

The Role of International Financial Reporting Standards in Reducing the Financial Risks

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Abstract: This paper describes the role of International Financial Risks Standards (IFRS) to reduce the financial risks that may face in Iraqi Small and Medium Enterprises (SMEs) by using the traditional methods of statistical analyzing and applying Fuzzy Logic as a suitable tool to evaluate the linguistic variable .

The researchers used the Fuzzy Logic (FL) to analyze the collected data of questionnaires, they used MatLab 6.5 to calculate the FL equations in addition to Excel.

The researchers concluded that there is a strong relation between IFRS and the financial risks that may face the SMEs in Iraq and the full applying of IFRS in Iraqi SMEs can help to protect SMEs from most of financial risks.

Index Terms: IFRS, Financial Risks, SME, Fuzzy Logic.

I. INTRODUCTION

The applying of International Financial Reporting Standards started in the seventies of the last century, and many countries adopted these standards because they are just like unified protocols to deal among countries. According to previous studies, many researchers believed that the IFRS may help companies, organizations, and enterprises to do their duties, and to avoid the financial risks such as market risk, liquidity risk, interest-rate risk... etc.

The using of Fuzzy Logic as a tool to analyze data in research can give accurate results do not depend on the personal diligence.

II. INTERNATIONAL FINANCIAL REPORTING STANDARDS

A. The Concept of IFRS:

International Financial Reporting Standards (IFRS) is a globally recognized set of standards for the preparation of financial statements by business entities. Those Standards prescribe ^[1]:

- The items that should be recognized as assets, liabilities, income and expense
- How to measure those items
- How to present them in a set of financial statements
- Related disclosures about those items.

B. The List of IFRS:

The first appearing of IFRS was in 2001. The IFRS were an evolution of the international accounting standards that published by Financial Accounting Standards Board (FASB) since 1973, the following are the financial standards that issued from 2003 to 2015^[2].

TABLE 1. THE INTERNATIONAL FINANCIAL REPORTING STANDARDS

Abbr.	Description	Year
IFRS 1	First-time adoption of international financial reporting standards	2003
IFRS 2	Share-based payment	2004
IFRS 3	Business combinations	2004
IFRS 4	Insurance contracts	2004
IFRS 5	Non-current assets held for sale and discontinued operations	2004
IFRS 6	Exploration for and evaluation of mineral resources	2006

IFRS 7	Financial instruments: disclosures	2005
IFRS 8	Operating segments	2006
IFRS 9	Financial instruments (updated in 2014)	2009
IFRS 10	Consolidated financial statements	2011
IFRS 11	Joint arrangements	2011
IFRS 12	Disclosure of interests in other entities	2011
IFRS 13	Fair value measurement	2011
IFRS 14	Regulatory deferral accounts	2014
IFRS 15	Revenue from contracts with customers	2014

C. The Benefits of IFRS:

Many benefits appeared since the application of IFRS due to globalization and evolution of electronic communication.

Many countries open their economies to foreign investment. The main benefits of using IFRS can be listed as following^[3]:

- Single Reporting – Convergence with IFRS eliminates multiple reporting such as local GAAP.
- Greater comparability of financial information for investors as a result of transparent financial reporting of company's activities; among sectors, countries and companies.
- Greater willingness on the part of investors to invest across borders will enable entities to have access to global capital markets and eliminates barriers to cross border listing. It will also bring in foreign capital flows to the country.
- Common accounting standards help investors to understand available investment opportunities as opposed to financial statements prepared under different set of national accounting standards.
- Lower cost of capital; more efficient allocation of resources.
- Higher economic growth.
- Convergence to IFRS gives local professionals opportunities to sell their services as experts in different parts of the world.
- IFRS balance sheet will be closer to economic value because historical cost will be substituted by fair values for several balance sheet items, which enable a corporate to know its true worth.
- Convergence will place better quality of financial reporting due to consistent application of accounting principles and reliability of financial statements. Trust and reliance can be place by investors, analysts and other stakeholders in a company's financial statements.

D. The Scope of Application IFRS in IRAQ:

This section contains summaries of information included in the profiles of IFRS application in Iraq^[1]:

1) Accounting standards required for publicly accountable entities (listed companies and financial institutions)

- Listed companies: Full IFRS must be used by companies whose securities are publicly traded and also by :
 - 1.Private banks
 - 2.Private shared companies
 - 3.Consultancy companies.
- Other companies whose securities are not publicly traded must use either full IFRS or the IFRS for SMEs
 - 1.Financial institutions: IFRS required.
 - 2.Separate company financial statements: IFRS required.

2) IFRS endorsement

- The types of standards following by companies : IFRS as issued by the IASB
- The auditor's report asserts compliance with: IFRS.
- Modifications to IFRS: None. Endorsement process for new or amended Standards, Iraqi Company Law (Number 21, year 1997, phase 133) requires all companies to apply IFRS. This applies to all new and amended standards as well as standards in force when the law was adopted.

3) Accounting standards required for SMEs

- The types of standards following by SMEs: Private banks, private shared companies and consultancy companies must use full IFRS. Other SMEs (simple companies and individual projects) are permitted to use either full IFRS or the IFRS for SMEs.

III. THE FINANCIAL RISKS

A. The Concept of Financial Risks:

There is no unified definition of financial risk in the financial literature. But many scholars and researchers can give a suitable description according to its field. Sierpińska and Jachna describe the financial risk as the additional risk borne by the shareholders due to the substitution of debt for common stock^[4], according to this definition, the financial risk can be equivalent to the capital structure risk. Blach defines the financial risk as any fluctuation in the cash flows, financial results and the company's value due to the influence of different types of factors^[5].

So the financial risks is the possibility for losing money of shareholders by investing in a company that has debt, if the company's cash flow proves inadequate to meet its financial obligations, and it also refers to the possibility of a corporation or government defaulting on its bonds, which would cause those bondholders to lose money.

B. The Types of Financial Risks:

According to many studies and researches, there are many types of financial risks affecting on the company's financial position:

1) Market risk:

Market risk is the risk that the value of an investment will decrease due to moves in market factors^[6]. For many scholars, Market risk is a principal risk to get a chance that a downturn or a bad investment reduces the investors funds.

2) Inflation or purchasing-power risk:

Inflation risk or purchasing-power risk means for many researchers that the inability of investments to grow equally with the global rate of inflation^[7]. Thus, the company will not be able to pay its obligations, and it will lose its capital gradually.

3) Interest-rate risk:

Interest-rate risk is the exposure of a company's financial condition to adverse movements in interest rates. Accepting this risk is a normal part of banking and can be an important source of profitability and shareholder value^[8]. Generally, interest-rate risk revolves around the changing of interest rate. If the company seeks a long-term risk-free return by putting its funds in a bank certificate of deposit, the company will face a chance of rising the interest rates while its assets will stuck at below-average rate of return.

4) Shortfall risk:

The shortfall risk directly linked with the value at risk (VaR) of a portfolio, where shortfall risk is about the company more than the market, it's the chance that company won't have enough funds to make its goals^[9]. The company can face shortfall risk by being either too conservative or too aggressive, if the company doesn't believe its portfolio can deliver enough, the best way to address this risk is to save more.

5) Special-situation risk:

Special-situation risk involves the life of a company as well, whether it's the special-needs case, planning for project, saving for a big event like a conference, advertising campaign or something else.

6) Timing risk:

Timing risk is a highly private factor that depends on the company's time horizon. While many researchers and experts agree that the chance that stocks will make funds over the next two decades is high, the prospects for the next two years are unclear.

7) Liquidity risk:

Liquidity risk affects on everything in the company from bonds to foreign stocks. It can be the chance that investments in a particular country suffer during some sort of credit crisis, or the potential for a thinly-traded stock to crater or for its shares to be difficult to redeem in a crisis.

There is a inverse relationship between liquidity of the company and liquidity risk, given that the higher the liquidity risk, the higher the probability of becoming illiquid, and therefore, the lower the liquidity^[10].

8) Political risk:

Political risk is the prospect that government decisions will damage the value of a company's

investments. Whether it's the safety of social security, the impacts of a policy and how it might affect stocks in the company's portfolio, tax-law changes or more.

Generally, political risk can refer to the ability and willingness of a country to service its financial obligations^[11], it includes economic and financial characteristics of the system, along with the political and social, in the same effort to forecast situations in which foreign investors will find problems in specific national environments^[12].

9) Societal risk:

Societal risk is ultra-big picture, looking at world events. This is what might happen in the event of terrorist attacks, war or catastrophe.

Societal risk is defined as the relationship between frequency and the number of people suffering from a specified level of harm in a given population from the realization of specified hazards^[13].

All of these risks will affect on the investments, making decisions, and obtaining loans from foreign banks, Figure 1 can illustrate the main financial risks.



Fig. 1 : The Main Types of Financial Risks

IV. METHODOLOGY

This part provides a thorough description of the research methodology used in this study. For the sake of establishing a relationship between the various subparts of this section, the researchers will first describe the educational context in which the research was done is described and then the idea behind the employed study method will be explained in detail. Secondly, the study questions will be discussed.

At last the researcher will elaborate on the methodology details including participants, instruments, and data collection as well as data analysis procedures.

A. Educational Context

The study has been applied in Iraq. Its population is approximately 35 million (according to statistic of 2013) and it is a developing country. It is located in Western Asia. It consists of 18 provinces. Iraq has more than 700000 SMEs working on its soil to enhance the national economy.

According to World Bank Report 2012, SME is well positioned and resourced to enhance its role as an important facilitator and conduit for finance into the SME sector [14]:

- It functions as an important catalyst for reviving SME activity in the credit market.
- It stimulates lending to SME’s through its ability to support and strengthen capacity in the institutions it serves whilst making it possible for SME’s to borrow at below market cost.
- A flourishing SME sector can contribute significantly to addressing much needed job creation.
- Diversify Iraq’s economy with less reliance on its oil sector and state supported institutions.

The data was collected from many SMEs in Iraq (North , Middle, and South of Iraq) .

B. Research Questions

The current research investigates on the perceptions of SMEs' accountants, auditors, and directors of account regarding the role of IFRS in reducing the financial risks. Moreover, the variables can be classified to three parts :

- The gender, the educational certificate, the experience, and the age of participants in research.
- The extent of applying IFRS in these SMEs
- The role of IFRS in reducing the financial risks facing SMEs in Iraq.

The research deals with the answer of the research questions of the questionnaire, involving participants' beliefs on the role of IFRS in reducing financial risks, and according to the financial information of the SMEs' participants.

The participants of the current research are 100 employees of SMEs in Iraq. They are different from each other in terms of age, educational certificate, gender and number of experience years.

The table 1 below indicates the number of male and female participants in the selected sample of the research.

TABLE 1: THE NUMBER OF MALE AND FEMALE PARTICIPANTS

Participants	Male Participants	Female Participants	Total
	62	38	100

The participants in this research differ in their gender, the percentage of males among the participants is (62%), and the percentage of females is (38%).

The table 2 below shows the educational certificate of the participants (Males and Females) in the selected sample of the research.

TABLE 2: THE NUMBERS AND PERCENTAGE OF EDUCATIONAL CERTIFICATE FOR THE PARTICIPANTS

Educational Certificate	Number (M/F)	Percentage (M/F)
Baccalaureate	12 (5/7)	12% (8.06%/18.42%)
Diploma	23 (19/4)	23% (30.65%/10.53%)
Bachelor	47 (26/21)	47% (41.94%/55.26%)
Master	15 (9/6)	15% (14.52%/15.79%)
Doctorate	3 (3/0)	3% (4.84%/0%)

The table 3 below shows the number of experience years and percentage of the participants (Males and Females) in the selected sample of the research.

TABLE 3: THE NUMBERS AND PERCENTAGE OF EXPERIENCE YEARS FOR THE PARTICIPANTS

Range of years	Number (M/F)	Percentage (M/F)
1-5	19 (10/9)	19% (16.13%/23.68%)

6-15	45 (29/16)	45% (46.77%/42.11)
16-25	29 (18/11)	29% (29.03%/28.95)
26-35	6 (4/2)	6% (6.45%/5.26%)
36-45	1 (1/0)	1% (1.61%/0%)

The table 4 below shows the range of age for the participants (Males and Females) in the selected sample of the research.

TABLE 4: THE RANGE OF YEARS AND PERCENTAGE FOR THE PARTICIPANTS

Range of years	Number (M/F)	Percentage (M/F)
20-30	19 (10/9)	56% (51.61%/63.16%)
31-40	45 (29/16)	29% (30.65%/26.32%)
41-50	29 (18/11)	11% (14.52%/5.26%)
51-60	6 (4/2)	2% (1.61%/2.63%)
61-70	1 (1/0)	2% (1.61%/2.63%)

V. DESIGNING AND ANALYZING THE QUESTIONNAIRE

In this research, the researchers distributed 100 questionnaires with 2 main parts. The first part is about the extent of applying IFRS in SMEs, and it is 10 questions-part as shown as in table 5

TABLE 5. THE 1ST PART OF THE QUESTIONNAIRE

S/N	Question
E₁	SMEs apply full IFRS in their transactions
E₂	Iraqi Company Law is identical with IFRS
E₃	All the financial statements of the Iraqi SMEs are issued according to IFRS
E₄	All accountants, auditors, and directors of account have a good knowledge about IFRS
E₅	IFRS are suitable for Iraqi SMEs
E₆	There are clear and real steps to adopt full IFRS in all Iraqi SMEs.
E₇	Applying IFRS in Iraqi SMEs will enhance the national economy
E₈	Using ICT to increase the efficiency of applying IFRS in Iraqi SMEs
E₉	There is a governmental support helping SMEs to apply IFRS
E₁₀	Periodic updating of the communication's channels for applying IFRS effectively in SMEs

The second part is about the role of IFRS in reducing the financial risks facing SMEs in Iraq, and it is 9 questions-part as shown as in table 6

TABLE 6. THE 2ND PART OF THE QUESTIONNAIRE

S/N	Question
R₁	Calculating the sensitivity disclosure analysis of IFRS can reduce the market risk.
R₂	Illustration of disclosures in the financial statements according to IFRS can decrease the interest-rate risk.
R₃	Hedge Accounting according to IFRS can protect the SMEs from inflation risk.
R₄	Adopting IFRS in Iraqi SMEs can provide successful solutions to face the shortfall risk.

R₅	According to the considerable knowledge, IFRS can help SMEs in facing the Special-situation risk.
R₆	The applying of IFRS can lessen the gap of timing risk.
R₇	The financial instruments of IFRS can reduce the liquidity risk in Iraqi SMEs.
R₈	The using of IFRS will decrease the negative impact of political risk.
R₉	The applying of IFRS in SMEs has the adaptability to changes in economic environment.

To determine the correlation between the two parts of the questionnaire (The independent variable R , and dependent variable E) , The researchers used the Spearman's rank correlation coefficient. Table 7 presents the value of Spearman's rho.

TABLE 7: THE VALUE OF SPEARMAN'S RANK CORRELATION COEFFICIENT

IFRS	Value of Spearman's rho	T Value	
		Calculated	Indexed
Financial Risk	0.572	6.127	1.866 0.05 (102)

Depending to the results of table 7, there is a positive relation between IFRS and financial risks, and the value of Spearman's rho reaches to (0.572).

This refers that there are reflections of IFRS on financial risks, for that the researchers use the regression analysis to analyze the relation for enhancing the results, as shown in the table (8).

TABLE 8: THE RESULTS OF REGRESSION ANALYSIS

Independent Variable (E)	Dependent Variable (R) Financial Risks		
	Regression Equation $R = 1.313 + 0.292 E$		
IFRS	Beta Value	T Value	R ²
		1.313	5.820
	0.292	15.247	

According to table 8, there is a good relation between IFRS and Financial Risks as beta value reaches to (0.292) at statistical level of (0.05), and T value reaches to (15.247) with R² equals (64.57%) which is a good value that reflects the strength of the relationship between IFRS and financial risks.

The researchers used the Fuzzy Logic tools to process and analyze data of the questionnaire. The results of analyzing the first part of questionnaire are shown in Table 9

TABLE 9 : THE ANALYZED RESULTS BY FUZZY LOGIC TOOLS

S/N	Acceptance	Relative Importance	Total %
E₁	35%	20 %	7.00%
E₂	55%	23%	12.65%
E₃	60%	15%	9.00%
E₄	52%	23%	11.96%
E₅	49%	15%	7.35%
E₆	33 %	24%	7.92%
E₇	71%	17%	12.07%
E₈	78%	22%	17.16%
E₉	49%	16%	7.84%

E₁₀	46%	19%	8.74%
R₁	39%	15%	5.85%
R₂	41%	18%	7.38%
R₃	36%	21%	7.56%
R₄	44%	23%	10.12%
R₅	51%	19%	9.69%
R₆	55%	22%	12.10%
R₇	48%	15%	7.20%
R₈	52%	13%	6.76%
R₉	61%	10%	6.10%

Figure 2 illustrates the results of questionnaire according to Fuzzy Logic tools.

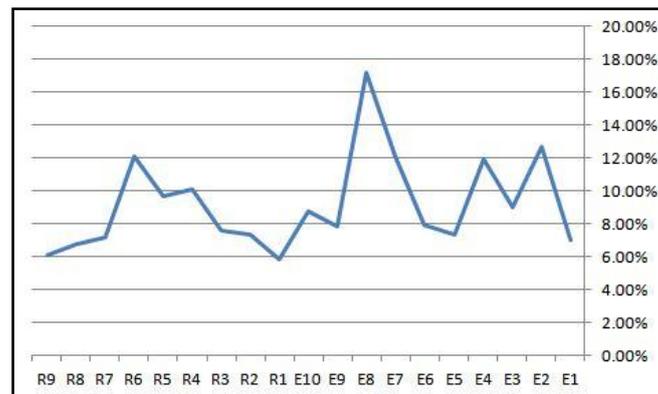


Fig.2: The Analyzed Results by Fuzzy Logic Tools

Table 10 shows the differences between the opinions of males and females in Iraqi SMEs.

TABLE 10 : THE DIFFERENCES BETWEEN MALES AND FEMALES

S/N	Total %	Male %	Female %
E₁	7.00%	4.34%	2.66%
E₂	12.65%	7.84%	4.81%
E₃	9.00%	5.58%	3.42%
E₄	11.96%	7.42%	4.54%
E₅	7.35%	4.56%	2.79%
E₆	7.92%	4.91%	3.01%
E₇	12.07%	7.48%	4.59%
E₈	17.16%	10.64%	6.52%
E₉	7.84%	4.86%	2.98%
E₁₀	8.74%	5.42%	3.32%
R₁	5.85%	3.63%	2.22%
R₂	7.38%	4.58%	2.80%
R₃	7.56%	4.69%	2.87%
R₄	10.12%	6.27%	3.85%
R₅	9.69%	6.01%	3.68%
R₆	12.10%	7.50%	4.60%
R₇	7.20%	4.46%	2.74%
R₈	6.76%	4.19%	2.57%
R₉	6.10%	3.78%	2.32%

Figure 3 illustrates the differences between the opinions of males and females in Iraqi SMEs .

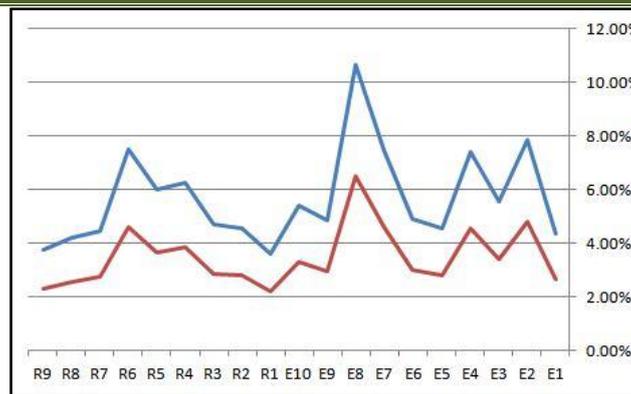


Fig.3: The Differences Between Males and Females

Table 11 shows the differences among the opinions of different educational certificate holders in Iraqi SMEs.

TABLE 11 : THE DIFFERENCES AMONG EDUCATIONAL CERTIFICATE HOLDERS

S/R	Total	Bacc.	Dip.	B.Sc.	H. Dip.	Ph.D.
E ₁	7.00%	0.84%	1.61%	0.39%	1.05%	0.21%
E ₂	12.65%	1.52%	2.91%	0.71%	1.90%	0.38%
E ₃	9.00%	1.08%	2.07%	0.51%	1.35%	0.27%
E ₄	11.96%	1.44%	2.75%	0.67%	1.79%	0.36%
E ₅	7.35%	0.88%	1.69%	0.41%	1.10%	0.22%
E ₆	7.92%	0.95%	1.82%	0.45%	1.19%	0.24%
E ₇	12.07%	1.45%	2.78%	0.68%	1.81%	0.36%
E ₈	17.16%	2.06%	3.95%	0.97%	2.57%	0.51%
E ₉	7.84%	0.94%	1.80%	0.44%	1.18%	0.24%
E ₁₀	8.74%	1.05%	2.01%	0.49%	1.31%	0.26%
R ₁	5.85%	0.70%	1.35%	0.33%	0.88%	0.18%
R ₂	7.38%	0.89%	1.70%	0.42%	1.11%	0.22%
R ₃	7.56%	0.91%	1.74%	0.43%	1.13%	0.23%
R ₄	10.12%	1.21%	2.33%	0.57%	1.52%	0.30%
R ₅	9.69%	1.16%	2.23%	0.55%	1.45%	0.29%
R ₆	12.10%	1.45%	2.78%	0.68%	1.82%	0.36%
R ₇	7.20%	0.86%	1.66%	0.41%	1.08%	0.22%
R ₈	6.76%	0.81%	1.55%	0.38%	1.01%	0.20%
R ₉	6.10%	0.73%	1.40%	0.34%	0.92%	0.18%

Figure 4 illustrates the differences among the opinions of different educational certificate holders in Iraqi SMEs.

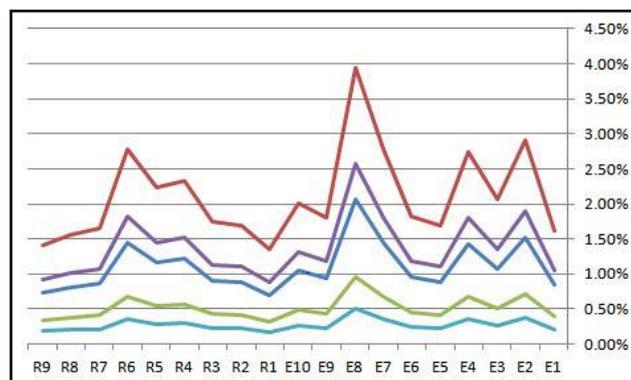


Fig.4: The Differences Among Educational Certificates Holders

VI. RESULTS

Depending on the previous results and analyses, the researchers conclude the following:

1. There is a strong relation between International Financial Reporting Standards (IFRS) and the financial risks that may face the Small and Medium Enterprises in Iraq.
2. The full applying of IFRS in Iraqi SMEs can help to protect SMEs from most of financial risks.
3. The impact of SMEs in Iraq on the global economy remains poor because of the newness of these SMEs.
4. There is a big different among the ways of thinking for SMEs' employees depending on their gender, educational certificate, years of experience, and age.
5. Iraqi SMEs can face all financial risks easily after adopting suitable ways to apply full IFRS according to Iraqi environment needs.

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