ANALYSIS OF THE RELATION BETWEEN EARNINGS QUALITY AND FINANCIAL FAILURE FOR IRAQI INDUSTRIAL COMPANIES

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ABSTRACT

Profit quality usually affects the overall performance of companies. Although there is little empirical evidence on this issue, the literature indicates that the profit quality may lead to easier access to investors and creditors, which enhances the financial performance of companies. This paper tests whether the quality of profits will prevent companies from reaching the stage of failure, using a set of data from companies listed on the Iraq Stock Exchange. The research found that the quality of receivables, which is the amount of change in cash flows from operating activities, has a negative impact on the value of (Z), meaning that the value of (Z) decreases as a result of companies' weakness in achieving benefits from their operational activities. In addition, the continuity of profits hinders the financial success of companies leading to a decrease in the value of (Z) and that most companies in most periods suffer from failure to achieve profits or financial dues. There is no ability to predict the profits of companies, expected to cause a change in financial performance, and get rid of the low performance curve. The results confirmed that the researched Iraqi companies are either failing or on the way to failure, which needs a serious consideration to address the problems of the product provided by them, examining operational activities and working to improve cash flows that have a role in achieving financial success.

Keywords: Earnings Quality, Financial failure, Iraqi companies.

INTRODUCTION

All companies operating in a competitive risky environment face the risk of bankruptcy or financial failure, which has negative repercussions at the company and shareholder level (Liang & Pathak, 2019). (Odom & Sharda, 1990) mentioned that when companies do not achieve a financial return that commensurate with the size of their investments, exposed to failure or bankruptcy, which ultimately leads to the company's inability to continue its operations in the market. As the company's health in a highly competitive business environment depends on achieving profit and maintaining financial solvency, therefore when a company loses its ability to maintain profit and solvency, it becomes unhealthy and runs the risk of business failure leading to total extinction (Akintoye, 2008). It is necessary to achieve the quality of profits, but the quality of profits is not the only solution to ensure that companies do not fail, yet it is one of the important factors must be taken into consideration to avoid financial failure. Since business growth is reported to stakeholders through financial reports, the reliability of the reported numbers is of utmost importance, because investors require information in order to assess future cash flows to determine the level of growth during a specific time period (Mashayekhi & Bazaz, 2010). We could say that, the extent to which business organizations report their activities, especially with regard to financing, may be a factor that can influence business performance and growth (Akintoye et al, 2019). Misinformation may lead to wrong decisions. Therefore, identifying companies that have profit quality is very important. Because this fact plays a vital role in decision-making (Al-Shar & Dongfang, 2017).

Although the profit quality has been widely discussed, there is still no agreement on their recognition and measurement (Revsine et al., 2001, Penman and Zhang, 2002, Katsuo, 2008), which makes it a far-fetched concept. And with the importance of profit quality, there is no single measure or technique for assessing profit quality for companies, and it was suggested that several measures of profit quality be applied in order to assess whether profits are of high quality or not. That leads to relevant and reliable information for investors (Abdelkarim & Debi’e, 2015). Some researchers assume that auditors are the determinants of the quality of profits due to their role in the investigation of unintended or deliberate errors, and researchers expect that the auditor's ability to detect errors depend on the auditor's effort and effectiveness (Dechow et al, 2010). The purpose of this research is to measure the quality of profits for industrial companies listed on the Iraq Stock Exchange and the extent of their reflection on financial failure of companies using a sample of (10) companies for the period from (2010-2018).

The research aims to review literature on profit quality and financial failure, diagnose its determinants and establish a base for future empirical research in this field. The study indicated some areas of research that received relatively little attention. The results of this study are an alert to companies to monitor and address cases that could lead to financial failure. Moreover, the results of the study determine the need to improve the practice of standards that reflect the quality of profits in Iraqi companies. Our study distinguished from previous studies, as it examines the relationship between profit quality and financial failure, which is central to survival. This study expected to have several contributions. First, this study provides good coverage of recognized profit quality indicators by adopting different measures of profit quality. Second, measuring profit quality is important to regulators because analyzing financial data is a meaningful indicator for the country's economic efficiency. Third, time series analysis of the quality of profits plays an important role for management and shareholders, because the quality of profits reflects financial performance and thus serves as an alarm to avoid falling into failure. Therefore, the research begins with the introduction, and then Section 2 discusses reviewing the literature on the quality of profits and financial failure. Section 3 discusses the methodology used in the research. In section 4, we show experimental results. Finally, Section 5 Conclusions.

LITERATURE REVIEW AND HYPOTHESES BUILDING

Earnings Quality and Financial Failure

The concept of profit quality has received a lot of attention in recent years by accountants and users of financial statements. It is clearly an important concept, but there is no precise definition of the term. More precisely, there are many definitions, but there is no universally accepted definition (Holt, 2013). In a comprehensive literature review, it is very difficult to find a single definition of the concept of profit quality. According to the most common mechanism available or related to the concept of profit quality, it relates to the cash flow from operations as fixed profit quality. If the current profit is higher than the cash flow of operations, this means that the company is of low quality and has a low ability to make a profit (Lyimo 2014). Consequently, researchers believe that the weak correlation between profit and future stock returns attributed to the low quality of profits (El Moatasem, 2005). Although there is no clear definition of the quality of profits, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have developed a common framework for a number of qualitative characteristics of appropriateness, assured representation, comparison, verifiable, timing, and understanding.

Profits that do not reflect these characteristics are their quality and reliability in question (Hasnan et al, 2016).

The definition of earnings quality differs by researchers, and (Entwistle & Phillips 2003) suggests that the quality of profits should conform to the primary purpose of financial reports that provide convenience and reliability to users of financial statements. (Dechow, 1994) explains that profits are very important to a large and diverse group. It is a stakeholder that it provides information on the company's performance, as managers and investors use profits as one of the main guides for identifying and evaluating investment opportunities (Bushman & Smith 2003, Adegbie et al, 2019). It is the most comprehensive measure of the quality of financial reporting (Lev, 1989). Profit quality used to extract value-related information for contracting purposes by current and future investors (Schipper & Vincent, 2003). Dechow & Dichev (2002) suggest that profit quality is one of the most important procedures for assessing a company's future cash flows. Financial statements considered of high quality when the reported profits accurately reflect the main economic events and conditions, in addition to enabling data users to make better decisions. If the profits reflect the transparency of the company and provide users with useful financial information to assess the performance of the company, then, high quality profits can be achieved (An, 2017).

The quality of the profits included in the financial statements is the most important characteristic of improving the efficiency of the capital market, yet there is no agreed measure that determines the quality of profits, as the quality of profits is subject to several factors (Ewert & Wagenhofer, 2010). The high-quality profits provide more information about the company's financial performance features, as the lack of quality in the profits reflect negatively on the financial performance of the company (Hasnan et al, 2016). The financial reports must provide information about the company's financial performance over a period of time, as determined Profit quality More information about the financial performance features of a company that are conditional on the quality of the information. The quality of profits determined jointly by the financial performance suitability and the ability of the accounting system to measure performance (Dechow et al, 2010). (Dichev et al, 2013) focused on measuring the quality of earnings through the quality of receivables, profit continuity and profitability predictability.

Accruals Quality

Chan (2004) used receivables to measure profit quality and concluded that there was a negative relationship between receivables and dividends, justifying that investors associate high receivables with administrative manipulation. (Houge & Loughran, 2000) pointed out that investors focus on the current profits, ignoring the importance of continued cash flow in the long term, which reduces the quality of profits, as the quality of receivables and cash flow are two important elements in the interpretation of profits. There are many academic evidence that support the existence of administrative manipulation of profits (Fried, 1994, Teoh et al, 1998) that managers reduce profits by raising dues, i.e. the increase in accounts receivable and given that investors depend on the declared final income, they are thus deceived in this way (Chan et al, 2006).

Earnings Persistence

Corporate profit is one of the most important factors used to evaluate the company's performance as it helps to calculate the value of the company (Francis, 2004). Given the existence of basic constraints in accounting systems, it is very likely that the company's profit declared in the financial statements is incompatible with the company's profit and stability can be considered in Profits are high quality profit for the company (Al-Shar & Dongfang, 2017).

Richardson et al (2001) stated that the quality of profits is the continuation of profits, that is, the company's ability to perform next year. (Hodge, 2003) revealed that the difference between reported profits and unbiased and accurate actual profits determines the quality of the profits. (Mikhail et al, 2004) studied the profits and cash flows, in their definition of the quality of the profits, and they concluded that quality of the profits considered as high, when previous profits are reflected in the future cash flows.

Earnings Predictability

Earnings quality is a crucial indicator for companies that have negative surprises in profits and poor performance due to higher dues. Many stakeholders, including corporate managers, equity analysts and other participants in the capital market, focus on the financial statements announced, specifically net profits as the last and key information indicating profit or loss and predictability regarding the company's performance (Al-Shar & Dongfang, 2017). (Chan et al, 2004) went on and discussed how important the financial statements are in forecasting future stock returns. Profitability prediction is a related component, which is also a component of the current study. (Holt, 2013) indicates that the quality of the profits represents the ability of the profits to predict future profits and cash flows. (Knechel et al, 2007) explained that the quality of profits indicates the reasonableness of reported profits and is among the characteristics of the profits that are reproducible.

SAMPLE, VARIABLES AND METHODOLOGY

Sample

The sample covers a 10-year period from (2010-2018) and consists of data from Iraqi industrial companies listed on the Iraq Stock Exchange. They are independent from each other and their subsidiaries not been used in the analysis to avoid the uncertainty that distorts the results in financial activities. Therefore, to obtain a clear picture of these industrial companies, researchers need to use standardized data prepared within international standards. The data source is the official website of the Iraq Stock Exchange, which issues a comprehensive report on the activities of companies during the fiscal year and a consolidated report according to the requirements of international standards, transparency and approval by a legal authority that directly supervises their activities. A sample of (10) industrial companies were chosen from a total of (21) companies. The reason behind it is that some companies failed due to circumstances related to circumstances, such as war and economic crises arising from the ISIS terrorist operations. Therefore, not all companies completed data for the above time series. As a result, the 10 selected companies for research are those who actually functioned and provided complete data. Which means there are no missing data or observations? They were a total of (90) observations from (10) companies for a period of (9) years.

Methodology and Variables and Methodology

The Deductive Approach is the one that studies the nature of the relationship between two or more variables, based on basic steps, which begins with the development of a hypothesis. After discussing the concepts of the hypothesis, a process of collecting, measuring and analyzing data then begins. The reached results followed by drawing conclusions and recommendations. The deductive approach used in quantitative researches (Chit & Wang, 2014). The research shall depend on a deductive approach, by which we begin developing hypotheses, discussing each one, in both theoretical and practical sides, then collecting data from the Iraq Stock Exchange website, followed by measurement and analysis of data, then we shall be able reach results that prove or reject the study hypotheses and based on that, conclusions are drawn. The research variables consisted of two variables, namely the independent variable (Earning Quality) and the dependent variable (Companies Failure). The profit quality indicators consisted of three indicators, as follows:

The Independent Variable (Earning Quality)

Indicators of the independent variable are as follows:

a. Accruals Quality, measured according to the following formula:

$$\frac{TCA_{j,t}}{Assets_{j,t-1}} = b_0 + b_1 \frac{CFO_{j,t-1}}{Assets_{j,t-1}} + b_2 \frac{CFO_{j,t}}{Assets_{j,t-1}} + b_3 \frac{CFO_{j,t+1}}{Assets_{j,t-1}} + \varepsilon_{j,t}$$

Where (TCAj, t) are the total current accruals of a company (j) for a year (t), (Assets j, t-1) are the total assets of a company (j) for a year (t), and (CFOj, t) are cash flows from the operational activities of (j) for year (t), and (Ej, t) is the random error variable of (j) for year (t).

b. Earnings persistence calculated using the following equation:

$$\frac{Earn_{j,t}}{Assets_{j,t-1}} = \delta_0 + \delta_1 \frac{Earn_{j,t-1}}{Assets_{j,t-1}} + v_{j,t}$$

Where (Earn j,t) are the earnings of company (j) for year (t).

c. Earnings predictability calculated using the following equation:

$$Pred_{j,t} = \sqrt{\sigma^2(\hat{v}_{j,t})}$$

Where (Pred j,t) is the earnings predictability for company (j) for year (t), and $\sqrt{\sigma}(vj,t)$ is the square root of error variant of earnings predictability.

The Dependent Variable (Financial Failure)

This variable calculated depending on a study carried out by Altman in 1968 using the following equation:

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$$

Where Z = failure indicator by which a company's failure is predicted.

$$X_1 = \frac{Working\ Capital}{Total\ Assets}$$

$$X_2 = \frac{Retained\ Earnings}{Total\ Assets}$$

$$X_3 = \frac{Profit\ Before\ Interest\ And\ Tax}{Total\ Assets}$$

$$X_4 = \frac{Market\ Capitalization}{Book\ Value\ oF\ Debts}$$

$$X_5 = \frac{Revenue}{Total\ Assets}$$

Altman's model divides companies into three categories depending on the value of $\boldsymbol{Z}$ and as follows:

- If the value of $\boldsymbol{Z} > 2.7$, the company is considered successful.
- If the value of $\boldsymbol{Z} < 1.8$, the company is considered failing or bankrupt.

If the value of $\boldsymbol{Z}$ lies between 1.8 and 2.7, the company is considered lying in a grey area, meaning that it's difficult to specify the status of the company.

RESULTS AND DISCUSSION

Descriptive Statistics

Table (1) presents the descriptive statistics of the researched companies for the period from (2010-2018) which shows the arithmetic mean of accruals quality (-1.73) with a negative value, and it shows that companies do not enjoy the quality of the entitlements that are cash flows generated from operational activities and in best cases have reached (0.04). As for the continuity of profits, which reached (33.76), and this means that the quality of the profits will remain the same, which is a problem, as there is a continuity in failure. While the predictive ability of the profits is (53.55) which is a great value, indicating there is a predictive ability that the situation will continue in the future. Indicators of financial failure have reached different arithmetic means, and most of them were low. However, the market value of property rights to the book value of the debt was large, and this gave companies an opportunity not to go bankrupt, they often compensate for the lack of profits by issuing new shares. Thus, companies continue to operate despite the presence failure in most periods. The mean of the value of (z) was (3.38), which is a large value recorded by companies due to the value of (MC / BVD) that increased its value, not other indicators, which ranged between (1.92) and (3.83). Data examined using a normal distribution, based on the value of (Jarque-Bera). If all indicators show probability ratios greater than (0.05), this means that the data is distributed normally and this qualifies for the use of correlation and regression methods.

Table 1
DESCRIPTIVE STATISTICS OF EARNINGS QUALITY AND FINANCIAL FAILURE

Variables	Mean	Std. Dev.	Minimum	Maximum	Jarque-Bera	Probability
Accruals Quality	-1.73	6.85	-56.57	0.04	4.25	0.12
Earnings persistence	33.76	0.12	33.15	33.84	0.73	0.29
Earnings predictability	53.55	74.35	0.70	86.01	0.84	0.66
WC/A	0.61	0.40	-1.52	1.16	4.37	0.11
RE/A	0.47	0.50	-0.16	2.47	0.98	0.61
PBIT/A	0.84	3.23	-0.91	28.45	0.46	0.79
MC/BVD	6.14	3.23	0.18	9.91	0.84	0.66
R/A	0.41	0.38	0.02	2.86	2.01	0.37
Z	3.38	1.01	1.92	3.83	0.75	0.69

Pearson Correlation

The results of Table (2) show the correlation relationships between the three indicators of the quality of profits and the index of financial failure. The more quality of the benefits has an inverse correlation relationship, the more these dues will reduce the value of (z) and thus lead to financial failure. The weak dues from cash flows do not give the ability for industrial companies to face the financial challenges. In addition, the continuity of profits in the current reverse fashion between companies and financial failure will lead to poor financial performance, as there is a decrease in profits on a continuous basis, which represents a clear obstacle for either the managers of companies or their inability to achieve their goals. As for the predictive ability of profits, they are very weak, managers were unable to forecast profits and their relationship to financial failure, and that two indicators of quality profits are the quality of receivables and continued profits are acceptable within the limits of the moral level (0.01) and 0.05) of financial failure, while the predictive ability is rejected.

Table 2
PEARSON CORRELATION OF THREE EARNINGS QUALITY INDEX AND FINANCIAL FAILURE

	Z	Accruals Quality	Earnings persistence	Earnings predictability
Z	1			
Accruals Quality	-0.34*			
Earnings persistence	-0.58**	0.26*	1	
Earnings predictability	0.05	0.23*	-0.06	1

Correlation is significant at the 0.01 level (2-tailed) **
Correlation is significant at the 0.05 level (2-tailed)*

Empirical Results

According to the results of Table (3), it became clear that Accruals Quality has a negative impact that has reached (-0.285) on the value of (Z) and this means that the flows that are based on cash flows from operating operations in its current form still reduce the value of (Z). That will lead to an inevitable financial failure. In addition, Earnings persistence has a negative impact, as it has reached (-0.414) in financial failure. Meaning that, the profits of the current companies do not cover the financial companies' obligations and that the continuation of companies in this way will lead to their failure, and that the assumptions of the quality of benefits and the continuity of profits are acceptable because the level of morale is acceptable at the level of significance (0.01). It also does not rely on the Earnings predictability, and there is no relationship between it and financial failure, which is neither effective nor reliable.

The determination factor (R-squared), reached (0.95), which means that the quality of benefits, the continuity of profits, and the predictive ability of profits explained by financial failure (0.95). This indicates the ability of the explanatory model and the accuracy of the results reached by the research, as the results are consistent with previous studies that reflect that quality profits, are the company's actual financial performance, as improving performance is increasing profits and disclosing them without tampering or misleading, which is expressed in the quality of profits (Chandrarin, 2003). The quality of profits is the focus of attention of investors, creditors, accounting policy makers and governments, problems will arise when profits distorted because of the director's manipulation practices, in making the company in front of the challenges of the future reflected on their performance (Ardi & Murwaningsari, 2018). A study by (Li et al, 2014) conducted on Chinese companies listed on the Shanghai Stock Exchange indicated that companies that are bankrupt or financially troubled do not have quality in profits. The stock market price is a reflection of the value of the real assets of the company, affected strongly by investment opportunities, which makes the validity of the financial statements a crucial factor in providing investment opportunities and thus improving performance as a whole now and in the future (Keown, 2004).

Table 3
EMPIRICAL RESULTS OF IMPACT MEASURING EARNINGS QUALITY ON FINANCIAL FAILURE

Independent Variable	Dependent Variable	Coefficient	Std. Error	t-Statistic	Prob.	Decision
C		-0.234	0.0355	-0.6575	0.5124	Rejection
Accruals Quality	Z	-0.285	0.0690	-4.1274	0.0001	Acceptance
Earnings persistence	Z	-0.414	0.0099	-41.6969	0.0000	Acceptance
Earnings predictability	Z	0.014	0.0313	0.4327	0.6662	Rejection
R-squared	0.95					
F-statistic	0.662.42	Method: Pooled Least Squares				
Prob(F-statistic)	0.000	$Z = -234 - (0.285)AQ - (0.414)EP + (0.014)EAP$				

CONCLUSION

In this research, the relationship between Quality of Profits, which consisted of three indicators, The Quality of The Dues, The Continuity of Profits, and The Predictive Ability of Profits, and their relationship to the financial failure measured with a value of (Z). A total of (10) companies for the period of (2010-2018) listed on the Iraq Stock Exchange were examined. The research found that the quality of receivables, which is the amount of change in cash flows from operating activities, has a negative impact on the value of (Z), meaning that the value of (Z) decreases as a result of companies' weakness in achieving benefits from their operational activities. In addition, the continuity of profits hinders the financial success of companies in leading to a decrease in the value of (Z) and that most companies and most periods suffer from failure from achieving profits or financial dues. There is no ability to predict the profits of companies expected to cause a change in financial performance, and getting rid of the low performance curve. The results confirmed that the researched Iraqi companies are either failing or on the way to failure, which needs a serious consideration in addressing the problems of the product provided by it and examining operational activities and working to improve cash flows that have a role in achieving financial success. We were unable to compare the results of our study with a similar previous work due to the lack of any previous work according to our knowledge of these indicators to assess the quality of profits and their relationship to financial failure. Our colleagues in other countries are encouraged to repeat and expand our study in order to test whether our results are the same in each country or can be improved using additional variables. We believe that further research on these topics will greatly enhance our understanding of profit quality.

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