

Does XBRL adoption increase financial information transparency in digital disclosure environment? Insights from emerging markets

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ABSTRACT

The eXtensible Business Reporting Language (XBRL) is one of the global-level business reporting standards that accommodates all firms to report financial affairs in a convenient manner. The main objective of this study is to explain the impact of XBRL adoption on the transparency of financial information disclosure in Jordanian financial companies. The current study used a sample of 124 respondents including accounting managers, auditors, and financial managers with a background in XBRL who are working in Jordanian financial firms. The findings confirmed that the adoption of XBRL in Jordanian financial firms increases financial information transparency in the digital disclosure environment which leads to more relevant, reliable, and transparent financial statements disclosure. One main implication the current study heightened is the importance of turning to the implementation of the XBRL will support the process of decision making which will support and enhance both the performance and decision-making process. Lastly, this research effort is the first of its kind that examined the impact of XBRL on the transparency of financial information from the financial firms' perspective in Jordan as a developing country.

Introduction

Information technology has changed how firms submit their disclosures online, enhancing public access to the information the business provides (Kar & Varsha, 2023; Yoshikuni et al., 2023; Uyob et al., 2023). Financial reporting for instance has shifted after the revolution of technology from the traditional paper form (e.g., PDF and Word) to electronic form (e.g., XBRL). It was also highly influenced by the emergence of Covid-19 pandemic, which affected every aspect of life from accounting profession, financial reporting, supply chain, financial disclosures, and sustainability reporting (Alkayed et al., 2023a). The impact of COVID-19 was not limited to Europe, US, and the UK, it also had a major impact on the emerging countries such as Jordan. Many sectors including the financial sectors were affected by the pandemic, and the need for change and transformation in communication was needed (Hai et al., 2021). As a result, the virtual information system was created as a method of gathering data and communicating it to users after processing (Mohammed et al., 2024; Dwivedi et al., 2023; Feng, 2023). Virtual information systems are built on the internet, which simplifies all information systems, including accounting and management systems, and allows different interest groups to make quick choices

on a variety of business-related issues, whether they are financial or not. Even though, despite the easy access to information made available by the internet, such information may not be integrated easily into spreadsheets and other analysis tools, making it difficult for users of such information to easily collect the data required from financial reports (Borgi & Tawiah, 2022).

In addition, according to Tohang et al. (2020), there is a problem with the transferability and asymmetry related to submitting disclosures online where in some cases one party has more access to information than the other which can strongly impact the cost of the capital market. The lack of standardized data for commercial and financial information poses a significant obstacle in the realm of financial reporting. Precise and prompt financial information serves as the cornerstone for well-informed financial and economic decisions, whether undertaken by individuals or institutions (Ai & Al-Okaily, 2023a; Ai, Al-Okaily, Iranmanesh, & Al-Betar, 2023b; Aws et al., 2021; Al-Fraihat et al., 2022; Al-Kofahi et al., 2023). The utilization of the internet in financial reporting has notably improved efficiency and streamlined the time required for presenting financial reports (Al-Okaily, 2023a,b). Nevertheless, in the absence of a uniform data standard, the task of integrating data fragments from various sources becomes challenging, particularly

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in cases where financial information is electronically collected. To address these limitations, XBRL -which is an electronic language used to communicate business and financial data- has emerged in the business and accounting world, and there has been increasing awareness of its adoption. In Jordan, business entities, consumers of financial statements, and decision-makers are currently unaware of the benefits and relevance of XBRL in simplifying the acquisition of accurate, trustworthy, and comparable financial information (Al-Okaily & Al-Okaily, 2022; Alkayed et al., 2023b). In line with the trajectory observed in numerous developing nations, Jordan is actively in the process of integrating XBRL. The ongoing efforts in this regard emphasize the critical role of XBRL adoption and seek to encourage financial statement users and decision-makers in Jordan to fully leverage its potential (Al-Okaily, 2022; Rahman et al., 2020; Al-Khatib et al., 2023; Altarawneh, 2021).

Moreover, it is noteworthy that the Amman Stock Exchange took proactive steps towards incorporating the XBRL language for electronic disclosure in the Jordanian capital market, initiating this endeavor in 2016. This decision was principally motivated by Jordan's capital market organizations' desire to harmonize with the most recent international financial market practices. Furthermore, the shift to electronic disclosure was spurred by the market's perceived relevance and benefits (Alkhawaldi et al., 2023; Bany Mohammad et al., 2022; Al-Majali A et al., 2023; Alsmadi et al., 2023a,b; Alsharayri & Al-Arabiati, 2021). In partnership with the Securities Commission, the Stock Exchange publishes an introduction brochure on electronic disclosure using XBRL, which covers the most important information on electronic disclosure in terms of its benefits and significance. In addition to the priorities and the mechanisms of electronic disclosure (Seele, 2016). By adopting XBRL, the certainty about a company's financial and non-financial information as well as the integrity of the information itself would improve the effectiveness and efficiency of resource allocation, increase income and welfare, increase eco-efficiency, and reduce the environmental impact which achieves the goal of environmentally sound management. It is so proposed that Jordan and emerging countries embrace XBRL technology because of not able to afford to fall behind the rapidly growing worldwide future reporting standard. Moreover, XBRL makes information available to any application for data processing and analysis, which is a necessary element for building better information systems for sustainability.

Financial and non-financial reporting projects choose XBRL as the best solution to standardize, disseminate, and analyze the data they manage. As a result, XBRL-enabled information systems can respond to stakeholder expectations in financial and environmental sustainability, from data preparation to subsequent disclosure and successful data-driven management, improving sustainability reporting in the same way that it has improved financial reporting. From this context, XBRL should be discussed as a virtual financial reporting mode that generates high-quality information, positively influencing the decline in the overall cost of production of financial and non-financial information, increasing confidence in business affairs, and becoming more efficient by saving time and various resources. Previous empirical studies on the impact of XBRL adoption had inconclusive findings. In the United States, Yen and Wang (2015) discovered a significant positive relationship between XBRL adoption and information asymmetry, but Yoon et al. (2011) discovered a strong negative correlation between XBRL use and information asymmetry in the Korean stock market. This is manifested by the observation of elevated abnormal bid-ask spreads following the XBRL mandate. In a similar vein, Liu et al. (2013) pointed out that the mandatory implementation of XBRL among businesses listed in the United States led to an augmentation in analyst following and forecast accuracy. Since accounting information systems and technologies are an important part of the fabric of organizational life and thereby need to be evaluated in a wider environmental context (Gelinas et al., 2017). To date, there has not been enough scholarly attention on improving transparency in business and financial information and on realizing efficiency gains in collecting, analyzing, and disseminating such

information.

The next section will present the literature review, the theoretical foundation and hypothesis development. Then, the methodology of the study is presented in Section 3. In the Section 4, the data analysis and main findings will be presented. Finally, this study will present the discussion based on the findings and conclude the paper with a summary of significant findings and recommendations for future research.

Literature review

Financial disclosure using XBRL

Companies communicate their financial information and status through reports created by their accountants, a process known as financial reporting. These reports play a crucial role in the decision-making process and serve as vital tools for monitoring a nation's economic status, offering valuable insights into its overall financial health. The acquisition of such information involves the implementation of governmental regulations mandating businesses and individuals to submit their financial data. However, the sheer amount and complexity of reporting requirements presents major administrative hurdles for businesses, which has a negative economic impact. The growing amount of data and its uneven reporting further impede our ability to comprehend the financial industry. Notwithstanding these obstacles, the increasing accessibility of the internet has led to a rise in the online release of financial data, diminishing dependence on conventional reporting techniques (Shehadeh et al., 2021). Regrettably, mismatched software and systems impede true cross-platform communication and data exchange, which diminishes the usefulness and openness of provided data. According to Wenger et al. (2013) XBRL is an XML vocabulary for business reporting, enabling data exchange via electronic networks like the internet. It offers platform independence, simplicity, and low implementation costs compared to EDI. XBRL taxonomies are freely available from regulatory bodies. Despite industry efforts, EDI is mainly used by large organizations due to proprietary formats. XBRL International develops taxonomies for financial report presentation standards.

The theoretical lens for XBRL

Many theories have been utilized to find the impact of adopting XBRL as methods to enhance the communication skills and information to the end users (Lui, Hansen, & Kriegstein, 2011). Recent studies have found that adopting XBRL has the potential to reduce information asymmetry, using XBRL is an XML-based data standard for business disclosures provides users for easier more efficient way to read and comprehend the information regarding companies which reduces the gap between managers and investors. Other theories were further used to examine how XBRL adoption strengthen financial information transparency, decomposed theory of planned behavior (DTPB), institutional theory (INT), and the unified theory of acceptance and use of technology (UTAUT) (Al-Okaily, 2024; Alqudah et al., 2023; Aloulou et al., 2023; Srouji et al., 2023; Hasan et al., 2023; Chouhan & Goswami, 2015; Rawashdeh & Rawashdeh, 2021). These theories have been extended, modified, and implemented to find how the existence of XBRL can be beneficial for increasing the transparency of disclosed information which also leads to reduce the information asymmetry. A recent study by Sassi et al. (2023) have examined 78 countries from 2009 until 2017 found that Jordan is one of the countries in the middle east that has zero adoption of XBRL, Whereas Europe such as Belgium, Spain and the United Kingdom have adopted XBRL to meet the information needs of government agencies and securities regulators, which leads to the importance of this research for policy makers and governmental agencies to the importance of implementing such important tool (Al-Qudah et al., 2022; Al-Okaily et al., 2023a,b; Magatef et al., 2023). Wenger et al. (2013). highlight the free availability of XBRL taxonomies

from regulatory bodies, making it attractive compared to EDI's often-expensive implementations. Fig. 1 below represents XBRL Taxonomy breakdown.

According to Silva et al. (2022) XBRL taxonomies use a hierarchical folder structure to present relevant subsets for industries. Entry points are used for creating XBRL instance documents, with Commercial and Industrial (CI) entry points being common. Some industries require additional XBRL filing using element tags. Each taxonomy has XML schemas, tag labels, presentation, and definitions. Sample instance documents are available. Ansary et al. (2020) argue that XBRL is a global standard for digital disclosure. In essence, XBRL provides a legal vocabulary for specifying information disclosure concepts. Importantly Hwang et al. (2021), suggested that XBRL motivates companies to adopt "detail tagging," instead of "block tagging," which increases the total number of tags used. The company's annual report serves as the source document and will be translated to XBRL. A study by Ndaks and Yusuf (2022) found that using XBRL increases the integrity, transparency and the financial information that is being released by the organizations. Furthermore, XBRL has made it possible for the targeted individuals who uses this information to have a better and faster understanding of the information.

In addition, Alkayed et al. (2023b), found that using XBRL for financial reports increased confidence among external parties in the management systems of Jordanian companies. Also, XBRL offers opportunities for growth, transparency, and efficiency not only in Jordan but also across the globe. Gupta et al. (2023) argue that there is a significant difference in information asymmetry is observed pre- and post-XBRL adoption. XBRL adoption shows a strong positive correlation with trading volume, suggesting a reduction in information asymmetry. Bai et al. (2014), contend that Japan's use of XBRL improves the information environment and lessens information asymmetry. Furthermore, research by Hao et al. (2014) on 165 US companies found a significant negative correlation between the cost of stock and the use of XBRL. Their research indicates that businesses willingly embracing XBRL experience a notable decrease in the cost of equity financing. The way we organize financial information using XBRL language in reports has become a significant concern in today's context. XBRL is recognized as a key programming language extensively used in the current accounting landscape (Qasim et al., 2023a,b; Alsharayri & Al-Arabi, 2021).

The impact of xbrl on financial information transparency

Information asymmetry arises when one party possesses superior knowledge or better information than others (Bergh et al., 2019). Both theoretical frameworks and empirical research consistently highlight the pivotal role of openly sharing detailed information in mitigating information gaps and enhancing the functioning of stock markets (Cheynel & Levine, 2020). Since its inception in 2000, XBRL has been the subject of numerous studies investigating its efficacy across various

domains (Qushtom, 2021; Faccia et al., 2021; Tawiah & Borgi, 2022). According to Efendi et al. (2019), the utilization of XBRL not only simplifies information retrieval but also elevates the quality of digital financial information. Similarly, Liu et al. (2014) posit that XBRL adoption enhances the transparency and accuracy of financial reporting. Furthermore, the adoption of XBRL addresses the challenge of comparing different elements in financial statements by meticulously identifying each line item and specifying the corresponding accounting method employed (Vasarhelyi et al., 2012). XBRL has also been identified as a catalyst for expediting the process of creating and reporting financial statements (Du & Wu, 2018). Beyond making earnings releases more effective for companies with positive news (Abdolmohammadi et al., 2017), XBRL contributes to increased market activity, thereby narrowing information gaps. Amin et al. (2018) contend that the incorporation of XBRL can significantly reduce the time required for obtaining audit reports. Additionally, La Torre et al. (2018) suggest that XBRL transforms the approach to report generation, rendering it more user-friendly for stakeholders seeking specific information.

In Jordan, several studies explore what financial experts in Jordan think about using XBRL. For example, Abed (2018) emphasizes the need for Jordanians to understand the language framework to use XBRL. Slehat (2018) looks into how technological, organizational, and environmental factors affect XBRL use in Jordanian businesses and finds that listed firms have what they need to use XBRL. While there are expected benefits for Jordanian businesses using XBRL, such as better communication, analysis, and comparison of financial reports, as well as improved quality, transparency, technological reputation, and information value, other studies identify barriers like a shortage of XBRL specialists, the availability of necessary software and hardware, and the need for more time and effort. Gatea (2021) highlights how XBRL makes information more efficient and provides a theoretical framework for using XBRL. Additionally, Gandoman and Rostami (2017) find a direct and significant connection between knowing XBRL and making financial statements better, improving financial transparency, and funding businesses. Different methods have been used to see how XBRL affects specific users of financial reports. Uyob et al. (2019) did a study showing that XBRL's influence increased a bit until 2014 but hasn't expanded much since then. Acknowledging the potential of technology to improve transparency is crucial in avoiding financial crises, but there's not enough research on how XBRL could make business and financial information more transparent for the financial industry. Also, the few studies on XBRL mostly focus on developed countries instead of developing ones like Jordan, leading to the need for more evidence on how XBRL might affect how financial information is transparent for Jordanian financial companies., and hence, we hypothesize:

H: There is a significant nexus between XBRL adoption and financial information transparency of Jordanian financial firms in a digital disclosure context.

Methodology

Instrument development

A survey questionnaire was developed for the purpose of this study to test the impact of XBRL adoption on financial information transparency. The developed questionnaire is divided into two main parts besides the cover letter and demographic information. The first part of the questionnaire deals with the adoption of the XBRL variable with 9 measures, while the second part deals with financial information transparency with 16 scales. The measurement items were adapted from previous studies related to the same topic (Singh & Singh, 2021; Shahwan et al., 2022). Prior to the distribution of the questionnaire, a process of translation was undertaken wherein the questionnaire was initially translated into Arabic and subsequently retranslated into English by multilingual specialists. The initial questionnaire underwent pre-testing by a panel of four experts in the relevant field. Their feedback led to

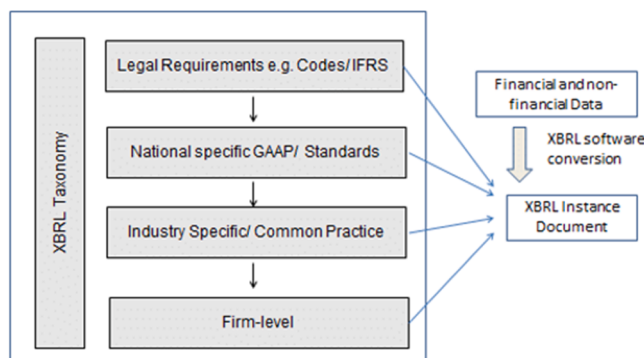


Fig. 1. is "XBRL Taxonomy breakdown".

adjustments and revisions in both the structure and substance of the instrument to improve its comprehensibility.

Afterward, a pilot study was undertaken using a sample of 30 participants to assess the clarity of the questions intended for inclusion in the questionnaire, ascertain the reliability and validity of the measures, and approximate the eventual response rate. The final draft of the Arabic questionnaire overall was deemed satisfactory, and acceptable and covers the research constructs is supposed to measure. The survey's target audience included financial managers, accounting managers, and auditors as the most knowledgeable informants due to their vast experience and knowledge in the preparation of financial statements therefore they would likely be among the first to be exposed to new technologies such as XBRL that could improve decision-making and financial reporting. The respondents also were asked to assess the questions based on a 5-point scale of '1' as strongly disagree and '5' as strongly agree.

Data collection

A purposive sampling approach was employed to gather research data from Jordanian financial firms such as financial services firms and banks. In total, 131 questionnaires were returned. However, only 124 questionnaires were usable providing a successful response rate of 62 percent. The appropriate sample size for analysis using partial least squares-structural equation modeling (PLS-SEM) should be between 100 and 200 (Lutfi, Al-Okaily, Alsayouf, & Alrawad, 2022; Maroufkhani et al., 2020), thus the sample size obtained for our study is sufficient to ensure the reliability of the results. Based on the detailed analysis, it is evident that the sample population exhibited a notable gender disparity, with a majority comprising males (81%) in contrast to females (19%). Notably, a significant portion (50%) fell within the age range of 40–50 years.

Delving into the educational qualifications of the respondents, it becomes apparent that the surveyed individuals possessed a commendable level of formal education. Specifically, 57% held a bachelor's degree, 30% held a master's degree, and 13% held a Ph.D. Expanding on the insights, it is noteworthy that a substantial number of respondents showcased a considerable wealth of professional experience. To be precise, 93% of those surveyed reported having accumulated more than five years of experience. These findings collectively shed light on the demographic composition and educational background of the study participants, underscoring the predominance of males, the prevalence of middle-aged individuals, and the high educational attainment within the sample.

Lastly, this study adopted Harman's single-factor approach to control the common method bias (CMB) concerns that often arise when utilizing self-report response to collect the research data. The test results indicated that a single construct accounted for 36.78% of the whole variance, which falls below the recommended threshold of 50% (Al-Sartawi, Sanad, & Momany, 2023). Thus, the CMB problem did not pose a significant concern in this study.

Empirical analysis and results

Test of the measurement model

The primary phase of Partial Least Squares Structural Equation Modeling (PLS-SEM) involves scrutinizing the measurement model. As outlined by Hair, Hult, Ringle, and Sarstedt (2014), there are four established criteria for evaluating this measurement model. The reliability of indicators was assessed based on indicator loadings, with a threshold set at 0.60 or 0.70 and above. Then, we gauged the composite reliability to examine internal consistency, considering values equal to or greater than 0.70 as acceptable. The assessment of convergent validity was conducted using the average variance extracted, with a criterion of 0.50 and above.

In assessing discriminant validity, Heterotrait-Monotrait (HTMT)

correlation matrix introduced by Henseler, Ringle, and Sarstedt (2015), and the Fornell-Larcker correlation matrix introduced by Fornell and Larcker (1981) were employed to evaluate discriminant validity. Tables 1 and 2 as well as Fig. 2 present the outcomes, demonstrating that all results meet the recommended benchmarks, signifying satisfaction with the discriminant validity evaluation. Subsequently, the measurement model garners acceptance.

Test of the structural model

The following stage in PLS-SEM is to test the structural model by running the PLS bootstrapping algorithm. Although path coefficients are significantly essential in PLS-SEM analysis, Hair et al. (2014) demonstrated that when paths are not significant or they show signs that are in contradiction with the hypothesized direction, the preceding hypothesis should not be accepted. Rather, critical paths considering the hypothesized track support the proposed causal association empirically. In this respect, using the bootstrapping technique in the evaluation of path coefficients involves the minimum bootstrap sample of 5000 and the number of cases should be equal to the number of observations in the original sample (Younis et al., 2023; Bataineh & Qasim, 2023; Younis, 2019). Consequently, this study set 5000 re-sampling with a spare bootstrap cases number which is equivalent to the initiative sample number (124) with the objective of producing medium errors and obtaining p-values. This hypothesis was tested, and its results confirmed that the adoption of XBRL in the Jordanian financial companies increases financial information transparency in the digital disclosure environment as displayed in Table 3 and Fig. 3.

Discussion and implications

This paper unveils a significant favorable influence resulting from the integration of XBRL in enhancing the transparency and efficiency of financial entities in Jordan. The implementation of XBRL reporting is shown to yield improved, more pertinent, trustworthy, and transparent financial data, making it easier to create group financial statements. The use of XBRL reporting streamlines financial statement analysis, catering to various decision-making objectives. At the 5% level of statistical significance, the main hypothesis—which suggests that the adoption of XBRL has a significant influence on enhancing information transparency and efficiency in Jordanian financial companies is supported. The results clearly show that the use of XBRL has a good and significant influence on the efficiency and transparency of financial organizations (Zhang et al., 2019; Zhou, 2020; Li et al., 2021; Kim et al., 2019; Chen & Zhou, 2019). Therefore, Jordan's use of XBRL is expected to improve the financial sector's efficiency and transparency. As a cutting-edge technological development, XBRL is anticipated to improve business information transparency through streamlining the reporting process to government agencies, streamlining the reporting process itself, and improving information quality and search and analysis capabilities for business information users. Furthermore, XBRL facilitates the efficient and accurate exchange of financial data across diverse systems, thereby reducing errors and minimizing the time required for financial statement preparation.

In order to precisely and efficiently analyze, compare, and share financial information, XBRL is used as a markup language for financial data. Our findings suggest that the integration of XBRL within the financial landscape of Jordan holds the potential to augment transparency and efficiency within Jordanian financial institutions. This result of this study is consistent with earlier studies as Alkayed et al. (2023b), which found that using XBRL for financial reports increased confidence among external parties in the management systems of Jordanian companies. The underlying theoretical rationale supporting the positive impact of XBRL adoption in Jordan can be elucidated through various perspectives. Primarily, XBRL allows the tagging of financial data with standardized codes, easing the analytical and comparative

Table 1
Result of measurement model.

Latent variable	Indicators code	Convergent validity		Internal CONSISTENCY RELIABILITY		Determination coefficient R^2
		Factor Loadings Loading > 0.60	Average Variance Extracted AVE ≥ 0.50	Cronbach's Alpha $\alpha \geq 0.70$	Composite Reliability CR ≥ 0.70	
XBRL Adoption	XBRL1	0.820	0.583	0.903	0.910	–
	XBRL2	0.739				
	XBRL3	0.723				
	XBRL4	0.742				
	XBRL5	0.836				
	XBRL6	0.794				
	XBRL7	0.779				
	XBRL8	0.765				
	XBRL9	0.658				
Information Transparency	T&E1	0.836	0.588	0.941	0.955	0.846
	T&E2	0.801				
	T&E3	0.808				
	T&E4	0.653				
	T&E5	0.804				
	T&E6	0.745				
	T&E7	0.836				
	T&E8	0.793				
	T&E9	0.847				
	T&E10	0.832				
	T&E11	0.690				
	T&E12	0.694				
	T&E13	0.755				
	T&E14	0.699				
	T&E15	0.714				
	T&E16	0.726				

Table 2
The discriminant validity.

Constructs	HTMT	Fornell-Larcker correlation matrix	
	HTMT < 0.90	Information Transparency	XBRL Adoption
Information Transparency	Yes	0.920	
XBRL Adoption	Yes	0.513	0.763

processes for investors, analysts, and regulators when evaluating financial statements across different companies. This standardized approach not only enhances accessibility but also reduces the likelihood of errors or omissions in financial reporting, thereby elevating the overall quality and transparency of financial information. Secondly, XBRL contributes to a reduction in both time and costs associated with the preparation and analysis of financial statements. The automation of data collection, processing, and reporting empowers financial entities to streamline their reporting procedures, minimizing the risk of errors and fostering efficiency and productivity. This efficiency can yield benefits for both financial companies and their stakeholders. Thirdly, through the provision of standardized and consistent financial data, XBRL plays a pivotal role in enhancing the accuracy and reliability of financial analysis and decision-making. Investors and analysts, leveraging XBRL-tagged data, are equipped to conduct more precise financial analyses, leading to better-informed investment decisions. In summary, the adoption of XBRL in the Jordanian financial landscape emerges as a strategic move with far-reaching benefits, encompassing improved transparency, operational efficiency, and informed decision-making processes.

Contributions to the literature

This study makes several significant contributions to the existing literature on XBRL adoption and its impact on financial information transparency. Our research adds robust empirical evidence to the growing body of knowledge surrounding XBRL adoption in emerging

markets. While previous studies have focused primarily on developed economies, this study sheds light on the positive impacts of XBRL in the context of Jordan, a developing nation. This expands our understanding of how XBRL can benefit diverse financial landscapes and economies at different stages of development. While past research has acknowledged the potential of XBRL to improve information asymmetry, this study delves deeper into the specific mechanisms through which XBRL enhances transparency. Our findings highlight the role of standardized data tagging and streamlined reporting processes in reducing errors, omissions, and ambiguities in financial information, ultimately leading to greater clarity and accessibility for stakeholders. Besides, our research goes beyond immediate reporting benefits and explores the potential of XBRL to foster informed decision-making processes. By providing reliable and consistent financial data, XBRL empowers investors, analysts, and regulators to make better-informed decisions, contributing to greater market efficiency and stability. These contributions extend and enrich the existing literature by confirming and extending findings indicating a positive relationship between XBRL adoption and information transparency. However, we further add nuance by examining the underlying mechanisms and long-term implications of this relationship. It fills a gap in the literature by investigating XBRL adoption within an emerging market context, providing valuable insights for policymakers and financial institutions in similar economies. Also, our findings pave the way for further research exploring the multifaceted impacts of XBRL, including its influence on specific stakeholder groups, its role in corporate governance, and its potential applications in non-financial reporting contexts.

Implications for practice

The positive findings of this study translate into tangible implications for practitioners in the financial sector to enhance financial reporting. managers should equip their team with the right software and knowledge lets you leverage XBRL's benefits, saving time and resources on reporting while minimizing errors. XBRL-tagged data makes their financial information easily digestible for investors, analysts, and creditors, fostering trust and potentially boosting your reputation and access to capital. Automating data tagging and report generation through XBRL

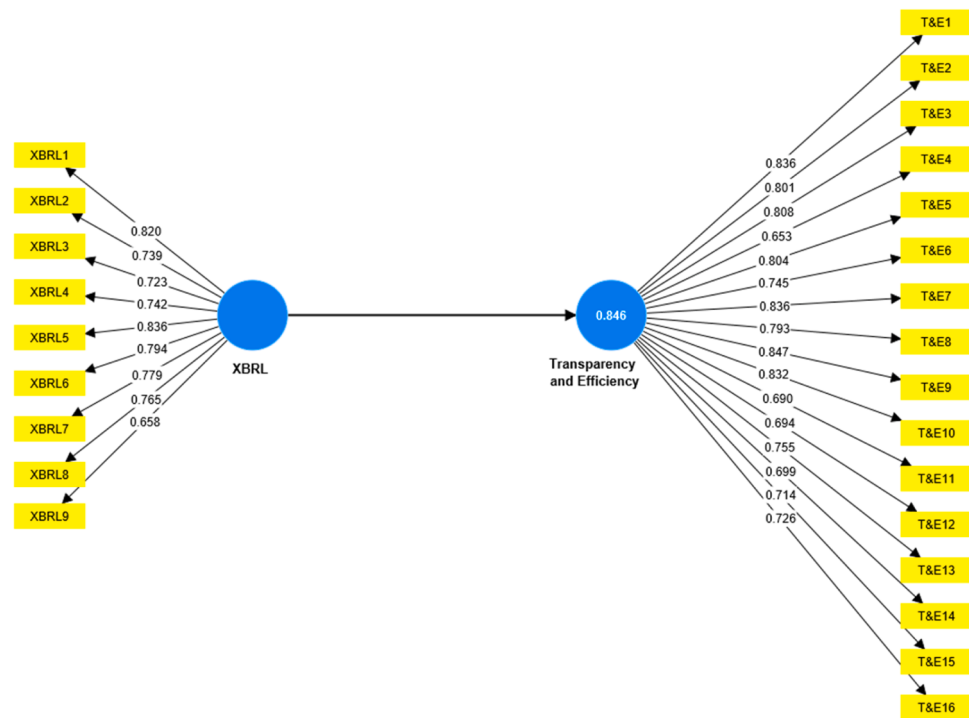


Fig. 2. Result of Measurement Model.

Table 3
Result of hypotheses testing.

Paths	Original Sample	Standard Deviation	P value	Decision
Adoption of XBRL -> Information Transparency	0.920	0.007	0.000	Accepted

software frees up valuable time for the finance team, allowing them to focus on strategic analysis and insights. For Regulators offering tax breaks or other benefits can encourage companies to embrace XBRL, accelerating its widespread adoption and boosting transparency across the market. Providing readily available and easy-to-understand instructions can ease the transition for companies of all sizes, reducing confusion and promoting consistent adoption practices. Equipping regulatory bodies with the right technology to analyze XBRL-tagged data

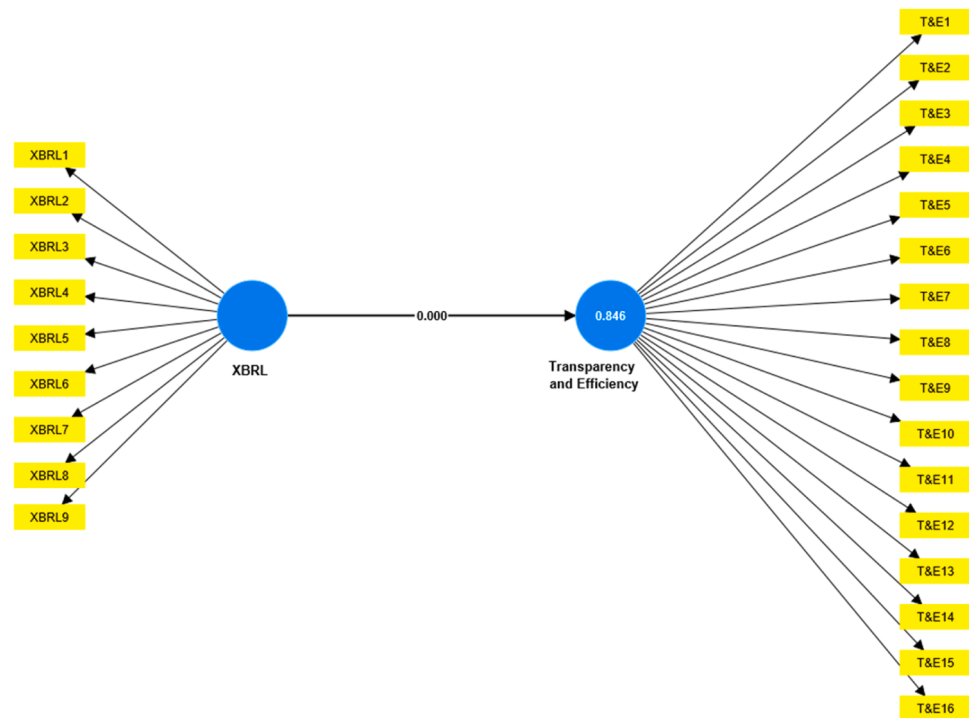


Fig. 3. Result of path coefficient (p-value).

empowers them to effectively monitor financial activities, ensuring market integrity and protecting investors. Also, sharing best practices and harmonizing XBRL standards across borders can facilitate cross-border investment and promote global financial stability. By embracing these practical implications, companies, regulators, and technology providers can work together to unlock the full potential of XBRL in Jordan and beyond. This research serves as a springboard for further progress, paving the way for a more transparent, efficient, and ultimately trustworthy financial landscape.

Conclusion

This research endeavors to investigate the influence of XBRL adoption on the transparency and efficiency of information disclosure within financial companies in Jordan. A sample of 124 individuals, encompassing auditors, managers, and decision-makers possessing a background in XBRL, underwent analysis for this study. The empirical findings put forth by this research underscore the favorable impacts of XBRL adoption on augmenting the transparency of financial information within Jordanian financial institutions. The outcomes of this study not only affirm the potential for XBRL to evolve into a pivotal standard for financial reporting but also underscore the imperative for regulators to enhance their understanding and knowledge before complete XBRL integration. While this study highlights the positive impact of XBRL adoption on information transparency in Jordanian financial companies, acknowledging its limitations and paving the way for future research are crucial for a comprehensive understanding. The study's sample size of 124 individuals, while relevant to the Jordanian context, might limit the generalizability of findings to other populations or markets. Future research with larger and more diverse samples could strengthen the generalizability of XBRL's impact. The study also utilized cross-sectional data, capturing a single snapshot in time. Longitudinal studies analyzing changes in transparency before and after XBRL adoption over an extended period could provide more robust evidence of causality. Finally, the study primarily focuses on the perspectives of auditors, managers, and decision-makers within financial companies. Examining the impact of XBRL on other stakeholders like investors, analysts, and regulators could offer a more holistic understanding of its implications.

CRedit authorship contribution statement

Manaf Al-Okaily: Investigation, Formal analysis, Conceptualization. **Hani Alkayed:** Software, Funding acquisition, Data curation. **Aws Al-Okaily:** Writing – original draft, Validation, Software, Project administration, Investigation.

Declaration of competing interest

The authors declare there is no conflict of interests.

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