



MEASURING MARKET RISK IN ACCORDANCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS USING VALUE AT RISK: AN APPLIED STUDY IN BAGHDAD SOFT DRINKS COMPANY

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Abstract. *The research aims to identify and measure market risks that have been referred to within the international financial reporting standards in preparation for disclosure in the financial statements and its impact on any of the income and balance sheet elements to help users, chiefly investors and creditors, improve their knowledge of the financial position of companies and take the right decision.*

In order to achieve the objective of the research, the researchers adopted the deductive approach for literature review by collecting previous sources and studies. Through the applied study the researchers used the data of trading prices in the Iraq Stock Exchange (of the Baghdad Soft Drinks Company) for 2019 to measure the market risk referred to in IFRSs by covariance - covariance method for estimating the value at risk to show how the Company's equity and annual profits affected as a result of its exposure to market risks.

The research concluded that there is no unified methodology for measuring the risks referred to by IFRSs. So, the most important recommendations is for the International Accounting Standards Board to provide a unified methodology for measuring risks and obligating all economic units that apply IFRS to submit their financial data, including information for measuring risks exposed to, for enhancing the qualitative characteristics of accounting information in the service of economic decision-makers.

Keywords: Risk; Value at Risk; IFRS; Market Risk Disclosure.

1. INTRODUCTION

The world is experiencing remarkable economical and political changes that exposing global companies to financial risks. Nowadays, such risks are increasingly concerning researchers, companies, and international organizations.

Therefore, the accounting literature shows a great deal of interest in providing information about the various risks associated with the elements of the financial statements after they are analyzed and measured, as the inclusion of this type of information in the current disclosure form will provide users with more realistic information and will facilitate their decisions about the investments that must be made. Accordingly, risks have become the focus of attention of international organizations, especially accounting, which obliges economic units to measure and mandatory disclosure of many risks. In this regard, (IASB, FASB) stipulates the mandatory disclosure of market risks arising from the use of financial assets, as the International Financial Reporting Standards (IFRS) indicated to

many risks that companies are facing, for example, Standard (9) - Financial Instruments - obligate companies to measure and disclose risks (market, interest rate, foreign currency risk, commodity price risk and share price risk), However, existed standards do not clarify how to measure these risks and disclose the extent of its impact on the elements of the financial statements.

2. THEORETICAL MATERIALS AND AN APPLIED STUDY

2.1. Theoretical Materials

2.1.1. Research Problem

The global development revolution has promoted political and economical uncertainty putting major companies at great financial risks. This development also included the accounting environment that resulted in changes in accounting policies and procedures, the latest of which was the issue of International Financial Reporting Standards (IFRSs) aiming to unify the accounting language to ease of conducting multi-national business and taking investment decisions through comparisons between companies and evaluating the risks. Therefore, the IFRSs referred to the risks' criteria that companies facing, but did not specifically address the methods of measuring those risks.

2.1.2. Research Importance

Current research arises of companies interested in analyzing and measuring risks as a result of expanding their economic activities to meet the national and global market economical system. Therefore, risks become one of the most important challenges posed by the business environment, and an element that cannot be overlooked in preparing the strategy, formulating policies, and taking current and future decisions. There are many risks indicated within the International Financial Reporting Standards, which are important to study, define, and showing how to measure them.

2.1.3. Research Objective

Current research aims to identify and measure the market risks highlighted by the International Financial Reporting Standards and their impact on income and the ownership interest to help users, mainly investors and creditors, improve their knowledge of the financial situation of companies and make the right decision.

2.1.4. Research Hypothesis

The research is based on a basic premise is: "Knowing the essence of risks and measuring them is one of the main factors that affect the success of companies on one hand and serve the decision-makers on the other hand".

This hypothesis is divaricated into the following hypothesis: "There is no significant impact of average returns on risk and its impact on user decisions and the company's performance".

2.1.5. The Concept of Risk

The word "risk" traces back to the Italian word "Risicare". Risks are a choice, not a fate. The measures that a person dares to take depend on their freedom to act [1].

Risks appear through the negative perception of the possibility of incurring losses, decreasing profits, or defects. On the other hand, others may see risks as opportunities or rewards together, that is, negative risks are associated with positive opportunities or rewards. Therefore, different definitions of risk exist in the literature by researchers and relevant bodies [2].

The Steering Group of the Institute of Chartered Accountants of England and Wales (ICAEW) defines the risk as it is the volatility of results and the uncertainty since it is the probabilities associated with the expected results [3].

COSO defines risk as it is the possibility that an events that, if they occur will adversely affect the entity's ability to successfully implement strategy and achievement of objectives and that may prevent the creation of value or weaken the existing value [4].

The Institute of Internal Auditors (IIA) defines risk as it is the probability of any event occurring that will have an impact on the achievement of objectives and measures risk by its impact and likelihood of its occurrence [5].

(ISO-31000) the international guide to definitions related to risks defines risk as it is the impact of uncertainty on objectives that may be positive, negative, or a deviation from the expected [6].

Concluding on the above, the risk is the likelihood of a specific event occurring that may lead to negative results (hinder the achievement of goals, fluctuation of results, the occurrence of deviations and other undesirable events) or positive results (achieving opportunities and rewards for companies and the possibility of achieving profits).

In summary, risks consist of three characteristics represented by the expected likelihood, their association with uncertainty, and the effects being negative or positive. Consequently, risks are measured through their effects and the probabilities of their occurrence.

2.1.6. Types of Risk

There are many classifications for the types of risks that companies are facing. The financial portfolio theory classifies risks into regular and non-regulatory, while there are those who divide risks into financial and non-financial, and the focus will be on the second classification as shown below:

First. Non-financial risk: It is the risk that is not directly related to cash assets and liabilities, although it will have an impact on future cash flow losses and includes (business risk and strategic risk) [7].

A. Business risk is the risk that annual financial and operating results will not meet the expectations of management and stakeholders [8]. It is related to the product market in which the company operates and includes technological innovation, product design, and marketing [9].

B. Strategic risk: This is the risk that corporate and business strategies (such as mergers and acquisitions, growth strategies, product innovations) are flawed or executed ineffectively [8].

Strategic risk has been described as the collection of external events and trends that could destroy the company's growth trajectory and shareholder value. It has been categorized into seven major categories (such as industry, technology, brand, competitor, customer, enterprise, and recession) [10].

Second. Financial risk: It is the risk that has a direct impact on losing the value of monetary assets and liabilities and includes (market risk, credit risk, liquidity risk, and operational and legal risks) [7].

IFRS Foundation, 2016, defined the financial risks according to the Standard (4) (insurance contracts) as risks of a possible future change in one or more of a specified interest rate, the price of a specific financial instrument, or a specific foreign currency exchange rate, a specific indicator [11].

For prices or rates, a specific credit rating, a specific credit index, or another variable, provided that if the variable is non-financial, that variable is not specific to the party to the contract.

A. Market risk: is the uncertainty and potential loss associated with movements in interest rates or currency exchange rates. Foreign, stock prices, or commodity prices [12].

Lam, J, 2014, divides market risk into three main categories [8]:

1. Trading risk: includes the risks that the company faces in its investment and trading portfolio(s) due to changes in interest rates, exchange rates, stock prices, and commodity prices.

2. Assets / Liabilities Mismatch Risks: arises from differing interest rate sensitivities for the assets and liabilities held in the balance sheet.

3. Liquidity risk: is the inability of the company to obtain funds to meet its financial obligations as they fall due, either by increasing liabilities or by transferring assets without incurring significant losses.

International Financial Reporting Standard No. (7) - (Financial Instruments - Disclosures) defined market risk as the risk of fluctuation in the fair value or future cash flows of a financial instrument due to changes in market prices, and it is divided into three types represented by currency risk, interest rate risk and other price risks [13].

B. Credit risk: the distribution of financial losses due to unexpected changes in the credit quality of a counterparty in a financial agreement [14].

C. Liquidity risk: It is the risk of loss resulting from shortage of cash or cash equivalents, and more specifically the risk of loss resulting from the inability to obtain financing at economically reasonable levels, or to sell or mortgage an asset at a listed price to cover an expected or unexpected commitment [15].

D. Operational risk: It is the risk of direct or indirect loss resulting from inadequate or failed internal processes, people, and systems, or from external events [16].

E. Legal risk: arises when the terms of the contract are not met and/or legal rules are violated [7].

2.1.7. Risk Measurement

Measuring risks is of great importance for companies as well as for investors and entrepreneurs who will guide the decision-making process in determining the types and size of the investment, short-term, and long-term goals. Measuring risks also contributes to providing warning signs. Risk measurement relies on linking historical data and forecasting tools to formulate potential scenarios that may pose a threat to companies [17].

The value at risk will be used as a methodology to measure the market risks that companies are exposed to, as explained below:

Value at Risk (VAR)

One of the main tools used to measure financial risk is the value at risk, this tool that J.P. Morgan first invented in a system of risk metrics in 1995, has more quickly become a tool for measuring risks applied in the financial field over the past few decades [18].

(VaR), from the point of view of financial institutions, can easily be defined as the maximum potential loss due to high probability whereas regulators define it as the minimum loss under abnormal market conditions [19].

Value at risk provides an answer to the question of what is the greatest amount that could be lost with a probability of % x for the period y [20].



The basic idea behind value at risk is very straightforward because it provides a simple quantitative measure of downside risk to a portfolio as the value at risk has two important characteristics [21]:

The first characteristic is that value at risk provides a consistent and common measure of risk for various positions and instrument types.

The second characteristic is that the value at risk takes into account the relationship between different risk factors. This feature is extremely important when calculating risk numbers for a portfolio of more than one instrument.

In mathematical terms, the value at risk is calculated according to Equation No. (1) as shown below:

$$VaR_{\alpha} = \alpha * \sigma * W \quad (1)$$

(α) denotes the specified confidence level, (σ) denotes standard deviation of portfolio returns, and (W) represents the initial portfolio value [21].

This method includes a set of operations to calculate it [17]:

First: Determine the stability processes for any type of the institution's assets (cash, bonds, etc.).

Second: Determine the correlation matrix (historical relationships between liquidity, interest rates, exchange rates, etc.).

Third: Determine the period of conversion to liquidity (a day, a week, a month, or a period that the company considers to be protected from risks)

Fourthly: Determine the level of statistical confidence (95% or 99%).

Fifthly: Determine the final result, estimate the size of the portfolio at risk and indicate the amount that the company will lose in the exercise of its activities, for example, if the company chooses a day and a level of confidence (99%) and the value of the asset (50) million dollars, this means that the company will not face a loss of more than 50 \$ 1 million for 99 days.

There are three methods for estimating the value at risk, as described below [7]:

Historical simulation methods: Use the historical statistical distribution of risk factors as an estimate of the future statistical distribution of these factors.

Monte Carlo simulation methods: that randomly generates a future statistical distribution of risk factors.

Methods of covariance - covariance: that assumes a parametric distribution of risk factors by making estimates of relevant parameters based on historical data.

The following two paragraphs discuss the theoretical framework of international financial reporting standards and fix which standards refer to the market risks faced by companies, and if include how they are measured and disclosed in the financial statements.

2.1.8. Defining International Financial Reporting Standards

A standard is a consensus document issued by a recognized body that specifies rules, guidelines, or characteristics of general and reusable activities or their results to achieve the optimum level of regularity in a specific area of activity.

International Financial Reporting Standards are a set of standards and the basis on which corporate financial statements are prepared. The standards define the items that must be recognized, such as assets, liabilities, revenues, and cost/expenditures, and explain how the value of those elements is determined, how to present them in a set of financial statements, and how to report these elements in the notes [22].

The International Financial Reporting Standards (IFRSs) are considered a set of internationally recognized standards for preparing financial statements by business entities as these standards include all the items that should be recognized as assets, liabilities, revenues, or expenses and how these items are measured and presented in a set of financial statements and related disclosures on these terms [23].

Among the benefits of applying these standards is to provide more useful financial information that enhances the protection of public rights when making an investment decision in a business, because the IFRSs require companies to explain in detail the risks they may face, such as business risks, credit risks, liquidity risks, interest rates, exchange rates, and policies for dealing with these risks [24]. It also allows for more accurate risk assessments by lenders and reduces the risk premium [25].

2.1.9. Market Risks From An IFRS Standpoint

The International Financial Reporting Standards indicated many risks that companies are exposed to. As it has been referred to in the types of risks paragraph, the market risk is one of the financial risks. International Financial Reporting Standard No. (4) - (insurance contracts) define financial risks as risks of a possible future change in one or more of a specified interest rate, or the price of a specific financial instrument, or a specific foreign currency exchange rate, a specific index of prices or rates, a specific credit rating, a specific credit index, or another variable, provided that if the variable is non-financial, that variable is not specific to the party to the contract [11].

While, International Financial Reporting Standard No. (7) - (Financial Instruments Disclosures) defines market risk: the risk of fluctuation in the fair value or future cash flows of a financial instrument due to changes in market prices. Accordingly, the standard classifies market risks into three types of risks, which are presented as follows [13]:

- **Currency Risk:** It is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in foreign exchange rates.
- **Interest-rate Risk:** It is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in interest rates in the market.
- **Other price Risk:** It is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices (other than those arising from interest rate risk or currency risk), whether these changes are caused by factors specific to a particular financial instrument or its source or factors. It affects all similar financial instruments traded in the market.

The standard No. (7) also includes requirements for qualitative and quantitative disclosure of the risks arising from the company's use of financial instruments [26]:

Qualitative disclosures: For each type of risk, the company must disclose:

- Exposure to risks and how they arise.
- Objectives, policies and procedures for managing risks and the methods used to manage risks.

Quantitative disclosures: must disclose:

- A summary of the quantitative data regarding its exposure to these risks at the end of the reporting period, and this disclosure should be based on information provided internally to the company's senior management personnel.
- Risk concentrations if they are not clear from the disclosures that have been made

And, The standard indicated that minimum disclosure of market risk included the following [27]:



- Sensitivity analysis for each type of market risk (currency risk, interest rate risk and other price risks) that the company is exposed to at the reporting date. The analysis should show how the profit or loss and equity were affected by reasonably possible changes in the relevant variable.
- The methods and assumptions used in preparing the sensitivity analysis and any changes in that previous reporting period.

Also, International Financial Reporting Standard No. (9) - Financial Instruments - obligate companies to measure and disclose risks (market, interest rate, foreign currency risk, commodity price risk, and share price risk), but the standard did not clarify how to measure these risks and disclose the extent of its impact on the elements of the financial statements. Therefore, through the next paragraph; the applied study the research will execute Value at Risk to measure the market risks referred to by the international financial reporting standards.

2.2. Applied Study

2.2.1. Baghdad Soft Drinks Company - A Joint Stock Company

Baghdad Soft Drinks Company, a private joint stock company is a Soft drinks Bottling company in Iraq. It is the company that has the exclusive license to sell Pepsi products in Iraq. PepsiCo International's franchise agreement authorises Baghdad Soft Drinks Company to produce and distribute PepsiCo's Pepsi-Cola, Seven-Up and Mirinda soft drink brands.

Baghdad Soft Drinks Co (ISX: IBSD on the Iraq Stock Exchange) was established in 1989 with a capital of 70,000,000 Iraqi dinars. Listed on the Iraq Stock Exchange in 2004 with a capital of 10,000,000,000 Iraqi dinars. In 2019 the company's capital became (177,333,333,333) after the merger of the Al-Zawraa Springs Company.

The company aims to encourage the savings of citizens and invest them in the activities of the private sector due to the importance of the role that this sector plays in industrial development. The company seeks to use modern technology in the field of soft and mineral drinks, and it works on developing and improving the manufacture of these products and packaging them using modern scientific methods. Currently, the production and bottling of mineral water/ Equafina brand have been added to the main activities of the company.

Baghdad Soft Drinks Company achieved 50.6 milliard dinars in profits during the year 2019. According to the company's balanced sheet, its profits jumped 14% over the year 2018, reaching 50.6 milliard dinars, compared to 43.4 milliard dinars in 2018. The company's expenses increased by 25 milliard dinars, and it was able to pay off its debts amounting to 14.5 milliard dinars.

The company has set future plans and projects that it aims to achieve, including:

- Establishment of a factory for bottling soft drinks and mineral water Equafina in Basra Governorate.
- Establishing a factory for the production of juices of various sizes.
- Establishing warehouses to accommodate the storage capacity of the final product.
- Establishing a store for raw materials at the old administration site at the company's headquarters.
- Purchasing a separate production line to produce energy drinks in metal cans.

2.2.2. Measuring Market Risk By Value At Risk Of Baghdad Company

For estimating the value at risk, the covariance - covariance method will used based on the company historical data for the year 2019 provided that the value at risk measurement process includes the following steps:

First Step is to calculate the standard deviation according to the equations below:

1. Calculate the return according to the equation below:

$$\text{Return} = \frac{\text{Close Price} - \text{Opening Price}}{\text{Opening Price}} * 100 \quad (2)$$

2. Calculating the average returns according to the equation below:

$$\text{Average returns} = \frac{\text{Total returns}}{\text{Number of returns}} \quad (3)$$

3. Calculate the variance according to the equation below:

$$\text{var}(R) = \frac{1}{N-1} (X_1 - \mu)^2 + (X_2 - \mu)^2 + (X_3 - \mu)^2 + \dots + (X_n - \mu)^2 \quad (4)$$

4. Calculate the standard deviation according to the equation below:

$$SD(R) = \sqrt{\text{Var}(R)} \quad (5)$$

Table 1. shows the market risk measurement process that relies on the Baghdad Soft Drinks Company data for the trading sessions, which are the basis for measuring the market risk of the company using the standard deviation.

Table 1. Trading and Risk Measurement Data for Baghdad Soft Drinks Company during 2019

Date	Opening price	Close price	Yield	(Yield - Average) ^ 2
2,1,2019	3.56	3.5	-1.7	3.82
8,1,2019	3.5	3.49	-0.3	0.31
14,1,2019	3.35	3.37	0.6	0.11
22,1,2019	3.36	3.32	-1.2	2.13
31,1,2019	3.3	3.4	3	7.63
3,2,2019	3.35	3.35	0	0.07
10,2,2019	3.35	3.3	-1.5	3.1
14,2,2019	3.2	3.19	-0.3	0.34
21,2,2019	3	3.06	2	3
28,2,2019	2.85	2.75	-3.5	14.27
4,3,2019	2.75	2.65	-3.6	15.25
11,3,2019	3.13	3.14	0.3	0
20,3,2019	3.01	2.99	-0.7	0.87
25,3,2019	2.95	2.92	-1	1.65
31,3,2019	2.84	2.9	2.1	3.4
3,4,2019	2.84	2.83	-0.4	0.39
9,4,2019	2.95	2.91	-1.4	2.64
14,4,2019	2.91	2.93	0.7	0.18

21,4,2019	3.03	3.14	3.6	11.3
29,4,2019	3.18	3.17	-0.3	0.34
8,5,2019	3.1	3.1	0	0.07
12,5,2019	3.14	3.15	0.3	0
23,5,2019	3.25	3.3	1.5	1.61
26,5,2019	3,320	3,450	3.9	13.3
30,5,2019	3.39	3.36	-0.9	1.33
3,6,2019	3.35	3.39	1.2	0.86
9,6,2019	3.4	3.41	0.3	0
24,6,2019	3.34	3.44	3	7.43
27,6,2019	3.44	3.53	2.6	5.51
30,6,2019	3.51	3.55	1.1	0.76
2,7,2019	3.45	3.43	-0.6	0.72
16,7,2019	3.3	3.29	-0.3	0.33
21,7,2019	3.29	3.29	0	0.07
24,7,2019	3.29	3.3	0.3	0
31,7,2019	3.39	3.38	-0.3	0.32
4,8,2019	3.37	3.38	0.3	0
6,8,2019	3.32	3.39	2.1	3.38
18,8,2019	3.4	3.37	-0.9	0.78
19,8,2019	3.38	3.38	0	0.07
22,8,2019	3.3	3.32	0.6	0.11
1,9,2019	3.2	3.2	0	0.07
8,9,2019	3.15	3.16	0.3	0
15,9,2019	3.14	3.11	-1	1.5
22,9,2019	3.1	3.1	0	0.07
30,9,2019	3.32	3.36	1.2	0.88
2,10,2019	3.33	3.3	-0.9	1.37
13,10,2019	3.3	3.44	4.2	15.79
17,10,2019	3.4	3.35	-1.5	3.03
22,10,2019	3.32	3.31	-0.3	0.33
31,10,2019	3.34	3.4	1.8	2.33
3,11,2019	3.38	3.36	-0.6	0.74
4,11,2019	3.34	3.36	0.6	0.11
17,11,2019	3.32	3.3	-0.6	0.76
21,11,2019	3.3	3.3	0	0.07
28,11,2019	3.33	3.34	0.3	0
1,12,2019	3.33	3.3	-0.9	1.37
9,12,2019	3.28	3.28	0	0.07
16,12,2019	3.25	3.29	1.2	0.93
22,12,2019	3.28	3.29	0.3	0
26,12,2019	3.26	3.29	0.9	0.42
Total			16.1	137.28
Average		variance		standard deviation
0.27		2.3		1.5

Source: Prepared by the Researcher Based on Iraq Stock Exchange Reports for the Baghdad Company during 2019.

Second Step: calculate the total value at risk.

Third Step: calculate the average value at risk.

The value at risk depends on an error level often 5%, the standard deviation computed in the first step, and the company value taken from the company data. This tool is extracted as in Equation 1.

Table 2. shows the calculation of the value at risk for Baghdad Soft Drinks Company, based on the company's data for the year 2019.

Table 2. The Total Value at Risk for Baghdad Soft Drinks Company, Based on Company Data

Date	Company value	Value at risk	(Value at risk - Average) ²
2,1,2019	9,111,299	683,347	24,509,950,316,256
8,1,2019	19,739,685	1,480,476	17,252,588,179,752
14,1,2019	7,462,000	559,650	25,750,037,728,050
22,1,2019	8,077,850	605,839	25,283,403,655,860
31,1,2019	36,736,392	2,755,229	8,287,895,355,770
3,2,2019	8,033,297	602,497	25,317,023,718,006
10,2,2019	31,153,950	2,336,546	10,873,859,085,362
14,2,2019	71,819,144	5,386,436	61,337,209,232
21,2,2019	27,401,629	2,055,122	12,809,079,945,506
28,2,2019	49,121,308	3,684,098	3,802,505,850,002
4,3,2019	70,013,831	5,251,037	146,736,878,906
11,3,2019	54,456,115	4,084,209	2,402,160,561,990
20,3,2019	34,064,694	2,554,852	9,481,765,166,256
25,3,2019	37,051,176	2,778,838	8,152,518,233,382
31,3,2019	60,521,140	4,539,086	1,199,054,565,182
3,4,2019	4,439,100	332,933	28,102,366,260,722
9,4,2019	36,570,250	2,742,769	8,359,792,060,230
14,4,2019	62,674,775	4,700,608	871,406,380,572
21,4,2019	31,528,407	2,364,631	10,689,424,272,492
29,4,2019	22,585,932	1,693,945	15,524,817,483,870
8,5,2019	3,534,000	265,050	28,826,692,533,450
12,5,2019	23,843,926	1,788,294	14,790,219,943,830
23,5,2019	20,681,750	1,551,131	16,670,631,771,992
26,5,2019	127,632,984	9,572,474	15,510,793,702,250
30,5,2019	37,744,365	2,830,827	7,858,336,709,256
3,6,2019	131,638,445	9,872,883	17,967,285,559,872
9,6,2019	190,199,033	14,264,927	74,491,183,334,756
24,6,2019	80,157,790	6,011,834	142,683,352,490
27,6,2019	104,320,670	7,824,050	4,795,883,192,450
30,6,2019	144,197,655	10,814,824	26,839,906,344,900
2,7,2019	12,558,550	941,891	22,016,820,607,472
16,7,2019	1,383,000	103,725	30,585,042,110,250
21,7,2019	28,096,600	2,107,245	12,438,702,664,170
24,7,2019	18,765,457	1,407,409	17,864,912,582,790
31,7,2019	27,407,883	2,055,591	12,805,723,084,572
4,8,2019	370,800	27,810	31,430,481,957,810
6,8,2019	31,221,800	2,341,635	10,840,322,483,760
18,8,2019	3,235,500	242,663	29,067,587,533,532
19,8,2019	27,699,800	2,077,485	12,649,506,701,610
22,8,2019	12,141,709	910,628	22,311,183,011,312
1,9,2019	32,691,350	2,451,851	10,126,705,515,752
8,9,2019	20,029,002	1,502,175	17,072,800,073,700
15,9,2019	11,327,251	849,544	22,891,971,332,580
22,9,2019	18,864,000	1,414,800	17,802,488,270,700

30,9,2019	112,202,785	8,415,209	7,734,570,050,990
2,10,2019	4,095,200	307,140	28,376,497,514,640
13,10,2019	132,749,338	9,956,200	18,680,552,732,100
17,10,2019	23,869,366	1,790,202	14,775,547,990,506
22,10,2019	11,281,391	846,104	22,924,900,908,020
31,10,2019	72,848,759	5,463,657	29,050,645,806
3,11,2019	32,316,911	2,423,768	10,306,228,339,892
4,11,2019	65,552,203	4,916,415	515,071,041,540
17,11,2019	27,252,309	2,043,923	12,889,367,301,152
21,11,2019	1,991,946,231	149,395,967	20,667,474,547,087,600
28,11,2019	27,848,215	2,088,616	12,570,453,248,772
1,12,2019	3,956,522	296,739	28,487,417,106,960
9,12,2019	9,348,000	701,100	24,334,484,067,000
16,12,2019	111,793,313	8,384,498	7,564,691,908,802
22,12,2019	23,606,396	1,770,480	14,927,555,640,780
26,12,2019	64,307,440	4,823,058	657,788,314,722
Total		338,045,975	21,588,924,311,181,900
Average	Variance		standard deviation
5,634,100	365,913,971,375,965		19,128,878

Source: Prepared by the Researcher Based on Iraq Stock Exchange Reports for the Baghdad Company during 2019.

So the maximum loss that Baghdad Soft Drinks Company faces during 2019 amounted to (5,634,100) as a result of its exposure to market risks because the greater the value at risk, the greater the market risk. To know whether the level of market risk in Baghdad Company is high or low and if the risks affect the performance of the company and the decisions of users, these risks will be tested according to the statistical test (Z-test).

Formulation of the hypothesis: There is no significant effect of average value at risk on market risk and its impact on company performance and users' decisions for the year 2019.

$$Z_c = (5,634,100 - 0) / (19,128,878 / \sqrt{60}) \rightarrow = 2.27 \quad (6)$$

$$P.value = 1 - 0.98 = 2\%$$

The hypothesis is rejected because the value of the level of significance 2% is less than the value of the error level of 5%.

2.2.3. Disclosure of Market Risk

International Financial Reporting Standards recommended that market risks be disclosed by sensitivity analysis, i.e. the extent to which profits or losses and owner's equity are sensitive (affected) as a result of price fluctuations.

Table 3. shows the affected of the owner's equity and annual profits of the Baghdad Company as a result of its exposure to market risks prepared according to the sensitivity analysis on the basis of percentage change, as price sensitivity ratios can be extracted by finding the average of the closing price minus the opening price.

Table 3. Impact of Market Risks on the Baghdad Company's Equity and its Annual Profits for 2019

The Company's name	Price sensitivity ratio	Annual profits	The change amount
	0.05	5,779,793,774	288,989,689

Baghdad Company	Price sensitivity ratio	Owner's equity	The change amount
	0.05	366,178,176,830	18,308,908,842

Source: Prepared by the Researcher Based on Iraq Stock Exchange Reports for the Baghdad Company during 2019.

The information that is shown in Tables 3. is more useful information for investors, especially when considering stock, bond, or mutual fund investments, as helping them to analyze price fluctuations that faced the company, where the volatility risk is one of the factors that should be considering that can affect the quality of an investment and then affected the company's business results (profits) and its financial position (owner's equity), and thus the decision-making process is more efficient.

3. RESULTS AND DISCUSSION

3.1. Results

In order to achieve the goal of the research, the researchers used the data of trading prices in the Iraq Stock Exchange (of the Baghdad Soft Drinks Company) for 2019 to measure the market risk referred to in IFRSs and show how the Company's equity and annual profits affected as a result of its exposure to market risks.

The result of using the value at risk method to measure the market risk was the rejection of the hypothesis that there was no significant effect of average value at risk on market risk and the assertion that there was an effect of the average value at risk on the market risks in a way that it influenced the decisions of users and the performance of the Baghdad Company. The presence of an effect of this type of risk can be explained by the fact that the Baghdad Company exposed to large price fluctuations that can be positive or negative.

The result of using the sensitivity analysis shows the extent to which profits or losses and owner's equity of Baghdad Company are sensitive (affected) as a result of price fluctuations. If the company provides this information to users is considered appropriate and useful information for a wide range of users, especially investors and creditors, as it makes their investment and economic decisions sound and reduces the level of uncertainty among users and in the process of making decisions. This information also helps the research sample company and the Iraqi companies as a whole to know the most important market risks it faces and can identify weaknesses that cause the risks and how to develop treatments for those risks in order to reduce their effects and maintain the company's reputation in the business market.

Thus, the hypothesis of this research can be proven, which states that knowing the essence of risks and measuring them is one of the main factors affecting the success of companies on one hand and serving the decision-makers on the other hand.

3.2. Discussion

The measuring of the risks referred to by the International Financial Reporting Standards and disclosing them by companies lead to improve the economic decision-making process because it helps users, mainly investors and creditors, to understand the company and know the extent of its financial strength and how it manages these risks.



So, because the measured market risks affected the company's performance and users' decisions and left a clear impact on the income and financial position components, the risk measurement information disclosing in the financial statements is beneficial to the company on the one hand and the users on the other hand, because it gives warning signals to the company management and reduces the level of uncertainty for the decision-maker, and rationalize the process of the sound economic decisions.

The most important recommendation for the International Accounting Standards Board is should provide a unified methodology for measuring market risks and require all companies that apply IFRS to submit their financial data, including information to measure these risks that they were exposed to, in order to enhance the accounting information quality in the service of economic decision-makers.

And the most important recommendation for Companies especially in Iraq is should develop a strategic plan to face the fluctuations and changes in economic and political conditions, particularly price fluctuations, to reduce the effects of market risks, especially as the Iraqi environment is dominated by uncertainties and continuing changes in the policies and laws.

4. CONCLUSIONS

The most important conclusions of this research are:

First: Despite international progress in regulating aspects of risk disclosure and the great interest of all agencies and companies, it still has no agreed conceptual framework for measuring and disclosing market risk.

Second: Many IFRSs deal with market risks to which companies are exposed in passing, without providing a specific methodology for measuring and disclosing them.

Third: The research sample company and the Iraqi companies as a whole didn't comply with IFRS for their accounting system, so, there is no deal with market risks or link between the risks referred to by the International Financial Reporting Standards and risk management of these companies.

Fourth: The level of market risk is high and affects the business results and financial position of Baghdad Soft Drinks Company due to price fluctuations that the company has been exposed to.

Fifth: Adding information measuring market risks to which Iraqi companies are exposed, to the current disclosure form meets the requirements of all users and addresses weaknesses in the accounting information disclosed in the financial statements that have become insufficient to make sound economic decisions.

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