islamic banks transcends the boundaries of mere legal liability [18]. While conventional banks operate within a framework defined by legal obligation and regulatory compliance, Islamic banks are also guided by the principles of Shari'ah. Islamic principles emphasize a number of behavioral ethical values such as transparency, honesty, integrity, and truthfulness [26]. Such ethical values are believed to enhance financial reporting quality. Furthermore, Islamic banks are experience more complex agency problems due to the nature of the contracts between them and their depositors (investment account holders), who lack the authority to interfere with how their money is managed. In addition to the traditional agent–principal conflicts, therefore, Islamic banks encounter additional conflicts between depositors and managers [27]. To mitigate the complex agency problems and avoid the occurrence of leaks, insider trading, and rumors that may result from the delay in providing timely financial information [28], Islamic banks are motivated to push auditors to finalize and release audited financial statements as soon as possible. Based on the arguments presented above, the first hypothesis is developed as follows:

H_1: ARL is shorter in Islamic banks than in conventional banks.

3.2. Board of Directors Size and ARL

Corporate governance practices are among the classical means of mitigating agency problems, as per agency theory [29, 30]. As a central element of corporate governance, the board of directors plays a crucial role [19]. The board of directors holds supreme authority over senior management and is accountable for overseeing the corporation's overall operations, ensuring that senior executives prioritize the shareholders' best interests [31]. To ensure that managers' goals are consistent with the aims of the shareholders, the board of directors is responsible for overseeing corporate financial reporting to guarantee the provision of reliable and accurate financial information to the stakeholders [32].

Concerning the critical role that boards of directors play in overseeing and controlling managerial acts and behavior, previous research has examined how boards contribute to enhancing financial reporting quality. Nonetheless, majority of these attempts have assessed the financial reporting quality through the lens of opportunistic earnings management. Examining how boards of directors affect ARL in banks has received less attention. The ability of a board of directors to effectively oversee and control the company is influenced by its characteristics and attributes. Previous research has emphasized two key attributes: board size and independence. Prior studies on the relation between board size and ARL provide mixed evidence. Some studies, grounded in resource dependence theory, suggest a negative relationship between board size and ARL. According to resource dependence theory, larger boards possess greater expertise and skills, leading to improved oversight over management [33]. Consistent with these arguments, some studies find that larger boards are associated with short audit lags [34, 35]. From another perspective, having a large board may result in administration and communication problems that will, in turn, impede the process of making decisions [36]. As the size of the board increases, so does the possibility of conflict, which, in turn, reduces the board's ability to reach an agreement. In support of this argument, prior studies have documented that firms with larger boards exhibit a greater propensity for earnings management [37]. As regards ARL, the previous literature has found that large boards of directors may result in a longer audit lag [38] due to the time needed to reach agreement on certain issues related to the audit. Hence, the second hypothesis is developed as follows:

H_2: There is a positive relationship between the board of directors' size and ARL.

3.3. Board of Directors Independence and ARL

The effectiveness of the board in performing its oversight role is also determined by the proportion of independent members on it. Within the board, there are inside directors, who represent the company's executives, and external directors who are independent of the management and are anticipated to act as protectors of shareholders' interests. Independent directors enhance the capability of the board to oversee and control managerial decisions, as asserted by agency theory [19]. Furthermore, it is believed that independent directors contribute valuable knowledge and access to beneficial networks that can enhance a company's success [39].

Consistent with these arguments, several prior attempts have provided evidence that independent boards lead to improved financial reporting quality. Independent boards are linked to less earnings management practices, from the standpoint of opportunistic earnings management [37, 40, 41]. When the timeliness of the financial reports is considered, several studies provide evidence that the more independent directors on boards, the shorter the ARL [13, 42, 43]. The above discussions lead to the third hypothesis:

H_3: There is a negative relationship between the board of directors' independence and ARL.

3.4. Audit Committee Size and ARL

In setting the overall policy for monitoring management, the audit committee, acting on behalf of the board of directors, is responsible for overseeing the process of financial reporting. An efficient and well-functioning audit committee promotes the financial statements quality by reducing opportunistic practices of earnings management [44] and promoting conservatism

[9]. As part of enhancing financial reporting quality, numerous studies have analyzed whether audit committees improve the timeliness of released financial statements by reducing the ARL. Those attempts have concentrated on two characteristics of audit committee, namely size and independence.

Existing literature on the association between audit committee size and ARL provides inconclusive evidence. In resource dependence theory, the diverse expertise within a large audit committee enables more effective control over the process of financial reporting and effective coordination with the external auditor on different issues. Accordingly, some studies have found that as audit committee size increases, the ARL tends to decrease [45].

However, agency theory asserts that large audit committees become less efficient in their monitoring role due to communication and coordination problems. As the number of members serving on the committee increases, it becomes difficult for the committee to reach an agreement, which results in a lengthy process of decision-making [36, 46]. According to this perspective, several studies have documented a direct relationship between the size of the audit committee and ARL [47]. Based on the arguments presented above, our fourth hypothesis is as follows:

$H_{4:}$ There is a positive relationship between the audit committee size and ARL.

3.5. Audit Committee Independence and ARL

Independent members serving on the board of directors and audit committee provide effective governance capabilities over management actions, as proposed by the agency theory. Fama and Jensen [19] advocate that independent director are capable of making unbiased judgements, free from managerial influence, and do not hesitate to suspect and investigate managerial actions and decisions. In accordance with these arguments, previous research has documented a positive link between the independence of the audit committee and improved financial reporting quality, through limiting opportunistic earnings management [48]. As part of improving financial statements' quality, some studies have documented a positive influence of an independent audit committee on enhancing financial reporting timeliness and reducing ARL [22]. The above discussions lead to the fifth hypothesis:

$H_{5:}$ There is a negative relationship between the audit committee's independence and ARL.

4. Research Methodology

4.1. Sample and Data Collection

We started by collecting data from all banks (both conventional and Islamic) in five of the GCC countries for the years 2014–2021. We excluded the United Arab Emirates (UAE) as data on the independence of boards of directors were not available. We used Bankscope to collect financial data, while we manually collected data on corporate governance, audit firm, and ARL from the annual/corporate governance reports of the banks considered, achieving observations of 320 bank-years in total. After 23 observations with missing variables were omitted, the size of the sample dropped to 297 observations. Table 1 shows the study's final sample distribution.

Table 1.
Sample distribution by country, year, and bank type.

Panel A: Sample Distribution by Country and Bank Type			
Country	**Conventional Bank Observations**	**Islamic Bank Observations**	**Total Observations**
Bahrain	16	64	80
Kuwait	40	40	80
Oman	38	12	50
Qatar	32	15	47
Saudi Arabia	8	32	40
Total	134	163	297
Panel B: Sample Distribution by Year and Bank Type			
Year	Conventional Bank Observations	Islamic Bank Observations	Total Observations
2014	16	19	35
2015	17	19	36
2016	17	21	38
2017	17	21	38
2018	16	21	37
2019	17	21	38
2020	17	21	38
2021	17	20	37
Total	134	163	297

While UAE data is omitted, the remaining GCC countries provide a complete dataset; the exclusion of UAE banks may influence the generalizability of the findings to the whole region. Future research may be able to address this limitation by using alternative data sources or methodologies to obtain the missing information. Adding the UAE data would improve the representativeness of the sample and enhance the holistic understanding of the determinants of ARL in the GCC banking sector.

4.2. Variables Measurement

4.2.1. Dependent and Main Explanatory Variables

This research aimed to examine whether bank type (conventional or Islamic) and corporate governance mechanisms matter in determining ARL. Thus, our dependent variable was ARL. We follow Blankley et al. [49] to measure ARL as the number of calendar days that elapse between the conclusion of a company's fiscal year and the date on which the external auditor officially signs the audit report. Our main explanatory variable is IB, which is a binary variable that is set to 1 if the bank is Islamic, and 0 otherwise. Several corporate governance characteristics are also tested. Following previous studies [13, 14], we test for the size and independence of the board of directors, the size and independence of the audit committee. We consider a board member to be independent if it is mentioned in the financial report (or corporate governance report) that they are independent. In other words, nonexecutive directors are not counted as independent in our model.

4.2.2. Control Variables

We alleviate the concerns that omitted variables may bias the results by controlling for several variables associated with ARL and IB simultaneously. Specifically, we control for several bank-, board-, and auditor-level characteristics.

Based on the previous literature, bank size positively affects the job carried out by the auditor. Auditors allocate higher resources (more staff and time) to large firms, which therefore experience shorter ARL [50]. In addition, large firms generally publish their audited financial reports sooner than small firms due to the external pressure they face from investors and regulators [51]. Bank risk is another important factor that might affect ARL [52]. Thus, we use leverage to control for this factor. Furthermore, return on assets (ROA) is used to control for the influence of a firm's profitability on ARL, as the previous literature has found that profitability is an important determinant of ARL [15]. ROA shows how efficiently the company's assets are utilized to generate revenues and is measured as the bank's income divided over its total assets.

We also control for auditor characteristics. Specifically, we control for audit specialist and auditor switch. We consider the audit firm to be a specialist if the auditor audits more banks than any other audit firm. It is perceived that an industry specialist has the particular expertise and extensive knowledge in the banking sector and is hence likely to finalize the audit process in a shorter timeframe compared to their non-specialist peers [53]. In our sample, Ernst and Young is defined as the industry specialist. Finally, we control for auditor switch. We allocate a value of 1 if the auditor is in their first year of tenure, and 0 otherwise. Consistent with previous literature [54, 55], a positive association is anticipated to be found between the occurrence of an auditor switch and ARL.

4.3. Model Specification and Estimation Method

To investigate the association between the type of bank and ARL, the following model is constructed:

$$ARL = a + b_1 IB + b_2 BODSIZE + b_3 BODINDEP + b_4 ACSIZE + b_5 ACINDEP + b_6 BANK\ SIZE + b_7 LEVERAGE + b_8 ROA + b_9 SPEC + b_{10} AUDSWITCH + \varepsilon_{it}$$

All variables are described in Table 2. Banks appoint the external auditors, and auditors have the right to accept or reject a bank's offer. Thus, the decision to use bank type and auditors is endogenous. In such circumstances, the ordinary least squares (OLS) estimator produces biased and inconsistent results. To alleviate these concerns, we used the Arellano and Bover [56] generalized method of moments (GMM) estimator. To address potential biases caused by unobserved factors, simultaneous effects, and dynamic endogeneity, the analysis utilizes the GMM model [57]. We used the control variables as the endogenous instruments and the time dummies as the exogenous instruments.

Table 2.
Variable definitions.

Variable	Code	Definition
Dependent variable		
Audit report lag	ARL	The number of calendar days that elapse between the conclusion of a company's fiscal year and the date on which the external auditor officially signs the audit report.
Independent variables		
Islamic bank	IB	A binary variable that is set to 1 if the bank is Islamic, and 0 otherwise.
Board of directors' size	BODSIZE	The total annual number of members serving on the board.
Board of directors' independence	BODINDEP	The proportion of independent directors relative to the total board membership.
Audit committee's size	AUDSIZE	The total annual number of members serving on the audit committee.
Control variables		
Bank size	BANK SIZE	The natural logarithm of year-end total assets.
Leverage	LEVERAGE	The ratio of the bank's total debt to total equity.
Return on assets	ROA	The bank's net income divided by total assets.
Audit specialist	SPEC	A binary variable that is set to 1 if the audit firm is identified as an industry specialist, and 0 otherwise.
Auditor switch	AUDSWITCH	A binary variable that is set to 1 if the audit firm is in the first year of tenure, and 0 otherwise.

5. Results and Discussion

5.1. Descriptive Statistics

Table 3 reports the descriptive statistics. The results show that ARL is averaged at 36.46 days for the whole sample. The minimum audit lag observed in the dataset is four days, while the longest is 77 days. Islamic banks make up 55% of our sample. For the governance variables, we found that the average number of directors on the banks' boards within our sample is nine. On average, banks have 47% independent directors on their boards. Audit committees have 3.47 members on average, 73% of whom are independent. We found that the mean bank size within our sample is $20 million, while the smallest (largest) bank has total assets of $260 thousand ($260 million). With regard to leverage, the average bank in our sample has liabilities that are six times larger than its equity, while the banks with the lowest (highest) leverage have a debt-to-equity ratio of 0.03x (23.16x).

Table 3.
Descriptive statistics.

Variables	Mean	Median	Std. Dev.	Min.	Max.
Dependent variable					
ARL	36.46	37	18.7	4	77
Independent variables					
IB	0.549	1	0.498	0	1
BODSIZE	9.22	9	1.34	6	13
BODINDEP	0.474	0.444	0.183	0	0.909
ACSIZE	3.47	3	0.707	2	6
ACINDEP	0.73	0.67	0.23	0	1.0
Control variables					
BANK SIZE	20.4	10.5	31.9	0.259	260
LEVERAGE	5.95	6.11	2.66	0.03	23.16
ROA	0.0112	0.0104	0.0105	-0.0354	0.0566
SPEC	0.869	1	0.204	0	1
AUDSWITCH	0.271	0	0.165	0	1

5.2. Correlation Analysis

Table 4 illustrates the correlations among the study's variables. The correlation shows that we do not have a multicollinearity issue in our main model, as the greatest correlation is observed between the size of the bank and its profitability (0.512). A weak correlation is observed between IB and ARL (0.033 only). On the other hand, they show that bank size and ROA are negatively correlated with ARL, with correlations of -0.329 and -0.183, respectively.

Table 4.
Correlation matrix.

Variables	A	B	C	D	E	F	G	H	I	J	K
A. ARL	1.00										
B. IB	0.033	1.00									
C. BODSIZE	-0.051	-0.044	1.00								
D. BODINDEP	0.269	-0.024	-0.008	1.00							
E. ACSIZE	0.247	-0.181	0.438	0.230	1.00						
F. ACINDEP	-0.197	0.054	0.013	0.491	-0.069	1.00					
G. BANK SIZE	-0.329	-0.384	0.326	-0.153	0.256	-0.008	1.00				
H. LEVERAGE	-0.140	-0.233	0.250	-0.091	0.269	0.099	0.427	1.00			
I. ROA	-0.183	-0.223	0.222	-0.140	0.145	-0.132	0.512	0.152	1.00		
J. SPEC	-0.120	0.077	-0.141	0.013	-0.176	0.167	-0.044	0.176	-0.132	1.00	
K. AUDSWITCH	0.162	-0.034	-0.041	0.067	0.057	-0.064	0.078	0.040	0.063	-0.122	1.00

5.3. Regression Results

The results of the hypothesis tests conducted using a two-step GMM are reported in Table 5. When examining whether bank type matters in determining the ARL, it is found that the IB binary variable is negatively and significantly related to ARL (-25.50). This result indicates that Islamic banks experience shorter audit delays and, hence, tend to publish their audited reports earlier, relative to conventional banks. This finding confirms our initial expectation and supports the first hypothesis, which states that ARL is shorter in Islamic banks. Since this research is one of the initial attempts to investigate the effect of bank type in determining ARL, the results provide support for prior claims that Islamic banks provide higher-quality corporate reporting, assessed with opportunistic earnings management [18]. This outcome may result from the restrictive Islamic business model, coupled with the existence of an extra governance layer, which differentiates them from conventional banks [41].

For the corporate governance attributes, the coefficient on board size (BOD_SIZE) is positive (0.273). However, this result is insignificant and does not support our second hypothesis, which states that the larger the board of directors, the longer the audit delays. The finding that larger boards result in longer ARL aligns with the argument that larger boards of directors experience communication and coordination problems [36], ultimately slowing the process of decision-making, as postulated by the agency theory.

Another corporate governance attribute identified as a key determinant of ARL in banks is audit committee size (AC_SIZE). The results in Table 5 provide significant evidence of a positive link between audit committee size and ARL (4.572). This result suggests that banks with larger audit committees experience longer ARL. Accordingly, this finding supports the fourth hypothesis. According to the resource dependence theory, A large audit committee is viewed as a sign of varied expertise, diverse knowledge, and valuable resources. However, a large audit committee leads to expanded coordination and communication problems, resulting in a lengthy decision-making process [36, 46].

Contrary to our earlier expectations, the analysis revealed no statistically significant association between a board of directors' independence and ARL. Our initial hypothesis states that banks with more independent boards publish their audited statements earlier than banks with less independent boards. This outcome could be explained by the high information cost in banks, which limits the effectiveness of boards of directors. However, the results in Table 5 reveal that audit committee independence is negatively related, as expected, with ARL. However, this relationship is not significant; hence, the fifth hypothesis is not supported.

The results on the control variables show that the coefficient on bank size (SIZE) is negative and statistically significant (-13.56). This finding supports our earlier expectation that large banks publish their audited reports earlier than small banks. This finding is consistent with some previous studies [25, 52]. Furthermore, the results show that leverage, ROA, and auditor industry specialization are not related to ARL.

Finally, the coefficient on the auditor switch (AUDSWITCH) is positive and significant (11.75), indicating that when the audit firm is in the first year of tenure, banks take longer to release their audited financial statements. This finding aligns with the argument that an auditor's familiarity with a client, gained through longer tenure, enhances the speed of the audit process [55]. Hence, banks appointing new audit firms have longer audit delays [54].

Table 5.
Regression results – Generalized method of moments (GMM).

Variables	Coefficient	Std. Err.
IB	-25.50**	10.54
BODSIZE	0.273	2.530
BODINDEP	-0.179	1.496
ACSIZE	4.572*	2.358
ACINDEP	-1.552	3.106
BANK SIZE	-13.56***	4.580
LEVERAGE	0.0120	0.878
ROA	-76.96	18.18
SPEC	3.771	4.610
AUDSWITCH	11.75***	3.800

Note: * *,**,*** denote significance at 10%, 5%, and 1% respectively.

5.4. Additional Sensitivity: Propensity Score Matching

This research study aims to examine whether bank type (conventional or Islamic) and corporate governance mechanisms matter in determining ARL. One problem with this setting is that Islamic banks differ significantly from conventional banks in some respects. Table 6 compares the two categories of banks based on several firm- and board-level characteristics. It shows that the two samples (Islamic bank sample and conventional bank sample) are very different. At the bank level, conventional banks are much larger, significantly more profitable, and more leveraged. At the corporate governance level, conventional banks' audit committees are significantly larger than their counterparts in Islamic banks.

Table 6.
Difference between samples means before matching.

Variables	Conventional Banks		Islamic Banks		Difference	
	N	Mean	N	Mean	Difference	P-value
ARL	134	35.78	163	37.02	-1.25	0.284
BODSIZE	134	9.28	163	9.17	0.12	0.226
BODINDEP	134	0.478	163	0.470	0.13	0.340
ACSIZE	134	3.62	163	3.36	0.26	0.000***
ACINDEP	134	0.657	163	0.643	0.014	0.195
BANK SIZE	134	$2.74m	163	$1.47m	$1.27m	0.000***
LEVERAGE	134	6.63	163	5.39	1.24	0.000***
ROA	134	0.014	163	0.009	0.005	0.000***

Note: *** denotes significance at 1%.

To capture the effect of being an Islamic bank on ARL, we should compare banks that are almost similar in their characteristics and differ only in their business orientation (i.e., Islamic or conventional). It is possible that ARL is simultaneously correlated with bank type (Islamic or conventional) and other bank characteristics, such as size or profitability. To attenuate such concerns, propensity score matching (PSM) is employed. First, the dependent variable, IB, was modeled within a logistic regression framework. The explanatory variables are the same variables explained earlier. Then, the model scores are used to match each Islamic bank with a conventional bank that has a similar score. We impose a caliper of 1%, which means that observations will be removed if the standard deviation of the propensity scores exceeds 1%. This will ensure that only good matches remain in the sample. To further improve the quality of our matched data, we require the matching to be with replacement. This means that a conventional bank will be matched with one or more Islamic banks, given that they have the closest propensity score. As a result, the bias of our estimate will be lower. The final sample, after matching, comprises 72 bank-year observations. Table 7 compares the conventional banks with Islamic banks after matching.

Table 7.
Difference between samples means after matching.

Variables	Conventional Banks (Control)	Islamic Banks (Treated)	Difference (Control-Treated)	P-value
ARL	38.72	29.75	8.97	0.0271***
BODSIZE	9.35	9.43	-0.08	0.626
BODINDEP	0.495	0.481	0.014	0.353
ACSIZE	3.63	3.57	0.06	0.621
ACINDEP	0.691	0.682	0.009	0.517
BANK SIZE	$2.5m	$2.57m	-$0.0.7m	0.956
LEVERAGE	6.63	7.08	-0.45	0.224
ROA	0.014	0.014	0.00	0.854

Note: *** denotes significance at 1%.

The results of the PSM are presented in Table 8 and show that IB is negatively related to ARL (- 6.683), which is consistent with our main results. With reference to corporate governance variables, the results provide significant evidence that board size and audit committee size are directly associated with ARL. These results support our main findings and align with previous studies suggesting that banks with large boards and audit committees take longer to finalize their audited financial statements. As stated earlier, these results are explained through agency theory, which argues that, as boards and audit committees get larger, they experience expanded coordination and communication problems [36, 46].

Results on the control variables present that the ROA is significantly negative (-1.164), indicating that banks with good financial performance are more eager to publish their audited reports, relative to those with a lower financial performance. This supports the theory suggesting that managers prioritize internal performance assessment and reward systems. Hence, they are motivated to delay reporting negative financial performance and very quickly release good financial news [58].

Table 8.
PMS Regression results – Generalized method of moments (GMM).

Variables	Coefficient	Std. Err.
IB	-6.683*	3.547
BODSIZE	3.304**	1.522
BODINDEP	0.176	0.994
ACSIZE	5.522***	1.621
ACINDEP	-3.136	2.397
BANK SIZE	-2.353	1.979
LEVERAGE	-0.0164	0.411
ROA	-1.164***	20.6
SPEC	3.528	3.209
AUDSWITCH	5.036	4.234
Observations	72	
R-squared	0.766	

Note: * *,**,*** denote significance at 10%, 5%, and 1% respectively.

The PSM-sensitivity analysis further strengthens the validity of the results in that it controls for intrinsic differences between the two types of the banks, Islamic and conventional. In other words, by matching banks with comparable characteristics, this analysis adequately controls for the bank type effect, controlling ARL. The findings are that Islamic banks maintain a lower ARL always, even after accounting for all factors such as bank size, profitability, and characteristics of governance. Significant declines in ARL post-match for Islamic banks corroborate the hypothesis that the alternative governance structure and ethical nature of Islamic banking enhance timely financial reporting. The matching strategy further controls for any unobservable differences in ARL caused by external factors related to leverage or audit committee composition. These results support the major outcomes and indicate that the differences between institutions should be accounted for in the analysis of ARL.

5.5. Discussion

This research offers important perspectives on the factors influencing audit report lag (ARL) in both Islamic and conventional banking institutions within the Gulf Cooperation Council (GCC) area. It provides evidence that Islamic banks experience reduced delays in their audit reports relative to traditional banks. This fact can be linked with the unique governance structures of Islamic banks, which are informed by Shari'ah principles that prioritize transparency, accountability, and promptness. The additional layer of governance existing in Islamic banks appears to reduce agency-related issues and facilitates the faster preparation of audit reports. Audit committee size is positively associated with ARL. Generally, agency theory may perceive it as a sign of coordination difficulties with a higher committee size and consequently cause a delay in the process.

However, the study fails to produce a significant association of an independent board of directors in relation to ARL. This may be based on the intricate nature of banking business and the significant costs associated with information, such that independent boards lack the capacity to reduce ARL. The results also support the hypothesis that bigger banks are associated with shorter ARL, reflecting their ability to allocate more resources and expertise to expedite the auditing process. This finding underscores the significance of organizational capacity in influencing corporate reporting timeliness. Moreover, the significant positive link between auditor switch and longer ARL highlights how important auditor familiarity with the client's operations in reducing delays. These findings support existing literature on the impact of different mechanisms of governance on ARL, especially concerning Islamic financial institutions. The results would suggest policy and regulatory intervention in structuring governance frameworks to confront the unique challenges of either type of bank. A takeaway for practitioners is therefore the need for efficient governance structures of boards and associated audit committees in order for financial reporting to be expedited.

6. Conclusion

The aim of this research was to examine whether bank type matters in determining ARL, measured as the number of calendar days that elapse between the conclusion of a company's fiscal year and the date on which the external auditor officially signs the audit report. The study also aims to identify factors that determine ARL in two distinct types of banks. Using a sample of Islamic and conventional banks listed in the GCC, we find evidence that Islamic banks experience shorter audit delays when compared to their conventional counterparts. This could be attributed to the fact that Islamic banks are motivated to push the auditors to finalize and release the audited financial statements as soon as possible to mitigate complex agency problems and avoid the occurrence of leaks, insider trading, and rumors that may result from the delay in providing timely financial information. We also provide evidence on the association between ARL and some corporate governance and bank characteristics (board of directors' size and audit committee size). The findings indicate that board size and audit committee size are positively associated with ARL. These findings support agency theory, proposing that large boards and committees experience communication and coordination problems, which lead to a lengthy decision-making process.

This research holds deep implications for auditors, regulatory organizations, and banking institutions. The results call for auditors to understand the governance frameworks adopted by different categories of banks and calibrate their strategies in light of the knowledge acquired. Regulatory authorities would be able to create appropriate governance frameworks that promote effective financial reporting and cater to the needs of both Islamic and conventional banking corporations. Banking institutions, such as Islamic banks, leverage their governance strengths by negotiating for lower audit fees because their shorter audit report lag (ARL) reflects efficient reporting practices. Conversely, conventional banks leverage governance practices inspired by the Islamic banking system to enhance timeliness in financial reporting. Moreover, the strong association between auditor switching and ARL indicates that bank clients should consider the effects and timing of switching auditors to minimize delays in the reporting process.

Finally, future research could extend the current study by implementing it in different research contexts to investigate whether the research conclusions are generalizable to other countries where Islamic banks and conventional banks operate. Additionally, the effects of other governance mecanisms, such as the financial expertise of the board members and audit committee members, could also be examined.

References

[1] M. Attia, N. Lassoued, and H. Sassi, "Financial reporting timeliness and the value relevance of earnings: Evidence from banks in the MENA countries," *The International Trade Journal,* vol. 33, no. 3, pp. 277-301, 2019. https://doi.org/10.1080/08853908.2018.1459212

[2] B. Schwartz and S. Soo, "The association between auditor changes and reporting lags," *Contemporary Accounting Research,* vol. 13, no. 1, pp. 353-370, 1996. https://doi.org/10.1111/j.1911-3846.1996.tb00505.x

[3] J. Abernathy, B. Beyer, A. Masli, and C. Stefaniak, "The association between characteristics of audit committee accounting experts, audit committee chairs, and financial reporting timeliness," *Advances in Accounting,* vol. 30, no. 2, pp. 283-297, 2014. https://doi.org/10.1016/j.adiac.2014.09.001

[4] S. Leventis, P. Weetman, and C. Caramanis, "Determinants of audit report lag: Some evidence from the Athens Stock Exchange," *International Journal of Auditing,* vol. 9, no. 1, pp. 45-58, 2005. https://doi.org/10.1111/j.1099-1123.2005.00101.x

[5] E. Onatuyeh, S. Aniefor, C. Orife, L. Ogbolu, and E. Osevwe-Okoroyibo, "The impact of auditor attributes and firm size on financial reporting timeliness of listed firms," *Investment Management and Financial Innovations,* vol. 21, no. 4, pp. 116-127, 2024. http://dx.doi.org/10.21511/imfi.21(4).2024.10

[6] Financial Accounting Standards Board (FASB), "Conceptual framework for financial reporting: Chapter 3, qualitative characteristics of useful financial information," Retrieved: https://www.fasb.org/page/ShowPdf?path=Concepts_Statement_No_8_Chapter_3_As_Issued.pdf&title=CONCEPTS%20STATEMENT%20NO.%208%E2%80%94CONCEPTUAL%20FRAMEWORK%20FOR%20FINANCIAL%20REPORTING%E2%80%94CHAPTER%203,%20QUALITATIVE%20CHARACT, 2010.

[7] International Financial Reporting Standards (IFRS), "Conceptual framework for financial reporting," Retrieved: https://www.ifrs.org/projects/completed-projects/2018/conceptual-framework/#about [Accessed 2018.

[8] S. Brown and S. A. Hillegeist, "How disclosure quality affects the level of information asymmetry," *Review of Accounting Studies,* vol. 12, pp. 443-477, 2007. https://doi.org/10.1007/s11142-007-9032-5

[9] N. Sultana, "Audit committee characteristics and accounting conservatism," *International Journal of Auditing*, vol. 19, no. 2, pp. 88-102, 2015. https://doi.org/10.1111/ijau.12034

[10] S. Boubaker, A. Houcine, Z. Ftiti, and H. Masri, "Does audit quality affect firms' investment efficiency?," *Journal of the Operational Research Society*, vol. 69, no. 10, pp. 1688-1699, 2018. https://doi.org/10.1080/01605682.2018.1489357

[11] H. Khlif and K. Samaha, "Internal control quality, Egyptian standards on auditing and external audit delays: Evidence from the Egyptian Stock Exchange," *International Journal of Auditing*, vol. 18, no. 2, pp. 139-154, 2014. https://doi.org/10.1111/ijau.12018

[12] M. Al-Mulla and M. Bradbury, "The demand and supply timely financial reports," *Pacific Accounting Review*, vol. 32, no. 3, pp. 335-353, 2020. https://doi.org/10.1108/PAR-10-2018-0076

[13] H. Afify, "Determinants of audit report lag: Does implementing corporate governance have any impact? Empirical evidence from Egypt," *Journal of Applied Accounting Research*, vol. 10, no. 1, pp. 56-86, 2009. https://doi.org/10.1108/09675420910963397

[14] M. Bhuiyan and M. D'Costa, "Audit committee ownership and audit report lag: evidence from Australia " *International Journal of Accounting and Information Management*, vol. 28, no. 1, pp. 96-125,, 2020. https://doi.org/10.1108/IJAIM-09-2018-0107

[15] N. Khoufi and W. Khoufi, "An empirical examination of the determinants of audit report delay in France," *Managerial Auditing Journal*, vol. 33, no. 8/9, pp. 700-714, 2018. https://doi.org/10.1108/MAJ-02-2017-1518

[16] K. Phipps, "Spirituality and strategic leadership: The influence of spiritual beliefs on strategic decision making," *Journal of Business Ethics*, vol. 106, no. 2, pp. 177-189, 2012. https://doi.org/10.1007/s10551-011-0988-5

[17] C. Hofmann and N. Schwaiger, "Religion, crime, and financial reporting," *Journal of Business Economics*, vol. 90, no. 5, pp. 879-916, 2020. https://doi.org/10.1007/s11573-020-00982-2

[18] O. Abdelsalam, P. Dimitropoulos, M. Elnahass, and S. Leventis, "Earnings management behaviors under different monitoring mechanisms: The case of Islamic and conventional banks," *Journal of Economic Behavior & Organization*, vol. 132, pp. 155-173, 2016. https://doi.org/10.1016/j.jebo.2016.04.022

[19] E. Fama and M. Jensen, "Separation of ownership and control," *Journal of Law and Economics*, vol. 26, no. 2, pp. 301-325, 1983. https://doi.org/10.1086/467037

[20] M. Jensen and W. Meckling, "Theory of the firm: Managerial behavior, agency costs and ownership structure," *Journal of Financial Economics*, vol. 3, no. 4, pp. 305-360, 1976. https://doi.org/10.1016/0304-405X(76)90026-X

[21] R. Watts and J. Zimmerman, "Positive accounting theory: A ten year perspective," *The Accounting Review*, vol. 65, no. 1, pp. 131-156, 1990.

[22] M. Abdillah, A. Mardijuwono, and H. Habiburrochman, "The effect of company characteristics and auditor characteristics to audit report lag," *Asian Journal of Accounting Research*, vol. 4, no. 1, pp. 129-144, 2019. https://doi.org/10.1108/AJAR-05-2019-0042

[23] W. Knechel and J. Payne, "Additional evidence on audit report lag," *Auditing: A Journal of Practice and Theory*, vol. 20, no. 1, pp. 137-146, 2001. https://doi.org/10.2308/aud.2001.20.1.137

[24] O. Abdelsalam and D. Street, "Corporate governance and the timeliness of corporate internet reporting by U.K. listed companies," *Journal of International Accounting, Auditing and Taxation*, vol. 16, no. 2, pp. 111-130, 2007. https://doi.org/10.1016/j.intaccaudtax.2007.06.001

[25] S. Wiyantoro and F. Usman, "Audit tenure and quality to audit report lag in banking," *European Research Studies Journal*, vol. 21, no. 3, pp. 417-428, 2018. https://doi.org/10.35808/ersj/1072

[26] S. Aldulaimi, "Fundamental Islamic perspective of work ethics," *Journal of Islamic Accounting and Business Research*, vol. 7, no. 1, pp. 59-76, 2016. https://doi.org/10.1108/JIABR-02-2014-0006

[27] W. Grais and M. Pellegrini, "Corporate governance in institutions offering islamic financial services – issues and options," World Bank Policy Research Working Paper No. 4052, 2006.

[28] J. Al-Ajmi, "Audit and reporting delays: Evidence from an emerging market," *Advances in Accounting*, vol. 24, no. 2, pp. 217-226, 2008. https://doi.org/10.1016/j.adiac.2008.08.002

[29] C. Chen, H. Lu, and T. Sougiannis, "The agency problem, corporate governance, and the asymmetrical behavior of selling, general, and administrative costs," *Contemporary Accounting Research*, vol. 29, no. 1, pp. 252-282, 2012. https://doi.org/10.1111/j.1911-3846.2011.01094.x

[30] A. Dey, "Corporate governance and agency conflicts," *Journal of Accounting Research*, vol. 46, no. 5, pp. 1143-1181, 2008. https://doi.org/10.1111/j.1475-679X.2008.00301.x

[31] B. Allam, "The impact of board characteristics and ownership identity on agency costs and firm performance: UK evidence," *Corporate Governance*, vol. 18, no. 6, pp. 1147-1176, 2018. https://doi.org/10.1108/CG-09-2016-0184

[32] C. Armstrong, J. Core, and W. Guay, "Do independent directors cause improvements in firm transparency?," *Journal of Financial Economics*, vol. 113, no. 3, pp. 383-403, 2014. https://doi.org/10.1016/j.jfineco.2014.05.009

[33] J. Hillman and T. Dalziel, "Boards of directors and firm performance: Integrating agency and resource dependence perspectives," *Academy of Management Review*, vol. 28, no. 3, pp. 383-396, 2003. https://doi.org/10.2307/30040728

[34] H. Chalu, "Board characteristics, auditing characteristics and audit report lag in African Central Banks," *Journal of Accounting in Emerging Economies*, vol. 11, no. 4, pp. 578-609, 2021. https://doi.org/10.1108/JAEE-09-2019-0173

[35] A. Ezat and A. El-Masry, "The impact of corporate governance on the timeliness of corporate internet reporting by Egyptian listed companies," *Managerial Finance*, vol. 34, no. 12, pp. 848-867, 2008. https://doi.org/10.1108/03074350810915815

[36] M. Jensen, "The modern industrial revolution, exit, and the failure of internal control systems," *The Journal of Finance*, vol. 48, no. 3, pp. 831-880, 1993. https://doi.org/10.1111/j.1540-6261.1993.tb04022.x

[37] J. González and E. García-Meca, "Does corporate governance influence earnings management in Latin American markets?," *Journal of Business Ethics*, vol. 121, no. 3, pp. 419-440, 2014. https://doi.org/10.1007/s10551-013-1700-8

[38] Y. Li, D. Zhang, and X. Wang, "The influence of corporation governance structure on internal control audit report lag: evidence from China," *Accounting and Taxation*, vol. 6, no. 2, pp. 101-115, 2014.

[39] S. Cavaco, P. Crifo, A. Rebérioux, and G. Roudaut, "Independent directors: Less informed but better selected than affiliated board members?," *Journal of Corporate Finance*, vol. 43, pp. 106-121, 2017. https://doi.org/10.1016/j.jcorpfin.2017.01.004

[40] M. Cornett, J. McNutt, and H. Tehranian, "Corporate governance and earnings management at large U.S. bank holding companies," *Journal of Corporate Finance*, vol. 15, no. 4, pp. 412-430, 2009. https://doi.org/10.1016/j.jcorpfin.2009.04.003

[41] M. Elnahass, A. Salama, and N. Yusuf, "Earnings management and internal governance mechanisms: the role of religiosity," *Research in International Business and Finance*, vol. 59, p. 101656, 2022. https://doi.org/10.1016/j.ribaf.2021.101565
[42] O. Abdelsalam and A. El-Masry, "The impact of board independence and ownership structure on the timeliness of corporate internet reporting of Irish-listed companies," *Managerial Finance*, vol. 34, no. 2, pp. 907-918, 2008. https://doi.org/10.1108/03074350810915842
[43] N. Sultana, H. Singh, and J.-L. Van Der Zahn, "Audit committee characteristics and audit report lag," *International Journal of Auditing*, vol. 19, no. 2, pp. 72-87, 2015. https://doi.org/10.1111/ijau.12033
[44] E. Alzoubi, "Audit committee, internal audit function and earnings management: evidence from Jordan," *Meditari Accountancy Research*, vol. 27, no. 1, pp. 72-90, 2019. https://doi.org/10.1108/MEDAR-06-2017-0160
[45] M. Mohamad-Nor, R. Shafie, and W. Wan-Hussin, "Corporate governance and audit report lag in Malaysia," *Asian Academy of Management Journal of Accounting and Finance*, vol. 6, no. 2, pp. 57-84, 2010.
[46] T. Mak and Y. Li, "Determinants of corporate ownership and board structure: evidence from Singapore," *Journal of Corporate Finance*, vol. 7, no. 3, pp. 235-256, 2001. https://doi.org/10.1016/S0929-1199(01)00021-9
[47] J. Bédard and Y. Gendron, "Strengthening the financial reporting system: Can audit committees deliver?," *International Journal of Auditing*, vol. 14, no. 2, pp. 174-210, 2010. https://doi.org/10.1111/j.1099-1123.2009.00413.x
[48] J. Chen and H. Zhang, "The impact of corporate governance code on earnings management – Evidence from Chinese listed companies," *European Financial Management*, vol. 20, no. 3, pp. 596-632, 2014. https://doi.org/10.1111/j.1468-036X.2012.00648.x
[49] I. Blankley, N. Hurtt, and E. MacGregor, "Are lengthy audit report lags a warning signal?," *Current Issues in Auditing*, vol. 9, no. 2, pp. 19-28, 2015. https://doi.org/10.2308/ciia-51215
[50] L. Fujianti and I. Satria, "Firm size, profitability, leverage as determinants of audit report lag: evidence from Indonesia," *International Journal of Financial Research*, vol. 11, no. 2, pp. 61-67, 2020. https://doi.org/10.5430/ijfr.v11n2p61
[51] S. Mitra, H. Song, and J. Yang, "The effect of auditing standard No. 5 on audit report lags," *Accounting Horizons*, vol. 29, no. 3, pp. 507-527, 2015. https://doi.org/10.2308/acch-51052
[52] R. Rusmin and J. Evans, "Audit quality and audit report lag: Case of Indonesian listed companies," *Asian Review of Accounting*, vol. 25, no. 2, pp. 191-210, 2017. https://doi.org/10.1108/ARA-06-2015-0062
[53] A. Habib and M. Bhuiyan, "Audit firm industry specialization and the audit report lag," *Journal of International Accounting, Auditing and Taxation*, vol. 20, no. 1, pp. 32-44, 2011. https://doi.org/10.1016/j.intaccaudtax.2010.12.004
[54] K. Chan, V. Luo, and P. Mo, "Determinants and implications of long audit reporting lags: Evidence from China," *Accounting and Business Research*, vol. 46, no. 2, pp. 145-166, 2015. https://doi.org/10.1080/00014788.2015.1039475
[55] J. Payne and K. Jensen, "An examination of municipal audit delay," *Journal of Accounting and Public Policy*, vol. 21, no. 1, pp. 1-29, 2002. https://doi.org/10.1016/S0278-4254(02)00035-2
[56] M. Arellano and O. Bover, "Another look at the instrumental variable estimation of error-components models," *Journal of Econometrics*, vol. 68, no. 1, pp. 29-51, 1995. https://doi.org/10.1016/0304-4076(94)01642-D
[57] M. Wintoki, J. Linck, and J. Netter, "Endogeneity and the dynamics of internal corporate governance," *Journal of Financial Economics*, vol. 105, no. 3, pp. 581-606, 2012. https://doi.org/10.1016/j.jfineco.2012.03.005
[58] A. Lurie and V. Pastena, "How promptly do corporations disclose their problems?," *Financial Analysts Journal*, vol. 31, no. 5, pp. 55-61, 1975. https://doi.org/10.2469/faj.v31.n5.55