



ISSN: 2617-6548

URL: www.ijirss.com



The impact of voluntary disclosure on external audit quality in commercial banks: Evidence from Saudi Arabia

 Jafar Othman Elsharif Abdulaziz

¹Department of Accounting, College of Business Administration, Majmaah University, Al-Majmaah 11952, Saudi Arabia.

(Email: j.abdelaziz@mu.edu.sa)

Abstract

This study aimed to examine the impact of voluntary disclosure on the quality of external audits in commercial banks within the Kingdom of Saudi Arabia. The research was conducted on a sample of nine commercial banks, selected using simple random sampling, covering the period from 2015 to 2024. The study employed content analysis of data obtained from the annual financial reports of the sampled banks. Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS), version 27, with simple regression analysis applied due to its suitability for this type of research. The findings revealed a statistically significant positive effect of the dimensions of voluntary disclosure—namely, social and environmental responsibility, financial performance, and non-financial performance—on the quality of external audits in Saudi commercial banks. Conversely, the study found no statistically significant effect of the voluntary disclosure of general bank information on audit quality in these banks. Among the key recommendations is the necessity to enhance the level of voluntary disclosure in commercial banks in Saudi Arabia and to leverage it to raise their efficiency.

Keywords: Audit quality, Commercial banks, Kingdom of Saudi Arabia, Voluntary disclosure.

DOI: 10.53894/ijirss.v8i6.10342

Funding: The author extends the appreciation to the Deanship of Postgraduate Studies and Scientific Research at Majmaah University for funding this research work through the (Grant Number: R-2025-1918).

History: Received: 16 July 2025 / Revised: 18 August 2025 / Accepted: 21 August 2025 / Published: 29 September 2025

Copyright: © 2025 by the author. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.

Transparency: The author confirms 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

In recent years, there has been a growing interest among researchers in accounting literature concerning the topic of accounting disclosure. This heightened attention arises because disclosure serves as a cornerstone for protecting shareholders' rights and enhancing investor confidence, which in turn positively impacts the performance of entities across various types and legal forms Abdullah and Abd Akhras [1] One of the primary reasons behind corporate collapses is the opacity of information disclosed by these companies, which can mislead decision-makers and significantly affect stakeholders due to various shortcomings in management integrity, financial information accuracy, disclosure practices,

and overall transparency. Consequently, there is an urgent need to develop and improve both the form and substance of annual reports prepared for decision-makers, as these reports have traditionally focused predominantly on financial data. Additionally, it has become essential to broaden the scope of disclosure in the annual reports of companies and banks as mandated by relevant regulatory bodies—a practice commonly referred to as voluntary disclosure [2-4].

External auditing plays a vital role in reinforcing trust in the presented financial data, thereby influencing the decisions of its users. This has led to increased attention on audit quality, which, according to the American Institute of Certified Public Accountants (AICPA), is achieved through the extent to which audit firms and offices comply with international auditing standards and apply various related considerations. As a result, high-quality audits are conducted by these audit firms and offices [5, 6]. Auditing standards indicate that audit quality is realized through issuing an appropriate audit report on the extent of the client's compliance with the applicable financial reporting framework. However, the concept of audit quality remains inherently complex and cannot be reduced to a single requirement. Despite numerous studies that have addressed audit quality, it continues to be an unresolved topic in accounting thought, as it can be viewed from multiple perspectives representing the diverse viewpoints of stakeholders, financial statement users, auditors and audit firms, regulatory bodies, and the broader society [7-9].

Ultimately, this study aims to investigate how the level of voluntary disclosure in Saudi commercial banks affects external audit quality.

2. Study's Methodological Framework

2.1. Study Problem

The low level of voluntary disclosure in enterprises, including banks, is regarded as a primary factor behind the collapse of numerous major corporations during recent global financial crises. This also highlights these corporations' failure to recognize the importance of enhancing voluntary information disclosure [10-12]. Consequently, many countries have encouraged and even mandated corporate managements to increase the disclosure of both financial and non-financial information, aiming to improve its quality and reduce information asymmetry—one of the most prominent challenges facing financial markets.

Some studies, such as Hung, et al. [13], have argued that it is not possible to conclusively determine the advantages of extensive voluntary disclosure, as increasing the volume of disclosed information may potentially harm banks. This suggests the absence of universally fixed foundations for voluntary disclosure practices, given that disclosure levels vary substantially from one bank to another.

The core problem addressed by this study lies in the fact that although Saudi commercial banks—like their counterparts worldwide—are often expected by financial statement users to provide information that goes beyond what is mandated by professional standards and Saudi Capital Market Authority regulations (thereby enhancing confidence in financial reporting quality and, in turn, audit quality), previous studies conducted in the Saudi context have largely overlooked examining the impact of voluntary disclosure levels on audit quality within the commercial banking sector.

Based on the above, the research question can be stated as follows:

What is the impact of voluntary disclosure on audit quality in Saudi commercial banks?

2.2. Study Objectives

The primary objective of this study is to examine the impact of the level of voluntary disclosure on audit quality in commercial banks within the Kingdom of Saudi Arabia. This main objective branches into the following specific objectives:

- To assess the effect of voluntary disclosure of general bank information on audit quality.
- To evaluate the impact of voluntary disclosure of the bank's social and environmental responsibility on audit quality.
- To examine the effect of voluntary disclosure of the bank's financial performance on audit quality.
- To investigate the impact of voluntary disclosure of the bank's non-financial performance on audit quality.

2.3. Significance of the Study

The scientific significance of this study lies in its contribution to enriching the body of knowledge in the field of voluntary disclosure and its effect on audit quality within the commercial banking sector. Moreover, this study aligns with Saudi Vision 2030, under which the auditing profession is undergoing fundamental transformations in terms of banks' compliance with legal requirements, commitment to financial transparency, and the fostering of trust between banks and investors. The study's academic importance is further underscored by the scarcity of research and studies addressing this topic within the Saudi academic literature; the researcher found no prior studies that have explored this specific subject, highlighting the novelty and originality of the present research. Practically, the study is expected to benefit the management of commercial banks in Saudi Arabia by providing insights into how the level of voluntary disclosure influences the quality of financial reporting, and consequently, the quality of external audits in these banks.

3. Theoretical Framework of the Study

3.1. Voluntary Disclosure

In today's era of economic openness, there is an increasingly pressing need for voluntary disclosure by organizations. Mandatory disclosure alone is no longer sufficient to meet the informational demands of financial report users, who require

both financial and non-financial data to support rational decision-making Abdullah and Abd Akhras [1]. Ibrahim [14] describes voluntary disclosure as non-mandatory, non-regulated disclosure that provides decision-useful information. Similarly, Adel and Babiker [15] characterize it as an effective tool for communicating business information to stakeholders, aimed at reducing information asymmetry and mitigating agency conflicts between managers and investors. The Financial Accounting Standards Board (FASB) defines voluntary disclosure as information beyond the scope of required financial reports, which is not explicitly mandated under accounting rules and standards [16].

Drawing on these definitions, the researcher observes that while voluntary disclosure has been conceptualized in diverse ways, these definitions fundamentally converge on the notion of providing additional, voluntary information to aid decision-makers in making informed choices. Accordingly, this study defines voluntary disclosure as the presentation of data and information related to an entity's activities in financial statements, reports, and accompanying notes, serving users of these reports in evaluating the entity's performance [17].

Voluntary disclosure also aims to inform financial statement users about significant and strategic aspects critical to the company's future operations [17, 18]. According to Shaqloof and Meftah [2], the core objective of voluntary disclosure is to provide current and prospective investors, as well as other report users, with information that enables them to forecast both the likelihood and magnitude of returns on their investments. It seeks to lessen information asymmetry between company management and existing investors, while also facilitating external oversight by these investors.

From this perspective, the researcher contends that the primary aim of voluntary disclosure is to determine the optimal amount, type, and quality of information to be disclosed, achieving a balance between relevance and reliability for decision-makers.

3.2. Motivations for Voluntary Disclosure

Several studies have identified a set of managerial motivations and incentives that drive voluntary disclosure, including but not limited to [19-21]:

1. Informing investors and stakeholders about the company's economic environment and its capacity to respond to financial market changes.
2. Providing comparative information that enables financial statement users to benchmark against other firms and facilitates the forecasting of future cash flows, both inflows and outflows.
3. Assisting in evaluating returns on investment and liquidity, helping investors and stakeholders assess the company's ability to generate cash.
4. Addressing limitations in market participants' analytical capabilities, as some lack robust backgrounds in financial analysis and thus may not fully engage with fundamental finance principles such as analyzing and valuing future cash flows. Additionally, they often lack access to internal company information.
5. Reducing transaction costs related to the company's securities, enhancing liquidity, lowering the cost of capital, and attracting greater attention from analysts and investors.

Based on these drivers, the researcher concludes that voluntary disclosure emerges from multiple managerial motivations and constitutes a complex phenomenon, encompassing relationships not only between management and current or prospective shareholders and creditors, but also between the firm and the broader society, reflecting its responsibility to contribute to societal welfare and progress.

3.3. Factors Influencing Voluntary Disclosure

Empirical studies have also explored various factors that influence voluntary disclosure levels. For example, Rouf and Akhtaruddin [22] and Elfekey, et al. [23] found that corporate governance mechanisms significantly impact voluntary disclosure, with board independence and CEO duality being the most influential. These studies further indicated that firm-specific characteristics, such as size and age, play notable roles in shaping voluntary disclosure practices. Additionally, Trang and Alradhi [24] demonstrated that ownership structure affects disclosure levels: foreign ownership tends to positively influence voluntary disclosure, whereas ownership concentration exerts a negative impact. Beyond these findings, the researcher notes that other factors—including financial leverage, overall profitability, and the size of the external audit firm—may also shape the extent of voluntary disclosure adopted by companies.

3.4. Types and Dimensions of Voluntary Disclosure

Voluntary disclosure can generally be categorized into two primary types [18, 25].

1. **Pure Voluntary Disclosure:** Information provided voluntarily by management in financial reports without any regulatory compulsion. This type typically signals the entity's commitment to environmental, ethical, and general societal values.

2. **Required Voluntary Disclosure:** Information disclosed voluntarily, absent legal mandates, yet driven by expectations or requests from various stakeholder groups with vested interests in the company's annual financial reports.

Thus, required voluntary disclosure pertains to information that is demanded by interested parties, even if it is not legally enforced.

In addition, scholars such as Al-Tarawneh and Al-Maddadah [6], Al-Nuaimi [10], and Hamadeh, et al. [26] have highlighted several core dimensions of voluntary disclosure, including:

1. **General Company Information:** Encompassing historical data on the company's establishment and development, its organizational structure, and the influence of political and economic contexts on its operations.

2. Company Activities: Covering strategic plans, comparisons of actual versus planned data, strategic impacts on current results, and articulation of financial and marketing objectives.

3. Information on Shares and Shareholders: Including commentary on share price developments (qualitative), outstanding share counts over time, comparative analyses of the company's share performance versus market indices, and both descriptive and tabulated numerical analyses of market valuations.

4. Information on Management: Disclosing managers' ages, academic qualifications, and previous leadership positions.

5. Social and Environmental Responsibility: Addressing product and service safety, environmental protection initiatives, aid, grants, and charitable donations.

6. Financial and Non-Financial Performance: Reporting liquidity ratios, historical financial data, debt ratios, dividend policies, quantitative sales forecasts, quantitative and qualitative profit forecasts, and cash flow projections.

3.5. Audit Quality

3.5.1. Definitions of Audit Quality

Audit quality is a critical concept that plays a pivotal role in providing an impartial opinion on the objectivity, fairness, and transparency of financial statements. Its effectiveness largely depends on the characteristics and competence of the audit team, which enable them to achieve the ultimate objectives of the audit process efficiently, effectively, and professionally at all stages [3].

DeFond and Zhang [27] defined audit quality as the degree of assurance provided by the auditor regarding the extent to which accounting standards have been applied in a manner that faithfully represents the company's financial position in its financial reports. Majoujah [28] described it as the external auditor's ability to detect and disclose material errors and irregularities in financial statements, thereby reducing information asymmetry between management and shareholders and safeguarding shareholder interests, especially given the separation between ownership and control.

Similarly, Arens, et al. [29] suggested that audit quality reflects the extent to which an audit successfully detects misstatements in financial statements and subsequently reports them. Detection demonstrates the auditor's technical competence, whereas reporting indicates their ethics, integrity, commitment, and independence.

Accordingly, audit quality can be defined as the extent to which an audit process provides accurate information based on the auditor's compliance with professional standards and ethics issued by recognized professional bodies.

3.5.2. Importance of Audit Quality

The importance of audit quality stems from its fundamental role in meeting the needs of all users of financial statements and reports. According to Abdel Jalil [30], audit quality is crucial for several reasons:

1. Enhancing credibility: Conducting external audits at the highest quality levels imparts maximum credibility to audit reports.

2. Ensuring reliability: It validates the trustworthiness of corporate financial statements, which necessitates audits of exceptional quality.

3. Serving public interest: Professional organizations emphasize that high-quality audits serve the collective interests of all users and beneficiaries of financial reports.

Based on these considerations, audit quality significantly contributes to narrowing the audit expectation gap by uncovering material misstatements that could compromise the fairness of financial statements, thereby fostering greater confidence in audit reports.

3.5.3. Determinants Limiting Audit Quality

Empirical research by Al-Tarawneh and Al-Maddadah [6] and Abdullah [31] highlighted several key factors that constrain audit quality in companies and banks, including:

1. Misaligned audit plans: Auditors typically follow pre-established plans when seeking evidence that corroborates recorded data. If such plans do not align with the company's operational nature, the results may be inaccurate.

2. Reliance on external procedures: Auditors often employ external methods to gather evidence that underpins an unbiased opinion on the correctness of financial statements and reports.

3. Alternative data sources: When internal records are insufficient, auditors may obtain additional information from sources such as internal personnel who might have participated in manipulations, leading to financial statements that fail to reflect the entity's true position accurately.

4. Post-accounting audits: The audit process commences only after the accountant's work is completed, making it more challenging to understand the underlying records and increasing the risk of undetected manipulation or misstatement, despite the auditor's highest professional diligence.

5. Judgment under uncertainty: Auditors issue neutral technical opinions based on their examinations, yet ambiguity can arise from judgments not firmly supported by concrete evidence, causing financial statements to diverge from actual realities.

Overall, these limitations underscore the complexities inherent in ensuring consistently high audit quality across different organizational settings.

3.5.4. Previous Studies and Research Gap

The researcher reviewed a range of prior studies closely related to the variables investigated in this research. This section highlights some of the most pertinent studies.

Study by Al-Tarawneh and Al-Maddadah [3] This study aimed to examine the impact of the level of voluntary disclosure on audit quality in publicly listed joint-stock companies on the Amman Stock Exchange. Using regression analysis, the study examined data from a sample of 166 companies across the financial, service, and industrial sectors. The results demonstrated a statistically significant positive relationship between voluntary disclosure and audit quality.

Study by Abu, et al. [32]: Abu Awwad explored the influence of voluntary disclosure on the quality of financial statements of firms listed on the Palestine Exchange, drawing insights from auditors based in Hebron, Palestine. Adopting a descriptive-analytical approach, the study utilized a structured questionnaire, distributing 33 surveys to a sample of auditors. Findings indicated that various dimensions of voluntary disclosure—including general company information, company activities, and social and environmental responsibility—positively affected the quality of financial reports.

Study by Al-Maghrabi [17]: This research investigated the effect of voluntary accounting disclosure on enhancing the quality of accounting information within Jordanian commercial banks. A descriptive-analytical methodology was employed, with data collected via a questionnaire distributed to 155 respondents across different banks. The analysis revealed a statistically significant positive effect of voluntary disclosure, encompassing both financial and non-financial information, on improving accounting information quality in terms of its fundamental and secondary qualitative characteristics.

Study by Al-Hassami and Al-Zoubi [33]: Focusing on Jordanian commercial banks, this study assessed the level of voluntary disclosure and its impact on information asymmetry. Utilizing content analysis within a descriptive-analytical framework, the researchers examined annual financial reports from 2013 to 2019. Results showed that voluntary disclosure in these banks stood at a relatively high level (78.1%). However, no statistically significant impact was observed of voluntary disclosure—including its financial, non-financial, and strategic components—on reducing information asymmetry.

Study by Abdullah and Abd Akhras [1] This study examined how voluntary disclosure practices influence external audit quality in the banking sector listed on the Iraq Stock Exchange during the period 2010–2016. Using content analysis, the researchers evaluated annual financial reports of 15 banks and processed the data through SPSS. Their findings indicated that the average level of voluntary disclosure was 0.48, suggesting limited awareness or application of voluntary disclosure practices. Additionally, while a significant positive relationship emerged between audit quality and voluntary disclosure related to general bank information, social responsibility, and non-financial performance, the study found weak and statistically insignificant associations with financial performance and corporate governance disclosures.

Study by Al-Aroud and Al-Harbi [34] This study investigated the effect of voluntary disclosure on financial performance indicators—namely earnings per share and market value per share—of Jordanian industrial joint-stock companies. Through content analysis of annual reports from 2014 to 2018, the researchers found a moderate positive impact of voluntary disclosure, across dimensions such as general information, future expectations, social and environmental activities, employee services, and corporate governance, on financial performance. Conversely, the influence of voluntary disclosure pertaining to research and development was notably weak.

Study by Zaitoun and Nuseir [35]: Zaitoun and Nuseir [35] research explored the relationship between voluntary disclosure of auditor tenure and audit quality in companies listed on the Egyptian Stock Exchange from 2014 to 2018. Applying content analysis to annual reports sourced from Misr for Information & Investment Services, the study examined a sample of 67 firms. Key findings revealed a significant negative relationship between voluntary disclosure of auditor tenure and the absolute measure of earnings management (as indicated by Miller's ratio), which in turn suggests a positive implication for audit quality.

3.5.5. Summary and Identified Research Gap

Collectively, these studies underscore a consensus on the positive role of voluntary disclosure in enhancing audit quality, with most reporting statistically significant relationships. Nonetheless, a clear research gap persists concerning the specific investigation of voluntary disclosure practices and their impact on audit quality within the commercial banking sector. To the best of the researcher's knowledge, no prior studies have directly examined the effect of voluntary disclosure on external audit quality in Saudi commercial banks. This gap constitutes the primary motivation for the current research, which seeks to contribute original insights by addressing this underexplored context. Moreover, the reviewed literature provided a foundational basis for the present study, informing its theoretical framework, helping shape its problem statement, objectives, and hypotheses, and serving as a reference point for interpreting its findings.

3.6. Study Hypotheses

In light of the research problem, objectives, and insights drawn from prior studies, the researcher formulates the primary hypothesis as follows:

3.7. Primary Hypothesis (H0)

There is a statistically significant relationship between voluntary disclosure and audit quality in Saudi commercial banks, significant at the $\alpha \leq 0.05$ level.

This primary hypothesis gives rise to the following sub-hypotheses:

H₁: Voluntary disclosure of general bank information has a statistically significant impact on audit quality at the $\alpha \leq 0.05$ level.

H₂: Voluntary disclosure of the bank's social and environmental responsibility has a statistically significant impact on audit quality at the $\alpha \leq 0.05$ level.

H₃: Voluntary disclosure of the bank's financial performance has a statistically significant impact on audit quality at the $\alpha \leq 0.05$ level.

H₄: Voluntary disclosure of the bank's non-financial performance has a statistically significant impact on audit quality at the $\alpha \leq 0.05$ level.

3.8. Study Population and Sample

The study population comprises all 13 Saudi commercial banks [36]. From this population, a sample of 9 commercial banks was selected through simple random sampling, representing approximately 69% of all commercial banks operating in Saudi Arabia. To evaluate voluntary disclosure practices in these banks and their impact on audit quality, the researcher analyzed their annual financial reports over a ten-year period spanning from 2015 to 2024.

3.9. Variables and Measurement

3.9.1. Dependent Variable

- **Audit Quality:** Measured by the amount of audit fees paid by the bank to external audit firms during the study period, serving as a proxy indicator for audit quality.

3.9.2. Independent Variables

These represent the dimensions of voluntary disclosure, operationalized as follows:

3.9.2.1. Level of Disclosure of General Bank Information

Captured through indicators such as: a brief historical overview of the bank, its address, organizational structure, impact of the economic climate, competitive advantages, online publication of annual and quarterly reports, use of electronic security measures for data protection, risk management practices, and the bank's insurance programs.

3.9.2.2. Level of Disclosure of Social and Environmental Responsibility

Assessed via indicators including: the bank's initiatives to reduce unemployment, environmental protection programs, aid provided to external parties, product safety and environmental impact, recreational, sports, and healthcare projects, information on charitable donations, expenditures on social and environmental programs, social activities, contributions to environmental projects, and information on employee welfare.

3.9.2.3. Level of Disclosure of Financial Performance

Measured by indicators such as: financial position analyses, return on equity, dividends per share, dividend policy, profitability ratios, return on assets, return on shareholders' equity, loans-to-deposits ratio, cost of sales to sales ratio, sales growth rates, and return on sales.

3.9.2.4. Level of Disclosure of Non-Financial Performance

Evaluated through: online banking facilities, international banking services, year-over-year comparative results, development of banking products and services, risk management information, and the bank's performance over the previous year.

3.10. Description of Study Variables

In this section, the researcher presents the results of the descriptive analysis of the study variables over the study period, as follows:

3.10.1. Descriptive Analysis of Voluntary Disclosure Dimensions (Independent Variable)

Table 1.
Descriptive Statistics for Voluntary Disclosure Dimensions.

Variable	Observations	Max Value	Min Value	Mean	Std. Deviation	Disclosure Level
Disclosure of General Information	200	100.00	0.00	54.09	26.37	Medium
Disclosure of Social & Environmental Resp.	200	100.00	0.00	37.69	29.29	Medium
Disclosure of Financial Performance	200	100.00	0.00	79.64	5.68	High
Disclosure of Non-Financial Performance	200	100.00	0.00	49.43	23.17	Medium

Source: Prepared by the researcher based on study data analysis, 2025.

The results of the analysis in Table 1 indicate that the level of voluntary disclosure for general information, social and environmental responsibility, non-financial performance, and bank governance was medium. In contrast, the level of disclosure for financial performance was high. This could be attributed to the banks' eagerness to disclose financial information, which provides stakeholders with an understanding of the banks' focus on financial performance.

3.10.2. Descriptive Analysis of Audit Quality Enhancement (Dependent Variable)

Table 2.
Descriptive Statistics for Audit Quality Enhancement.

Value	Audit Fees
Maximum Value	967,867.00
Minimum Value	224.00
Arithmetic Mean	23,247.31
Standard Deviation	248,657.29

The results presented in Table 1 (should be Table 2, as per context) indicate the sampled commercial banks' interest in the external audit process, given its importance for management, as well as for the beneficiaries and users of financial statements and reports.

4. Data Analysis and Discussion of Results

In this section, the researcher verifies the validity of the hypotheses formulated for the study. Simple linear regression was employed as the primary analytical technique. This approach examines the joint distribution of two variables: the independent variable (x), which is assumed to be measured without error, and the dependent variable (y), which varies in response to changes in the independent variable. The purpose of regression analysis is to estimate the functional relationship between these variables, thereby explaining variations in the dependent variable resulting from fluctuations in the independent variable.

Before proceeding with hypothesis testing and discussing the analytical results, the researcher assessed whether the data adhered to a normal distribution. Table 3 presents the outcomes of the skewness and kurtosis tests conducted for this purpose.

Table 3.
Normality Assessment of Study Variables.

Variable	Skewness	Kurtosis
Disclosure of General Information	1.036	-0.605
Disclosure of Social & Environmental Resp.	-0.426	-0.309
Disclosure of Financial Performance	2.031	-0.479
Disclosure of Non-Financial Performance	0.284	-0.587
Audit Quality	1.678	-0.279

As shown in Table 3, skewness values ranged from -0.426 to 2.031, while kurtosis values fell between -0.279 and -0.758. These results suggest that the data approximate a normal distribution. Having established this, the researcher proceeded to test the study hypotheses, as detailed in the subsequent sections.

Table 4.
Impact of Voluntary Disclosure on Audit Quality.

Variable	Unstandardized Coefficients	Standard Error	Standardized Coefficients	T-value	Significance
Constant	0.515	0.020	-	61.466	< 0.003
Disclosure of General Information	0.021	0.003	0.057	0.751	0.429
Disclosure of Social & Environmental Resp.	0.001	0.016	0.039	0.426	0.657
Disclosure of Financial Performance	0.030	0.024	0.168	1.549	0.011
Disclosure of Non-Financial Performance	0.002	0.002	0.139	0.063	0.075

Note: $p < 0.001$, $F = 4.567$, $R^2 = 0.486$, Adjusted $R^2 = 0.068$.

4.1. Results of the Main Hypothesis Test

The central hypothesis of this study posited that there is a statistically significant effect of voluntary disclosure on audit quality in Saudi commercial banks at a significance level of $\alpha \leq 0.05$. To test this hypothesis, the researcher employed multiple regression analysis. The results are summarized in Table 4.

As shown in Table 4, the model's R^2 is 0.486, with an adjusted R^2 of 0.068. This suggests that all dimensions of voluntary disclosure collectively explain approximately 48.6% of the variation in audit quality among Saudi commercial banks. The F-statistic was 4.567 ($p < 0.001$), indicating that the overall regression model is statistically significant at $\alpha \leq 0.05$.

These findings support the validity of the central hypothesis, confirming that voluntary disclosure has a statistically significant effect on audit quality in Saudi commercial banks. When compared to prior research, this result aligns with the findings of Al-Tarawneh and Al-Maddadah [3] and Zaitoun [37] but differs from Abdullah and Abd Akhras [1], who reported weaker associations.

Thus, the present study contributes empirical evidence that underscores the importance of voluntary disclosure in enhancing audit quality within the context of Saudi commercial banking.

4.2. Results of Sub-Hypotheses Testing

The sub-hypotheses posited a statistically significant effect at the significance level ($\alpha \leq 0.05$) for voluntary disclosure dimensions—

General Bank Information (X_1), Social and Environmental Responsibility (X_2), Financial Performance (X_3), and Non-Financial Performance (X_4)— on audit quality in Saudi commercial banks. Below is an analysis of the results of these hypotheses.

4.3. Analysis of the First Sub-Hypothesis

A statistically significant effect exists ($\alpha \leq 0.05$) for voluntary disclosure of general bank information on audit quality.

To validate this hypothesis, a simple linear regression equation was applied. Table 5 presents the results.

Table 5.
Simple Regression Analysis of the Effect of General Information Disclosure on Audit Quality.

Statistical Measure	Value	Significance (Sig.)	Statistical Inference
Pearson Correlation (R)	0.086	0.121	Not Significant
Coefficient of Determination (R^2)	0.241	–	–
Calculated F-value	1.653	0.121	–
Regression Coefficient (B)	1.473	–	–
Calculated t-value	1.516	0.121	Not Significant

Table 5 illustrates the relationship between the independent variable (*General Information*) and the dependent variable (*Audit Quality*). The Pearson correlation coefficient (0.086) indicates a weak positive association. The coefficient of determination ($R^2 = 0.241$) suggests that voluntary disclosure of general information explains 24.1% of the variation in audit quality improvement.

The calculated F-value (1.653, $*p^* = 0.121$) and t-value for the regression coefficient ($B = 1.473$, $*t^* = 1.516$, $*p^* = 0.121$) are statistically insignificant at $\alpha = 0.05$. These results indicate no statistically significant relationship between general information disclosure and audit quality. The first sub-hypothesis is rejected.

Comparison with Prior Studies: These findings align with results from Abdullah and Abd Akhras [1] and Obeid, et al. [38] but contradict those of Al-Tarawneh and Al-Maddadah [3] and Al-Maghrabi [17].

4.4. Analysis of the Second Sub-Hypothesis

A statistically significant effect exists ($\alpha \leq 0.05$) for voluntary disclosure of social and environmental responsibility on audit quality.

This hypothesis was tested using simple linear regression. Table 6 presents the results.

Table 6.
Simple Regression Analysis of the Effect of Social and Environmental Responsibility Disclosure on Audit Quality.

Statistical Measure	Value	Significance (Sig.)	Statistical Inference
Pearson Correlation (R)	0.863	0.012	Significant
Coefficient of Determination (R^2)	0.746	–	–
Calculated F-value	27.09	0.012	–
Regression Coefficient (B)	1.654	–	–
Calculated t-value	5.432	0.012	Significant

Table 6 demonstrates the relationship between the independent variable (*Social and Environmental Responsibility*) and the dependent variable (*Audit Quality*). The Pearson correlation coefficient ($r = 0.863$) indicates a strong positive relationship. The coefficient of determination ($R^2 = 0.746$) indicates that voluntary social and environmental responsibility disclosure accounts for 74.6% of the variation in audit quality.

The F-statistic (27.09, $*p^* = 0.012$) and t-statistic for the regression coefficient ($B = 1.654$, $*t^* = 5.432$, $*p^* = 0.012$) are statistically significant at $\alpha = 0.05$. These results confirm a statistically significant relationship between social/environmental responsibility disclosure and audit quality. The second sub-hypothesis is supported.

Comparison with Prior Studies: These findings align with Al-Tarawneh and Al-Maddadah [3] and Al-Maghrabi [17] but contradict Abdullah and Abd Akhras [1] and Al-Aroud and Al-Harbi [34].

4.5. Analysis of the Third Sub-Hypothesis

A statistically significant effect exists ($\alpha \leq 0.05$) for voluntary disclosure of financial performance on audit quality. This hypothesis was tested using simple linear regression. Table 7 presents the results.

Table 7.

Simple Regression Analysis of the Effect of Financial Performance Disclosure on Audit Quality.

Statistical Measure	Value	Significance (Sig.)	Statistical Inference
Pearson Correlation (R)	0.672	0.001	Significant
Coefficient of Determination (R ²)	0.519	–	–
Calculated F-value	23.31	0.001	–
Regression Coefficient (B)	1.493	–	–
Calculated t-value	4.367	0.001	Significant

Table 7 demonstrates the relationship between the independent variable (*Financial Performance*) and the dependent variable (*Audit Quality*). The Pearson correlation coefficient (0.672) indicates a strong positive relationship. The coefficient of determination ($R^2 = 0.519$) indicates that voluntary financial performance disclosure accounts for 51.9% of the variation in audit quality.

The F-statistic (23.31, $*p^* = 0.001$) and t-statistic for the regression coefficient ($B = 1.493$, $*t^* = 4.367$, $*p^* = 0.001$) are statistically significant at $\alpha = 0.05$. These results confirm a statistically significant relationship between financial performance disclosure and audit quality.

4.6. Conclusion: The Third Sub-Hypothesis is Supported

Comparison with Prior Studies: These findings align with those of Al-Tarawneh and Al-Maddadah [3] and Al-Maghrabi [17], but contradict those of Al-Aroud and Al-Harbi [34].

4.7. Analysis of the Fourth Sub-Hypothesis

A statistically significant effect exists ($\alpha \leq 0.05$) for voluntary disclosure of non-financial performance on audit quality. This hypothesis was tested using simple linear regression. Table 8 presents the results.

Table 8.

Simple Regression Analysis of the Effect of Non-Financial Performance Disclosure on Audit Quality.

Statistical Measure	Value	Significance (Sig.)	Statistical Inference
Pearson Correlation (R)	0.756	0.001	Significant
Coefficient of Determination (R ²)	0.583	–	–
Calculated F-value	26.09	0.001	–
Regression Coefficient (B)	1.697	–	–
Calculated t-value	4.851	0.001	Significant

Table 8 demonstrates the relationship between the independent variable (*Non-Financial Performance*) and the dependent variable (*Audit Quality*). The Pearson correlation coefficient (0.756) indicates a powerful positive relationship. The coefficient of determination ($R^2 = 0.583$) suggests that voluntary non-financial performance disclosure accounts for 58.3% of the variation in audit quality.

The F-statistic (26.09, $*p^* = 0.001$) and t-statistic for the regression coefficient ($B = 1.697$, $*t^* = 4.851$, $*p^* = 0.001$) are statistically significant at $\alpha = 0.05$. These results confirm a statistically significant relationship between non-financial performance disclosure and audit quality. The fourth sub-hypothesis is supported. Comparison with Prior Studies. These findings align with Al-Tarawneh and Al-Maddadah [3] and Al-Maghrabi [17] but contradict Abdullah and Abd Akhras [1] and Al-Aroud and Al-Harbi [34] and Al-Hassami and Al-Zoubi [33].

5. Conclusion

Voluntary disclosure plays an essential role in enhancing confidence in financial reports within the banking sector. It assists users of these reports in mitigating information asymmetry, particularly regarding aspects such as social and environmental responsibility, financial and non-financial performance, and corporate governance. For external audits to fulfill their role in improving the reliability of financial data through the provision of an impartial professional opinion, it is necessary to supply data and information beyond what is mandated by accounting standards.

The researcher believes that a general emphasis by banks—and particularly by Saudi commercial banks—on voluntary disclosure is likely to enhance the quality of external audits.

This study aimed to investigate the effect of the level of voluntary disclosure on audit quality in commercial banks operating in the Kingdom of Saudi Arabia. Through the analysis of the study data, several findings were reached. In light of these findings, the study proposes a set of recommendations as outlined below.

6. Findings

Based on the analysis of the study data, the following results were obtained:

1. There is a statistically significant effect at the $\alpha \leq 0.05$ level of voluntary disclosure in Saudi commercial banks on audit quality. This result indicates that Saudi commercial banks pay attention to aspects such as sales growth rates,

- development of banking products and services, return on assets, profitability ratios, efforts to reduce unemployment, and expenditures on social and environmental programs.
2. There is no statistically significant effect at the $\alpha \leq 0.05$ level of voluntary disclosure of general bank information on audit quality. This suggests that disclosing general information reduces variability in the specific information related to the nature of the bank's operations.
 3. There is a statistically significant effect at the $\alpha \leq 0.05$ level of voluntary disclosure of the bank's social and environmental responsibility on audit quality. This finding highlights the interest of Saudi commercial banks in social and environmental responsibility, reflecting the growing demand for financial data that provides relevant information on the social and environmental impacts of banks.
 4. There is a statistically significant effect at the $\alpha \leq 0.05$ level of voluntary disclosure of the bank's financial performance on audit quality. This underscores the necessity for external auditors to understand how to assess and audit the bank's financial performance, which is considered important by bank management and various stakeholders.
 5. There is a statistically significant effect at the $\alpha \leq 0.05$ level of voluntary disclosure of the bank's non-financial performance on audit quality. Often, disclosure of non-financial information serves as a means of enhancing the bank's annual financial reports.

7. Recommendations

In light of the study's findings, the following recommendations are proposed:

1. Improve the level of voluntary disclosure among commercial banks in Saudi Arabia and leverage it to enhance their overall efficiency.
2. Enhance the level of disclosure of general information by Saudi commercial banks to reduce variability in the information concerning the nature of the bank's operations.
3. Encourage audit firms and offices in Saudi Arabia to keep pace with professional developments by adhering to the application of International Standards on Auditing (ISAs) in conducting audit engagements for banks.
4. Conduct further research on the impact of voluntary disclosure on improving audit quality within the commercial banking sector in Saudi Arabia. This includes exploring dimensions of voluntary disclosure not addressed in the current study, such as future strategies, forward-looking expectations, and other related aspects.

References

- [1] A. A. Abdullah and A. N. Abd Akhras, "Voluntary disclosure and its impact on the external audit process: An applied study on a sample of the banking sector listed on the Iraq stock exchange," *Journal of the College of Administration and Economics for Economic, Administrative and Financial Studies*, vol. 12, no. 3, pp. 318–325, 2020.
- [2] M. F. Shaqloof and O. S. Meftah, "A proposed model for measuring the level of voluntary disclosure in annual financial reports: A field study on companies and banks listed on the Libyan stock market," *Al-Jamea Journal*, vol. 34, pp. 206–242, 2021.
- [3] M. S. Al-Tarawneh and R. K. Al-Maddadah, "The impact of the level of voluntary disclosure on audit quality in public shareholding companies," *Arab Journal of Administrative Sciences*, vol. 31, no. 2, pp. 311–331, 2024.
- [4] D. S. A. H. Abdelkader, *The impact of auditors' fulfillment of their responsibilities towards other information accompanying the financial statements on their perception and that of stakeholders of the expectation gap: An experimental study*. Alexandria, Egypt: Alexandria University, 2018.
- [5] H. Dahdouh and R. Hamada, "The role of voluntary disclosure in enhancing trust in financial reports of companies listed on the Damascus securities exchange (A field study)," *University of Damascus Journal for Economic and Legal Sciences*, vol. 30, no. 2, pp. 1–33, 2014.
- [6] M. S. Al-Tarawneh and R. K. Al-Maddadah, "The impact of the level of voluntary disclosure on audit quality in public shareholding companies listed on the Amman stock exchange", Mutah University, Karak, Jordan, 2023.
- [7] J. R. Francis, "A framework for understanding and researching audit quality," *Auditing: A Journal of Practice & Theory*, vol. 30, no. 2, pp. 125-152, 2011.
- [8] W. R. Knechel, G. V. Krishnan, M. Pevzner, L. B. Shefchik, and U. K. Velury, "Audit quality: Insights from the academic literature," *Auditing: A Journal of Practice & Theory*, vol. 32, no. Supplement 1, pp. 385-421, 2013.
- [9] L. M. Gaynor, A. S. Kelton, M. Mercer, and T. L. Yohn, "Understanding the relation between financial reporting quality and audit quality," *AUDITING: A Journal of practice & Theory*, vol. 35, no. 4, pp. 1-22, 2016.
- [10] F. A. M. Al-Nuaimi, "Voluntary disclosure and its impact on the cost of capital in Jordanian public shareholding industrial companies listed on the Amman stock exchange," *Arab Journal of Management*, vol. 39, no. 3, pp. 93–106, 2019.
- [11] S. M. A. H. Abdulmohsen and M. A. J. Al-Zoubi, "The impact of the level of voluntary disclosure on supporting information symmetry in Jordanian commercial banks," *Amman Arab University Journal of Research*, vol. 7, no. 1, pp. 1–26, 2022.
- [12] A. Uyar, M. Kilic, and N. Bayyurt, "Association between firm characteristics and corporate voluntary disclosure: Evidence from Turkish listed companies," *Intangible Capital*, vol. 9, no. 4, pp. 1080-1112, 2013.
- [13] J. C. Hung, K.-C. Lin, and N.-X. Lai, "Recognizing learning emotion based on convolutional neural networks and transfer learning," *Applied Soft Computing*, vol. 84, p. 105724, 2019.
- [14] L. K. Ibrahim, "The impact of governance mechanisms on voluntary disclosure in the banking sector", University of Mosul, Mosul, Iraq, 2013.
- [15] A. R. Adel and A. A. Babiker, "The role of sustainable development accounting in improving the level of voluntary disclosure in industrial enterprises: A field study," *Journal of the Faculty of Commerce, Nile University*, vol. 3, no. 3, pp. 27–56, 2016.
- [16] Financial Accounting Standards Board, *Goodwill and other intangible assets*. Norwalk, CT: Financial Accounting Standards Board, 2001.

- [17] M. I. M. Al-Maghrabi, "The impact of voluntary accounting disclosure on the reliability of accounting information in Jordanian commercial banks," *Ramah Journal for Research and Studies*, vol. 73, pp. 109–142, 2022.
- [18] L. A. K. Ismail and K. A. Youssef, "Voluntary disclosure and its role in enhancing the quality of financial reports," *Journal of the College of Human Development*, vol. 5, pp. 221–254, 2018.
- [19] Z. C. B. Emily, Peter *et al.*, "Do characteristics of pulmonary nodules on computed tomography in children with known osteosarcoma help distinguish whether the nodules are malignant or benign?," *Journal of Pediatric Surgery*, vol. 46, no. 4, pp. 729-735, 2011.
- [20] C. Silvia and R. D. Colauto, "Voluntary disclosure in the context of convergence with international accounting standards in Brazil," *Revista Brasileira De Gestão De Negócios*, vol. 18, pp. 658-677, 2016.
- [21] L. M. C. M. Davide, Emanuel Sanches, G. J. Miranda, J. d. O. Barizon, F. d. A. Souza, R. P. d. Carvalho, and M. C. Gonçalves, "In vitro pollen viability of maize cultivars at different times of collection," *Ciência Rural*, vol. 47, no. 2, p. e20151077, 2016.
- [22] M. A. Rouf and M. Akhtaruddin, "Factors affecting the voluntary disclosure: A study by using smart PLS-SEM approach," *International Journal of Law and Management*, vol. 60, no. 6, pp. 1498-1508, 2018.
- [23] H. I. Elfekey, Ken, S. Okamoto, H. Kajimoto, and Y. Yamada, "A texture display using vibrotactile and electrostatic friction stimuli surpasses one based on either type of stimulus," in *2017 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, 2017: IEEE.
- [24] T. N. Trang and K. A. Alradhi, "Coronavirus pandemic in Vietnam: An effective response model," *Social Identities*, vol. 27, no. 6, pp. 682-697, 2021.
- [25] H. A. Y. Shalou', "Determinants of voluntary accounting disclosure in joint-stock companies: A theoretical and field study in the Egyptian business environment", Tanta University, Tanta, Egypt, 2013.
- [26] A. Hamadeh *et al.*, "Full control of the spin-wave damping in a magnetic insulator using spin-orbit torque," *Physical Review Letters*, vol. 113, no. 19, p. 197203, 2014.
- [27] M. DeFond and J. Zhang, "A review of archival auditing research," *Journal of Accounting and Economics*, vol. 58, no. 2, pp. 275-326, 2014. <https://doi.org/10.1016/j.jacceco.2014.09.002>
- [28] R. Majoujah, "The impact of audit methodologies on external audit quality: A field study on a sample of auditors in Ouargla, Touggourt, and Hassi Messaoud," Kasdi Merbah University of Ouargla, Algeria, 2016.
- [29] M. Arens, E. Worrell, and J. Schleich, "Energy intensity development of the German iron and steel industry between 1991 and 2007," *Energy*, vol. 45, no. 1, pp. 786-797, 2012.
- [30] L. Abdel Jalil, *The impact of audit risks on external audit quality in the Algerian environment: A study on a sample of auditors*. Biskra, Algeria: Mohamed Khider University of Biskra, 2019.
- [31] A. A. Abdullah, "Voluntary disclosure and its impact on the external audit process: An applied study on a sample of the banking sector listed on the Iraq stock exchange," *Journal of the College of Administration and Economics for Economic, Administrative and Financial Studies*, vol. 12, no. 3, pp. 1–26, 2020.
- [32] A. Abu, Khaled , A. Shibani, and M. Ghostin, "Exploring the critical success factors influencing BIM level 2 implementation in the UK construction industry: The case of SMEs," *International Journal of Construction Management*, vol. 22, no. 10, pp. 1894-1901, 2022.
- [33] S. A. M. Al-Hassami and M. A. J. Al-Zoubi, "The impact of the level of voluntary disclosure on supporting information symmetry in Jordanian commercial banks," *Amman Arab University Journal of Research – Administrative Series*, vol. 7, no. 1, pp. 327–350, 2022.
- [34] S. F. Al-Aroud and H. M. Al-Harbi, "The impact of voluntary disclosure on the financial performance of Jordanian public shareholding industrial companies," presented at the Paper presented at the International Conference on Entrepreneurship, Creativity and Innovation in the Business Environment – Opportunities, Tools, and Challenges, Al-Balqa Applied University, Jordan, 2019.
- [35] M. Zaitoun and A. Nuseir, "Parents' satisfaction with a trial of a newborn hearing screening programme in Jordan," *International Journal of Pediatric Otorhinolaryngology*, vol. 130, p. 109845, 2020.
- [36] Saudi Central Bank, "Annual financial stability report," Riyadh, Saudi Arabia: Saudi Central Bank, 2025.
- [37] M. J. K. Zaitoun, "The effect of voluntary disclosure of audit partner on audit quality: Applied evidence from companies listed on the Egyptian stock exchange," *Accounting Research Journal*, vol. 1, pp. 201–248, 2020.
- [38] M. Obeid *et al.*, "Humoral responses against variants of concern by COVID-19 mRNA vaccines in immunocompromised patients," *JAMA Oncology*, vol. 8, no. 5, pp. e220446-e220446, 2022.