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Probing into the Non-Compliance of Extensible Business Reporting Language (XBRL) Practices among Saudi Public Listed Companies

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Abstract
In the realm of financial reporting, the widespread adoption of eXtensible Business Reporting Language (XBRL) has revolutionized how companies disclose financial data. Despite its mandate for Saudi publicly listed firms since the year 2015, non-compliance persists, necessitating further investigation. This study meticulously examines XBRL practices among Saudi companies using available data on Tadawul website. The findings revealed notable sectoral disparities in compliance and non-compliance rates underscoring the urgency for reinforced regulatory oversight and governance mechanisms. The study advocates for continuous efforts to enhance transparency and accountability in financial reporting, highlighting the imperative for additional research to shed light on factors influencing reporting behaviours. These insights will inform targeted interventions aimed at refining reporting practices and enhancing investor confidence in Saudi financial markets, thereby fostering economic stability and growth. Consequently, this study lays the groundwork for shaping the future trajectory of the Saudi business landscape. However, further research is warranted to explore the factors contributing to non-compliance among specific companies and sectors.
Keywords: Business Reporting, Financial Reporting, Non-Compliance, Saudi Arabia, XBRL

Introduction

In the dynamic landscape of global finance, the emergence of eXtensible Business Reporting Language (XBRL) marks a significant paradigm shift in the communication and processing of financial information. XBRL, an open digital reporting language, was developed to address the growing demand for transparent and accessible financial data. It standardizes financial information across diverse regulatory, technological, and geographical contexts (Borgi & Tawiah, 2022). By facilitating the automated exchange of financial data, this XML-based framework simplifies the extraction of financial information, enhancing the clarity, accuracy, and comparability of financial reports and statements. With the potential to streamline reporting processes, reduce human error, and enhance the quality of financial data, XBRL adoption is rapidly gaining momentum worldwide.

As regulatory bodies and businesses embrace this technology, XBRL becomes an integral component of modern financial reporting, offering transparency and efficiency that bolster the integrity of financial markets (Krisko, 2017). This universal shift towards XBRL adoption underscores its significance as the cornerstone for standardizing business and financial reporting globally (Alkayed et al., 2023).

Despite the potential advantages of XBRL, its adoption among firms remains limited in many countries worldwide (Saragih & Ali, 2022). Borgi and Tawiah (2022) reported that out of 98 countries, only 34 have adopted XBRL, indicating a lack of widespread acceptance globally. This reluctance suggests resistance to change among stakeholders, with some businesses and regulators preferring traditional financial reporting methods and hesitating to adopt new technologies like XBRL (Rasmi Abed, 2019).

In Saudi Arabia, the adoption of XBRL began in 2015. However, upon initial examination of the websites of Saudi public-listed companies on the Tadawul platform[1], it becomes apparent that some companies are not adhering to XBRL reporting requirements. Hence, there is a pressing need for a thorough investigation to uncover the reasons behind the limited or non-compliant XBRL practices among Saudi public-listed companies.

Surprisingly, despite the growing body of research on XBRL in various contexts, there remains a notable absence of studies deeply examining its implementation in the Saudi context and why some companies comply whereas others do not. While a few studies conducted in Saudi Arabia have focused on describing XBRL implementation, its characteristics, and its potential impact on the Saudi stock market, as well as the behavioural factors influencing its implementation (Noser, 2022; Rawashdeh & Rawashdeh, 2021), a comprehensive exploration of the reasons behind non-compliance among some Saudi companies is yet to be undertaken.

Hence, this paper aims to explore XBRL practices among public-listed companies by conducting descriptive analysis of the Tadawul website to uncover the lack of XBRL implementation among a significant number of Saudi public-listed companies. To achieve this objective, it is imperative to ask: what are the current XBRL reporting practices among Saudi public-listed companies? The paper is structured as follows: Section two following this introduction presents a literature review, while Section three outlines the research methodology and data used in the study. Section four presents the findings of the investigation, and Section five concludes with recommendations for future research.

[1] The Saudi public-listed website's (Tadawul) is a pivotal online resource for investors, analysts, and other stakeholders looking to obtain the latest data and insights into the Saudi capital market. https://www.saudiexchange.sa/. (last accessed, 10th May 2024).

Literature Review

This section discusses some of the previous studies conducted on issues related to XBRL and its implementation in various context across the world. The section also highlights some of the few available studies conducted on issues related to XBRL implementation in the Saudi context.

XBRL Reporting

Financial reporting serves as a critical tool for stakeholder decision-making, providing insights into a company's financial health, regulatory compliance, and informing economic decisions. The onset of the 21st century has witnessed a technological revolution that has permeated various aspects of human activity, including the corporate sphere (Varshney, 2020). The digitization of business operations has become a prevailing trend, reshaping organizational interactions, decision-making processes, and information disclosure practices. The literature on digital reporting standards continues to expand in response to these evolving digital reporting practices, with eXtensible Business Reporting Language (XBRL) garnering increasing attention from academia and the business community (Grassi & Lanfranchi, 2022).

Numerous studies have explored the significant impact of XBRL on the growth and efficiency of capital markets (Birt et al., 2017; Abhishek et al., 2018; Burd, 2021; Ruan et al., 2021; Cahan et al., 2022). For instance, Abhishek et al. (2018) found that XBRL implementation positively influences the accuracy and reliability of financial reporting. XBRL, as a standardized language, promotes consistency in financial reporting, facilitates comparisons, and underscores the importance of data accuracy, reliability, and transparency. Additionally, the study revealed XBRL's potential to establish a consolidated reporting mechanism, enabling corporations to meet diverse regulatory environmental disclosure requirements in their annual filings. This finding is consistent with research by Birt et al. (2017), which concluded that XBRL provides relevant, comprehensible, and comparable data, facilitating informed decision-making.

Furthermore, Cahan et al. (2022) argued that XBRL's interactive display enhances users' ability to categorize, characterize, and comprehend financial reports, thereby increasing the usefulness of financial information. According to Burd (2021), XBRL's accessibility to detailed data, particularly in tax disclosure contexts, assists analysts in forecasting.

Several regulatory bodies and professional associations have recognized XBRL as a standardized electronic financial reporting format that offers superior advantages in generating, developing, transmitting, examining, and disseminating corporate data compared to other reporting formats such as Word, Excel, PDF, and HTML (Tawiah & Borgi, 2022). Figure 1 illustrates the global adoption of XBRL among implementers.

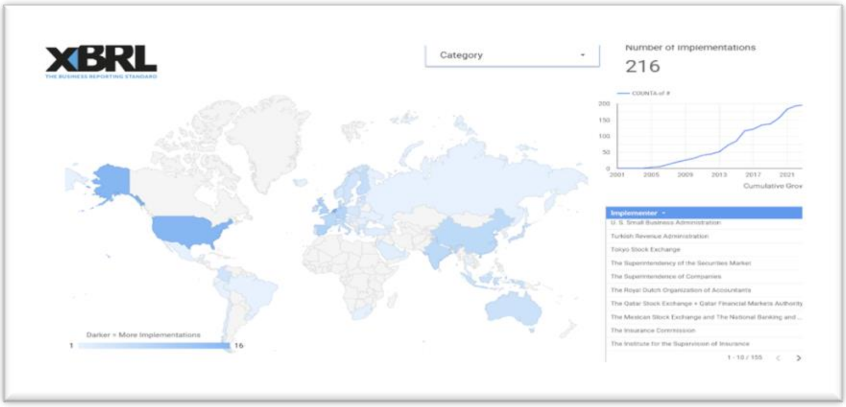

Figure 1. The Number of Implementers of XBRL Around the World[2]

The use of XBRL technology in financial reporting processes has been found to indicate improved disclosure and reduced information asymmetry (Tzu et al., 2016; Liu et al., 2017b; Kim et al., 2019). Additionally, it has been shown to enhance the dependability and precision of financial information (Alsharayri & Al-Arabiat, 2021; Lestari et al., 2021); present both financial and non-financial data in a single financial report (Abhishek et al., 2018); and improve consistency, relevance, reliability, and transparency in financial reporting (Kim et al., 2019). This results in a lower cost of capital (Ra & Lee, 2018), a rise in company worth, and an improvement in the business-to-government reporting procedure (Troshani et al., 2018).

Challenges and Inhibitors of XBRL Implementation

While XBRL offers a wide range of potential advantages for enhancing the financial reporting supply chain, its implementation also presents challenges that hinder user engagement and reduce the utility of XBRL reports for decision-making (Azhar, & Subramanian, 2019). This section explores inhibitors and challenges associated with XBRL practices and implementations as identified by various stakeholders, particularly in developing countries.

Abhishek et al. (2018) conducted a study in India to delve into the significance of XBRL, analyzing the challenges and prospects associated with its implementation in the Indian context. A primary challenge identified in India is the lack of awareness among the population regarding XBRL, a common issue in many developing nations. This finding is consistent with studies by Rasmi Abed (2019), Ilias et al. (2017), and Martić et al. (2017), which involved surveys and analysis of respondents' perceptions of XBRL. Rasmi Abed (2019) noted respondents' reluctance to adopt the new technology, with awareness influenced by the respondents' industry backgrounds, with those in service sectors demonstrating greater knowledge. Consequently, this contributes to a lack of understanding of XBRL among accountants and other stakeholders.

Furthermore, a study by Singh and Singh (2022) revealed that professional Indian accountants have relatively high awareness of XBRL, emphasizing the role of individual factors such as training and experience in shaping perceptions. Moreover, it underscores the

[2]A list of XBRL implementers around the world. https://www.xbrl.org/the-standard/why/xbrl-project-directory/. (last accessed, 12th April 2024).

importance of training, particularly in areas such as application technology and software development, as highlighted in the case of China by (Yuanqing & Liucheng, 2018). This underscores the need for developing new training programs for business owners at a national level (Brunetti et al., 2020).

Ilias et al. (2022) also pointed out obstacles to XBRL implementation, including a lack of government support, reliance on external assistance, and limited pressure from professional organizations and stakeholders. This underscores the significance of regulators understanding external factors and their implications for XBRL implementation decisions. The main barriers to XBRL implementations include a lack of understanding of its benefits and uncertainties surrounding its creation and usage. Markelevich et al. (2021) suggest that due to necessary modifications and fine-tuning, it may take some time before the technological benefits of XBRL are fully realized.

XBRL Reporting Practices in Saudi Arabia

Since January 1, 2015, firms and chartered accountants have been mandated to utilize the Qawaem website for all preparation and audits, in line with instructions from SOCPA and the Department of Zakat and Income Tax (DZIT). This collaborative XBRL project aims to enhance transparency and streamline the reporting process, benefiting both reporting entities and regulatory bodies. Qawaem is expected to provide additional decision-making tools, more precise financial information, and improved corporate governance (IRIS Business Services Limited, 2015).

Another platform, "Ifsah," supervised by the Capital Market Authority (CMA), allows companies listed on the Saudi stock exchange to upload their financial reports in XBRL-compatible format. These reports undergo validation, conversion to XBRL, and submission via Tadawul, the listed companies' website (Tadawu, 2019). Under CMA regulations, every Saudi public-listed company is required to post its quarterly and annual financial statements in XBRL format on Tadawul website (Boshnak, 2020) Tadawul, an electronic stock trading platform launched in October 2000, revolutionized the Saudi stock exchange, providing market pricing, breaking news, and corporate data. All Saudi public-listed companies must post specific financial information on the Tadawul website.

Despite the mandatory XBRL requirement since 2015, an inconsistent pattern exists in the reporting practices of Saudi Arabian public-listed companies, as observed through the Tadawul website. Prior research has yet to analyze the reasons for companies' divergent reactions to the requirements or delve thoroughly into Saudi public companies' challenges in implementing XBRL. Previous research in the Saudi Arabian context has primarily used a quantitative approach and focused on factors influencing XBRL implementation.

Rawashdeh and Rawashdeh (2021) discussed the characteristics impacting the use of XBRL tools, examining users' behavioral intention utilizing the unified theory of acceptance and use of technology (UTAUT) paradigm with the addition of trust and satisfaction. Moreover, Noser (2022) examined the influence of mandated XBRL on Saudi stock market companies' stock price crash risk, finding a negative association with crash risk. Conversely, Mustafa (2023) investigated the effect of XBRL-based financial reports on earnings quality and

credibility, finding no reduction in earnings management or improvement in reported earnings.
Given the scarcity of research on XBRL reporting practices in the Saudi Arabian context and the lack of in-depth answers regarding non-compliance with XBRL reporting requirements, further investigation is warranted.

Methodology
This study meticulously selected publicly listed companies based on specific criteria. Firstly, inclusion required listing on the Saudi stock exchange (Main Market), known as "Tadawul," from 2018 to 2023. This timeframe was chosen due to the availability of relevant financial data in XBRL format during this period, capturing a significant phase in Saudi Arabia's economic and regulatory development, as reflected in corporate practices and compliance observed in our dataset. Companies listed after 2018 were intentionally excluded to maintain consistency and completeness of financial data within the study’s specified timeframe. Additionally, entities operating within the Real Estate Investment Trusts (REITs) sector were omitted due to their exemption from submitting XBRL reports, and their unique regulatory framework compared to other sectors. Following these criteria, the final sample size of Saudi public-listed companies included in this analysis is 170. The investigation focuses on the quarterly and annual uploading of XBRL files for each listed company in order to illustrate the current practices of XBRL reporting among Saudi public-listed companies.

Table 1
Sector of Companies included in the Study

Sector	Frequency	Percent
Energy	4	2%
Materials	40	24%
Capital Goods	11	6%
Commercial & Professional Svc	3	2%
Transportation	5	3%
Consumer Durables & Apparel	6	4%
Consumer Services	10	6%
Media and Entertainment	1	1%
Consumer Discretionary Distribution & Retail	8	5%
Consumer Staples Distribution & Retail Real	4	2%
Food & Beverages	12	7%
Health Care Equipment & Svc	7	4%
Pharma, Biotech & Life Science	1	1%
Banks	10	6%
Financial Services	4	2%
Insurance	27	16%
Software & Services	1	1%
Telecommunication Services	4	2%
Utilities	2	1%
Real Estate Mgmt & Dev't	10	6%
Total	170	100%

Source: Compiled by the author

The table above, Table 1, outlines the companies included in this study, categorizing them based on their respective sectors. A total of 170 publicly listed companies from 20 different sectors within the Saudi economic landscape were represented. The materials sector comprises approximately one quarter of these companies, while software and services, Pharma, Biotech & Life Science, and Media and Entertainment each make up one percent of the total. Each company that uploaded an XBRL report was assigned a value of (1), and those that did not upload their report were assigned a value of (0) for both annual and quarterly report. Each assigned value was summed together and divided by six (6) which is the number of years considered (2018-2023), this computation yielded the annual rate of compliance for each company. The quarterly compliance was computed by adding number of quarterly compliances in a year and divided by four (4 times a year). The result was further added together for the 6 years considered and divided by 6 to attain the rate of quarterly compliance. Furthermore, the categorized sectors were tested for variability in compliance and non-compliance to the XBRL reports using analysis of variance using SPSS version 29.

Results

Overall Compliance Rates

The examination of financial reporting compliance among publicly listed Saudi companies provides valuable insights into their adherence to reporting standards. To enhance clarity, the analysis is structured into two periods: quarterly reports and annual reports. This organization aligns with regulatory reporting cycles and facilitates a comprehensive understanding of compliance trends. The periodic reporting makes it possible to track changes in the reporting record or a company which can then be further investigated, if deemed a worthy endeavor. Furthermore, the periodic reporting enables the tracking of the overall reporting record making it possible to know if there is a deep or increase in reporting.

Quarterly Reports: The analysis presented in this paper reveals that the average compliance rate for quarterly report submissions is approximately 60.15%, suggesting a moderate level of adherence to quarterly reporting obligations. Fluctuations in compliance rates may stem from operational and administrative hurdles encountered by companies during the preparation of quarterly reports.

The sectors with the highest compliance rates in quarterly reports include 'Utilities,' 'Energy,' and 'Consumer Durables & Apparel,' with 'Energy' demonstrating notably high compliance. This suggests that industries with significant infrastructure investments and regulatory oversight prioritize timely reporting to reflect their operational status and performance accurately. Sectors such as 'Consumer Services', 'Health Care Equipment & Services' and Pharmaceutical, Biotech & Life Science exhibit lower compliance rates, possibly due to operational complexity or less stringent oversight.

Annual Reports: An average compliance rate of around 74.61% was observed for annual report submissions, slightly higher than that of quarterly reports. This increase may be attributed to the annual reporting cycle's greater integration into corporate practices, driven by longstanding regulatory requirements and stakeholders' perceived significance.

Overall, annual compliance rates surpass those of quarterly reports across all sectors, suggesting a heightened emphasis on annual reporting. This preference may stem from the perceived comprehensiveness and significance of annual reports in shaping crucial business decisions and stakeholder assessments. Sectors like 'Consumer Durables & Apparel', 'Utilities', 'Energy', 'Banks' and Transportation uphold their high compliance rates from quarterly to annual reports, indicative of sector-specific reporting requirements and mature reporting processes. The prevalence of higher annual reporting rates also implies a prioritization of annual reporting by some companies over quarterly submissions. This observation warrants further exploration by subsequent studies seeking to delve into this phenomenon.

The 'Consumer Durables & Apparel' sector exhibits a notable increase in compliance rate when transitioning from quarterly to annual reporting, suggesting increased resource allocation towards comprehensive annual disclosures reflecting yearly performance and strategies. Additionally, the 'Transportation' sector demonstrates relatively high compliance for annual reports, likely due to its reliance on investor confidence and the need for financial transparency at the fiscal year's end.

These findings highlight a discrepancy in compliance between quarterly and annual reports, with annual reports receiving marginally better adherence overall. The variability in the recent year (2023) revealed less compliance as the year passed.

Figure 2. Annual and Quarterly Compliance and Non-Compliance of XBRL Report

Sector-wise Compliance Analysis

In addition to the periodic findings presented above, the second aspect of the findings are based on sectors. A detailed examination of compliance and non-compliance rates across various industries underscores notable sectoral disparities in financial report submissions in both the quarterly and annual compliance reporting as demonstrated below.

Highest Compliance in Annual Reports: The 'Utilities', 'Energy', 'Banks', 'transportation' and 'Consumer Durables & Apparel' sectors emerge as leaders, boasting compliance rates exceeding the 80% threshold for annual reports. This robust adherence may stem from the capital-intensive nature of these sectors and the heightened scrutiny they face, necessitating stringent financial disclosures.

Quarterly Report Compliance: Within the domain of quarterly reports, the 'Energy' sector takes the lead with an impressive compliance rate of approximately 79.17%. Following closely are sectors like 'Utilities', 'Consumer Durables & Apparel' and 'Transportation', signaling a trend of heightened compliance in sectors subject to greater regulatory and public oversight.

Variability Across Sectors: Sectors such as 'Consumer Services' and 'Health Care Equipment & Services' exhibit comparatively lower compliance rates, shedding light on the challenges encountered by these industries. Factors contributing to this variability may include the size and resource constraints of companies within these sectors, their susceptibility to market fluctuations, and the nuances of their regulatory landscapes. The existence of variability in annual and quarterly compliance and non-compliance in XBRL reporting occurred in the extreme years (2018 and 2023) indicated that years in-between had no variability in compliance and non-compliance across all sectors (Table 2).

Table 2
Analysis of Variance for Sectors based on Quarterly Report

Source of Variation		Sum of Squares	df	Mean Square	F	Sig.
Quarterly report 2018	Between Groups	4.098	19	.216	1.975	.013
	Within Groups	16.382	150	.109		
	Total	20.480	169			
Quarterly report 2019	Between Groups	1.943	19	.102	1.580	.068
	Within Groups	9.713	150	.065		
	Total	11.656	169			
Quarterly report 2020	Between Groups	1.539	19	.081	1.046	.413
	Within Groups	11.617	150	.077		
	Total	13.156	169			
Quarterly report 2021	Between Groups	.773	19	.041	.884	.604
	Within Groups	6.905	150	.046		
	Total	7.678	169			
Quarterly report 2022	Between Groups	.832	19	.044	.678	.836
	Within Groups	9.690	150	.065		
	Total	10.522	169			

Quarterly report 2023	Between Groups	10.252	19	.540	9.083	.000
	Within Groups	8.911	150	.059		
	Total	19.163	169			

Discussion

The observed higher compliance rates in sectors such as 'Utilities', 'Banks' and 'Energy' likely stem from the critical role these industries play in the national economy. Given their significance, these sectors are subject to more stringent regulatory compliance requirements and internal controls to ensure stability and transparency within their operations. The variability in compliance rates across sectors can be attributed to a multitude of industry-specific factors. Variations may arise due to differences in the scale of operations, inherent risks associated with each industry, and the level of regulatory and investor scrutiny specific to the sector in question.

The overall trend of moderate compliance levels among Saudi companies underscores the evolving nature of the financial reporting landscape. While certain sectors exhibit robust compliance practices, the collective data suggests a need for bolstered regulatory frameworks and enhanced corporate governance practices, particularly to improve quarterly reporting compliance. A notable trend observed is the alignment between high quarterly compliance rates and corresponding high annual compliance rates within certain sectors. This suggests a robust culture of financial disclosure prevalent within these sectors, emphasizing their commitment to transparent reporting practices.

Conversely, sectors with lower quarterly compliance rates may not necessarily demonstrate significant improvement in their annual reports. This discrepancy could indicate underlying systemic issues in financial reporting practices or sector-specific challenges that hinder timely and accurate reporting. The presence of sectors exhibiting variable compliance between quarterly and annual reports underscores the necessity for further investigation into the factors influencing reporting behaviours. Such an analysis could shed light on strategic decisions made by companies within these sectors, possibly prioritizing annual reporting as it is perceived as more impactful for stakeholders.

Conclusion

The analysis of compliance rates across various sectors of the Saudi economy offers valuable insights into the state of financial reporting practices. While certain sectors demonstrate commendable adherence to reporting standards, there remains room for improvement across the board. The findings underscore the importance of ongoing efforts to strengthen regulatory oversight and corporate governance mechanisms to foster greater transparency and accountability in financial reporting. Additionally, the observed discrepancies in compliance rates between quarterly and annual reports highlight the need for further research to elucidate the underlying factors shaping reporting behaviours within different sectors. Such insights will be instrumental in informing targeted interventions aimed at enhancing overall reporting practices and bolstering investor confidence in the Saudi financial markets.

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