RESEARCH ARTICLE OPEN ACCESS

The possibility of using quantitative models to predict financial failure and its impact on Earnings per Share: A study of a sample of companies listed in the Iraqi Stock Exchange

Assis. Prof. Dr. Salim Sallal Al-Hisnawi¹, Assis. Lec. SadikJafar Al-Attabi²

1(Department of Finance and Banking, University of Qadisiyah , Faculty of Management and Economics)
2 (Department of Accounting, Middle Euphrates University , Technical Institute - Diwaniyah)
http://qu.edu.iq/ade

Abstract:

The study aims to use quantitative models to predict financial failure of the investment companies and to identify the Statistical relationship between financial ratios and EPS. The study used descriptive statistics factors, as well as regression model to analyze data and test the hypotheses. This model contains numeral of independent variables which represent profitably, leverage, liquidity, activity ratios.

Based on (8) companies data for three years from (01/01/2010) to (31/12/2012), the study founded some of Conclusions: There is ability of investment companies to continue, and there is Significant Statistical relationship for profitably ratio (return on investment), activity ratio (assets turnover) with EPS, as well as positive relationship between independent variables and dependent variable.

Keywords — Financial Failure, profitably, leverage, liquidity, EPS.

I. INTRODUCTION

The subject of the financial failure of the hottest topics that researchers face of interest to them, and what it may result in negative effects on the national economy and many of the working groups. Often mixes concepts in this research so used many terms as words synonymous meaning such as bankruptcy distress -- - tripping, and thus mixed financial standards and legal, economic, described the case of company named failed or distressed or troubled, And this is mainly due to the difference in conditions that are subject research from one country to another, where is the financial ratios of the most important financial analysis tools and the most common in use, as they reflect the mathematical relationship between two values or two items of the financial statements items, and through the Ratio Analysis Finance for these lists can assess the financial situation of the company and its performance during a given period by making comparisons between financial ratios for certain company financial ratios similar companies, also helps in comparing the company's performance

and financial position in periods. Among the most prominent uses of financial ratios analysis is to predict a stalled companies; the faltering in the businesses of the problems that many are trying to deal with it cautiously because of the danger posed by the business companies, as the company can not achieve a reasonable return on their investment. You can not pay its obligations to creditors and solvent. (Ross and et al, 1999: 733).

I have been there many studies conducted in this area since ancient times was the first study to (Smith and Winak) in 1930. (Altman, 1968) is first researcher studying predict failure and stumble in US companies, it has had a number of studies in this area, and then rolled studies in various sectors of the industrial sector encompassing all types and the banking sector and other sectors .

II. Search Methodology

A.The importance of research

The importance of the study to focus on the predictability of the ability of investment firms to continue and distancing itself from financial distress

by using financial ratios to Kida model, as well as determine the relationship between these rates and their impact on earnings per share because of its clear to the Iraqi economy impact; therefore, the importance of the study stems from the study financial distress of companies and financial ratios affecting earnings per share through:

1) the possibility of knowledge related to the ability of companies to survive and expand their market value.

- 2) To assist in making appropriate investment decisions by dealers in the financial market, such as investors, brokers, and others by the results of this study.
- 3) This is a rare study in dealing with the financial information extracted from the financial statements of the companies included in the investment sector of the Iraqi financial market.

B. Research Objectives

We Could be clarified as follows

- 1) A statement of the nature of financial ratios for companies to clarify the possibility of staying in the market and any of these ratios more influential than others on the earnings per share
- 2) find out what is looming on the horizon of the financial market by investing research topic and address the obstacles that mired companies and the possibility to overcome to achieve the desired goals 3) knowledge of the predictive ability of the Kida model and the explanatory power of the various hypotheses of the variance in earnings per share to come up with recommendations that will improve the quality of disclosure of financial information in the Iraq Stock Exchange .

C.Research problem

We Can study the formulation of questions following problem:

1) Is it possible to predict the ability of investment firms in the Iraqi financial market to continue and distancing itself from financial distress by using financial ratios to Kida model?

2) Is there a statistically significant relationship between the rate of profitability (return on investment) and earnings per share of investment companies listed on the Iraq Stock Exchange?

- 3) Are there significant differences between the leverage ratio and earnings per share of investment companies listed on the Iraq Stock Exchange relationship?
- 4) Is there a statistically significant relationship between the liquidity ratio (Current Ratio) and earnings per share of investment companies listed the Iraq Stock Exchange? on 5) Is there a statistically significant relationship between the percentage of activity (asset turnover) and earnings per share of investment companies listed on the Iraq Stock Exchange 6) Is there a statistically significant relationship between the proportion of liquidity (cash / assets) and earnings per share of investment companies listed on the Iraq Stock Exchange?

D.Hypotheses of the study:

According to the problem of the study and its objectives, clear the following hypotheses:

- 1) the ability of investment firms in the Iraqi financial market to continue and distancing itself from financial distress by using financial ratios to Kida model.
- 2) profitability ratios represented by (return on investment) significant statistical relationship with earnings per share of investment companies listed on the Iraq Stock Exchange.

 3) Leverage ratios represented by (property / book value of total debt to right) are statistically significant relationship with earnings per share of investment companies listed on the Iraq Stock Exchange.
- 4) liquidity ratios represented by (Current Ratio) are statistically significant relationship with earnings per share of investment companies listed on the Iraq Stock Exchange.
- 5) ratios represented by activity (turnover of assets) are statistically significant relationship with earnings per share of investment companies listed on the Iraq Stock Exchange .
- 6) liquidity ratios represented by (cash / total assets) significant statistical relationship with earnings per share of investment companies listed on the Iraq Stock Exchange.

III. The theoretical framework of the study

Argenti used, (1976: 22) term failure in his work and he knew the process by which the company has begun to walk the long road that ends with the financial Insolvency, and therefore stressed that the failure of the company is a process that takes several years, ranging from 5 and 10 years, the company successive stages before it reaches the financial hardship of any inability to repay obligations, and during that period the company will go through four stages of a clear and major milestones, as follows:

Phase I:

The tendency of administrative shed company acquires at this stage specific flaws, but they are still flaws lurk and any errors or corruption clearly did not result in the company's performance, and therefore, the financial statements and financial indicators will not be of any importance in the detection of these defects. These defects are concentrated in the management of the company, especially in the higher levels of them, and most important of which to be a general manager with absolute power to marginalize and eliminate the role of the rest of the executives or that one person combines the positions of Director General and Chairman of the Board and the also the embodiment authority Absolute which combines implementation and oversight of implementation, and defects supplied by (Argenti) as well as the company suffered from poor financial management level, or be unable to adapt to new developments of the circumstances that surround it.

Phase II: qualitative errors

The company begins at this stage of committing material misstatement or as described(Argenti) catastrophic dangers, and these risks are a result of these flaws in the company's.

Phase III: manifestations of collapse.

As a result of the commission of past mistakes, the company will be at this stage has started down the path of collapse, and the symptoms of access to financial hardship has begun to emerge clearly and increasingly, the evidence suggests and financial indicators at this point that there was a year or two at the most that separate between the company and

the state of financial hardship

Phase IV:

The impasse - the actual collapse this stage is the final stage and is a virtual collapse of the stage and of which the company has reached a moment to financial hardship.

A.Reasons for failure:

Explained ((Harrington, 1993: 96), a director of one of the insolvent companies (in one of his studies for the faltering companies at March 22, 1973 that the causes of the failure and the faltering companies are summarized in the following:

- 1. Lack of capital.
- 2. defect in the system cost
- 3. weakness in controls
- 4. The lack of consulting foreign participation
- 5. The government, under the laws do not provide protection for the companies .
- 6 Foreign fluctuations as cases of integration, and technological changes.
- 7. fraud and deception in business processes(Altman and longer,1968: 211) study of important studies that have usedfinancial ratios to predict the failure of companies, Altman has been used in the search term bankruptcy is intended to companies bankrupt companies that declared bankrupt and placed under receivership or reorganization erased right. A sample of 33 US industrial company has chosen bankrupt during the time period from 1946 until 1965 and 33 industrial company is similar to bankrupt companies in the first group of industry type and size of assets.

A sample of 33 US industrial company has chosen bankrupt during the time period from 1946 until 1965 and 33 industrial company is similar to bankrupt companies in the first group of industry type and size of assets.

Was used Altman in his style multivariate discriminatory analysis of linear, and using a method discriminatory analysis were selected (5) financial ratios considered the best in the distinction between the bankrupt companies and non-bankrupt companies any better financial ratios special performance in which they can predict the failure or tripping, and this ratios are: (Aslamboli,2003: 115)

- 1) The ratio of net working capital to total assets.
- 2) The proportion of retained earnings to total assets.
- 3) The ratio of net profit before interest and taxes to total assets.
- 4) Ratio of the market value of equity to book value of total debt .
- 5) The ratio of net sales to total assets.

The link that reflect this model the following equation:

Z = 0.012X1 + 0.014X2 + 0.033X3 + 0.006X4 + 0.010X5

Since Z is discriminatory value (Z. Score) a criterion to distinguish between the bankrupt and non-bankrupt companies.

It is noted that the ratios adopted this model dealing with the most important financial dimensions that must be studied in the facility which is liquidity, profitability, financial leverage, and activity Under this model companies classified in three categories according to their ability to continue and these categories are: First Class: Class successful companies or viable and that if the value of the Z 2,99 and bigger .Category II: the category of failed companies and potentially bankrupt and that if the value of Z is less than 1.81.

The third category: the category of companies that are difficult to give a definitive decision on it, and therefore need to be a detailed study, and that's when the value of Z which is greater than 1.81 and less than 2.99.

According to many studies to Altman model is one of the models used by companies to predict the status. (Zubaidi, 2002: 176).

It is also a form Kida of models developed in 1981 from modern models used to predict the financial failure process, this model has proved a high capacity to predict the incidents of financial distress, reaching 90% by the year of the occurrence of default (Matar, 2003: 206); so it was President model for the study.

B. Previous studies

1) (Aljahmani, 1999) Study: The study was conducted in Jordan, where the study was applied to the banking sector in Jordan were analyzed 23 Financial ratio of the four banks stalled and four

non-stuttering from 1992 to 1997, has been used by the researcher in this study discriminatory analysis of linear Multi - variables and adopted a researcher at the standard measurement tripping struggling to achieve the loss of over two years or three years in a row. The researcher reached model consists of five financial ratios can be used to predict the failure of the banks), the ratio of cash and investments to total deposits, the trading ratio, the ratio of net profit before tax to shareholders' equity, the ratio of net profit before tax to the paid-up capital, operating profit ratio to expenses general and administrative). Accuracy rate of the model to predict a stalled banks was 75%

2)(Bian, Mazlack, 2003) study: This study was conducted in China's telecommunications sector and industry computer industry, has been reached to 56 extracted Financial ratio of previous studies have been reduced this ratio to 24 Financial ratio can be used in this study, where the data were analyzed Financial extracted. Lists of companies, and used the method of logistic analysis Logistic analysis. Has been reached seven financial ratios can be used to predict the failure of companies, namely, (net income to total assets, the trading ratio, cash flow to total debt, sales to total assets, net income to shareholders' equity, current liabilities to total debt)

C.The study methodology

The study is based on a model to predict Kida financial failure for companies, being looked predictability using financial ratios, in addition to the quantitative approach, to determine the direction and strength of the relationship between the study of financial ratios and earnings per share variables. The study methodology to collect information and community study in addition to the method of data analysis and model study, as well as knowledge of the study variables, and analysis and testing of hypotheses.

D.Data collection

The study relied on data collection necessary for the preparation of the books, magazines and messages related, as well as the annual reports of the movement of trading in the Iraqi market and financial statements published study sample of companies, in addition to the annual releases of the Iraqi Central and Internet sites for the bank

E .Society and the study sample

Study population consisted of all listed on the Iraq Stock Exchange companies for a period of three years for the period from (01/01/2010) to (31/12/2012), which consists of (84) companies, as composed the Iraq Stock Exchange consists of seven different sectors: banking sector, industry, hotel and tourism, investment, agriculture, services, and insurance. The study sample consisted in all the investment sector listed companies being more sectors neglected in addressing researchers for study because of its obvious activity in the market in terms of turnover and number of shares, as the sector traded 1142, 3150.943 million dinars volume; while the number of shares amounted to 1170, 2784.760 million shares for the year (2010), (2011), (2012), respectively. (Annual Bulletin of the Central Bank of Iraq, 2012), in addition to what is exposed to Iraq and the suffering of the fluctuation in industrial and agricultural areas and the deterioration of the infrastructure of the joints of the production. Explains Appendix (1) the names of the sample companies, as the number of companies reached (8) companies, all of which represent the investment sector, and constitute the study sample rate (9.5%) of the original community of the Iraqi market for securities and the percentage (% 88.9) of the study sector adult (9) companies, has been taking this sample to provide all the information about the study.

IV, Practical framework

A.Approach to data analysis

To conduct statistical tests analytical study is based
on statistical analysis software (SPSS V14), and
represented as follows:
1) matrix link: To determine the degree and type of
relationship between the variables.
2) Multiple regression analysis: To determine the
explanatory power of the model study.

B. Model and the variables of the study

The study includes two models, each model dependent variable and independent variables as follows:

I) the predictability of financial failure by Kida

model, this model is built on (5) independent variables of financial ratios where you specify (the value of) variable Z under the following equation:

Z = 1.042X1 + 0.42 X2 + 0.461X3 + 0.463X4 + 0.271X5

Whereas:

Z = (the dependent variable) to predict the value of financial failure.

X1 = (profit ratio) is b (return on investment), and equal (net profit after tax / total assets). (Trading traffic reports in the Iraq Stock Exchange).

X2 = (leverage) ratio and equal to (the sum of the right of property / total liabilities).

X3 = (liquidity ratio) is b (trading) and equal to the ratio (current assets / current liabilities)

X4 = (activity ratio) is b (asset turnover) and equal (sales / total assets).

X5 = (liquidity) ratio and equal to (cash / total assets)

If the value of the (Z) according to this model project to be positive in the safety case of financial failure, but if it is negative, it is threatened with financial

2) the predictability of profitability per share based on the independent variables of the study (of the financial ratios used in the Kida model) through the following equation:

$$Y = a + (B1X1) + (B2X2) + (B3X3) + (B X4) + (B5X5)$$
 Whereas:

Y: (dependent) variable EPS a: is a hard limit

X5, X4, X3, X2, X1 represents the independent variables used in the Kida model.

Appendix (1) explains averages study data model variables, while Appendix (2) shows Results of the study variables values.

C.Descriptive statistics for the study sample

Appendix shows (3) descriptive statistics for the sample companies, have been extracted all companies which statistics are composed of the study sample averages three factors to her years (2010) and (2011) and (2012) together .

It is clear from Appendix (3) that the average statistics of these companies spread over a very wide ranges. The Company Secretary for Financial Investment, which made a loss in its operations, the

lowest average of the ratio of profitability represented by (return on investment) of all companies, and the average return on investment for companies ranging from (-0.09) and (0.05) for the company Khaimah Financial Investments , standard deviation of (0.04). It should be noted here that the presence of Al Khaimah Financial Investment and Company Zora financial investment with return on investment of (0.04) within companies, resulting in higher statistics of these companies.

As for the leverage ratio of B (Royal / liabilities) right. The highest percentage among all companies, the Company good financial investment. ranged between (26.11) and (0.00) dinars for the company Mesopotamia financial investments with a standard deviation (7.66).

In terms of liquidity of B ratio (trading) ratio, got good financial investment a higher proportion of trading among all companies, and ranged ranges trading ratio for these companies between ((26.81 times and (1.10) times the company Mesopotamia financial investments and standard deviation (7.80) times

In terms of the percentage of the activity of B (assets) turnover, ranged in these companies between (0.01) times the company good financial investment and (0.11) times the company Khaimah financial investments with a standard deviation (0.04) times

As for the liquidity ratio of b (cash / total assets), we see the great disparity of the company good financial investment, which got the highest ratios of trading activity among all companies, has reached a minimum liquidity ratio of b (cash / total assets) b (0.00) once, while I got Harmony Financial Investment Company highest ratio of (0.33) time and standard deviation (0.11) times

As for the dependent variable (earnings per share), got company Mesopotamia financial investments with the highest incidence among all companies, and ranged for these companies between (0.10) (-0.10) for Alaiam for Financial Investment, which made a loss in its business and Sway standard (0.06). Table (1) shows the results of the KIDA model.

Table (1)the results of Kida model Analysis and testing hypotheses

	results of Kida model Analysis and testing	
Company	Equation Kida model	The company's position on the prediction
Alkhair for	Z = 1.042 (0.016) + 0.42	Able to
financial investment	(26.11) + 0.461(26.81) +	continue
(1)	0.463(0.009) + 0.271(0.0001)	
	= 23.35	
Alweaam	Z = 1.042 (0.031) + 0.42	Able to
for Financial	(13.92) + 0.461(14.86) +	continue
Investment	0.463(0.065) + 0.271(0.331)	
(2)	= 12.85	
Alaiam for	Z = 1.042 (0.018) + 0.42	Able to
Financial Investment	(11.67) + 0.461(13.196) +	continue
(3)	0.463(0.069) + 0.271(0.085)	
	=11.06	
Zora for	Z = 1.042 (0.036) + 0.42	Able to
Financial Investment	(11.20) + 0.461(12.170) +	continue
(4)	0.463(0.097) + 0.271(0.088)	
	=10.421	
Khaimah	Z = 1.042 (0.045) + 0.42	Able to
for Financial	(10.71) + $0.461(11.706)$ +	continue
Investments	0.463(0.107) + 0.271(0.172)	
(5)	=10.038	
Alebattk	Z = 1.042 (0.012) + 0.42	Able to
for Financial	(8.31) + 0.461(6.099) +	continue
Investments	0.463(0.041) + 0.271(0.269)	
(6)	= 6.41	
Alameen	Z = 1.042 (-0.085) + 0.42	Able to
for Financial Investment (7)	(4.24) + 0.461(5.24) +	continue
	0.463(0.021) +0.271(0.182)	
	= 4.17	
Bain	Z = 1.042 (0.009) + 0.42	Able to
Alnahrain for	(0.001) + $0.461(1.101)$ +	continue
Financial	0.463(0.019) + 0.271(0.053)	
Investments (8)	=0.54	

Represents an attempt to test the acceptance or rejection of hypotheses that have been identified in methodology Kida using the model to predict financial failure, in addition to simple linear regression and multiple independent variables and earnings per share analysis, as follows:

D.The first hypothesistest

Table(1) shows the results of Kida model to position the financial failure of the investment companies ranked according to top the ability of the company to continue, the AlkhairFinancial Investment Company received the highest

value (Z), which represents the degree of the ability to continue and away from financial distress is according to data statements, which reached (23.35), followed by Harmony Financial Investment В occupies (12.58),Mesopotamia financial investments resulted in a positive value for the (Z), which amounted to (0.54), since (Z value) according to this model were positive for all investment firms in the Iraqi financial market; therefore, all companies in the safety case of financial distress. Thus, the value of (Z) refers to the health of the view of the researcher in the first hypothesis that investment firms have the ability to continue and away from financial distress.

Table (2) the results of the regression analysis for thestudysample

* statistically significant at the level of correlation $(0.05 \ge \alpha)$

Independen	В	Si		D.	Si	F	R	R2
t variable		g.	Т	W	g.			
(Day 6'4 - 1-11'4	1	*0	1.1					
(Profitabilit	1.	*0	11.					
y ratio)	8 2	.0 1	08					
Net profit	-	0.	-					
after tax /	0.	15	2.3					
total assets	0		2					
	1		2					
(Leverage)	0.	0.	1.5		*0	30	99	00
ratio	0	28	3		.0	.4	.3	98.
D (1	*0					01	7%
Property	-	*0	-		3	3	%	
/ liability	0. 8	.0 5	4.4	1.				
right	1)	1	34				
			1					
(Liquidity	-	0.	-	6				
ratio)	0. 0		0.8					
(Current Ratio)	4	50	2					
Katio)	7							

E.The second hypothesis test

Table (2) Shows the regression coefficients of the variables and independent tests relating thereto, as shown in Table (2), that the value of the regression coefficient for the ratio of profitability represented by (return on investment) (1.82) This means that the change is incremented by one unit in the return on investment will leads to a change in earnings per share by (1.82), and indicate the value of t calculated for this variable (11.08) and the level of significance (1%) to the health of the hypothesis that the ratio of profitability represented by (return on investment) the impact of statistical significance on the earnings per share

F.The Third hypothesis test

Table(2) shows that the value of the regression coefficient for the ratio of the lever of b (Royal / liabilities) right (-.01) This means that the change is incremented by one unit in the proportion of leverage of the company will lead to a change in earnings per share by (-.01) dinars, and indicate the value of t calculated the value of the regression coefficient for this variable (-2.32) and the level of significance (15%) to the invalidity of the hypothesis that the proportion of leverage represented by (property / liabilities) right of statistical significance on the earnings per share effect

G.The fourth hypothesis test:

Table(2) shows that the value of the regression coefficient for the liquidity ratio of b (Current Ratio) (0.01) times and this means that the change is incremented by one unit in the proportion of trading of the company will lead to a change in earnings per share by (0.01) times, and indicate the value of t calculated the value of the regression coefficient for this variable (1.53) and the level of significance (28%) to the lack of a statistically significant effect of the ratio of trading on the earnings

H.The fifth hypothesis test

Table(2) shows that the value of the regression coefficient for the percentage of the activity of B (turnover of assets) (-0.81) times and this means that the change is incremented by one unit in assets turnover of the company rate will lead to a change in earnings per share by (-0.81) visits and indicate

the value of t calculated the value of the regression coefficient for this variable (-4.41) and the level of significance (5%) to have a statistically significant effect of the rate of turnover of assets on earnings per share.

I.The sixth hypothesis test

Table shows (2) that the value of the regression coefficient for the liquidity ratio of b (cash / total assets) (-0.04) visits, and this means that the change is incremented by one unit in the proportion of the company's liquidity will lead to a change in earnings per share by (-0.04) time, and indicates the value of t calculated the value of the regression coefficient for this variable (-0.82) and the level of significance (50%) to the lack of statistical significance of the liquidity ratio of b-impact (cash / total assets) on earnings per share .

It is clear from the above, in the table (2), if the ratio of profitability represented by (return on investment) and the proportion of activity represented by (the turnover of assets) are the key factors in the interpretation of earnings per share; the back of the return on investment relationship is positive and significant, while the afternoon the impact of turnover of assets negatively and morally. As was the effect of leverage ratio and liquidity ratio of b (cash / total assets) is negative and significant on earnings per share, while the impact of liquidity b ratio (proportion of trading) is a positive and significant on earnings per share.

It confirms these results test F statistical acceptance where the value (30.43) and the level of significance (3%), and this can give you the confidence and safety of the model as a whole, and that the value of determination R2 coefficient is very high, as it was (98.7%), and this shows that the independent variables whole can explain equivalent (98.7%) of the changes in earnings per share ie a very strong impact on the dependent variable, also emphasizes the value of Durbin Watson DW (1.346) (less than 2) weak form for the purposes of future prediction, as was the correlation R value of (99.3%) which is a very strong relationship between the dependent variables on the other hand.

In light of the above results, in general, see the acceptance of the hypothesis of the first search of

the ability of companies to continue and distancing itself from financial distress, also note the presence of a very strong and positive correlation between independent variables and other variable assumptions of (earnings per share). For each variable individually can say to accept hypotheses second, fifth and rejected other hypotheses.

V. Conclusions and Recommendations

A. Conclusions

Possible to say that the findings of the study support the reasonableness of the presence of the security of the financial failure of the investment companies listed on the Iraq Stock Exchange; therefore the study found through statistical analysis to the following conclusions:

- 1) proved Kida ability investment companies in Iraq Stock Exchange to continue the model, it was the value of Z is positive for all companies ranged from \$ 23.35 for the company good financial investment for the company and 0.54 Mesopotamia financial investments
- 2) the ratio of profitability represented by (return on investment) and the proportion of activity represented by (the turnover of assets) are the key factors in the interpretation of earnings per share; the back of the return on investment relationship is positive and significant, while the impact of turnover of assets negatively and morally.
- 3) the effect of leverage ratio and liquidity ratio of b (cash / total assets) is negative and significant on the earnings per share, while the impact of liquidity b ratio (proportion of trading) is a positive and significant on the earnings per share \(\frac{4}{3}\)) there is a very strong and positive correlation between the independent variable and dependent variables (earnings per share)
- 5) the possibility of giving confidence and safety for the model earnings per share, which was confirmed statistical acceptance by the test F

B.Recommendations

- 1) interest based on the companies analyzed the financial ratios of their importance in the development of important indicators on the status of companies.
- 2) The importance of sophisticated quantitative models as a scientific tool to measure the effective

tripping and predictable and work on the development of financial analysis through the quantitative analysis of the data so that the company's knowledge of the current situation and forecast the future .

3) the role of trade unions and government agencies to educate the companies based on the concept and the types of default and its impact on companies and trained on how to use financial ratios to predict the financial situation of the company.

References:

- 1) The annual report of the movement of trading in the Iraq Stock Exchange 2010, 2011.2012.
- 2) Auditors' reports and corporate boards 2010, 2011.2012.
- 3) Annual Bulletin of the Central Bank, 2010, 2011, 2012.
- 4) Aslamboli, Maram, "to use financial ratios to predict a stalled general food industry companies in Syria", Master Thesis, University of Damascus, 2003.
- 5) Aljahmani, Issa, "the use of financial ratios to predict a stalled banks, Empirical Study on the banking sector in Jordan", Journal of Public Administration, No. 4,2001.
- 6) Al-Zubaidi, Mahmoud Hamza, "bank credit analysis and credit management," Warraq for Publishing and Distribution, Amman, Jordan, 2002.
- 7) Hayali, WalidNaji; Alwan, Badr Mohammed, "Financial Accounting in the measurement,

- 4) the possibility of investors evaluate investment opportunities through the use of a stalled companies predict and identify investment unwanted and disposal model
- 5) the need to focus strictly financial statements of the company, and the issuance of financial statements that are periodic and regular and accurate

recognition and accounting disclosure, Warraq for Publishing and Distribution, Amman, Jordan ,2002. 8) Rain, Mohammed, "Recent trends in the financial

- 8) Rain, Mohammed, "Recent trends in the financial analysis of credit," Dar Wael for publication 0.2003.
- 9) Altman, E.I., "Financial Ratios Discriminant analysis and the prediction of corporate Bankruptcy", Journal of finance, 1968.
- 10) Argenti, John, " Corporate collapse the causes and symptoms", Hohnwiley and sons, New York, 1976.
- 11)Bian H. and Mazlack. L.," Fuzzy-Rough Nearest-reighbor classification approach", china, 2003.
- 12) Harrington, R.D., "corporate financial analysis, decisions in global environment", business one IRWIN, Fourth edition, 1993.
- 13) Ross, A.S. Westerfield W.R, and Jordan D.D, "Fundamentals of corporate finance", second edition,1993.

Appendix (1) averages study data model variable

No.	Company	Number of Shares	Cash	Current liabilities	Current assets(ID)
		(Million)	(ID)	(ID)	
1	Alameen for Financial Investment	750	152722977	160295013	840004348
2	Alkhair for financial investment	7000	5304584	283662119	7604924994
3	Alweaam for Financial Investment	1833.3	726951634	147088049	2184995003
4	Bain Alnahrain for Financial Investments	1000	588075478	10012723907	11025945469
5	Alaiam for for Financial Investment	1000	430828415	124270910	757990048
6	Alebattk for Financial Investments	400	36811478	34203184	451352728
7	Khaimah for Financial Investments	400	63479713	44313922	518728321
8	Zora for Financial Investment	1000	119424094	110720834	1347475202

International Journal of Engineering and Techniques - Volume 3 Issue 6, Nov - Dec 2017

Appendix (2) Results of the variables of the study variables

No.	Company	Net sales	The book value of total debt	Equity (ID)	Total Assets	Net profit after tax (ID)
		(ID)	(ID)	(11)	(ID)	
1	Alameen for Financial Investment	179499995	1602950130	160295013	840004348	71146686 -
2	Alkhair for financial investment	71582671	283662119	283662119	7690776884	119545349
3	Alweaam for Financial Investment	143389919	147088049	147088049	2194095128	68118123
4	Bain Alnahrain for Financial Investments	211293077	10012723907	10012723907	11026112211	100824023
5	Alaiam for for Financial Investment	65085981	124270910	124270910	1602767126	19397888
6	Alebattk for Financial Investments	30078562	34203184	34203184	433352728	7772154
7	Khaimah for Financial Investments	39404325	44313922	44313922	369361654	16646029
8	Zora for Financial Investment	131260050	110720834	110720834	1351253689	48665105

Appendix(3) descriptive statistics for the study sample

N	The	depend	Independent variables						
0	company	ent	independent variables						
	company	variable							
•		variable							
		Earning	Liquidity	(Activity	(Liquidity	(Levera	(Profita		
		s per	ratio)	ratio)	ratio)	ge)	bility		
		share	Cash /	Sales /	(Current	Equity/	ratio)		
		EPS	Total	Assets	Assets /	liability	Net		
		(%)	Assets		current	(%)	profit		
				(%)	liabilities		after		
			(%)		(Once)		tax/		
					(%)		total		
							assets		
							(%)		
1	Alameen	0.10-	0.18	0.02	5.24	4.24	0.09-		
	for								
	Financial Investmen								
_	t	0.02	2.22	0.04	25.04	26.44	0.02		
2	Alweaam for	0.02	0.00	0.01	26.81	26.11	0.02		
	Financial								
	Investmen t								
3	Bain	0.04	0.33	0.07	14.86	13.92	0.03		
	Alnahrain for								
	Financial								
	Investmen ts								
4	Alaiam for	0.10	0.05	0.02	1.10	0.00	0.02		
	for Financial								
	Investmen								
5	t Alebattk	0.02	0.27	0.04	6.01	8.31	0.01		
)	for	0.02	0.27	0.04	0.01	0.31	0.01		
	Financial								
	Investmen ts								
6	Khaimah	0.02	0.09	0.07	13.20	11.67	0.02		
	for Financial								
	Investmen								
7	ts Zora for	0.04	0.17	0.11	11.71	10.71	0.05		
	Financial	5.57	0.17	0.11	11.71	20.72	3.03		
	Investmen t								
8	Alameen	0.05	0.09	0.10	12.17	11.20	0.04		
	for Financial								
	Investmen								
	t								

State	depe	Indepe	ndent va	riables		
ment	ndent					
	variab					
	le					
	Earni	(Liqui	(Acti	(Liqu	(Leve	(Profita
	ngs	dity	vity	idity	rage)	bility
	per	ratio)	ratio)	ratio)	Equit	ratio)
	share	Cash /	Sales	Curr	у/	Net
	(%)	Total	/	ent asset	liabili	profit
		Assets	Asset	s/	ty	after
		(%)	s	curre nt	(%)	tax/
			(%)	liabili		total
				ties)assets
						(%
Avera	02.0	0.15	0.06	11.4	10.7	0.01
ge					7	
Mini				1.1	0.00	-0.09
mum	-0.10	0.00	0.01			
Maxi	0.10	0.33	0.11	26.8	26.1	0.05
mum	0.10	0.33	0.11	1	1	0.03
Stand				7.66		
ard	0.06	0.11	0.04		7.66	0.04
Devia	0.06	0.11	0.04		7.00	0.04
tion						
			l			1