

Research Article

USE OF THE FINANCIAL STATEMENTS IN THE MANAGEMENT OF A COMPANY'S FINANCIAL CRISIS: A CASE STUDY FROM JORDAN

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ABSTRACT

Financial statements are important in order to understand the financial status of a business, and help to make the right decisions. The information provided in the financial statements is not enough for a meaningful conclusion. Thus, an analysis of the financial statements is required to help detect any possible risk or crisis and to help acting towards it at the right time. That's why we analyzed the financial statements of our cases RJ (Royal Jordanian Airlines), JPMC (Jordan Phosphate Mining Company), and BOJ Bank of Jordan. We chose these companies because they operate globally as it is the nature of the business and services it provides, which makes it easier to compare it with the industry or competitors. We found out that the use of financial ratios are a good financial tool and an indicator to detect a crisis, to know why it happened, when it happened, and in what stage of the crisis the company is.

Keywords: *Financial Crisis, Financial Statements, Ratio Analysis, Business, Crisis*

Araştırma Makalesi

BİR ŞİRKETİN FİNANSAL KRİZ YÖNETİMİNDE FİNANSAL TABLOLARIN KULLANIMI: ÜRDÜN'DEN BİR VAKA ÇALIŞMASI

ÖZET

Finansal tablolar, bir işletmenin mali durumunu elde etmek ve doğru kararları vermeye yardımcı olmak için önemlidir. Finansal tablolarda verilen bilgiler anlamlı bir sonuç için yeterli değildir. Bu nedenle, olası bir risk veya krizin tespit edilmesine ve doğru zamanda hareket etmesine yardımcı olmak için finansal tabloların analizi gereklidir. Bu yüzden RJ (Royal Jordanian Airlines), JPMC (Jordan Phosphate Mining Company), ve BOJ Bank of Jordan vakalarımızın mali tablolarını analiz ettik. Bu şirketleri, sundukları iş ve hizmetlerin doğası gereği küresel olarak faaliyet gösterdikleri için seçtik. Finansal oranların kullanımının bir krizi tespit etmek, neden olduğunu, ne zaman olduğunu ve krizin hangi aşamasında olduğunu bilmek için iyi bir gösterge olduğunu öğrendik.

Anahtar Kelimeler: *Finansal Kriz, Finansal Tablolar, Oran Analizi, İş, Kriz*

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1. INTRODUCTION

Businesses around the world are exposed to the risk regardless of the size of the company or type of work it does. A crisis may hit a company at any time and comes in many forms such as; strikes, equipment explosions, or government policies. To avoid these risks a manager should be aware of the analysis of the company's and to do so the manager should know the financial analysis tools. One of the best and powerful financial tools is the ratio analysis using the financial ratios. Analysis of the financial ratio described as the systematic use of ratios to analyze the financial statements to assess a firm's strength and drawbacks, as well as its past results and current financial position.

The significance of this study stemmed from the lack of expertise in the use of financial tools during a financial crisis, especially in Jordan, so there is a need to examine this area during the financial crises of a organization. The aim of the study is to measure how managers use the financial instruments particularly financial ratios to cope with a crisis, financial problem, or to predict a crisis. The sample used is a four year financial statement of three companies from different sectors in Jordan; which are Royal Jordanian Airlines (RJAL), Jordanian Phosphate Mining Company (JPMC), and Bank of Jordan (BOJ). The importance of these companies comes first from their strong and large contribution in the economy of Jordan; RJ as the Hashemite Kingdom of Jordan's national air carrier. For JPMC; it produces over seven million tons of phosphate a year, which ranks Jordan the sixth country in the world in terms of production levels and the second in terms of export. BOJ is one of the best banks in Jordan ranked in top 10 banks in Jordan. And second; operating internationally which makes easier to compare it to the industry or competitors as they follow the international law. It is also a good example of identifying a crisis by looking at their financial statements as they are publicly held and has its financial statements introduced to the public.

2. CONCEPTUAL FRAMEWORK

2.1. Financial Analysis

Financial analysis is the selection and explanation of the financial data to help investors and managers to make the right decisions regarding an investment or the situation of the business itself. The objectives of the financial analysis can be summarized to five points: Maintaining the financial security of the company, determining the degree of which the company profits, Predict and assess possible future business development, determining the willingness of the company to fulfill all short- and long-term loans, and Measurement of company organization management performance (NCERT, 2013). Featuring the Income Statement, Balance Sheet & Cash Flow Statement; Financial Analysis defined as the process of evaluating a company's financial situation by examining its reliability, viability and profitability.

The main steps of the financial statement analysis are as in **Figure 1**.



Figure 1. Financial Statement Analysis Process (steps).

Data from AAFM India is a standard-setting body set up by AAFM USA for Wealth Management (CWM), Equity Analysis, Financial Planning, Project Management, PMS, Real Estate. (n.d.). Retrieved March 2019, from <https://www.aafmindia.co.in/financial-statement-analysis-tools-limitation-uses-process>

1. Determine the purpose of the analysis in order to choose the proper technique (the approach, the methodology, the resource of data, and the format of the report) based on the objectives ("Financial Statements Analysis", 2018).
2. Collecting input data: In order to understand the market structure and financial status and performance of the firm, the collection of knowledge regarding the environment and industry where the company works is necessary to answer the questions of step 1.
3. Processing data: using the analytical tools (financial ratios, drawing up tables, compiling financial statements of a standard size or carrying out regression analysis) to analyze the data gathered in step 2.
4. Analysis and interpretation of data: assessing and interpreting the data of step 3 ("Financial Statements Analysis", 2018).
5. Developing and communicating conclusions and recommendations: The interpreted data and information has to be presented in a suitable form which answers the questions of step.
6. Follow-up: The analyst should perform daily reviews to determine whether the findings and advice are still correct. This will frequently entail a repetition of all the previous measures.

2.1.1. Financial Analysis Types and Tools

According to Anitha and Ravinder (2013) there are two types of financial analysis

1. Vertical analysis: is the Analysis of the relationships between the various components, including the analysis of these components and their total for a given period of time.
2. The horizontal analysis: helps periodic fluctuations of several components of the financial statements to be reviewed. It is defined as the analysis of changes in several Financial Statements components over different periods with the assistance of a series of Statements

The five important financial analysis tools are:

1. Comparative financial statement analysis (also known as horizontal analysis) The aim of this statement is to express the financial situation and the profitability of a firm for different periods of time through an extremely comparative form, the results of this statement could be presented as absolute numbers, changes in these numbers, in terms of percentages, or an increase or decrease in these percentages (Anitha & Ravinder, 2013).
2. Common size statement analysis (also known as vertical analysis) indicates the connection of various elements of the financial statement with a standard or base item and is indicated as a percentage of this item. Therefore, these percentages can be easily compared to previous years or another firm.
3. Trend analysis is a way to study the outcomes of the operations and the financial status over a number of years. The computation by taking a base year and its figures is shown as a value of 100, and the numbers of following years are expressed as a percentage of the numbers of base years.
4. Ratio analysis is a tool for interpreting financial statements by computing financial ratios, and then comparing these ratios with previous year's data for the same company or other companies, expressed as a proportion, a fraction, or percentage. The purpose of ratio analysis is to study past performances of the company to learn from it and to have a future plan or projecting the performance of the company; it also helps in evaluating the profitability, solvency and efficiency of the company.

Financial ratios will be categorized supported a distinct basis, consistent with Tracy (2012), and are divided into five categories:

- a. Profitability ratios: Provide information on the profitability of a company over a period of time.
- b. Liquidity ratios: define a firm's capabilities to meet its commitments over the short term.
- c. Leverage ratios: reveal the extent to which debt was used to fund acquisitions of the company's properties.
- d. Efficiency ratios: Describe how effectively the enterprise uses its resources to produce income from different asset categories.

e. Valuation ratios: are similar to liquidity ratios in that they reflect a company's willingness to offset any expenses. We should always take into consideration that placing high confidence within the rule of thumb isn't favorable, as a ratio may change from industry to another, or from a company to another based on (size, policy, service-type or manufacturing) (Parker, 2019).

f. Cash flow analysis is a valuable tool it refers to the analysis of the actual movement of cash into and out of an organization and gives the reasons why cash flow increased or decreased. It helps predict the course of the company, forecast liquidity and determine the capacity of the company to fulfill its debts (White, Sondhi, & Fried, 2012).

2.2. Financial Crisis

Organizations may be exposed to a vast assortment of emergencies. These emergencies can be triggered by human misjudgment, environmental hazards and internal unethical actions. A financial crisis is a situation that usually occurs because of an organization's financial or monetary status. It would involve problems with the short-term liquidity or cash flow. The financial crisis needs urgent measures to keep or increase cash flow. Necessary actions to comply with the financial crisis would include accelerated accounts payable if it means losing discounts, maintaining or increasing profit margins on sales if possible, or cutting expenses by eliminating non-essential expenses. Also, the disposal of non-essential or vital assets, staff reduction and relocation of non-essential critical activities (A. O.oparanma, 2014); The causes of financial crises can usually be divided into many categories (e.g., banking, currency, debt crises, and sudden stop episodes) and there are significant differences among them (Reinhart & Rogoff, 2011). Currency crises entail major exchange rate shifts and (related) inflation crises, which are reasonably easy to recognize. Sudden stops frequently occur in regions with comparatively limited tradable markets, as well as significant foreign exchange obligations. This is a condition where a nation cannot satisfy its international or domestic commitments, or both, whether sovereign or private. A banking crisis refers to a condition when a real or imminent bank runs or fails to cause banks to suspend the internal convertibility of their liabilities or where the government is compelled to interfere to avoid this by extending aid to a wide degree (Dabrowski, 2003).

Crisis management is the method of defining a problem plan as a solution to the crisis, addressing the problem and overcoming it (A. O.oparanma, 2014). Five guidelines for how to brace organizations for crises:

1. Defining challenges and risks.
2. Conducting a impact analysis.
3. Formulating a strategy and coordinating personnel.
4. Preparation and training.
5. Follow-up activities.

2.2.1. Financial crisis phases.

According to (Heller & Darling, 2012) a crisis can be of short or long term, with mild or significant effects on a single institution. Thus, a crisis may entail four distinct and independent stages or phases, but in certain situations these phases can be so closely linked that they converge together in close proximity. Those processes are as in **Figure 2**:

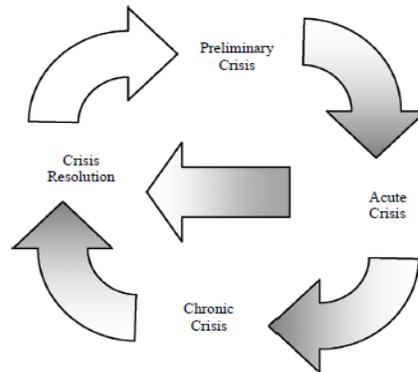


Figure 2: Phases of a Typical Crisis.

Heller, V. L., & Darling, J. R. (2012). Anatomy of crisis management: lessons from the infamous Toyota Case. *European Business Review*, 24(2), 156. DOI: 10.1108/09555341211204017

a. Preliminary (pre-) crisis stage.

The first phase and known as Prodromal. It is the stage of alert which can be incredibly brief or even instant. Crisis managers' role is a proactive role. In this level they attempt to define a forthcoming crisis (Boudreaux, 2005).

b. Acute crisis stage

Fink (1986) argues that in general a crisis start before the acute stage. In this stage The problem splits out of the prodrome phase and mature into an real crisis, it is the shortest and most intense stage. The success of the Preliminary stage is influenced by the intensity and damage of the crisis.

c. Chronic crisis stage

At this stage (Fearn-Banks, 1996) proposed that the company perform an analysis of the incidents, practices, and mass media reporting of the crisis to date, and try to take advantage of effective management initiatives and learn from the past. According to Fink (1986), this stage refers to the lasting effects of the crisis, this relates to the permanent impact of the crisis.

d. Crisis resolution stage

The Fink (1986) model's last stage is the Level of Resolution. This stage indicates a definitive conclusion of the crisis. Although institutions see this as the goal, it is not one

that can be pushed to. An institution's unrealistic assumption that the recurrent stage will be over may make them vulnerable to the crisis re-emergence.

Due diligence must be exercised in the intervening stages to ensure that such a regression does not occur. As crises are not standardized on a predictable plateau scale, it is always difficult to see when and where a crisis finishes and another starts in a period, or at what stage the business is facing multiple crises at the same time as seen in **Figure 3** (Fink, 1986).

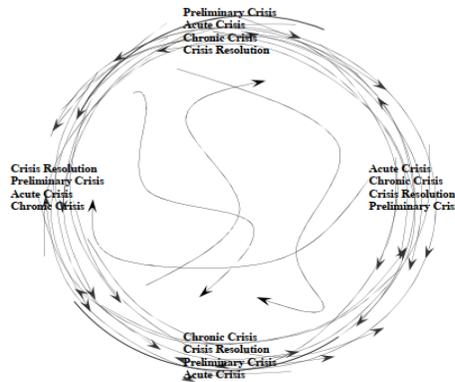


Figure 3: How Crisis Cycles May Appear.

Heller, V. L., & Darling, J. R. (2012). Anatomy of crisis management: lessons from the infamous Toyota Case. *European Business Review*, 24(2), 156. DOI: 10.1108/09555341211204017

2.3. Risk

Business is always exposed to risk, larger companies are exposed to more risks, and international companies are exposed to even more types of risks. One of the most important challenges that organizations are facing is the increasing diversity of risks that affects their operations and their ability to achieve their goals. Researchers identified various ways of interpreting the definition of risk. Gregoriou (2006) defined risk as a reduction in the overall profits of an organization, Molak (1997) defined it as the probability of part or more of the system collapse contributing to adverse outcomes. Chaman (2003) ensures it's an incident or situation that will impact the accomplishment of the performance objectives if it happened. Chapman and Cooper (1983) described Risk as "the probability of suffering economic and financial loss or physical and material harm arising from an uncertainty connected with the action taken".

Researchers also categorized risk in various ways, depending on the form of impact (Campbell, 2008) categorized risk: strategic risk, financial risk, operating risk, and threat-

hazard risk. Raee (2009) classified risk into two categories financial risk and non-financial risk. Regardless of classification variations, scholars agree that risk assessment lets organizations identify and assess risks, and let's formulate and execute preventive and remedial strategies.

Toma, & Alexa (2012) classified risk depending on their place of the region they are classified into two types: Internal risk such as (human factors, systems, technological, culture, capacity, procedures and processes, physical, etc.), and External risk such as (economic, natural, political, social, legal, regulatory, competition. In this study we will explain financial and non-financial risk, each one has different types as follows:

1. Non-financial risk includes Operational Risk, Strategic Risk, Compliance (Legal) Risk, and Natural (Environmental) Risk.

External defects result in operational risks. Any transactions or procedures may malfunction due to faulty planning or insufficiently trained personnel; they can also arise from unexpected external incidents such as collapse of transport networks or lack in supply of products by a retailer. Strategic risks are the consequences of failure to accomplish certain market targets, threats related to working in a specific sector; such as mergers and acquisitions; from consumers, or shifts in demand and business (Alexa & Toma, 2012). Compliance risks are those related to the obligation to abide by rules and regulations. Natural factors are the unexpected natural disasters that a businessperson has very little or no influence over, such as an earthquake, flood, drought, cyclone, fire, tornado, etc.

2. Financial risk includes Credit risk (default or counterparty risk), Market Risk, Capital Risk, and Liquidity Risk.

Credit risk is the risk of loss arising from the creditor's default, which is the inability to honor and fulfill its legal obligations or credit quality changes that reflect the price of financial assets (Das, 2006). Market risk is some kind of risk associated with certain risks levied on the reserves of banks based on adjustments and variations in market conditions such as international exchange rate, interest rate, stock price and so on. Liquidity risk is the risk of shortage of cash for redemption of debts (Jones, 2009). Capital risk is the likelihood of a shortage of resources available as the last financial fund and assets such as machinery, factories and liquid securities.

2.4. Background info

Jordan is an Arab country in western Asia, officially the Hashemite Kingdom of Jordan. Jordan is surrounded from the south and east by Saudi Arabia, northeast by Iraq, north by Syria and west by Palestine. Jordan is a fairly small country, almost landlocked with an area of 89,342 km² with a population of 10 million, making it the 11th most populated country in the Arab region. Amman is the capital, the most populous city in Jordan with approximately 40% of the population of the region.

It is also its economic, political, and cultural center, and responsible for almost 70% of the economic activity. Jordan is a constitutional monarchy; got independent from the UK in 1946. In 1999 King Abdulla II inherited the throne with an ambitious reform plan. Jordan represents one of the smallest economies with relatively few natural resources, and suffering from high rates of unemployment and poverty. It is funded by foreign loans, international aids, and remittances from expatriate workers. Jordan joined the WTO in 2000, at the same time it signed a free trade deal with the US.

Based on Jordan Data's (2019) report; Nearly 14.4% of the population live long-term (as of 2010) below the national poverty line. The World Bank, however, classified Jordan as a "top-middle-income" country. As of 2017; the GDP for Jordan is \$40.068 billion, and GDP per capita is \$9,172 by purchasing power parity (Jordan Data, 2019). King Abdullah's plan operated well by achieving a rise in the foreign investments, improving partnerships, and providing coming up with the foundation of free-trade zone in Aqaba and developing the information and communication technology (ICT) sector of Jordan, And setting five other special economic zones (Jordan: 2006 Article IV Consultation and Fourth Post-Program Monitoring Discussions, 2007). Nonetheless, Jordan's economy experienced hardship during the subsequent years, when it addressed the consequences of the Great Recession and the Arab Spring spillover (Sowell, 2016).

2.5. Cases

2.5.1. RJAL

A Royal Decree issued by His Majesty King Hussein, as the national air carrier of the Hashemite Kingdom of Jordan, established RJ (Royal Jordanian) on December 15, 1963. On 5 February 2001, the Royal Jordanian Airlines Corporation was registered as a public Jordanian shareholding firm. And in Dec 2007, after it privatized, it started listing its shares on the Amman Stock Exchange; Jordanians hold the majority ownership and thus the company retained its position as Jordan's national carrier. The Company's aims are to carrying out scheduled air transportation operations to and from the Kingdom and to carry out aircraft management that arrives in and take off from Kingdom airports. RJ has contributed to the national economy since its existence, contributing 3% to the country's GDP, taking in hard currency and playing a key role in drawing visitors from around the world (RJ annual reports 2014-2017).

In 2015 and 2017 RJ was facing a crisis, the response of the management towards the crisis RJ is facing started in 2015, started implementing (2015-2019) business plan that focused on maximizing revenues and reducing expenses without affecting the safety standards and the level of services. For example, suspending some destinations due to their poor feasibility or due to security reasons, increase its aircraft number; lower its fuel costs by implementing fuel reduction initiative, and to raise its capital by JD 200 million divided into two years.

2.5.2. JPMC

The Jordan Phosphate Mines Corporation was founded in 1949, and registered as a public company four years later in 1953. The company's goals are phosphate and fertilizer production. The company produces over seven million tons of phosphate a year, which in terms of output volumes makes Jordan the sixth country in the world and the second in terms of exports. By the year 2006 the organization was privatized as part of the country's economic restructuring policy plan to improve the national economy. The Jordanian Anti-Corruption Commission, which claimed it had an effect on its finances, sued the organization for bribe transactions between 2007 and 2013 (Alkhatib, Albzour, & Marji, 2015). JPMC currently operates three phosphate rock mines in Jordan and a downstream fertilizer and chemical plant in Aqaba, South Jordan, which produces phosphoric acid, diammonium phosphate ("DAP"), sulfuric acid and aluminum fluoride (Alnabhan, 2005). It is considered one of the world's largest phosphate countries with more than 60 percent of it having phosphate bearing reserves, the world's fourth-largest phosphate rock exporter and also the Jordanian economy's main income exporter. Phosphate can be contained in the land at various depths starting from zero to twenty meters below ground, making phosphate production in Jordan very cost-effective and quite profitable (Tarawneh, 2016). In 2014 JPMC invested in a project that became the region's largest phosphoric acid production project with collaboration with the Indian Farmers Fertilizers Cooperative (IFFCO), under the name Jordan-India Fertilizer Company (JIFCO). The latest plant uses around 1.8 million tons of low grade phosphate annually. Moreover, JPMC opened a project in Indonesia with Indonesian Petrokemia Grisk Company, and this project is estimated to consume annually about 800 thousand tons of low-grade phosphate. In 2015 JPMC also decided to distribute JD16.5 million in cash of its capital. Taking into consideration JPMC has not distributed cash dividends since 2012, but in 2015 the company increased its capital by 10 percent, issuing the bonus shares (Jordan Times, 2019). 2016 and 2017 were tough for JPMC, contributing to a drop in net revenue, largely attributed to a significant decrease in oil values relative to 2015, with phosphate prices dropping by 19% in 2016 and 26% in 2017, fertilizer prices dropping by 27% in 2016 and 26.1% and phosphoric acid prices falling by 28.4% in 2016 and 30% in 2017. Hence, such decreases in global markets led the merged business to a net loss of JD 90.1 million contrasted with a profit of JD 34.6 million in 2015. In accordance with the promises reached by both the BOD's and the Executive Management, the Board has brought out a strategy to address the problems faced by declining rates and to introduce a set of steps to manage expenditures. The impact was a gain in 2nd half of 2017 of JD 21 million, with predictions to increase in 2018. Reduced losses in 2017, reflecting a JD 46.6 million compared to JD 90 million in 2016 (a 50% reduction); following the fulfillment of the commitments provided to the General Assembly on 29 April 2017 by the BOD and the Executive Management in establishing a plan to rationalize spending, maximize the usage of human and material resources, track the efficiency of the joint ventures, and collect company debts.

2.5.3. BOJ

Bank of Jordan is the second biggest financial institution in the country. It was founded in 1960, and is centered in Amman. Bank of Jordan provides on-line payments and credit cards. It maintains over 100 branches of banks in Jordan and 12 branches in parts of the West Bank and Gaza Strip. The Bank has followed the commitment to economic growth and change across many of its financial and banking operations and facets since 1960. The bank has accompanied both domestically and globally the growing changes experienced by the Banking Industry for more than five decades.

3. METHODOLOGY

3.1. Data collection

To organize the analysis, a hybrid qualitative-quantitative approach is used. Mixed-method methodology works extremely well with case studies, since it requires the author to collect information from research papers and implement both quantitative or qualitative methods to the data (Kitchenham, 2009). Data used for the analysis of each company are secondary data that were collected from different resources. Regarding the financial data of the cases that was collected from the financial statement from 2014 to 2017 as these years were sensitive for two of the cases; they were in a financial distress. JPMC was facing a corruption case which affected it, both JPMC and RJ were privatized which naturally affected their financial performance. These companies were chosen as they are well-covered by the media due to their contribution in the Jordanian economy; which enables real and essential amount of material to be used. The figures are taken from 'www.readyratios.com' for comparison with the industry average; a database that provides the overall ratio for each sector globally. And data for competitors; they are taken from 'www.macrotrends.net;' a database that lists the ratios for foreign firms and gurufocus.com; which is a database that offers the financial details for enterprises around the world. As for the case details; were taken from each company's annual reports and from the website 'www.ase.com.jo' of the Amman Stock Exchange, it was also used to gather details for the competitors

3.2. Data analysis

The financial statements are reviewed and evaluated to evaluate a company's financial health and position. In terms of data processing; the five financial analyzes were rendered using Microsoft Excel, horizontal analysis, vertical analysis, trend analysis, cash flow analysis, and most important ratio analysis. As there are unlimited numbers of ratios and importance of ratios differs from industry to another, selected ratios were chosen based on their importance in the analysis of RJ in order to get a meaningful and helpful data. Ratio analysis was chosen as each type of ratios measure a different aspect of the company's performance, also the interpretation of the ratios is extremely important financial tool for each of the activities performed within the organization.

4. ANALYSIS & FINDINGS

This paper seeks to research three businesses and the financial crisis they are facing, to see how the management used financial factors to behave against this situation, and what the management does to get through the situation that the business is facing. Analyzing the financial statements of each company using the financial ratios we may determine the organization is in crisis, where the issues are, and the level the organization is coping with in crisis.

For the Profitability ratios, we chose the Profit Margin (GPM) as it is an important and a simple measure of how much profit is made from sales, namely the percentage of sales revenue that results in profit after deducting all the expenses. Secondly, we chose Return on Assets (ROA) as it is an important ratio for both the management and the shareholders as it gives the percentage of return the shareholder or the company gets on the assets of the company, ROA also can give a glance that the company is having a better performance or not through the changes in the ratio. For

Liquidity Ratios, we chose Quick ratio as it measures its willingness to meet obligations when they come due by taking the most liquid short-term assets. Since the Acid-Test Ratio is rigid than the current ratio you have greater flexibility to meet your short-term obligations if you have a positive outcomes, in comparison to an equivalent current ratio. And it is important since it demonstrates the willingness of the company to fulfill its short-term obligations, if a company can't meet its obligation then this means the company is in a bad financial condition that it may fail. If a company can't meet its obligation then this means the company is in a bad financial condition that it may fail.

In Leverage Ratios; Debt Ratio (DR) is the first ratio that Tests the amount of liabilities calculated as a proportion in comparison to income. It says the amount of the debt of a company but not in absolute terms, which makes it easier to compare it to different companies of different sizes.

Finally, Valuation Ratios; are the most important ratios for a shareholder and an investor as they give a fast glance at the financial condition of a company and help them to make decisions about which investment to use. The first ratio is Earnings per Share (EPS) it is considered a key performance indicator for management, the main factor of EPS is management effectiveness or lack of it, corporate financial strategy or general economic activity. Not only does it reflect the firm's bottom line, but its powerful impact on stock pricing often means that it is also the stockholders' 'bottom line.' Thus, EPS may be believed to be a direct consequence of the policy and execution of the management. The second ratio is the Payout Ratio gives the percentage of EPS that was used as a dividend per share. The policy revolves around the activity of the stockholders and how management generally sees the benefits (or lack of them) of handing back the cash to the owners of the business. This can be affected by the growth strategy of the business and management's perception of how investors will react to a given dividend policy. More ratios were used for a specific case, for example inventory turnover was used for JPMc as the other two cases don't have a real inventory.

The first case covers four-year-financial data of Royal Jordanian Airlines from 2014 to 2017; during this period RJ was facing a financial distress due to some external factors that led to financial losses as shown in **Figure 4**.

Royal Jordanian Airlines	Consolidated Income Statement (In Thousands of Dinars)			
	Dec-14	Dec-15	Dec-16	Dec-17
Profit (Loss) for the year before income tax	49,492.0	21,027.0	24,491.0	468.0
Income tax expenses	9,854.0	4,994.0	80.0	194.0
Profit (Loss) for the year	39,638.0	16,033.0	24,571.0	274.0
Attributes to:				
Equity holders of the parent	39,701.0	16,008.0	24,605.0	246.0
Non-controlling interests	63.0	25.0	34.0	28.0
Profit (Loss) for the year	39,638.0	16,033.0	24,571.0	274.0
Basic and diluted earnings earnings per share attributable to equity holders	0.47	0.35	0.17	0.0017

Figure 4: RJAL Profit and Loss

In Table 1 the value of each choice ratio is compared to the industry average, except for the EPS ratio it was compared to a competitor of the same size and industry. The values for RJ’s EPS have been converted into terms of dollars to make the comparison more accurate.

Table 1. Comparing Ratio Analysis of RJ to Industry Averages

Ratios	Ratio Analysis				Industry Average			
	2014	2015	2016	2017	2014	2015	2016	2017
1. Profitability Ratios								
Gross Profit Margin	5.6%	15.0%	11.8%	12.7%	64.3%	77.9%	76.9%	73.1%
Return on assets	-10.6%	3.6%	-4.3%	0.1%	64.3%	77.9%	76.9%	73.1%
Return on equity	248.1%	32.3%	-32.9%	0.3%	16.1%	34.1%	29.4%	29.4%
2. Liquidity Ratios								
Quick Ratio	0.37	0.29	0.81	0.62	0.71	0.56	0.66	0.67
3. Leverage Ratios								
Debt Ratio %	1.04	0.89	0.87	0.82	0.79	0.76	0.72	0.67
4. Valuation Ratios								
Earnings per Share (EPS)	\$ (0.33)	\$ 0.24	\$ (0.12)	\$ 0.00	\$ 0.92	\$ 2.89	\$ 2.99	\$ 4.03
Payout Ratio	0	0	0	0	0.38	0.08	0.12	0.11

From the profitability ratios we understand that the company is having losses for two years (2014 and 2016), for instance, ROA was 11% and 4% respectively, and ROE was 248% (This large number is caused by the negative total shareholders’ equity as a result of the accumulated losses from 2013) and -22% respectively. But those losses were due to high costs for 2014 and a high fall in sales for 2016. In 2015 and 2017 it is clear that management is working to control the costs by lowering them as much as possible, also the management tried to increase its sales in 2017 which they managed to achieve.

The liquidity ratios show that RJ is having a problem in managing its obligations and liability payments when they come due by its assets. When it comes to meeting its short-term-due-in-few-days obligations, for instance, the quick ratio for 2014 and 2015 was 0.37 and 0.29 respectively, but the ratio increased for 2016 (0.87) and 2017 (0.82) which shows that the management was able to control its liabilities better than the previous years. RJ would have a problem especially in 2014 and 2015; in this case selling its current assets RJ won't be able to pay all its short-term liabilities.

For the leverage ratios, RJ has liabilities high that in some years it cannot cover it from the assets; which means that in case of a default or bankruptcy owners and shareholders will not get anything from the company as they have to pay their debts and obligations. This also means that most of RJ assets are financed by debt, for 2014 and 2015 debt ratio was 1.04 and 0.89 respectively, but after 2015 the percentage is lower 0.87 in 2016 and 0.82 in 2017; which means that 82% of the assets are financed by debt which is better than in 2014.

Valuation ratios generally show the relationship between the market value of a company (equity) and its earnings. Analyzing RJ's ratios showed that its equity's value is too low due to the losses they faced in 2014 and 2016 which resulted in negative EPS (\$-0.33 and \$-0.12), and low profits for 2015 and 2017 (\$0.24 and \$0.001). Also not issuing any dividends for long periods is bad for the company as it won't attract any new investors, and a continuous 0% dividend yield is an alarm sign that a business faces detrimental economic or financial difficulties as is the case for RJ.

The second case covers four-year-financial data of Jordan Phosphate Mining Company from 2014 to 2017; during this period JPMC was facing a financial distress due to some external factors that led to financial losses as shown in **Figure 5**.

Jordan Phosphate Mines Co JPMC	Consolidated Income Statement			
	(In Thousands of Dinars)			
	Dec-14	Dec-15	Dec-16	Dec-17
Profit (Loss) before income tax	20,623.0	48,394.0	84,883.0	44,444.0
Income tax benefit (expense)	312.0	13,748.0	5,257.0	2,209.0
Profit (Loss) for the year	20,935.0	34,646.0	90,140.0	46,653.0
Attributes to:				
Equity holders	19,775.0	33,764.0	88,821.0	47,532.0
Non-controlling interests	1,160.0	882.0	1,319.0	879.0
Profit (Loss) for the year	20,935.0	34,646.0	90,140.0	46,653.0

Figure 5: JPMC Profit and Loss

Table 2. Comparing Ratio Analysis of JPMC to Industry Averages

Ratios	Ratio Analysis				Industry Average			
	2014	2015	2016	2017	2014	2015	2016	2017
1. Profitability Ratios								
Gross Profit Margin	23.8%	24.7%	14.1%	15.4%	37.9%	35.5%	29.4%	34.1%
Return on assets	1.7%	3.0%	-7.9%	-4.3%	3.6%	3.5%	2.9%	2.5%
Return on equity	3%	4%	-12%	-7%	6%	6%	-1%	2%
2. Liquidity Ratios								
Quick Ratio	0.37	0.29	0.81	0.62	0.71	0.56	0.66	0.67
3. Leverage Ratios								
Debt Ratio %	0.35	0.30	0.36	0.37	0.72	0.82	0.74	0.54
4. Efficiency Ratios								
Inventory TO	2.15	2.45	2.75	2.61	4.1	4.6	4.6	4.2
5. Valuation Ratios								
Earnings per Share (EPS)	\$ 0.19	\$ 0.32	\$ (0.76)	\$ (0.41)	\$ 2.68	\$ 2.78	\$ 0.85	\$ (0.31)
Payout Ratio	0	0.31	0	0	1.40	0.70	0.18	0.33

The profitability ratios for JPMC show that the company is having a financial distress in the years 2016 and 2017 with a GPM of 23.8% and 24.7% for 2014 and 2015, and in 2016 and 2017 PM ratio decreased to 14.1% and 15.4% respectively. Also ROA (-7.9%, -4.3%) and ROE (-12% and -7%) shows negative values in 2016 and 2017, while in 2014 and 2015 had good values close to the competitor's values as shown in **table 2**.

Regarding the liquidity ratios, JPMC is safe when it comes to its current liabilities size, as when short-term obligations come due JPMC can meet them by selling its current assets. However, showed in the quick ratio (0.42, 0.61, 0.45, and 0.48) respectively; for the short-term-due-in-days liabilities there is probably some risk in meeting those obligations from its most-liquid assets as they are too low.

The leverage ratios show that between 30%-35% of JPMC's assets, and 44%-59 of the equity is financed by debts, which means that the company is working properly in means of managing its assets and equities without the strong need of liabilities and this is a good sign that the company can recover.

Efficiency ratios assess the ability of the business to leverage its cash, and in the short run successfully control its liabilities. For JPMC an inventory turnover that fell between 2.2 and 2.8 shows that the company is selling its inventory fast; this may indicate that the company is having weak sales, (which is true in this case). Another warning is Days' Sales in Receivables Ratio which indicates that JPMC needs extra days to collect its accounts receivables; and this could increase its risk.

And finally the valuation ratios; show the relationship between the market value of a company (equity) and its earnings. In JPMC case, the EPS is low in 2014 and 2015 (\$0.19 and \$0.32) respectively, and negative for the other years (\$-0.76 and \$-0.41), this indicates to the weakness of JPMC in 2016 and 2017 which may lead to losing their market value. The P/E ratio in 2014 (34.93) and 2015 (17.14) indicates that the value of the share is high with high price share, which can attract new investors. But for 2016 and 2017 this is inapplicable due to the negative values of EPS.

The third case covers four-year-financial data of Bank of Jordan from 2014 to 2017; BOJ unlike the previous two cases wasn't facing a financial distress but there are some red flags that indicate to a risk coming later.

Bank of Jordan	Consolidated Income Statement			
	JD			
Profit (Loss) before income tax	59,999,897	61,966,178	62,315,408	67,583,363
Less: Income tax expense	(15,175,308)	(21,903,385)	(20,113,384)	(21,973,902)
Profit for the year	44,824,589	40,062,793	42,202,024	45,609,461
Attributes to:				
Banks's shareholders	47,127,403	40,835,470	41,396,285	46,795,537
Non-controllers' interests	(2,302,814)	(772,677)	805,739	(1,186,076)
Profit (Loss) for the year	44,824,589	40,062,793	42,202,024	45,609,461

Figure 6: BOJ Profit and Loss

Table 3. Comparing Ratio Analysis of BOJ to Industry Averages

Ratios	Ratio Analysis				Industry Average			
	2014	2015	2016	2017	2014	2015	2016	2017
1. Profitability Ratios								
Gross Profit Margin	75.5%	81.4%	84.4%	79.3%	96.8%	96.1%	95.7%	96.9%
Return on assets	2.2%	1.9%	1.9%	1.9%	0.9%	0.9%	0.9%	0.9%
Return on equity	14.4%	11.7%	10.8%	11.2%	8.6%	8.3%	8.2%	7.7%
2. Liquidity Ratios								
Quick Ratio	0.35	0.35	0.52	0.23	7.23	2.21	3.21	10.24
3. Leverage Ratios								
Debt Ratio %	0.84	0.83	0.82	0.83	0.89	0.89	0.89	0.89
4. Valuation Ratios								
Earnings per Share (EPS)	\$ 0.21	\$ 0.19	\$ 0.15	\$ 0.17	\$ 0.38	\$ 0.24	\$ 0.33	\$ 0.30
Dividend Yield	\$ 0.08	\$ 0.08	\$ 0.06	\$ 0.06	\$ 1.69	\$ 3.88	\$ 4.86	\$ 7.14
Payout Ratio	0.93	1.07	1.23	1.09	0.37	0.36	0.33	0.41

For BOJ the profitability ratios show that the company is in a good position financially; it has high and increasing profits after a slight fall of revenues in 2015 and 2016; Figure 6 shows the changes. And from this analysis it is clear that although the revenue has decreased they were able to manage the expenses in these years. As shown in Table 3 ROA (2.21% in 2014, 1.86% stable for the rest), and ROE (14.4%, 11.7%, 10.8%, and 11.2% respectively) values also are very good reassuring the financial health of BOJ. For the liquidity ratios BOJ is in a very good position where it can meet and can manage its obligations easily from its current assets, as its Quick ratio for the years was 0.55, 0.34, 0.52, 0.22 respectively. But for the short-term-due-in-days obligations its ability decreases, with the highest value of 0.52 in 2016 and lowest of 0.22 in 2017; this means that it is harder for the company to meet its shorter-term obligations.

BOJ's leverage ratios show that an average of 83% of the assets is financed by liabilities, and those values of debt to equity ratio (5.44, 5.01, 4.67, and 4.84) respectively are good compared to the industry. For valuation ratios that show the relationship between the

market value of a company (its equity) and its earnings, BOJ have good market value, an EPS of (0.21, 0.19, 0.15, 0.17) respectively, and paying dividends for the whole period (0.08 in 2014 and 2015, 0.06 in 2016 and 2017). These values define the company as strong and trustable for the investors. P/E ratio indicates increased demand in 2016 (increase from 12.33 to 19.65) which may mean that because anticipate earnings growth in the future.

5. CONCLUSION

Case 1: RJ

RJ was facing ups and downs in losses for more than a decade; which led to accusations of corruption in the company as it is the main airlines for Jordan. These losses continued due to several reasons mentioned before such as; suspending flight to some countries caused by the political situations in these countries, or due to the lack of demand and high cost for some destinations. In response to the financial crisis RJ is facing the management made a four-year-plan that mainly focused on maximizing revenues, cutting costs, and enhancing the quality of the services provided by RJ. For example, suspending some destinations due to their poor feasibility or due to security reasons, increase its aircraft number; lower its fuel costs by implementing fuel reduction initiative, and to raise its capital by JD 200 million divided into two years. The results of this plan are shown in the figure of 2015 and 2017 as it is clear that the management had started to react towards the crisis.

After analyzing RJ's financial statements we can understand that the company is in the third stage (phase) of the crisis; chronic crisis stage, which in this phase the company already realized the crisis, evaluated the risk, and now is responding to it according to their analysis of the risks and the crisis. RJ management should follow a direction in order to get through this hardship, first; is by increasing their sales by some campaigns that attracts new customers and encouraging people to try new destinations with RJ, second by having more control over its liabilities and trying to reduce them as much as possible as they are a huge part of the problem during the decreases in sales.

Case 2: JPMC

In 2014 and 2015 JPMC was normally active with good profits, but in 2016 a sharp decline in the international sharp fall in the prices of its products of phosphate (19%), fertilizers (27%), and phosphoric acid (28.4%); which affected its sales and therefore its revenues decreased which led to the losses that continued in 2017, but the management had some actions fast by first realizing the risk caused by the fall in the prices, second evaluated the risk and finally put a plan in order to face this crisis, mainly by controlling expenditures which showed good results for 2017 by decreasing the losses and saving JD 21 million during the second half of 2017.

After analyzing JPMC's financial statements and ratios we understand that the management in 2016 realized the risk, evaluated it, and made a plan to act towards it in

order to reduce the losses to the minimum. It shows that the company is in the third phase of the crisis; chronic crisis stage. Which means that in this stage management is responding to the crisis with the proper actions they got after analyzing the problem. For better results, the company should first start with increasing its market share and widen to new markets around the world in order to compensate the losses caused by the fall in prices. Secondly, the company should try to reduce its expenses as much as possible for the coming years in order to decrease its losses.

Case 3: BOJ

The third case which is BoJ is not in crisis, like the previous cases, but there are some figures in 2017 that may be red flags to a risk coming later, such as, profit margin and P/E ratio for the coming years as in 2017 there was slight fall compared to 2016, mainly due to the new tax laws. Assuming that BoJ may be in the first stage; that is preliminary crisis stage, which means that the company getting some warnings or red flags that indicate a possible crisis regardless of its size, In this phase management should be aware of any changes in general and in laws in particular as stages of a crisis could change fast that the management won't have the time to realize it and will have to act towards it with the right actions.

As mentioned in case of RJ; the company should start reaching new markets and customers in order to improve and increase its sales. Jawabreh, Allahham, Alrjoub, and Ahmad (2012) assured that a company must develop newer methods of handling their client relationships to maximize consumer satisfaction and sales using information technologies (IT). This also is applicable on the other case as for JPMC using new technologies may cut the costs in order to reduce the losses caused by the rises in the international prices; which is a main problem for the company. In light of the lack of case studies about companies in Jordan in general, and their financial condition in specific; recommendation for further studies showing the effect of the 2008-2009 global crisis on these companies, and whether the current situation of the cases with financial distress is a side effect from the global financial crisis. Another recommendation is to widen the range of the study to understand and find the pre-crisis stage for RJ and JPMC.

6. SUGGESTIONS

- To management

Managers should have a frequent assessment of risks or unusual events, this step may help detect a future risk that may lead to crisis. The importance of ratios differs from industry to other, and sometimes some ratios don't give an exact evaluation of the case, therefore, choosing the right ratios is an important step in the analysis.

- Further research

The lack of case studies in Jordan was one of the limitations in this study; a recommendation is to do a case study of the effect of the global financial crisis (2007-2009) on one of the companies or any other Jordanian company.

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