

Risk of Irregularity Reflection on the Profitability of Equity Investment: An Empirical Study in the Iraqi Stock Exchange

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Abstract: The idea of centred research on finding the causes of irregular risk with its consequence bounces back to the profitability of investment shares. This depends on the nature of the circumstances surrounding the company as well as the data of the internal environment and what is going on around them. In addition, it also depends on the fact that risks of irregularity are non-market and result of risks within the company which can be from the administration or the investor. It is the overall risk of the company that affects its efficiency and effectiveness as the profitability of objectives is based on industrial and service business organizations. A goal sought by investors and security speculator as the funding equity figure of the president and the most common forms of financing the property has been chosen. The study devises an uncertainty that prevails in the financial market and accompanying the vulnerability of investor shares to a lot of risk and proceeds to the failure to take appropriate measures. Therefore, there has been research on companies listed for trading on the Iraq Stock Exchange as a society with 84 companies. A sample of 30 companies from various sectors (services sector, the banking sector, insurance companies, investment companies, industrial companies and agriculture) were selected from the 84 companies. From the research, conclusions and recommendations were made such as: the high coefficient of variation as a measure of the risk of irregularity in corporate research sample indicates the largest volatility in revenues compared to corporate research sample in which the risk levels of irregularity declined as a result of limited investment returns. While the later fluctuates, it is among the most prominent recommendations from the research to an investor in order to maximize investment benefits that are not taken into account of earnings per share. This is a basis for measuring the risk of irregularity by taking in to account other factors related to risk of irregularity in companies.

Key words: Irregular risk, profitability, stock returns, financial markets, maximize investment benefits, risk

INTRODUCTION

The uncertainty that prevails in the financial market, accompanied by the vulnerability of the Iraqi investor in common stock to many risks comes as a result of incompetence in management such as bad action and failure to take appropriate measures in emergency incidents. Therefore, its impact on the profitability of the stock reflected on the difficulty of the best resources in their possession. By applying the correct form this will lead to maximizing investor benefit by achieving a better return. The research aims to provide a conceptual framework to reconcile the relationship between research in theoretical basis of variables and the variables to be tested experimentally. The study also aims at the analysis

of the relationship between profitability and risks associated with irregularity of investment in the ordinary shares and the statement of the effects of that relationship in the feasibility of stock investment. The research sampled thirty companies listed on the Iraq Stock Exchange companies using a random preview of unintended style and this accounted for nearly 36% of the size of the research community of Iraqi market stock exchange over the duration of the year 2012/2013.

The stock market where the securities exchange between buyer and seller are acting under the laws and provisions are being governed wish to enter the investor's market target by either the desire to profit by speculating in the market or by investing in the long term and earn annual dividends on processed stocks or

classified sectors listed on the Iraqi stock exchange within the eight sectors such as: banks, insurance, investment, services, industry, hotel and tourism, agriculture, telecommunications. This falls beneath 84 companies from various sectors that have provided accounts and financial statements.

MATERIALS AND METHODS

Research hypotheses:

- There is statistically significant relationship between profitability and irregular risk in stock investment
- Profitability variation statistically has significant effect on irregular risk of companies' research sample

The concept of profitability: The concept of profitability on the relationship between profits and the elements that contributed to the achievement reflect on the final result of the policies and decisions implemented by the company's management. Profitability provides the finance needed to repay the loans necessary to finance companies that are used to judge the efficiency and effectiveness of the company's management (Mriziq, 2014). In accordance with this point this study found that the goal of profitability in a company is based on tools to measure the efficiency of the decisions taken from the company in terms of decision-making wise. This is employed in order to achieve a better return through investment decision on how the company make use of the available resources and make use of the financial decision on how to obtain the necessary funds for the work company (Nasser, 2012).

Profitability is a primary objective and it is essential for a continuous survival of the company and a very looking forward to shareholders to reflect on the profitability in the relationship between profits and the elements that contributed to the realization (Mriziq, 2014). These variables are measured through the rate of return on investment and return on equity as described in Eq. 1 and 2:

$$\text{Rate of Return on Investment (ROI)} = \frac{\text{Net income}}{\text{Assets}} \quad (1)$$

$$\text{Rate of Return on Equity (ROE)} = \frac{\text{Net income}}{\text{Equity}} \quad (2)$$

The company's profitability is measured using a number of ratios or financial indicators that represent the end result of a number of policies and decisions taken by the company. Important information is provided by profitability ratio to indicate the effectiveness of the

policies and operations of the company and to show combined effects of the aspects of liquidity, assets and debt on the operating result of the company (Ahmed, 2011).

Percentage of gross income margin: This percentage refers to the percentage remaining for each dinar of sales after subtracting the cost of goods sold out. This percentage indicates the efficiency of the administration in price and generates sales and controlling costs. It is derived by dividing the total income on sales:

$$\text{The percentage margin of gross income} = \frac{\text{Gross income}}{\text{Net sales}}$$

Percentage of operating income margin: This ratio indicates the percentage remaining for each dinar of sales after subtracting all of the cost of goods sold and operating costs; the percentage operating income margin represents returns arising from the operational activity of the company before interest and taxes. This figure is important to measure the overall operational efficiency of the company and it is calculated through the following equation:

$$\text{The ratio of net operating income} = \frac{\text{Margin of earnings before interest and taxes}}{\text{Net sales}}$$

The ratio of net income margin: The ratio of net income margin is the percentage of all remaining dinars from sales after deducting all costs. The ratio is then determined by dividing the net income on sales:

$$\text{The ratio of net income margin} = \frac{\text{Net income}}{\text{Net sales}}$$

The rate of return on investment: This is also called the rate of return on assets measured by the overall efficiency of the administration to achieve profits of its total investments in assets. The company is always looking for an increase in the return on investment because the scale of the profitability of short and long-term all the company's investments rising in the index indicates the efficiency of the administration of investment and operational policies. This ratio also refers to the quality of management in the use of assets and it is better used in order to turn a profit by investing in various assets. The result is compared to the previous years or to the standard of the industry. The implication shows that the percentage indicates a high efficiency in the use of assets and vice versa which is calculated according to the equation of the following:

$$\text{Daily assets} = \frac{\text{Net profit before tax}}{\text{Total assets}}$$

Rate of return on the right of ownership: The aim of this rate is to measure the rate of achievement on return on investment of fund owners and the administration's performance. Therefore, the rate of high return on the right to property is a competent guide which can also rise as a guide and as an indication of a high risk as a result from increased leverage. Meanwhile, falling finance is referred to as conservative loans as calculated according to the following equation (Ameri, 2010, 2013):

$$\text{The rate of return on the right of ownership} = \frac{\text{Net income}}{\text{Property right}}$$

The concept of risk: There is no doubt that there are several types of risks faced by an investor so the likelihood of the actual yield achieved at a level is different from the expected return. This is the basis of risk leads to production of difference or variation in the levels of achieved yield for different reasons and factors, including external factors. The investor does not have a control over it and on other relevant relationship with investor himself. Perhaps, the inefficiency of the administration is one of the foundation factors that contribute to high rates and the potential risk. The study found that the interest of the investor is not limited to the expected returns obtained from investments but also goes beyond that; it also goes to the attention of the risks surrounding the others.

There are 2 concepts from the risk: the first one is the possibility of achieving positive result in the future as a result of the decision made in the present while the second means the deviation from the results through the previous stages. The latter is more concerned about the future heavily on the unpredictability of future results but it is possible to minimize them from being used across previous experiences. Wahab *et al.* (2001) defined investment risk as the possibility of a yield lower than expected return, greater than the probability of a yield or lower/negative (loss) as the risk rose. It is worth mentioning that the risk government bonds often go down to zero as it is almost guaranteed in risk-free financial investments (Al-Shmaa, 1992).

Classification of risk: Risk is classified from several points of view in accordance with various criteria. This study limits itself to classification based on their sources, as listed.

Systematic risk: This risk is resulted from the economic factors and it is associated with businessmen, investors and business organizations inclusively; therefore, diversification cannot be avoided (Modigliani and Fabozzi, 1996). Systemic risk is also known as the risk resulting from general joint factor affecting the economic system as a whole. Thus, it is touted as the risk of the general economic environment and that part of the risk of investment that affects the market as a whole which is sometimes called the risk of the market. Its effects on the overall market cannot be overestimated and its disposal through diversification includes the risk of inflation, economic stagnation and high interest rate.

Un-systematic risk: This risk is as a result of the public or private investor from various institutions out of lack of administrative efficiency of the administration but this type of risk can be avoided by diversifying internal factors (Modigliani and Fabozzi, 1996). Here, the risk of irregularity is also called private or non-market risk which is often what a company specializes in from a particular sector that are affected by the events of the past limited to a particular company or a particular sector. It can also be defined as the risk of irregularity from the unique part of the college in a company or industry. This risk is independent of the market portfolio that any association with the market coefficient is equal to zero (Rahma, 2009). The risk irregularity is measured according to the following equation (Ameri, 2013):

$$CVR_j = \frac{\sigma R_j}{R_j}$$

Where:

CVR_j = The irregular variation coefficient of risk

σR_j = The standard deviation of the rate of return

R_j = The average rate of return

The most important points that illustrate both regular and irregular risk can be summarized into Table 1.

Sources of un-systematic risk

Management risk: This is arisen due to administrative errors in a particular company; thus it leads to different effects in interest rate for the expected rate of return on investment despite the quality of its products and the strength of its financial position-consequently resulting to risk from administrative errors within the risk of irregularity. Management risk may occur to decrease the rate of return even in cases of booming economic activity. It may also be as a result of common administrative errors, misconduct and inappropriate measures in emergency incidents such as energy crises and disruptions of workers (Rahma, 2009).

Table 1: Comparison of systemic risk and the risk of irregularity

Items	Systematic risk	Un-systematic risk
1	Arising from the general joint factors	Arising from the factors that are unique to a particular company
2	Affecting all businesses	Affecting the company itself
3	It cannot be avoided but can be modified	Avoidable diversification
4	Part of the operational and other financial	Part of the operational and other financial
5	Measured by a beta factor (B)	Measured by a factor of variation (CV)

The risks of the industry: This risk is as a result of industry-specific conditions such as difficulty in providing the necessary raw materials and the presence of continuous disagreements between workers and management of the company. Also, this is found as special effects to government laws related to the control of pollution and the effects of competition overseas on the domestic industry. There are also effects on on-going changes in the tastes and preferences of consumers in the developed economies and the emergence of new products or new technology (Rahma, 2009).

The risks of business cycles: This means the business cycles under the influence of risk is limited to a certain facility or industry that specifically occur at irregular times and reasons beyond financial market conditions which make it difficult to predict their occurrence (Hindi, 1996).

RESULTS AND DISCUSSION

This study contains three paragraphs as the introduction includes the results of the financial analysis of the variables. The second part refers to the result of descriptive statistics of the variables while the last part highlights tests of hypotheses of the result while the implications are discussed as follows.

Financial analysis of the variables

Profitability analysis

Return on investment (assets): Research showed that return on investment for companies from the sample specified by the results from Table 1 has the highest yield of 0.272 in the year 2012 for Karkh Saidiya City games due to the rise in net profit and the lowest yield of 0.001 in the year 2012 for sumer commercial bank due to lower net profit. As for the rest of the companies in this study, the revenue varies between the two rates mentioned while the highest yield of 0.337 in the year 2013 as well as for karkh saidiya city games due to higher net profit and impairment of assets. The lowest return in the year 2013 amounted to 0.004 for Sumer Commercial Bank and due to lower net income and higher asset value but for the rest of the

Table 2: The results of the return on investment

Companies	Return on investment	Return on investment
	2012	2013
Bank of Baghdad	0.023	0.019
National Bank of Iraq	0.013	0.045
Credit Bank of Iraq	0.035	0.040
Dar Es Salam Investment Bank	0.013	0.023
Sumer Commercial Bank	0.001	0.004
Babylon Bank	0.017	0.016
Gulf Commercial Bank	0.032	0.075
Mosul Bank for Finance and Investment	0.041	0.034
Union Bank of Iraq	0.026	0.029
Al-mansour Bank for Investment	0.029	0.028
Kurdistan International Bank for Investment and Development	0.040	0.032
Al-ameen for Insurance	0.055	0.091
Dar Al-salam for Insurance	0.074	0.063
Al-zawraa for Financial Insurance	0.064	0.005
Al-wiaam for Financial Insurance	0.063	0.014
Kharkh Tour Amusement City	0.272	0.337
Al-mansour Pharmaceuticals Industries	0.023	0.064
Iraqi for Tufted Carpets	0.054	0.059
Baghdad Soft Drinks	0.022	0.097
Fallujah for Construction Materials	0.052	0.049
Mamoura Realestate Investment	0.036	0.028
United Bank for Investment	0.066	0.074
Modern Constrction for Materials	0.030	0.030
National Household Furniture Industry	0.017	0.021
National Chemical and Plastic Industries	0.015	0.018
Baby lon Hotel	0.026	0.007
National for Tourist Investment	0.123	0.192
Iraqi Agricultural Products	0.045	0.031
Modem Animal and Agricultural Production	0.005	0.033
Middle East Producing and Marketing-Fish	0.067	0.080

companies, the revenues vary between the two rates mentioned. Table 2 shows the results of the return on the findings.

The return on equity: The results from return on equity of the companies from the sample selected are shown in Table 2. There is highest yield of 1.018 in the year 2012 from the company (Baghdad for soft drinks) due to high value of the net profit. There is lowest yield value of 0.002 in the year 2012 for sumer commercial bank due to lower net profit. For the rest of the research from the samples selected, the returns have varied between the two rates mentioned above while the highest yield of 1.206 in the year 2013 for Bank of Baghdad because of the rise in net profit. The lowest yield in the year 2013 amounted to 0.004 for hotel Babylon due to increase in adoption of the company-financed on long-term sources of funding (the nominal capital and paid-up) and the decline in net profit. For other companies, there is variation of revenue between the 2 amendments. Table 3 shows the results of return on equity.

Irregular risk analysis: Result shows that the irregular risk of returns shares from the companies is evidence for

Table 3: The results of the return on property right

Companies	Return on investment 2012	Return on investment 2013
Bank of Baghdad	0.150	1.206
National Bank of Iraq	0.023	0.099
Credit Bank of Iraq	0.103	0.130
Dar Es Salam Investment Bank	0.098	0.127
Sumer Commercial Bank	0.002	0.007
Babylon Bank	0.045	0.044
Gulf Commercial Bank	0.098	0.206
Mosul Bank for Finance and Investment	0.119	0.073
Union Bank of Iraq	0.059	0.148
Al-mansour Bank for Investment	0.072	0.046
Kurdistan International Bank for Investment and Development	0.116	0.087
Al-ameen for Insurance	0.061	0.100
Dar Al-salam for Insurance	0.077	0.065
Al-zawraa for Financial Insurance	0.070	0.005
Al-wiaam for Financial Insurance	0.067	0.015
Kharkh Tour Amusement City	0.292	0.365
Al-mansour Pharmaceuticals Industries	0.025	0.084
Iraqi for Tufted Carpets	0.134	0.094
Baghdad Soft Drinks	1.018	0.101
Fallujah for Construction Materials	0.072	0.063
Mamoura Real estate Investment	0.036	0.030
United Bank for Investment	0.175	0.170
Modern Construction for Materials	0.032	0.042
National Household Furniture Industry	0.021	0.026
National Chemical and Plastic Industries	0.019	0.018
Babylon Hotel	0.217	0.004
National for Tourist Investment	0.137	0.211
Iraqi Agricultural Products	0.053	0.044
Modern Animal and Agricultural Production	0.010	0.121
Middle East Producing and Marketing-Fish	0.083	0.105

the variation in Table 4 for shares of revenue of companies volatility ranged from higher contrast (2876.67) for the world for real estate of investments. This result expresses the fact that the company's shares listed are stock-risky for height one integer while the lowest coefficient (0.305) of corporation (IACS modern chemical) expresses low risk of irregular shares from the listed company so as to have a defensive stock. Other companies varied in terms of irregular risk and ranged between the two rates as mentioned in Table 4.

Descriptive statistics of the variables: There is adoption of a number of descriptive analysis tools such as: circles, standard deviations, maximum and minimum values and the value to the extent to which the sum represents the difference between them and the coefficient of variation. Table 5 displays the results of the statistical description of the variables. The table shows that the private irregular risk businesses of all studied companies have the arithmetic mean as 114.6267. The standard deviation is 522.4331 and coefficient of variation is 4.557. This indicates that the dispersion has greater irregular risk and coefficient of variation in relation to the profitability metrics: return on investment and return on the property right) which stood at 1.195 and 1.699, respectively. It

Table 4: The results of the risk analysis of irregular

Companies	Variance
Bank of Baghdad	35.404
National Bank of Iraq	11.790
Credit Bank of Iraq	11.478
Dar Es Salam Investment Bank	6.378
Sumer Commercial Bank	4.201
Babylon Bank	2.929
Gulf Commercial Bank	122.304
Mosul Bank for Finance and Investment	0.524
Union Bank of Iraq	4.212
Al-mansour Bank for Investment	8.876
Kurdistan International Bank for Investment and Development	4.977
Al-ameen for Insurance	6.304
Dar Al-salam for Insurance	5.360
Al-zawraa for Financial Insurance	1.026
Al-wiaam for Financial Insurance	77.636
Kharkh Tour Amusement City	32.780
Al-mansour Pharmaceuticals Industries	8.563
Iraqi for Tufted Carpets	8.152
Baghdad Soft Drinks	12.345
Fallujah for Construction Materials	22.776
Mamoura Real estate Investment	2876.670
United Bank for Investment	5.228
Modern Construction for Materials	64.904
National Household Furniture Industry	3.690
National Chemical and Plastic Industries	0.305
Babylon Hotel	69.469
National for Tourist Investment	7.303
Iraqi Agricultural Products	17.793
Modern Animal and Agricultural Production	1.765
Middle East Producing and Marketing-Fish	3.661

includes the homogeneity of the largest company among the selected companies in relation to the indicators of profitability as it comes with all of the return on assets and return on the property right. Thus, there is need to study the effect of disparity in profitability at the level of the studied companies in the risk of irregular companies.

Test of hypotheses: The following study discusses the research hypotheses using linear regression model in the framework.

Test of first hypotheses: The research hypotheses are formed to devise a logical connection with the relationship between profitability and irregular risk in companies. The hypotheses are committed to the need to formulate a specific association between variables provided for the existence of significant differences between profitability relationship and irregular risk, after conducting statistical analysis and the linear correlation coefficient is calculated between the two variables studied as shown in Table 6. The relationship between the 2 variables were not significant after the value of the correlation coefficient of -0.75 was gotten for the scale of the first non-profit embodied by the return on investment of -0.77 for the profitability of the second measure which represents a return on the right of ownership and the level of

Table 5: The results of descriptive statistics for variables

The details	Arithmetic mean	SD	Range	Minimum value	Maximum value	Coefficient of variation
Risk irregular	114.6267	522.43310	4.557	2876.67	0.31	2876.36
ROA	0.0546	0.06526	1.195	0.34	0.00	0.34
ROE	0.1279	0.21740	1.699	1.21	0.00	1.21

Table 6: The results of testing linear correlation between profitability and irregular risk

Details	The correlation coefficient	The value of t calculated	Moral test	Statistical significance X
ROA	-0.75	1.159	Sig. = 0.694 Insignificantly	No semantic relationship
ROE	-0.77	1.228	Sig. = 0.684 Insignificantly	No semantic relationship

Table 7: Test results of the effect of profitability in the irregular risk

Details	ROA		ROE	
	Values	Moral test	Values	Moral test
Variance	0.004	Insignificantly	0.047	Insignificantly
The value of t	1.159	p = 0.694	1.228	p = 0.684
The coefficient of determination	0.006	Insignificantly	0.006	Insignificantly
The value of F	0.158	p = 0.694	0.169	p = 0.684

statistically significant to be 0.694 and 0.684, respectively. These results show that the risk of irregular variation for companies in this research sample is not associated with a written contrast to invest in those companies' earnings. Therefore, the stock returns will fluctuate because of dating back to variation of supply and demand forces in the Iraqi financial market but not because of returning to companies the exported shares (Table 6).

Test of second hypothesis: The second hypothesis testing needs to employ linear regression between the models of the variables. On this basis, the purpose of confirming the results of the first hypothesis was formulated to measure the expected impact on profitability by measuring the return on assets and return on the property right of selected companies of irregular risk.

Table 7 shows the result of test of regression between the relationship of profitability as an independent variable and the risk of irregularity as the dependent variable. The result shows that there is no significant effect statistically in the risk of irregularity as measured by return on investment. If the increase value of profitability and one unit is expected to decrease the risk of irregularity, the amount will be equivalent to the value of the contrast of 0.004. By reflecting the direction of the negative relationship between the 2 variables, it shows that profitability varied in accordance with the measure of return on investment in variation of irregular risk of 0.006 in terms of the coefficient of determination or interpretation no significant relationship to conform to the users testing. This discrepancy is due to the fact that Iraqi investor does not take into consideration the profitability of stocks but rather depends on other variables outside the current specimen.

The result also reveals that there is lack of moral influence of profitability on the companies with irregular

risk after the result measurement under the return of the right of ownership. Table 7 shows that the change is not significant when the single profitability increased and led to adverse deviation of 0.047 in terms of the variation in the value of the return on the right of ownership. From the interpretation, the profitability variation accounted for 0.006 according to this measure of variation in irregular risk in terms of determination coefficient. There is no significant relationship due to the low value of the test statistics (F) calculated to be 0.169. This shows in the final result that proves the invalidity of the second hypothesis which states that there is a positive trend relationship between profitability and irregular risk.

CONCLUSION

From the research some conclusions are drawn: there is negative relationship between profitability and irregular risk as included in the Iraqi stock exchange companies. This is reflected in the decline of risk with increasing levels of irregular levels of profitability and vice versa. The result also confirms the fact that profitability in the selected companies as measured by return on investment is on the rise for a certain number of companies due to the high profitability or low value of the assets. Profitability is significant high in many of the countries as measured by return on the property right because of the high value of the profitability or decline in the adoption of the selected companies on return on equity; this includes paid-in capital and retained earnings as sources of fund. There is increase as observed in the coefficient of variation as a measure in corporate irregular risk from the sample which indicates greater volatility in revenues compared to the other number of the sample of companies selected where the level of risk of irregularity fell as a result of fluctuation in limited investment.

RECOMMENDATIONS

The researcher recommends examination of different irregular risk levels in terms of non-diversification in direct and indirect causes of profit shares. Moreover, it is the aim of Iraqi investors to maximize the benefits of investment that does not take into account the

profitability of the stock as a basis for measuring the irregular risk and other factors related to the companies of risk of irregularity. The study recommends the activation of the role of managing the Iraqi stock exchange in the area of financial disclosure on the status of companies and provision of necessary information for all the investors in Iraqi stock exchange. This is in order to increase the safety of investment decisions in stocklisted on the aforementioned market and through encouragement of market to fully deploy data in financial accounts and reports and in other assistance.

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