RESEARCH

Exploring the Impact of Adoption of a new method of Business Financial Reporting to improve Financial Market: An Empirical Study

Khalid M. Alharbi
Assistant Professor
Department of Accounting, College of Business Administration in Yanbu, Taibah University, Madinah, Saudi Arabia
Email: kmharbi@taibahu.edu.sa
ORCID: 0000-0001-6820-530X

Ibtissem Missaoui
LR LAMIDED, Higher Institute of Management of Sousse, University of Sousse, Tunisia
Email: missaouiibtissem513@gmail.com
ORCID: 0000-0002-1548-9094

Arshi Naim
Faculty of Business and Economics, Al-Quds University, Jerusalem, Palestine
Email: naimarshi123@gmail.com
ORCID: 0000-0003-1325-6964

ABSTRACT

PURPOSE: The focus of the current study is to empirically investigate the effect of integrating Extensible Business Reporting Language (XBRL) as a sustainable and standardised financial reporting framework for the development and efficiency of global financial markets.

DESIGN/METHODOLOGY/APPROACH: The study analyses financial data from 18 countries spanning from 2000 to 2022 to understand the results of XBRL technology on financial reporting and market dynamics.

FINDINGS: The results have indicated that the integration of XBRL has a statistically significant and growing impact on financial market progress. The integration of XBRL tools can enhance quality of information on finance, reduce information asymmetry and enhance overall conditions of markets, including liquidity and investor participation.

ORIGINALITY/VALUE: This research has contributed to the existing body of knowledge by demonstrating the importance of XBRL-formatted financial information, thereby enhancing investor understanding and facilitating successful market integration.

KEYWORDS: *Digital Information; Business Financial Reporting; Disclosure and Transparency; XBRL Technology; Financial Market Development; Strategic innovation practices; Informational Environment.*

INTRODUCTION

In the new era, the most significant transformation caused by information technology (IT) has affected the method by which companies realise their online disclosures, notably improving access for people to the information provided through financial reports (Al-Okaily *et al.*, 2024; Liu *et al.*, 2017). Specifically, in financial reporting, the digitalisation has stimulated a shift from traditional paper-based formats (such as PDF and Word) to electronic formats such as Extensible Business Reporting Language (XBRL or iXBRL), thereby updating and restructuring the quality of the financial reporting process.

The current research revolves around the idea of XBRL in finance and accounting, contributing to a deeper understanding of how such graphical representation of data is useful for successive evolution of the stock market exchange (Bonsón *et al.*, 2009). This new technology of XBRL is more likely to let firms save costs and attempt to achieve better financial reporting. To do this, a well-structured background of XBRL is required for future applications.

A positive modification in financial reporting initiatives to a standard formulated under acceptance by the international community will reduce costs and improve the efficiency of comparing financial information across different countries. The advancement of IT has knowingly reorganised the business landscape (Bonsón *et al.*, 2009). As corporations strive to keep up with the ever-changing marketplace, they must adopt new tools and technologies that can enhance their operations and increase their transparency. Many companies have well-known dedicated websites to disseminate pertinent information to shareholders (Alharbi and Mahgoub, 2024; Farghaly Abdelaliem *et al.*, 2023). An important technological growth in the field of financial reporting is the development of Extensible Business Reporting Language (XBRL). This open and internationally

recognised standard enables the digital sharing of business and financial data in a consistent and structured format among various entities. One of the key benefits of adopting XBRL is its ability to streamline the electronic submission of financial statements, ensuring compatibility across systems (Bonsón *et al.*, 2009). Furthermore, since it is built upon XML architecture, XBRL-formatted reports can be efficiently processed by machines, including web-based platforms. Therefore, the main objective of adopting XBRL is to move financial reporting into the digital age and to take benefit of the technology now accessible.

Alkayed *et al.* (2023) has noted that programming data mining and investigation is challenging due to inconsistencies in the context and terms in accounting, format of reports for finance related subjects, and eventually makes comparisons between different firms' financial reports. To address these issues, the XBRL technology is presented as a vital resolution to the limitation of traditional reporting (Alkayed *et al.*, 2023).

Our contribution to this research has many advantages. Firstly, it provides a comprehensive analysis of the idea of how the addition of XBRL system can influence the evolution of the stock market, considering both the benefits and limitations that arise from its integration. By understanding the potential advantages faced by stock exchanges, policymakers, investors, and market contributors can make informed decisions regarding the implementation and future development of XBRL in the financial reporting ecosystem.

Secondly, this study can contribute to the information technology (IT) business value literature by demonstrating a positive relationship between IT (e.g., XBRL, iXBRL) adoption and stock market development. Hence, we explore how the financial market is affected by the including of technology languages such as XBRL, focusing on the profits and challenges by international stock exchanges. Lastly, investors can then make more informed decisions based on the uniform data, reducing uncertainty and potentially increasing market liquidity and stability. The findings are as follows. It seems that XBRL enhances the appeal to financial analysts. Furthermore, it reveals that mandatory XBRL adoption tends to have a beneficial effect on financial market development. Lastly, it reveals that the adoption of XBRL and IFRS in different countries does not necessarily result in capital market development.

LITERATURE REVIEW

Many studies in the past have focused on the growing impact of IT on stock market exchanges (Barth *et al.*, 2008). From an objective point of view, the XBRL system has appeared as a significant instrument for enhancing the quality of financial reporting, offering a uniform format for the disclosure and analysis of financial information. Subsequently, this technique has considered noteworthy attention within the realm of stock exchange development, as it promises enhanced transparency, efficiency, and comparability of financial information. Prior studies (Bonsón *et al.*,

2009; Liu *et al.*, 2017) have examined the impact of XBRL integration on stock market, offering valuable insights into its potential advantages and challenges. In this context, the adoption of XBRL tools has the potential to enhance market efficiency by reducing information asymmetry, thereby promoting fairer and more efficient stock exchange operations. On the other hand, the integration of XBRL can contribute to attract both local and foreign investors, as it streamlines the comparison and evaluation of financial information across different countries, thereby fostering international investment and cross-border listings (Alkayed *et al.*, 2023).

Several studies have documented that XBRL adoption exerts a strong and positive correlation with financial market development (Bai *et al.*, 2014; Cong *et al.*, 2014). It improves financial reporting quality, enhances market efficiency, and provides greater accessibility to financial information, thus facilitating investment decision-making.

Cong *et al.* (2014) pointed out that the integration of XBRL has a positive effect on the stock market efficiency. According to Saravanan and Firoz (2024), the adoption of IFRS has shown several advantages including the improvement of stock market liquidity, reduction in capital costs, cost savings, and enhancement of corporate performance. According to Alkayed *et al.* (2023), the adoption of XBRL tools has made a good contribution in improving the quality of financial reporting, leading to enhanced transparency and reduced information asymmetry. Thus, XBRL promotes consistency in financial reporting, simplifies comparisons, and guarantees the significance, dependability, and openness of financial data.

Birt *et al.* (2017) demonstrated that the adoption of XBRL can provide relevant, comprehensive, and comparable information. The authors showed that users can quickly employ XBRL in their decision-making processes. Tawiah and Borgi (2022) found that the adoption of XBRL can enhance the credibility, transparency, and dissemination of financial information by organisations. Besides, Alkayed *et al.* (2023) revealed that XBRL presented opportunities for improved growth, transparency, and operational effectiveness not only within Jordan but also on a global scale. In a similar vein, Bai *et al.* (2014) demonstrated that utilising XBRL in Japan boosted the quality of the information environment and diminished information asymmetry risk. Previous work reports mixed findings regarding the effects of mandatory versus voluntary XBRL adoption.

In voluntary frameworks, XBRL adoption has been shown to reduce information asymmetry, with firms utilising XBRL-based reporting (Gatea *et al.*, 2021). In a mandatory context, the adoption of XBRL tools has been found to enhance the quality of a company's financial information environment (FIE) and improve decision accuracy among users (Bai *et al.*, 2014). Additionally, Liu *et al.* (2017) pointed out that information asymmetry increased in the first year after implementation of XBRL.

Hypothesis Development

Based on the research reviewed earlier, we have determined that implementing XBRL technology can enhance the financial reporting quality and the data analysis, decrease asymmetric information between investors. This implies managing the manipulation of earnings, and increase the accuracy of analysts' earnings predictions. As a result, this would aid in improving the decision-making process for investors.

Several of the previous studies have demonstrated the substantial profits associated with the integration of the XBRL language. For instance, Chong *et al.* (2017) analyse 554 US bank loan contracts. Research has shown the applications of XBRL having a crucial effect in reducing the asymmetric information. Liu *et al.* (2017) showed that XBRL adoption has a positive effect on stock market liquidity. Awad (2018) concluded that one of the most important positive effects of adopting business language is to reduce information asymmetry and increase the stock market liquidity. Tawiah and Borgi (2022) discovered that XBRL adoption led to a crucial outcome such as the mitigation of information asymmetry risk. With financial data becoming more accessible and comprehensible, stakeholders are empowered to make well-informed decisions.

The reduction in information asymmetry stems directly from enhanced transparency and information efficiency. Moreover, it advances the efficiency of earnings releases for firms with positive news (Yen and Wang, 2015), improves stock market liquidity, and further reduces information asymmetry. This suggests that adopting XBRL technology may incentivise investors to actively participate in stock markets. Thus, XBRL adoption could enhance financial markets and reduce the cost of capital, ultimately leading to positive effects on financial market development (Amalia *et al.*, 2024).

The hypothesis (H1) explains the mandatory implementation of the tool XBRL which has improved the functioning of financial markets.

Several previous studies (Chikwira and Mohammed, 2023; Klibi and Kossentini, 2014; Missaoui and Bouchaddekh, 2015; Yen and Wang, 2015) have explored the growing impact of applying International Financial Reporting Standards (IFRS) in many domains. Past research has shown the growth in stock markets through the applications of IFRS. During 2015 to 2024, research shows that both IFRS and XBRL have emerged as a significant advancement in improving the quality of financial reporting. While IFRS aims to improve the clarity, consistency, and reliability of financial disclosures across nations, XBRL serves as a digital framework that enables uniform, machine-readable financial data exchange.

The fresh international movement towards the adoption of IFRS signals a decrease in information asymmetries for international stakeholders. A robust monitoring environment should accompany these standards to advance legitimacy. The legal framework and implementation regime are crucial for establishing accounting standards which are important for foreign investors when selecting portfolio allocations in foreign equities. Moreover, several studies have scrutinised the separate effects of implementing XBRL and IFRS on the stock market liquidity (Al-Okaily *et al.*, 2024; Amalia *et al.*, 2024; Liu *et al.*, 2017).

Al-Okaily *et al.* (2024) showed that XBRL adoption can lead to more timely and accurate financial reporting, which in turn can increase transparency and reduce information asymmetry between investors and firms. The enhancement in transparency leads to more efficient capital allocation and better value discovery in the stock market. The present research intends to explore whether the joint adoption of XBRL and IFRS leads to greater enhancements in financial market development compared to the adoption of each standard individually. The hypothesis (H2) examines the interaction effects of adopting XBRL and IFRS that contribute to the development of financial markets.

RESEARCH METHODOLOGY

To evaluate the proposed hypotheses and fulfil the research objectives, data were primarily sourced from the World Bank website, covering various indicators such as stock market liquidity, macroeconomic conditions, banking sector performance, investment activity, and overall economic development. Additional data regarding the adoption of IFRS were retrieved from the official websites of PricewaterhouseCoopers (PwC) (www.pwc.com) and Deloitte's IAS Plus (http://www.iasplus.com). The study employs a sample of 18 countries: India, the United States, Canada, Singapore, Peru, Chile, Israel, China, South Korea, Indonesia, Japan, Malaysia, Belgium, Spain, the United Arab Emirates, Saudi Arabia, Australia, and South Africa over the period 2000 to 2022. Detailed descriptions of all variables are given in Table 1 and the econometric models utilised in our analysis are given below.

$$FMD_{i,t} = \beta_0 + \beta_1 ADOPXBRL_{i,t} + \beta_2 LIQ_{i,t} + \beta_3 BANK_{i,t} + \beta_4 ECGR_{i,t} + \beta_5 INVEST_{i,t} + \beta_6 INFL_{i,t} + \varepsilon_t \quad (1)$$

$$FMD_{i,t} = \beta_0 + \beta_1 ADOPXBRL_{i,t} + \beta_2 LIQ_{i,t} + \beta_3 BANK_{i,t} + \beta_4 ECGR_{i,t} + \beta_5 INVEST_{i,t} + \beta_6 INFL_{i,t} + \beta_7 interADOPIFRSXBRL_{i,t} + \varepsilon_t \quad (2)$$

Table 1: Summary of Operational Variable Definitions

Variable	Definitions	Measurements
The dependent variable		
FMD	Financial market development	It is measured by calculating the ratio of a country's total market capitalisation to its gross domestic product (GDP).
Independent Variables		
ADOPXBRL	Adoption of XBRL	It is a binary variable equal to one for XBRL adopting countries and zero for non-adopters.
Control Variables		
EGR	Economic growth rate	It is measured by the annual percentage of variation in a country's GDP.
INFL	Inflation	It is proxied by the rate of annual change in level of the inflation.
INVEST	Gross domestic investment	The gross capital formation to (GDP) ratio.

Variable	Definitions	Measurements
BANK	Banking sector development	Measured by domestic credit to private sector divided by GDP.
LIQ	Financial market liquidity	The total value of shares traded expressed as a percentage of the GDP.
ADOPIFRS	Adoption of International Financial Reporting Standards (IFRS)	It is a binary variable that takes a value of 1 if a country adopts IFRS for SMEs, and 0 otherwise.
LEGLSYS	The legal system	This is represented by a binary variable, assigned a value of 1 for common law countries and 0 for civil law countries.

Source: Constructed by the authors

DISCUSSION

Descriptive Analysis

Table 2 presents the statistical summary of the variables, where FMD represents the level of financial market development.

Table 2: Statistical Summary of Variables

Variable	observations	Mean	Std. Dev.	Min	Max
FMD	414	98.84165	60.89181	14.33362	330.8181
ADOPXBRL	414	0.6521739	0.4768567	0	1
LIQ	414	72.52378	66.00632	1.6101	480.2873
BANK	414	100.3773	46.73891	17.91024	216.308
ECOGROWTH	414	3.641456	3.448679	-11.91024	14.51975
INVEST	414	25.79855	6.216275	12.53754	46.66012
INFL	414	3.453301	4.600318	-16.58148	20.44746
LEGLSYS	414	0.5555556	0.4975052	0	1
ADOPIFRS	414	0.5410628	0.4989139	0	1

Source: Constructed by the authors

The minimum value of the financial market development level is 14.33362, while the maximum value is 330. 8181.The wide gap between the minimum and maximum values highlights the substantial variation in stock market development among the countries. This gap is also included in the sample of the study. This provides evidence that there are differences in the levels of market maturity, liquidity, and operational efficiency in the current financial setup. Such disparities may come from diverse financial reporting environments across countries, which can lead to varying levels of information asymmetry in financial disclosures.

Correlation Analysis

Table 3 : Correlation Matrix

Variable	ADOPXBRL	LIQ	BANK	ECOGROWTH	INVEST	INFL	LEGLSYS	ADOPIFRS
ADOPXBRL	1.000							
LIQ	0.0457	1.000						
BANK	0.2299	0.4752	1.000					
ECOGROWTH	-0.1781	0.321	-0.2481	1.000				
INVEST	0.1722	0.4233	-0.0067	0.3814	1.000			
INFL	-0.1725	-0.1373	-0.2747	0.3381	-0.0303	1.000		
LEGLSYS	0.6505	0.0268	0.2749	-0.1711	0.0445	-0.1500	1.000	
ADOPIFRS	0.0408	-0.0247	0.2348	-0.1083	-0.2388	-0.0631	-0.0336	1.000

Source: Constructed by the authors

Table 4: VIF Test (Variance Inflation Factor)

Variable	VIF	1/VIF
ADOPXBRL	2.25	0.444853
LIQ	2.18	0.459346
BANK	1.75	0.571382
ECOGROWTH	1.74	0.573690
INVEST	1.64	0.608401
INFL	1.46	0.684789
LEGLSYS	1.22	0.816477
ADOPIFRS	1.14	0.874932
Mean VIF	1.67	

Source: Constructed by the authors

Table 3 shows the correlation matrix and Table 4 displays that the mean VIF outcome of the dataset is 1.67. This shows that there is no evidence of the existence of perfect correlation between the exploratory regression variables.

FINDINGS

Table 5: Impact of Mandatory XBRL Adoption on Financial Market Development

Variable	Coefficient	P
ADOPXBRL	19.42324	(0.006) ***
LIQ	-0.2163714	(0.000) ***
BANK	0.4604593	(0.000) ***
ECOGROWTH	1.47601	(0.067) *
INVEST	-1.07622	(0.023) **

Variable	Coefficient	P
INFL	1.248552	(0.024) **
ADOPIFRS	0.7430151	0.913
LEGLSYS	52.52951	(0.000) ***
Constant	45.40685	(0.001) ***
Prob> F	0.000	
R-Squared	0.4260	
Adj R-Squared	0.4146	

Source: Constructed by the authors

Table 5 shows our main empirical results. We find that the coefficient of the implementation of the tool, XBRL technology has a strong and positive influence on financial market exchange development at the 1% level. It indicates that the integration of XBRL could improve financial statements, thereby potentially reducing information processing costs. Hence, our primary hypothesis was accepted. It indicates that the use of this standardised language for financial reporting improves the transparency of financial information and facilitates informed decision making. Our results align with previous works. For example, Gatea *et al.* (2021) confirmed that XBRL plays a crucial role in supporting financial operations by offering a united services model for management, ensuring comprehensive oversight of operations, and elevating the standard of financial reporting.

Liu *et al.* (2017) confirmed that the implementation of XBRL among European non-financial companies significantly heightened stock market liquidity and decreased the risk of information asymmetry. Cong *et al.* (2014) agreed that XBRL implementation can contribute to raising the stock market efficiency. Moreover, Tawiah and Borgi (2022) recognised a connection between XBRL practice and the improvement of the quality of financial reporting. Therefore, these outcomes support the idea that financial statements formatted with XBRL can enhance information transparency. Implementing XBRL can have a positive effect on financial reporting transparency, leading to more reliable, accurate, and accessible financial information. These determinants highlight the real importance of XBRL adoption in promoting the growth of stock markets.

As it is important to analyse the control variables, we find that economic growth has a positive and statistically significant effect on stock market development, consistent with earlier studies by Chikwira and Mohammed (2023). Furthermore, the level of banking sector development has a significant and positive effect on the stock markets, in line with the findings of Giovannetti *et al.* (2013), who emphasised the importance of the banking sector in determining financial market progress.

Interestingly, our analysis also revealed that the level of investment negatively and significantly affects the financial market development at the level of 5%. This unpredicted result highlights the complexity of the correlation between investment and stock market growth. Overall, our findings highlight the importance of the integration of various economic determinants and their influence on

stock market progress. Our outcomes reported that the legal system has a significant and positive effect on the growth and stability of financial markets at the 1% level.

This finding is confirmed by prior research conducted by Anser *et al.* (2024). They found that countries with a common law system tend to provide higher levels of stakeholder protection, consequently motivating investor activity in the stock market and ultimately contributing to its growth. Furthermore, our study showed that macroeconomic stability has a notable effect on stock market liquidity, while the adoption of IFRS did not have any notable effect, as this variable yielded an insignificant coefficient.

Table 6: Regression Analysis of the Interaction between XBRL and IFRS Adoption and its Impact on Financial Market Development

Variables	Coefficient	P
1.ADOPXBRL	19.42324	(0.000) ***
1.ADOPIFRS	15.81103	(0.086) *
ADOPXBRL#ADOPIFRS 1 1	-30.08715	(0.006) ***
LIQ	-0.1730494	(0.000) ***
BANK	0.3381821	(0.002) ***
ECOGROWTH	0.5371144	0.401
INVEST	0.338121	0.582
INFL	0.4449421	0.308
LEGLSYS	56.47666	(0.000) ***
Constant	45.40685	0.255
Prob> F	0.000	
R-Squared	0.5407	

Source: Constructed by the authors

Table 6 presents the findings of our second hypothesis. It aims to determine the interaction between XBRL-IFRS adoption and the financial market. However, the findings displayed in Table 6 clearly show that the use of mandatory XBRL and IFRS has a negative and significant effect on financial market progress. Consequently, our second hypothesis is supported. This indicates that XBRL did not prove to be an efficient mechanism for financial information disclosure, and its integration did not inherently improve the quality of financial reporting. Also, the negative impact on financial market progress suggests that the implementation of XBRL-IFRS may have introduced complexities that outweighed its potential benefits.

This could imply that the market may not have been fully prepared for the transition to XBRL, leading to confusion among investors and analysts. Moreover, the benefits of improved data accessibility and comparability may be dominated by the preliminary costs and challenges of adapting to a new reporting background. This could discourage investor confidence in the financial market during the transition period. Therefore, if market contributors are not well-versed

in understanding XBRL-tagged financial statements, this could lead to misunderstandings and ultimately hinder market growth. The complexity of navigating both XBRL and IFRS could also foster a lack of trust among stakeholders, further exacerbating the negative impact on financial market progress.

Although implementing XBRL-IFRS is intended to improve financial reporting, its incorporation has introduced challenges that pose significant hurdles to further examination and strategic solutions. Concerning the control variables, our investigation discovered that the gross domestic investment levels, stock market liquidity, the level of economic growth, banking sector development, and legal system factors all exerted notable influences on stock market development.

SUPPLEMENTARY ANALYSIS

The financial stock markets play a crucial role in any country to ensure economic development. (Missaoui and Bouchaddekh, 2015). The functioning of financial markets affects the disclosure of information among investors (Goldstein and Yang, 2017). According to Al-Okaily *et al.* (2024), the quality of financial information plays a decisive role in the progress of financial markets. Thus, we anticipated that highly developed stock markets are more likely to adopt XBRL.

For our analysis, we employed pooled logistic regression, considering that our dependent variable (ADOPXBRL) is binary, taking on values of 1 or 0. The outcomes are detailed in Table 7. Our findings indicate that the level of stock market development does indeed affect the decision to adopt XBRL. This significant and positive association between financial market advancements and the integration of XBRL may be due to factors such as regulatory frameworks, technological infrastructure, and institutional readiness (Yen and Wang, 2015). Also, investors in developed stock markets may increasingly prompt companies to use XBRL for financial reporting, obliging firms to adopt the technology to meet investor demands and enhance transparency.

Table 7: Regression Analysis

ADOPXBRL	Coefficient	P
FMD	0.000968	(0.006) ***
LIQ	0.0004638	0.164
BANK	0.0002458	0.612
ECOGROWTH	-0.0152528	(0.007) ***
INVEST	0.0073642	(0.028) **
INFL	-0.0073499	(0.060) *
ADOPIFRS	0.6537282	(0.000) ***
LEGLSYS	-0.0575169	0.144
Constant	0.0021508	0.982
Prob> F	0.000	

ADOPXBRL	Coefficient	P
R-Squared	0.5635	
Adj R-Squared	0.5549	

Source: Analysed by the authors

Note: ***level of significance is 1%, **level of significance is 5%, *level of significance is 10%.

PRACTICAL IMPLICATIONS

The accuracy and validity of our main findings were assessed considering the global financial crisis. These crises have the potential to heighten uncertainties, increase information asymmetry, and amplify volatility spillovers. By adopting XBRL, organisations can improve information sharing, reduce information asymmetry between borrowers and lenders (Chong *et al.*, 2017), and enhance the transparency of financial reporting (Tawiah and Borgi, 2022). To maintain data integrity, we excluded the 2008 dataset to mitigate the impact of the global financial crisis. The results that have not been detailed are in alignment with our primary discovery, underscoring the accuracy and validity of our core findings.

CONCLUSIONS

As of now, investors, adopters, policymakers, and researchers continue to explore the implications and advantages of XBRL technology adoption in financial reporting practices. The study employs a sample of 18 countries: India, the United States, Canada, Singapore, Peru, Israel, Chile, China, South Korea, Indonesia, Japan, Malaysia, Belgium, Spain, the United Arab Emirates, Saudi Arabia, Australia, and South Africa over the period 2000 to 2022. Our findings reveal a strong and positive association between XBRL technology adoption and financial market development. This suggests a potential benefit of XBRL, which could facilitate market efficacy and overall financial market growth. The benefits of XBRL adoption can be influenced by factors such as implementation challenges, lack of standardisation, limited stakeholder awareness, and organisational resistance to change. Therefore, it implies that the integration of XBRL tools offers many advantages such as enhancing information transmission and reducing information asymmetry. It also helps users more easily access and understand firm information, which reduces conflicts between directors and stockholders.

The current study adds value to the academic community by illuminating the potential benefits of XBRL adoption which has received limited attention in previous research. The insights from this research enhance our knowledge of how XBRL technology can positively influence the quality and transparency of financial reporting. Furthermore, the empirical insights provided in the study can be instrumental for financial analysts, regulators, and stakeholders in understanding the advantages of including XBRL in their reporting processes. Regulators should consider actively

encouraging and normalising the use of XBRL in financial reporting. Furthermore, they can foster greater transparency and productivity in the financial sector, which can ultimately lead to increased investor confidence and improved reputation for financial companies. In addition, financial firms can bridge the relevance of XBRL applications to enhance their information disclosure processes and attract more stockholders.

Our study has several limitations. First, future research should expand the scope by exploring a more diverse sample of countries and including other variables such as the quality of corporate governance. Second, investigating the economic consequences of XBRL adoption, such as its impact on corporate tax strategies and credit ratings, can provide valuable insights. Third, examining the role of Artificial Intelligence (AI) and Machine Learning (ML) in enhancing XBRL data analytics can provide insights into addressing inherent challenges, such as ensuring data consistency and quality and improving information disclosure in financial markets. This will support informed decision-making and improve the global effectiveness of XBRL implementation in financial markets. The successful integration of XBRL involves addressing challenges related to data tagging consistency, implementation costs, and regulatory support.

There are several possible future research avenues. It is crucial to focus on analysing the long-term impact of XBRL and iXBRL adoption on financial market volatility, investor sentiment, and the overall resilience of stock exchanges. Future studies can investigate the impact of XBRL adoption on Environmental, Social, and Governance (ESG) reporting and sustainability metrics, which might provide insights to improve the reliability of ESG data, thereby supporting global efforts towards sustainable development.

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BIOGRAPHY

Dr Khalid M. Alharbi is PhD in Accounting, MA in Accunting, and BSc in Accounting and he is an Assistant Professor in the Department of Accounting at the College of Business Administration (Yanbu), Taibah University, Madinah, Saudi Arabia. His research expertise spans cutting-edge areas in accounting, with a particular focus on sustainability reporting, corporate governance, and corporate social responsibility (CSR) disclosures. Dr. Alharbi's scholarly pursuits also extend to interdisciplinary research, exploring the intersections of accounting with emerging fields such as Artificial Intelligence (AI), health sciences, and management. Dr. Alharbi has authored over six peer-reviewed articles in high-impact journals. His academic excellence has been recognised through prestigious accolades, including a Research Grant from Princess Nourah bint Abdulrahman University for outstanding research published in a top-tier international journal.

Dr Ibtissem Missaoui, PhD is an Assistant Professor in the Department of Accounting and finance at the Higher Institute of Management of Sousse, Tunisia (University of Sousse). She is a member of the Laboratory of Management of Innovation and Sustainable Development. Dr. Missaoui has an academic background in finance, accounting, and management, complemented by practical experience in the finance sector. Her research spans a wide range of topics, including finance, accounting, environmental issues, Islamic finance and accounting, financial technology, climate and energy finance, with a particular focus on energy-related challenges, innovation, and financial market crises. She has published more than nine peer-reviewed articles in high-quality SCI and SSCI journals. Her research interests include finance, sustainable development, and the intersection of technology and environmental economics.

Professor Arshi Naim, a Top 2% Scientist (Stanford and Elsevier, 2024 and 2025), is a distinguished academic with over 22 years' experience in business management, digital marketing and higher education. She has published more than 100 Scopus-indexed articles and has authored books with leading international publishers. She holds a PhD in Business Management and has extensive global teaching and leadership experience. For 14 years, she led accreditation and quality assurance initiatives at King Khalid University, Saudi Arabia. She currently serves as Professor of Business Management and Sustainability at the London Institute of Sustainable Development, UK, Professor of Business and Economics, Al-Quds University, Jerusalem, Palestine and as a Research Supervisor at INTI University, Malaysia. A certified QM Master Reviewer, Dr Arshi also holds professional and executive education credentials from Oxford, Harvard and Accenture. She actively collaborates with institutions worldwide to promote academic excellence, research impact and innovation.