

# THE IMPACT OF EXTENSIBLE BUSINESS REPORTING LANGUAGE(XBRL) ON THE QUALITY OF FINANCIAL REPORTS

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## Abstract

The aim of this research is to study the impact of extensible business reporting language (XBRL) on the quality of financial reports in companies enlisted in Amman. Stock exchange the analytical descriptive method was used questionnaire through. The study was applied on companies enlisted in Amman stock exchange. The results showed that the level of extensible business reporting language and financial reporting quality among the listed companies enlisted in Amman stock exchange is ' high. Besides, there is a statistically significant effect of extensible business reporting language (XBRL) on the quality of financial reports in companies enlisted in Amman stock exchange. The researcher recommended based on the results of the study: The necessity of establishing an accounting standard that organizes using (XBRL) in accordance with the requirements and regulations of disclosing accounting information in the light of the international accounting standards.

**Keywords:** extensible business reporting language, quality of financial reports, companies enlisted in Amman stock exchange.

## Introduction

In the latest periods of the 20<sup>th</sup> century, business organizations started doing more efforts to reach new markets throughout the world; therefore, those organizations looked for new distinctive ways to introduce their financial reports to their customers all over the world. However, the financial reports with their conventional limits would not be able to satisfy the requirements of organizations. Alsharayri & Al-Arabiati, (2021), Benboualia & Berberib, (2018). Therefore, businesses organizations started looking at information technology as a distinctive channel and instrument that contributes to conveying and distributing financial reports to all customers all over the world. However, in the light of the lack of a certain standardized way to prepare and disseminate financial reports, there had been a state of chaos in the process of electronic publishing, where each institution publish its own reports based on its choice for doing that. Indeed, the various available ways in introducing financial reports and the high costs of obtaining information created problems among users concerning the nature of dealing with reports and comparing them which, in turn, adversely affected the importance of those reports. Accordingly, there has been a global appealing for establishing a standardized way for preparing and publishing financial reports Gandoman, et al (2017), Inderpal, S. (2013), Gatea et al., (2021), Aksoy et al., (2021). The exerted professional efforts resulted in the emergence of a standardized way for preparing and publishing reports, represented by Extensible Business Reporting Language (XBRL), where this language is considered as a general framework that can be adopted in preparing and publishing financial reports – in this way, reports can be exchanged and analyzed more easily and effectively with lower costs. Therefore, the American Institute of Certified Public Accountants (AICPA)

recommended adopting it for commercial business. The parties organizing the international financial markets started adopting (XBRL) and forcing the enlisted companies to use it. There has been an increased interest in (XBRL) after the global crisis in 2007; it had a negative effect on stock exchange and dealers. In this vein, more efforts were made to establish the suitable mechanism to increase the effectiveness of stock exchange, where (XBRL) was particularly adopted to support the implementation of those mechanisms. Hosseini, et al (2018), Ruan et al., (2021), Tohang et al., (2022).

### **The study objectives:**

This study aimed at measuring the effect of (XBRL) on the quality of financial reports based on the following sub-objectives:

1. Identifying the effect of (XBRL) on the quality of financial reports according to the credibility of financial reports.
2. Identifying the effect of (XBRL) on the quality of financial reports according to the suitability of financial reports.
3. Identifying the effect of (XBRL) on the quality of financial reports according to the comparability effectiveness of financial reports.

### **The study importance:**

The importance of this study stems from the novelty of its topic which addresses the effect of applying the international language for electronic financial reports on the quality of financial reports in the companies enlisted in Amman stock exchange. This is done in order to identify the nature of companies and the information that investors need to make the correct investment decisions to reach the optimal level of disclosure of accounting information which, in turn, satisfy the needs of financial lists users as well as the local community needs in the various sectors.

### **The previous studies:**

Benbovali & Berberi (2018) conducted a study which aimed at highlighting the role of (XBRL) and how it affects the efficiency of the Algerian stock exchange. The study population consisted of all the companies enlisted in the Algerian stock exchange. The study revealed that using (XBRL) makes the published financial reports more transparent, objective, accessible and analyzable by financial analysts as well as more exchangeable between the various organizations around the world, in addition to increasing the speed and effectiveness in companies. Awad (2018) conducted a study which aimed at evaluating the financial reports prepared by the International Financial Reporting Standards (IFRS) based on (XBRL) and evacuating risks on the quality of electronic information relating to (XBRL). The results revealed that (XBRL) is not applied in the Egyptian work environment, where the users of financial and non-financial have to do more efforts and time in Inserting, auditing and analyzing data. Kovarova, et al. (2016) conducted a study which aimed Financial Reporting Trends And Adoption Of Xbrl Among Austrian Listed Companies reduced the level of information incompatibility and increased transparency by allowing the displaying of

information introduced by organizations, as well as facilitating accessibility and processing of information even though they are introduced in different languages or different applications. Also, publishing these financial reports via the internet using this new program will accelerate and improve the process of decision making. Erlane K. Ghani, et al (2014) conducted a study which aimed at identifying the extent to which financial reports writers in Malaysia understand (XBRL). The results revealed that most writers of financial reports considered the language as a beneficial tool for decision making, and that it is compatible with the systems of accounting information and infrastructure in organizations, even though the opinions of most respondents are relatively different concerning the difficulty degree of applying it in the first stages of implementation. The study concluded that (XBRL) provides the best way for preparing the financial and electronic reports, and that it will improve the performance of organizations and impose severe surveillance on the process of preparing and displaying financial data which will, in turn, increase the governance of companies with the existing accounting information systems.

Elissavet Stergiaki, et al (2013) conducted a study which aimed at identifying the impact of using (XBRL) on users from the European Union zone and the extent to which they accept it. The study results revealed that most companies are satisfied with the outcomes of (XBRL), and that users feel comfortable with regard to the ease of introducing financial lists at the local and international level as well as the increase in the size and importance of individual transactions. (XBRL) is able to improve the general standards for the quality of accounting information and introducing the financial reports accurately, objectively and timely. Also, the implementation of (XBRL) has the potential of supporting the transparency of accounting information in the capital markets, reducing the variation of information and improving the process of resources customization... Maureen Francis Mascha, et al (2011) conducted a study which aimed at answering two main questions: the first question is "what is the mechanism of disclosing financial reports, and the second is" why was this technology used in particular? The results showed that after giving the participants training about using the various techniques, (66%) selected the technology of (XBRL) and (34%) selected spreadsheet, while no one selected (PDF) documents. The reason why many participants selected (XBRL) is attributed to its capability to achieve several traits, such as increasing the effectiveness of processes, reducing time and effort, increasing transparency and the ability to be used again. In the same vein, other participants selected spreadsheets since they have sufficient experience in dealing with them. The results also revealed that selecting the technique of (XBRL) is attributed to the capacity of this technique of increasing the investors' understanding to date which, in turn, supports the process of decision making. Furthermore, (XBRL) has the potential of preparing internal and external reports and financial reports effectively, in addition to developing the electronic financial disclosure.

### **The study hypotheses:**

In the light of the study problem, importance and objectives, the researcher aimed to test the following hypotheses:

**The first hypothesis:** there is no statistically significant impact for (XBRL) on the quality

of financial reports according to the credibility of financial reports.

**The second hypothesis:** there is no statistically significant impact for (XBRL) on the quality of financial reports according to the suitability of financial reports .

**The third hypothesis:** there is no statistically significant impact for (XBRL) on the quality of financial reports according to the comparability effectiveness of financial reports.

#### **The study methodology:**

The researcher used the analytical descriptive approach with its two parts: the descriptive or deductive approach and the analytical or inductive approach based on the statistical processing to analyze and test the validity of the study hypotheses. The researcher used the questionnaire as the study instrument to collect the study data in order to identify the degree to which the study participants agree or disagree with the study topic.

#### **The study population and sample:**

The study population consisted of all the companies enlisted in Amman stock exchange with a total of (193) companies, whereas the study sample consisted of (155) individuals from those working as employees, financial managers, manager assistants and executive managers in banks who were selected from (60) banks enlisted in Amman stock exchange.

#### **Reliability and face validity:**

In order to verify the questionnaire's face validity and the validity of the study instrument's questions in terms of correct wording and clarity, the researcher introduced the questionnaire to a number of academic arbitrators and specialists in the study domain. After performing the required arbitration, the suggested modifications were made to the study questionnaire.

#### **Reliability and the statistical validity:**

The test reliability means that the scale gives similar scores and results if it was reapplied under the same conditions. Reliability also means that if the test was applied to a group of people and the scores of each individual was monitored, and the test was reapplied to the same group and similar scores were obtained, then the test is said to be reliable. It is also defined as the degree of accuracy and consistency of measurements that are obtained in the test. The researcher also held a test to verify the reliability of the questionnaire's items by using Cronbach alpha coefficient, and the value was (0.92) for all the items in the questionnaire, which means a high reliability value for the questionnaire items; the increase in alpha coefficient value means an increase in the validity of the data, and that the scale measures what it has been designed to measure.

#### **Displaying and discussing the results and the recommendations**

The statistical results in table (1) revealed that the mean scores for the responses of the study sample individuals about the items that measure (XBRL) in the financial reports was (3.85), which is a high value. (XBRL) in the quality of financial reports according to the credibility of financial reports was in the first place with a mean of (3.88), followed by the quality of

financial reports according to the suitability of the financial reports with a mean of (3.86), while the quality of financial reports according to the comparability of financial reports was in the last place with a mean of (3.80). Accordingly, the mean scores for the responses of the study sample individuals were high, as illustrated in the following table:

**Table (1): The means and standard deviations for the sample responses**

Number	Dimension	Mean	SD	Order by mean	Level by mean
1	(XBRL) in the quality of financial reports according to the credibility of financial reports	3.88	0.950	3	High
2	(XBRL) in the quality of financial reports according to the suitability of financial reports	3.88	0.720	1	High
3	(XBRL) in the quality of financial reports according to the comparability of financial reports	3.80	0.762	2	High
-	Average mean	3.88	0.81	-	High

The statistical results in table (1) showed that the total mean for responses of the study sample individuals on the items that measure the dimensions of sustainable accounting was (3.85) with a standard deviation of (0.81), which is a high value.

**The results related to the main hypothesis:** there is no statistically significant impact for (XBRL) on the quality of financial reports according to the credibility of financial reports enlisted in Amman Stock Exchange.

**Table (2): The results of Analysis of Variance to verify the validity of the model to test the main hypothesis**

Source	R coefficient	R <sup>2</sup> coefficient	Total square	Mean squares	F calculated value	Sig. level
Regression	0.857	0.864	98.055	32.352	*198.798	0.000
Error			38.152	0.163		
Total			133.205			

\* Statistically significant at ( $\alpha \leq 0.05$ )

The statistical results in table (2) revealed that the model is valid to test the main hypothesis, and that there is a statistically significant impact at ( $\alpha \leq 0.05$ ) for (XBRL) on the quality of financial reports according to the credibility of financial reports enlisted in Amman Stock Exchange, based on F calculated value with (195.796) at ( $\alpha = 0.000$ ), where the value is significant at ( $\alpha \leq 0.05$ ). Also, the statistical results in the same table revealed that the dimensions of the independent variable account for (67.4%) of variance in the dependent variable (the quality of financial reports), which is an explanatory power that reflects a high degree of stability of the study model. Accordingly, we accept the alternative hypothesis which states that “there is a statistically significant impact at ( $\alpha \leq 0.05$ ) for (XBRL) on the

quality of financial reports according to the credibility of financial reports enlisted in Amman Stock Exchange".

**Table (3): The results of multiple regression analysis to test the impact of (XBRL) on the quality of financial reports**

The dimensions of the independent variable	B	Standard error	Beta B	t-value	Sig. level
(XBRL) in the quality of financial reports according to the credibility of financial reports	0.176	0.039	0.217	4.564	0.000
(XBRL) in the quality of financial reports according to the suitability of financial reports	0.261	0.075	0.242	3.472	0.001
(XBRL) in the quality of financial reports according to the comparability of financial reports	0.489	0.068	0.480	7.158	0.000

\* Statistically significant at ( $\alpha \leq 0.05$ )

Based on Beta coefficients and (t-test), the statistical results in table (3) revealed that (XBRL) has a statistically significant impact on the dependent variable (the quality of financial reports), with reference to the high values of the calculated (t) at ( $\alpha \leq 0.05$ ) as well as the statistically significant effect power for the values of (Beta).

**Table (4): The results of Step Wise Multiple Regression to predict the impact of (XBRL) on the financial reports**

The order of the independent variables in the prediction formula	R <sup>2</sup> Value	T calculated value	Sig. level
(XBRL) in the quality of financial reports according to the credibility of financial reports	0.758	21.295	0.000
(XBRL) in the quality of financial reports according to the suitability of financial reports	0.691	5.828	0.000
(XBRL) in the quality of financial reports according to the comparability of financial reports	0.68	3.472	0.001

\* Statistically significant at ( $\alpha \leq 0.05$ )

Stepwise multiple regression was used to determine the importance of each dimension of the Independent variable in the model which represents the impact of (XBRL) on the quality of financial reports. Table (4) shows the order of the dimensions of the Independent variable in the regression formula. (XBRL) effect on the quality of financial reports according to the credibility of financial reports was in the first place, where it accounted for (75.5%) of Variance in the dependent variable (quality of financial reports), followed by (XBRL) effect on the quality of financial reports according to the suitability of financial reports was in the first place, where it accounted for (69.1%) of Variance in the dependent variable (quality of financial reports), while (XBRL) effect on the quality of financial reports according to the comparability of financial reports was in the first place, where it accounted for (68%) of Variance in the dependent variable (quality of financial reports).

### **The results related to the study sub-hypotheses:**

**The first sub-hypothesis:** there is no statistically significant impact for (XBRL) on the quality of financial reports according to the credibility of financial reports.

The results of table (4) revealed that there is a statistically significant impact for (XBRL) on the quality of financial reports according to the credibility of financial reports based on the (t)calculated value of (4.564) at a significance level of ( $\alpha=0.000$ ), which is significant at ( $\alpha\leq 0.05$ ).Indeed, this is advocated by (Beta) value with (0.217), which is a low correlation coefficient value. Accordingly, we accept the alternative first sub-hypothesis stating "there is a statistically significant impact for (XBRL) on the quality of financial reports according to the credibility of financial reports."

**The second sub-hypothesis:** there is no statistically significant impact for (XBRL) on the quality of financial reports according to the suitability of financial reports.

The results of table (4) revealed that there is a statistically significant impact for (XBRL) on the quality of financial reports according to the suitability of financial reports based on the (t) calculated value of (3.472) at a significance level of ( $\alpha =0.001$ ), which is significant at ( $\alpha\leq 0.05$ ).Indeed, this is advocated by (Beta) value with (0.242), which is a low correlation coefficient value. Accordingly, we accept the alternative second sub-hypothesis stating "there is a statistically significant impact for (XBRL) on the quality of financial reports according to the suitability of financial reports."

### **The third sub-hypothesis:**

There is no statistically significant impact for (XBRL) on the quality of financial reports according to the comparability of financial reports. The results of table (4) revealed that there is a statistically significant impact for (XBRL) on the quality of financial reports according to the comparability of financial reports based on the (t) calculated value of (7.158) at a significance level of ( $\alpha =0.000$ ), which is significant at ( $\alpha\leq 0.05$ ). Indeed, this is advocated by (Beta) value with (0.480), which is a low correlation coefficient value. Accordingly, we accept the alternative third sub-hypothesis stating "there is a statistically significant impact for (XBRL) on the quality of financial reports according to the comparability of financial reports."

### **Recommendations:**

The study recommended the following:

- 1) The necessity of establishing an accounting standard that organizes using (XBRL) in accordance with the requirements and regulations of disclosing accounting information in the light of the international accounting standards.
- 2) The necessity of urging the various institutions and organizations to disclose using (XBRL) in order to face challenges promote competition and cope with globalization.
- 3) The necessity of encouraging the various parties to hold courses and seminars about publishing via (XBRL) to face difficulties identify problems and do the required effort to deal with them.

- 4) The necessity of establishing specialized committees to address the topic of disclosure by using (XBRL), in terms of legal and surveillance requirements in the electronic websites.

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