

**T.C.
ISTANBUL COMMERCE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCE
MASTER OF BUSINESS ADMINISTRATION
PROGRAMM**

**THE ROLE OF FINANCIAL STATEMENTS FOR
COMPANIES IN THE FINANCIAL CRISES: A CASE
STUDY FROM JORDAN**

MA Thesis

**Shorouq M. Barakat
200008000**

Istanbul, 2020



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ÜNİVERSİTESİ**

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GRADUATE SCHOOL OF Social Sciences

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ABSTRACT

The purpose of the research is to test how managers use the financial instruments in reviewing the financial statements to face or to predict a crisis. It focuses on the important role of financial ratios as one of the most used tools to analyze a company to examine its financial health which is used by both management and investors. Studying three publicly held companies from different sectors in Jordan; Royal Jordanian Airline, Jordan Phosphate Mining Company, and Bank of Jordan. A hybrid qualitative-quantitative approach is used to for this analysis as it works well for case studies, and secondary data was used and collected from the annual reports of each of the companies. Separated analyses were made for each company; horizontal analysis, vertical analysis, ratio analysis, and trend analysis, which resulted in financial distress with RJ and JPMC caused by both internal and external factors; BOJ had a good result that reflects its financial health.

Keywords: Financial Crisis, Financial Tools, Management, Ratio analysis.

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LIST OF ABBREVIATIONS

Abbreviation	Explanation
A/R TO	Accounts Receivable Turnover
A/R	Accounts Receivable
AAFM	American Academy Of Finance Management
ACH	Automated Clearing House
ATM	Automated Teller Machine
BOJ	Bank of Jordan
Bps	Basic Points
CEO	Chief Executive Officer
CI:	Corruption Index
CPI	Consumer Price Index
CR	Cash Ratio
D/E	Debt to Equity Ratio
DR	Debt Ratio
EBIT	Earnings before Interest and Tax
EP	Environment Protection
EPI	Environment Protection Index
EPS	Earnings per Share
EV	Electric Vehicle
FDI	Foreign Direct Investment
FICO	Fair Isaac Cooperation
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GPM	Gross Profit Margin.
IATA	International Air Transport Association
ICBS	International Comprehensive Banking System
ICT	Information and Communication Technology
IFFCO	Indian Farmers Fertilizers Cooperative
IMF	International Monetary Fund
IP	Intellectual Property
IPR	Intellectual Property Rights
IT	Information Technology
JD-JOD	Jordanian Dinar
JIFCO	Jordan Farmers Fertilizers Cooperative
JPMC	Jordan Phosphate Mining Company
LRV	Line Replaceable Units
MENA	Middle East and North Africa
MOPIC	Ministry of Planning and International Cooperation
NCER	National Council Of Educational Research And Training
NWC	Net Working Capital
OTP	One-Time Password
P/E	Price Earnings Ratio
PCI-DSS	Payment Card Industry-Data Security Standards
PM	Profit Margin.
PWC	Price-waterhouse Coopers

QR	Quick Ratio
RIT	The Local Organization For Integrity And Transparency
RJ	Royal Jordanian
RJAI	Royal Jordanian Airlines
ROA	Return on Assets
ROE	Return on Equity
SDR	Special Drawing Rights
SME	Small & Medium-sized Enterprises
TO	Turnover
UNRWA	United Nations Relief & Work Agenda



INTRODUCTION

Business, anywhere within the world despite its age, size, or industry, is consistently exposed to the various risks which will and might harm the corporation, if not detected and managed on time. A manager should know the financial tools that help detect these risks. In step with Reinhart and Rogoff (2008, 2009) In order to reduce the future risks of economic crises and strengthen the world financial set-up; it is crucial to understand what's mutual in economic crises. A crisis doesn't distinguish an organization's size or notoriety; it can hit any company at any time when a company least expects it. Strikes, layoffs, an allegation of misconduct, product recalls, and threats from employees, equipment explosions, and government policies are examples of what are the forms of a crisis. According to Sullivan (2003), Crisis management involves identifying crisis planning, response, confronting, and determination.

For this research ratio analysis is employed to investigate the chosen companies, ratio analysis is defined as the process of determining and interpreting relationships between the items of financial statements, to provide a meaningful understanding of the performance and financial position of an enterprise (Ratio Analysis Formulas, Objectives, Limitation and Advantages 2019).

The importance of this research came from the dearth of lack that specializes in the financial tools uses during a financial crisis especially in Jordan, so there's a desire to review this field during a company's financial crises. The goal of the research is to test how managers use the financial tools particularly financial ratios to face a crisis , financial difficulty, or to detect a crisis. The sample used is a four-year financial statement of three companies from different industries in Jordan: which are Royal Jordanian Airlines (RJAL), Jordanian Phosphate Mining Company (JPMC), and Bank of Jordan (BOJ).

In chapter one; we will discuss and explain more about the financial analysis with its tools and types; financial statements analysis; risk, and financial crisis. Later an introduction was given about the cases that were used in the study. In chapter two the method of the study and data collection were explained. In chapter three the analysis of

the cases of the study is introduced and the results of the analysis were explained. And at last, in chapter four a conclusion about the study overall was explained.



1. LITERATURE REVIEW

1.1. Financial Statements Analysis

(Tracy, 2012) Consisting of the Income Statement, Balance Sheet & Cash Flow Statement; Financial Analysis defined as the process of assessing the financial position of a company by analyzing its stability, viability, and profitability (Laitinen, 2002). The term 'financial analysis' is divided into 'Analysis and Interpretation' which they are always related and each of them is useless without the other. Analysis means the simplification of financial data, and interpretation means explaining the meaning and significance of these data (NCERT, 2013).

Therefore, (NCERT, 2013) Summarized the objectives of financial Analysis as follows:

- Finding the financial stability of the business enterprise.
- Evaluating the earning extent of the business.
- Estimating the fixed assets, stock, etc. to be dealt with.
- Estimating and determining future growth of the business possibilities.
- Assessing the firm's ability to meet short-term and long-term loans.
- Evaluating the administrative efficiency of the business enterprise.

Metcalf & Titard (1976) defined financial statement analysis as “a process of evaluating the relationship between component parts of a financial statement to obtain a better understanding of a firm's position and performance.”

Taking into consideration that not only the person performing the analysis and interpretations has a purpose or point of view, but so do others such as management; investors, lenders, and creditors; employees and labor unions (Mashkour, 2020).

Financial statements analysis steps.

The main steps of the financial statement analysis 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 as they are to be selected on the basis of objectives ("Financial Statements Analysis ", 2018). Decisions regarding the approach, the methodology, the resource of data, and the format of the report that is created are directed in this step (Simon, 2020).

2. Collecting input data: Acquiring information concerning the economy and industry within the company operates is needed to understand the business nature and the financial position and the performance of the company, and also to answer the questions of step 1 (Simon, 2020).

3. Processing data: computing financial ratios, creating charts, preparing common-size financial statements, or performing regression analysis (statistical analysis) are the analytical tools used to analyze the data gathered in step 2 (Simon, 2020).

4. Analyzing and interpreting the data: assessing and interpreting the data that was processed in step 3 and using it to support a conclusion or recommendation ("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 1 (Simon, 2020).

6. Follow-up: Regular evaluations should be conducted by the analyst to assess if the conclusions and recommendations still accurate. This will involve a repeat of all the previous steps regularly (Simon, 2020).

1.2. Financial Analysis Tools and Techniques

It is possible to group financial analysis indicators supported company objectives, the achievement of which they assist to live (March and Cyert, 1963). Financial analysis indicators can specialize in the past, present, or future development. Probably the best-known classification of economic analysis tools is predicated on financial analysis methods. It distinguishes between instruments associated with fundamental financial analysis or technical analysis, instruments belonging to the group of lower-level financial analysis methods and instruments from the group of higher-level financial analysis methods (Kovanic and Kovačičová, 1999).

1.2.1. Types of financial analysis.

According to (Anitha and Ravinder, 2013) there are two sorts of analysis are to translate the position of an enterprise.

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. Therefore, a vertical analysis will be done in the following ways:

- a Preparation of common-size statements of the 2 similar units
- b Preparing a standard size statement of various years of a similar business unit

2. The horizontal analysis such an 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.

1.2.2. Tools of financial analysis.

As follows:

- Comparative Financial Statement
- Common Size Statement
- Trend Analysis- Cross-sectional
- Ratio Analysis
- Cash Flow Analysis

a. Comparative statement analysis.

The aim of the statement is to express the financial position 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).

b. Common size statement analysis.

A Statement that shows the relation with a regular or base item of different elements of the financial statements which is stated as a percentage and then compares these figures with the chances of the previous year or another business.

c. Trend analysis.

The analysis is done in order to focus on the amounts changes in the selected data over time using preceding data of a commercial enterprise. Trend analysis studies the operational results and the financial positions over a period of time (years).

d. Ratio analysis.

(Livingstone and Kerrigan, 1977) defined ratio as the relation of two amounts (X and Y), expressed as of X to Y, $X: Y$, as a fraction, a number, or as a percentage. It is describes the relationship between different items of the financial statements of a company. The main purpose of ratio analysis is to live past performance and to forecast future trends

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

1. Profitability ratios: Provide information on the profitability of a company over a period of time.
2. Liquidity ratios: describe the ability of a firm to fulfill its short-term obligations.
3. Leverage ratios: reveal the extent to which debt was used to fund acquisitions of the company's properties.
4. Efficiency ratios: describe how well the company uses its investment to generate revenue from various types of assets.
5. Valuation ratios: are similar to liquidity ratios in that they describe the ability of a firm to pay certain 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).

Part 1: Profitability Ratios.

1. Profit Margin (PM)

Formula: Profit Margin = Net Income/Sales Revenue

It shows the percentage of profit generated from the sales, of sales revenue in particular. When comparing the Profit Margin frequently and it is increasing generally it is a good sign regardless of the reason, arithmetically it has two reasons; 1) Expenses have fallen compared to Sales, which is a good indicator and it means that the management cares about Cost Control and generates Sales at a lower cost. Or Sales Revenue is increasing at a rate faster than Expenses (Cost Control by management or Economies of Scale). 2) Selling products at a higher price, which is also a good sign that shows that the products are Premium, or the business is improving in the competitive environment by having Loyal Customers. In this case, when a product is

valued by customers the company is gaining Market Strength which will result in the Pricing Power that gives the company the Strength to be Price Maker, Not a Price Taker.

And for the reversed case (decrease) there are also two reasons and they're generally the reverse of the previous ones; 1) Cost is increasing compared to Revenue which is not a good sign and could mean that the management doesn't have a tight over Cost Controls. Or a weak bargaining position along the supply chain, factors outside the control of the business. Ex: Airlines and Jet Fuel. 2) Lower Selling Price due to Competitive Pressure and a Price Discount is a must in order to keep the Market Share. OR the quality of the product doesn't warrant a higher price for the customer (Price Taker). This is often the result of Competition in the marketplace or The Structure of the market. Generally, a profit margin falls between 10%-20%, and a ratio between 15%-20% is somehow ideal and means that the company has a lower opportunity of financial risk. A ratio of less than 10% indicates to higher risk which may result in a net loss (Parker, 2019).

2. Gross Profit Margin (GPM)

Formula: $\text{Gross Profit Margin} = (\text{sales revenue} - \text{the cost of sales}) / \text{sales revenue}$

It means that the percentage left after the cost is deducted is what's left to pay other expenses and for net profit.

An increase in the gross profit ratio is a good sign and could happen for two reasons: 1) an increase in the selling price which may happen due to two factors also; the first is an increase in the market power that the customers value your product and won't change to another. The second reason which comes from external factors is an increase in the demand which can raise the prices too. 2) Cost of sales decreasing which may happen due to three reasons: (a). Market power (e.g. Wal-Mart), (b). Changing suppliers or improved efficiency of production, (c). External factors (e.g. coffee beans prices has fallen for Starbucks. For the opposite situation, a decrease in the gross profit margin can also be because of the same two reasons mentioned above: 1) selling prices decreased due to a change in the market strategy, in order to gain a market share by discounting without changing with the supplies, or it may happen due to economic reasons which price must be reduced. 2) Cost of goods sold increased due to inflation in the supply

chain but still have to continue with it in order not to lose or lower market share. This may also happen if the company is a start-up (price taker) and suppliers increased their prices.

For most manufacturing companies the ratio lays between 20%-50%, depending on the product the company presents. For fast-moving merchandise, the rate is at its lowest, e.g., groceries. In normal circumstances, the gross profit margin remains stable from one period to another. A significant change may indicate a change in consumers' demand for the company's' products (Williams, Haka, Bettner, & Carcello, 2008).

3. Return on Assets (ROA)

Formula: $\text{Return on Assets} = (\text{income before tax} + \text{interest expenses}) / (\text{Average assets during the period})$.

Presented as a percentage it means that (e.g., 18%) for every dollar of assets in the business 18% of the amount is returned to the funders of the business. A rise in the ROA ratio generally is a positive sign that means the profitability has increased due to a fall in expenses or a rise in revenues. More to it, it surely shows that the management is improving their performance which shows their decision resulting in getting 'more for less' or even for the same input. The other reason is that assets are being consumed without spending on them to maintain and repair, which is trickier because no business should completely let their income-generating-assets diminish without replacing them, and in this case, it is important to look at their information to determine which of these situations is occurring.

For the reversed case, a decrease in ROA ration might happen when assets have increased but the profitability is still the same, which can happen when large assets investments have a lag time before profitability ends up in books. The other reason, assets aren't performing as they used to, or these assets investments are never showing up as profitability in books, which also relates to management performance whether it is competitive pressure, bad strategy or being unable to counter an economic downturn.

A successful business has a ratio of 15% or more. A extreme high ROA may propose that assets needs replacement, or that assets are required to support the growth of revenue. On the other hand; a low ROA may result due to an inadequate profits or

excessive assets. Determining the appropriate rate depends on industry averages (Williams et al., 2008).

4. Return on Equity (ROE)

Formula: Return on Equity = (Net Income – Preference Dividends) / (Average number of common stockholders' equity during the period)

Presented as a percentage that represents the return achieved using the fund's owners have put and as well as Retained Earnings (Stockholders Funds). An increase in the ROE ratio is somehow similar to ROA ratio, which in general, management has increased overall efficiency, but ROE can be manipulated by increasing liability with a corresponding reduction in equity. This is why the relation between ROE and ROA should be examined. And for the reversed case it normally means that Net profit has fallen in relation to common stockholders' equity is considered poor which gives the idea of inefficient management.

For strong and large companies an ROE ratio of 12% or higher is considered good. A ratio of 30% or more is considered normal, especially in companies with new or highly successful products (Williams et al., 2008).

Part 2: Liquidity Ratios.

1. Current Ratio (Net Working Capital)

Formula: Current Ratio (NWC) = Current assets/ current liabilities

The number we get after the calculation represents the number of times the current assets can be used for payment of current or short-term obligations.

As most of the ratios, generally, the higher the ratio the better it is, an increase in CR means the company has more ability to pay its upcoming short-term debts which are better for the business, just like liquidity. There is a debate of the ideal ratio figure should be is. For example, a ratio of 2 is considered a safe liquidity position in most business and a figure of less than 1 may indicate a distress in the company, theoretically would mean that a firm's liquidity is low which will affect its ability to meet its current obligations, this may cause the business to close down due to the need to sell its non-current assets after all.

A healthy current ratio is not only a good sign of solvency, but it is also a sign of a well-functioning business. A high current ratio is an indication of a strong debt-paying ability and means the company is more liquid. Although a very high ratio-like 4:1 or 5:1- may indicate that the majority of a company's assets are current assets (Williams et al., 2008). It also may mean that account receivables are too high because of flexible credit policies or the collection of the payment is slow, or inventory is excessive. Some user prefer different figure of a ratio, for example, Owners or stockholders generally prefer a low current ratio; creditors prefer a relatively high ratio (Schmidgall & Damitio, 1996).

An ideal current ratio is 2:1 or higher, which qualifies as a good credit risk. But as mentioned before, this is not a rule of thumb as there are many successful and grown businesses' that have a rate between 1.2-1.5; which can be justified that their receivables and inventory can be turned to cash quickly when needed. A current ratio that equals 1 would mean that the company may have a slight problem with paying its current liabilities, and a ratio of 1.0 is considered very low which is risky (Horngren & Harrison, 2005).

2. Acid-Test Ratio (Quick ratio)

Formula: Acid-Test Ratio (QR) = (Cash & Cash Equivalents + Short-Term Investments + Current Receivables) / Current Liabilities

For example, if it is = 1.45 then you can cover your current liabilities from your current assets 1.45 times.

Quick ratio simply measures the ability of a company in paying its due liabilities, and it doesn't give a conclusion about the general success of efficiency of a company. As the previous ratio, an increase means that the business is stronger and safer financially, and the chance that the company will collapse due to insolvency is less. And for the decrease in the ratio, it indicates that managers may need to make more effort and restructuring of cash or at least improve the liquidity to meet its short-term obligations. This may entail selling long-term assets for cash or increasing cash through an equity capital rises.

A ratio of 1.0 or higher indicates that the company is sufficient in meeting its short-term liabilities, a QR less than 1.0 is considered low. A low or decreasing QR could give

several meanings about the company. Like An over-leveraged balance sheet, the companies sales are decreasing, the company is facing a distress or a hardship in collecting the ARs, or that the company is too fast when dealing with it bills (Wohlner, 2018).

3. Cash Ratio (CR)

Formula: $\text{Cash Ratio} = (\text{Cash \& Cash Equivalents} + \text{Short-Term Investments}) / \text{Current Liabilities}$

Cash ratio is the most continuously changing ratio because cash and short-term investment that represent this ratio are considered 'idle assets'. It measure the company's ability to meet it current liabilities from all on-demand funds. And an increase in the ratio means that the company is improving its short-term debts paying ability. The reverse can be true when the highly liquid assets and cash are converted to cash to meet current liabilities. If this ratio is falling means the uncertainty of how the business will meet its short-term obligation without asset restructure or conversion is increased.

Although there is no ideal figure, a cash ratio that falls between 0.5-1 is preferred. A ratio that equals 1.0 means the amount of current liabilities equals the amount of cash and cash equivalent of the company. A high cash ratio is preferred by creditors, as it shows that the company does not have a problem when it comes to paying its liabilities. A ratio of less than 1.0 indicates that the company do not have sufficient cash on hand that can be used for paying its short-term (current) liabilities, which is considered a bad situation for the company (Kenton, 2019).

Part 3: Leverage Ratios.

1. Debt Ratio (DR)

Formula: $\text{Debt Ratio} = \text{Liabilities} / \text{Assets}$

Expressed as a percentage a debt ratio measures liabilities in relation to assets, it tells the amount of liabilities of a company but not in absolute terms, which makes it easier to compare it to different companies of different sizes. It also shows how much of assets will be distributed to owners if all assets have been sold and debts are paid off. A change

in debt ratio means that the level of risk is changing as the most widespread use for it is to measure risk. A fall in the ratio means that the company is improving and getting safer by lowering its chances of failure which is because it has more assets to sell when needed to meet its debt payments. This fall could result from a fall in debts or a rise in assets.

Note: if the result is 100%, in theory, it means that the business could not pay its debts even if it sold all of its assets.

According to the Risk Management Association, the average debt ratio for most companies is around 62% with a little variation from company to another. An acceptable figure for the debt ratio falls between 60%-70%. A business with a high debt ratio may have trouble paying its liabilities, which may cause it to bankrupt, but it may be different from a business to another. For example, banks may have a high debt ratio of 90% which is kind of normal for a bank (Williams et al., 2008).

2. Debt to Equity Ratio (D/E)

Formula: Debt to Equity Ratio = Liabilities / Equity

For example, a figure of 20% means that for every dollar of equity there are 20 cents of liabilities.

A change in this ratio means that there is a change in leverage; which happens when the company changes the way it fund its growth. A high D/E ratio (high leverage) increases the growth as there is more cash generating-assets that can be funded (by debt), this will increase the speed of generating cash from these assets and also keeping stockholder's funds the same. The weakness of this ratio is that the way leverage can increase growth; it also if a plan didn't work could increase losses. In conclusion, when the Debt to Equity Ratio changes it represents a change in the financing strategy of the business. The acceptable D/E ratio is 1.5-2 or less, and for large companies it could be higher than 2. According to (Hayes, 2019) The average D/E ratio for the companies in US is about 1.5.

3. Times Interest Earned Ratio (also known as Interest Coverage Ratio)

Formula: Times Interest Earned Ratio = (Income before Tax + Interest Expense) / Interest Expense

It simply represents how many times interest expenses are covered by a company's earnings before interest and tax (EBIT). Firstly, the fact there is any result at all after the calculation must imply there is some interest expense (if not, the result would be a figure divided by zero). The main reason why a company collapses is that it cannot service its debts when they fall due. Therefore you need to have a margin of safety from EBIT that covers your interest expense; so the business does not collapse.

A change in EBIT ratio means that the margin of safety (risk) is changing, which is a good sign when it comes to an increase in the ratio. It makes it simpler and easier to meet the debts from earnings and could help with further investments or growth. If the ratio is decreasing then it is either the earnings from operations are decreasing or a high interest expense due to a new debt.

In conclusion, a change in the times' interest earned ratio represents a change in debt serviceability based on EBIT. A high ratio means that there is an ease in paying interest, and a low value suggests difficulty (Horngren & Harrison, 2005). An acceptable ratio is 2.5 or greater; which means that the risk is acceptable. A figure that is less than 2.5 is considered bad and means a higher risk that may lead to bankruptcy or default (Horton, 2019).

Part 4: Efficiency Ratios.

1. Inventory Turnover

Formula: Inventory Turnover = Cost of Sales / (Average Inventory for the Period)

Inventory turnover covers how many times a firm can sell its inventory in a period of time, a change in this ratio is a change in the efficiency of the firm's operations, and a high ratio is preferred. An increase of this ratio means that goods are selling in a better time manner, and that sales are increasing. However, what exactly is causing the change is generally unable to be distinguished from the ratio alone especially if you are an outsider.

An acceptable 'inventory TO' is between 3 and 6. A value that is too high indicates a low supplementary inventory that may cause a loss of sales if couldn't fill orders. Therefore, a business goal is to get the most profitable rate, which doesn't have to be the highest rate. A rate that is less than 3.0 would mean that the company keeps inventory for a long time or they can't get rid of it (Metcalf & Titard, 1976).

2. Accounts Receivable Turnover (A/R TO)

Formula: Accounts Receivable Turnover = Sales / (Average Accounts Receivable during the Period).

It tells you how times over the accounts receivable (AR) balance is turned into cash. A change in the A/R TO has three main causes, the first one is under internal control is that new processes, systems and/or management have changed the success in which they collect debts. If the A/R TO increases, then the Accounts Receivable and Collections team have become better at achieving a core function; and if AR TO falls, the opposite is true: the collections team is performing worse or if there is no dedicated collections team, then the accounts department (or perhaps management) is dedicating less time and effort on managing a key aspect of cash flow control. The second reason is a deliberate change in the credit and collections policy of the business, which may result in increased sales (if the policy is loosened) or improved cash flow (if the policy is tightened effectively). The final reason, not under the control of management, is that the general economy or particular industry may be trending towards a downturn.

A high A/R TO might indicate that a company operates on a cash basis, or that the company is collecting A/R's efficiently and that they have a high proportions of good customer who pay their debt on time. On the other hand a low ratio could be caused insolvent customers, weak collection process, or a bad credit policy (Kenton & Murphy, 2019). Also A/R ratio cannot have a negative value (Lucic, 2014).

3. Days' Sales in Receivables

Formula: Days' Sales in Receivables = (Average Accounts Receivable during the Period) / (Sales Revenue / 365) **OR** 365 / Receivable turnover ratio

It gives the average days it takes for a company to turn its A/R balance into cash. There are four major reasons that cause a change in Days' Sales in Receivables Ratio, three of them are identical to those of the accounts receivable turnover, which are; [1] the efficiency of the collections team, [2] the credit and collections policy and [3] the general state of the economy. The fourth cause is the credit policy and level of credit sales within sales revenue. If the level of credit sales increases as a matter of policy and therefore leading to a higher accounts receivable balance on average, then the Days' Sales in Receivable will increase. The average of collecting receivables is between 30-60 days.

Part 5: Valuation Ratios.

1. Earnings per Share (EPS)

Formula: $\text{Earnings per Share (EPS)} = (\text{Net Income} - \text{Preference Dividends}) / \text{Weighted Average Number of Common Shares Outstanding}$

An EPS ratio gives how much profit (earnings) a company earns for every common share outstanding, for example 0.58 cents would be the profit per the common share outstanding. The results are expressed as a monetary figure.

There are key drivers of EPS; just like management success or fail, the company's financing policy, or the economy's general strength. First, the economy's strength generally lifts or drops the financial success of a business no matter how skilled, special or well-trained a management team is. A booming economy will normally lead to a higher EPS for most businesses or lead to a falling EPS when the economy is shrinking. The second reason is the skill of management. All internal decisions are incorporated into the earnings figure. Management plays an important role in leading to higher earnings for the business. It is assumed that EPS is a direct result of the strategy and implementations of managements; it is also represents the bottom line for the business and the stockholders. The comprehensiveness of the EPS figure (using the final net income figure) and its flow-on effects means that EPS results will almost always be a key performance indicator for management too. And finally, the financing policy of the business, the reason financing policy is an influence lies in that the EPS is as a result of net profit in relation to common stockholder equity and therefore debt financing is

totally excluded and that the issuance or cancellation of shares can also have a direct impact. If a debt is suddenly tripled, for instance, then profits generated from this debt may suddenly balloon as well. This means EPS will grow as profits have increased while common stockholder equity has remained the same. On the other hand, if common stockholder equity changes, possibly from a new share capital raising then the EPS would fall if profit remained the same.

Most companies endeavor a 10% or 15% increase in EPS (Metcalf & Titard, 1976). Therefore, a high EPS ratio assists the company in dividends generating or investing back into the business for more growth. A high ratio indicates a worthwhile investment depending on its stock price in the market (Bragg, 2017).

A high EPS is always preferred as it indicates that the company is getting more profit even if it does not distribute any dividends. These unpaid dividends typically get reinvested in the company which leads to growth that leads to an increase in the values of the firm, therefore, an increase in the shares of the company. On the other hand a negative EPS indicates that the company is operating at loss which may cause a concern (Merritt, 2018).

2. Price/Earnings (P/E) Ratio

Formula: Price/Earnings (P/E) Ratio = Stock Price / Earnings per Share

Expressed with a decimal or two, P/E ratio measure the value of a stock (cheap or expensive) compared to a benchmark such as industry comparison. This ratio represents how many times the share price covers a company's EPS. A booming economy may lead to a booming stock market and/or level of earnings, or vice-versa in a declining economy. Therefore, this factor can affect either of the two inputs into the ratio. As for the stock price input alone, this is normally affected by either the general popularity of the stock, the anticipated growth levels of the company or some sort of valuation based on earnings or discounted cash flows or return on equity.

A payout ratio of 30:1 or higher represents a strong and rapid growth company, a ratio of 10:1 or lower means that the company with flat or declining earnings. 10:1 or slightly above means that future earnings are expected to stabilize (Williams, Haka, Bettner, & Carcello, 2008).

3. Dividend Yield

Formula: $\text{Dividend Yield} = \text{Annual Dividends per Share} / \text{Stock Price}$

Provides a proportion of the stock price allocated as an annual dividend. There are three reasons why the Dividend Yield will change; either the stock price changes, profit changes with a static payout ratio & stock price or, on the other hand, profits & the stock price remain static while the payout ratio changes. The mathematical idea is that if the stock price remains constant and profits rise (or fall) and the same percentage of profits are paid as dividends (the payout ratio), then the absolute figure of dividends will increase (or decrease) and the dividend yield will also change. As for the payout ratio changing, this is a choice of management and the company board. Management may choose a dividend policy because a current stockholders demanding the excess of cash being distributed. Or that a higher dividend may attracts more investors and push up the stock price for the benefit of all current stockholders. As for taking the decision to reduce the level of dividends, there are once again many reasons. Two major reasons are that (1) the company simply does not have the spare cash; perhaps the success of the business was not as hoped or that there are upcoming expenditures that require the cash to be utilized in other ways apart from dividends. (2) That management, and stockholders, believes that the company can use the money to grow the business faster and generate more return on equity or capital growth than the stockholders could achieve if they received the cash.

Dividend yield ratio differ between companies depending on their ages, for an old company a good dividend yield ratio lies between 5% to 8%, and for younger and growing companies it is between 0% to 3% (Metcalf & Titard, 1976). Also dividend policies differ between companies depending on the industry of the company. In larger companies stockholders get high dividend yield compared to the market value of the stock, which means that they are being compensated for their investment. For example, tech companies rarely give dividends, so a small distribution of dividends might yield a high ratio ("Dividend Yield Ratio", 2019). As (Johnston, 2017) explained; a low dividend yield is a sign of the poor health of the company, if this is occurred due to a decline in sales or profits that led to cut in dividends.

4. Payout Ratio

Formula: $\text{Payout Ratio} = \text{Dividends per Share} / \text{Earnings per Share}$

Given as a percentage, the payout ratio shows the exact percent of the figure that is used as 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 given dividend policy. As for earnings capability, this is also generally under the control of management and has a direct influence on the payout ratio because if the dividend policy remains constant (i.e. a given dividend per share) and EPS increases, then the Payout Ratio will fall as a matter of arithmetic.

On the flip side, one could argue if you are a stockholder, then a higher EPS should lead to a higher dividend, which could keep the Payout Ratio constant. If a company's payout ratio is 0% it means that it does not pay dividends, but for a new and growth-oriented company it is normal to have a low or zero payout ratio as it would reinvest most of its earnings to expand; develop new products and enter new markets. A payout ratio of 100% means that the company is giving the shareholders more money that it is earning and will possibly be obliged to lower or stop paying the dividend (Hayes, 2019).

A ratio between 0% and 35% is considered a good ratio; typically a distribution within that range is found when a company starts a dividend. A ratio between 35% and 55% is a healthy and suitable for investors; distributing half of the company's earning means that the company is well established and it is reinvesting the rest of its earnings for growth. And a payout ratio between 55% and 75% is considered high as the company is distributing more than half of its earnings, which may mean less growth. A very high payout ratio falls between 75% and 95%, which means that the company is distributing almost all the money it makes as dividends. This increases the risk of cutting the dividends, and to maintain a healthy ratio the company would cut down its dividend or reduce it.

e. Cash flow analysis.

Cash flow analysis provides information about the actual movement of cash into and out of an organization, that is, why cash flow increased or decreased. It is helpful in predicting and forecasting the direction of the company, its liquidity, and its ability to pay its debts (White, Sondhi, & Fried, 2012).

1.3. Risk

Risk is “the possibility of suffering economic and financial losses or physical and material damages, as a result of an inherent uncertainty associated with the action taken” Chapman and Cooper (1983). The term risk later developed into a situation that could not only adversely affect the company's operational and financial objectives, but also have a positive effect (Verbano, Venturini, 2013).

According to (Toma, & Alexa, 2012), business risks are diverse. Depending on their place of the region they are classified into two types:

1. Internal risk such as (human factors, systems, technological, culture, capacity, procedures and processes, physical, etc.)
2. External risk such as (economic, natural, political, social, legal, regulatory, competition).

Therefore, (Ali, Akhtar, & Sadaqat, 2011), classified business risk into two types as follows:

- a. Non-Financial risk
- b. Financial risk.

1.3.1. Non-financial risk.

- a. Operational risk:

It includes fraud risk and a possibility of not meeting the business' contractual obligations. Also divided into internal and external events; internal failures such as; inadequately trained staff. And external such as a transportation system break down or failing to deliver goods by a supplier (Ali, Akhtar, & Sadaqat, 2011).

b Strategic Risk:

The risk that the business goals and objectives associated with operating in a given industry will not be achieved, and it arises from:

- Merger and acquisitions
- Changes in demand, or a customer
- Research and development

c Compliance (Legal) Risk:

Related to the need of following laws and regulations, the government plays a big role in business by either putting more barriers like taxes or overcome these barriers by presenting benefits or incentives to investors and businesses (Ali, Akhtar, & Sadaqat, 2011).

d Natural (Environmental) Risk:

Natural factors like earthquakes, floods, tornados, etc., that may cause a life or property loss, or even may damage a product for a company, that's why understand and increase the awareness of the environmental consequences of climate change.

1.3.2. Financial risk.

(Bahramov, & Gluhov 2011) defined financial risk as a proportion of borrowed capital of the own funds, that when acquiring a loan is as complicated as it repayments. This will affect the delivering of raw material that will slow down or stop the production. It is also related with the transactions, systems and the financial structure of the business. it covers credit risk, market risk, capital risk, liquidity risk.

a Credit risk (default or counterparty risk): It is the possibility of loss resulting from a borrower who does not make payments as promised.

b Market Risk: The risk of a decrease in the value of a portfolio, because of a change in the values of the factors of the market risk.

c Capital risk: The risk that an investor may face a loss of all or part of the invested amount, or a company's risk of the loss of its capital value, the capital includes equipment, factories, and liquid securities.

d Liquidity risk: The risk of not being able to quickly trade a security or an asset in the market to prevent a loss.

1.4. Financial Crisis

Hamidovic (2012, defined the crisis as “inherently abnormal, unstable and complex situation that represents a threat to the strategic objectives, reputation or existence of an organization.” Financial crisis involves a cash flow or short-term liquidity problems when financial assets losses a great part of its value, it occurs as a result of the financial or monetary condition of a company. And to maintain or increase cash flow management should instantly act towards it. Whether it involves cutting discounts, keeping or increasing profit margins on sales if necessary or reducing expenses by removing non-essential expenditures, coping with a financial crisis will require accelerated accounts payable payments. Often, selling of non-essential or valuable properties, payroll reduction and outsource sensitive non-essential operations.

A financial crisis is often associated with one or more of the following phenomena: significant changes in the volume of credit and asset prices; extreme disruptions in financial intermediation and the provision of external finance to diverse business actors; large-scale balance sheet problems; and large-scale government support (in the form of liquidity support and recapitalization). We should take into consideration that various issues faces firms daily, very few becomes crises (Riezebos et al., 2003).

1.4.1. Financial crisis management.

Zehir (2005) defined crisis management as a process that needs specific expertise that tries to forecast events that could disrupt strategic objectives. It can also be defined as an organization's method of coping with any significant unexpected events that are threats to the organization, its stakeholders, or the public.

When analyzing the nature of crises a person should first understand what crisis management is not (Littlejohn, 1983). Crisis management is not mismanagement,

organizations face regular crisis-type situational responses because of insufficient or ineffective planning or the lack of any kind of planning. Mismanagement is when the management is incapable of pursuing the work to facing a true crisis situation; due to unordered priorities as managers know which situations needs instant attention and which do not. The real challenge for a company is to recognize crises quickly to be able to address the issue. Therefore, a company's crisis management should consist of a structured approach for dealing with actual crises in order to keep the business running as normal as possible

Unlike common opinion, a crisis may not always be negative. It is identified merely by some degree of risk and uncertainty (Fink, 1986). Perl (2010) states that "if the crisis response is off to a rapid start, the chances for reputation damage decrease." Muffet-Willett and Kruse (2009) affirm that leadership is critical during a crisis and that it helps with the success of the company. Furthermore, they assure that a crisis leader needs to be flexible, adaptive, and prepared for a challenge of tough decisions whatever the cause or situation is. And to response to a crisis the organization must evaluate the type and weight of the crisis they are facing, to do so it should consider the degree of responsibility facing the organization (Jeong, 2009). As PAS (2011) states there are no checklists when responding to a crisis, as each company should uniquely develop it practices to face a crisis.

1.4.2. Financial crisis phases.

According to (Heller & Darling, 2012) crises may be of short or long period, with minor or major impact on a specific organization. Therefore, a crisis may include four different and separate stages or phases, but in some situations these stages can be so closely connected that they merge in close proximity together. These phases are as in **figure 2:**

- (1) Preliminary (pre-) crisis stage.
- (2) Acute crisis stage.
- (3) Chronic crisis stage.
- (4) Crisis resolution stage.

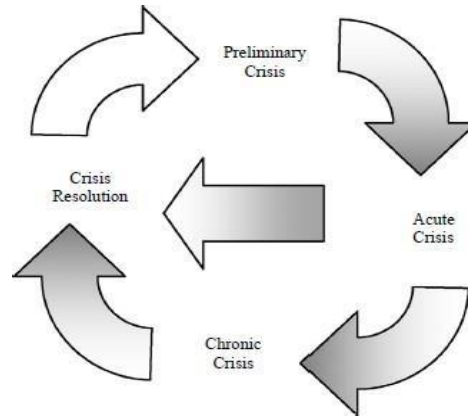


Figure 2: Phases of a typical crisis.

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 is the Preliminary (pre-) crisis stage, also known as Prodromal. it is the warning stage, which may be extremely short or even immediate. Crisis managers' role is a proactive role. In this level they attempt to define a forthcoming crisis. This information can be found in internal and external reports, government legislations, and business publications (Boudreaux, 2005).

(Sturges, 1994) describe this form of coverage as a trigger theme that could pose a potential threat to an organization. For a company to perceive a crisis development, it should remain sensitive and track mass media reporting related news patterns (Seeger, Sellnow, & Ulmer, 2001).

b Acute crisis stage

Fink (1986) and others argue that, in general a crisis start before the acute stage. In this stage the issue breaks out of the prodrome phase and mature into an actual 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 argument, says (Fink, 1986), relates to the permanent impact of the crisis. Even though individual incidents can arise rapidly, the incident's cumulative effects will span the crisis's lifecycle. In addition, this stage will involve a series of crisis-related questions that will keep the event accessible to various audiences.

d Crisis resolution stage

The Fink (1986) model's last stage is the resolution stage. This stage outlines a definite end to the crisis. Whereas organizations see that as the purpose, it's not one that should be pushed to. The premature expectation of an organization that the chronic stage is over will leave them vulnerable to the revival of the crisis. Due diligence must be exercised in the intervening stages to ensure that such a regression does not occur. Since crises are not tiered on a predictable plateau scale, It is often hard to see where and when a crisis ends and another begins in a cycle, or at what point the business is at when several crises are experienced simultaneously as seen in figure 3. In fact, it could very well be the pre-crisis light of an oncoming crisis that will end one crisis (Fink, 1986).

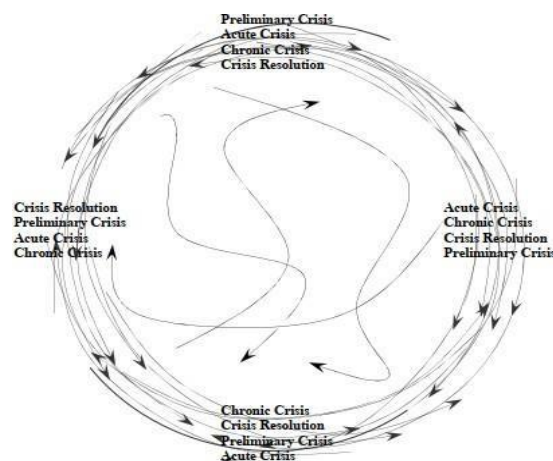


Figure 3: How crisis cycles may appear.

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

Thereafter, problems that need practical solutions a management faces during a crisis:

1. The most important aspect of crisis management is to prevent a crisis rather than fix it, and the purpose is to prevent circumstances or decisions that may lead to a crisis. Many organizations are thought to lack the capability to recognize the possible cause of the crisis.

2. Many businesses have a low organizational performance that may be a result of poor crisis management.

3. The employees level of education could affect the crisis management process, as an employee is unable to understand the company's crisis strategies,

4. A crisis plan is extremely useful in emergencies as it only requires execution, and it provides step-by-step reaction to an actual crisis. On the other hand, most organizations do not have a crisis plan (OPARANMA, 2014).

1.4.3. Financial crisis types.

Financial crises can take various shapes and forms, Reinhart and Rogoff (2009) classify crises into two groups, the first group includes currency and sudden stop crises, and the second group includes debt and banking crises. It is important to note that crisis do not necessarily occur independent, different types of crises can interfere as one type can lead to another type of crises. Or two crises can take place with one another because of the common factors, and it is misleading to classify a crisis as one for example; a combination of currency and banking crises (Claessens & Kose, 2013).

a Currency crises:

The currency crisis includes a disorderly currency assault culminating in devaluation (or rapid depreciation), or pressuring authorities to protect the currency through investing huge sums of foreign reserves, or rapidly rising interest rates, or introducing capital controls (Claessens & Kose, 2013). Currency crises include large exchange rate shifts and related inflation crises that are easy to recognize.

b Sudden stop (known as a capital account or balance-of-payments crisis) :

Sudden stops often occur in countries with relatively limited tradable industries and significant foreign-exchange obligations. Sudden stops have impacted countries with

differing per capita gross domestic product (GDP), financial development rates and exchange rate regimes, as well as countries with varying reserve coverage levels.

c Debt crises (foreign or domestic):

A debt crisis divided into domestic and foreign debt (Sovereign and private debt). Racickas & Vasiliauskaite (2012) defined a debt crisis as the situation in which a country cannot fulfill its obligations regardless of the type. A *foreign debt crisis* happens when a country is unable to service its foreign debt (sovereign or private debt). A *domestic debt crisis* occurs when a country refuses to fulfill its domestic fiscal obligations in real terms, either by deliberately defaulting, or by inflating or otherwise degrading its currency, or by using certain (other) forms of financial repression (Claessens & Kose, 2013). Crises in domestic debt are more difficult to detect. McKinnon and Pill (1996, 1998) explain that it is difficult to identify the main cause of a crisis, and a debt crises are also likely to involve sudden stops, currency or banking crises (or different combinations), making the initial cause difficult to identify.

In general, external sovereign debt crises involve a unique event which is the default on payments, this make them it easy to identify. It depends on rating agency's classifications or information from international financial institutions (McFadden, Eckaus, Feder, and Hajivassiliou (1984).

d Banking Crises:

A banking crisis describes a situation in which a bank runs or fails to persuade banks to suspend internal convertibility of their liabilities or in which the government is forced to intervene to avoid this by extending assistance on a huge scale (Dabrowski, 2003). Banking crises are very common and the least understood type. Banks are fundamentally vulnerable, subjecting them to depositor-runs. Therefore, individual bank problems can spread rapidly to the entire banking system (Claessens & Kose, 2013). Claessens and Kose (2013) explain that a banking crisis actually reflects a solvency issues not from the liability side. Furthermore, banks also get into trouble when many of their loans go sour or when shares lose their value rapidly, for example the Japanese crisis in the late 1990's. Throughout the recent recession, issues in asset markets, such as those relating to subprime and other mortgage loans, played a significant role. These types of problems

can go undetected for some time, and until now it can be challenging to know when they start and end.

1.5. Background info

1.5.1 Brief history of Jordan.

Jordan, officially the Hashemite Kingdom of Jordan, is an Arab country in Western Asia. Jordan is bordered by Saudi Arabia to the south and the east, Iraq to the north-east, Syria to the north and Palestine to the west. Jordan is a relatively small, almost landlocked country with an area of 89,342 km² and a population numbering 10 million, making it the 11th-most populous Arab country. Amman is the capital, Jordan's most populous city with almost 40% of the country's population. 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 took 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 agreement with the United States.

Based on Jordan Data's (2019) report; almost 14.4% of the population lives below the national poverty line on a long term basis (as of 2010). However, The World Bank categorized Jordan as an "upper-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 following years as it dealt with the effects of the Great Recession and the spillover from the Arab Spring (Sowell, 2016).

1.5.2. PESTEL Analysis.

Political: As a constitutional monarchy with an appointed government, the king exercises his executive authority through the prime ministers and the council of ministers. Suffering from the weak political situation, as in the last decade there have been multiple changes in the government for the prime ministers due to continued protests against the situation and regulations that affect the life of the people. New higher tax policies, increasing unemployment rates reaching 18% in 2018, cutting subsidies on important products like fuel.

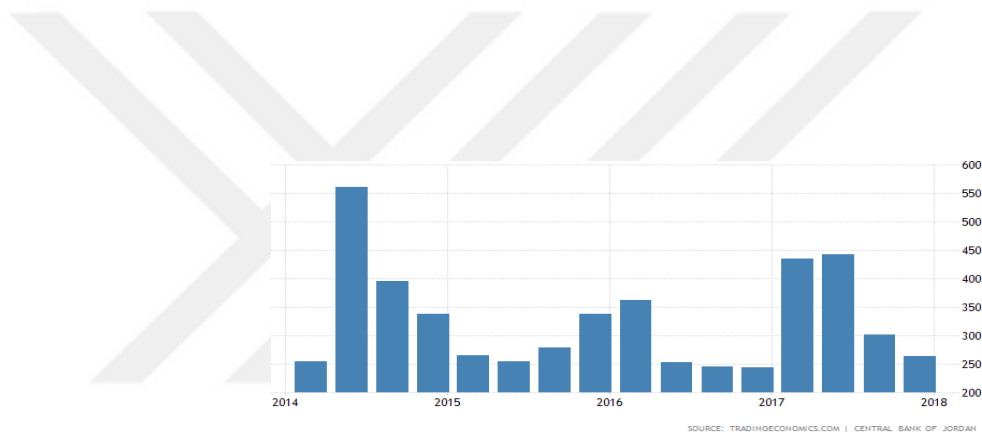


Figure 4: Foreign direct investment (FDI) (2014-2017).

Jordan Foreign Direct Investment - Net Inflows 2009-2019 Data: 2020-2022 Forecast. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/foreign-direct-investment>

As shown in **figure 4**, FDI is decreasing at the end of 2016 and 2017; FDI decreased from 55bn (\$2.2bn) in 2014 to JD1.02bn (\$1.4bn) in 2017. Caused by the new government decisions related to tax and fuel, and also affected by the political situation in surrounding countries and the terrorist attacks that increased the costs of the government. Limited resources of revenue, depending on international aid, and foreign loan interests' are also weaknesses for Jordan in attracting foreign investment.

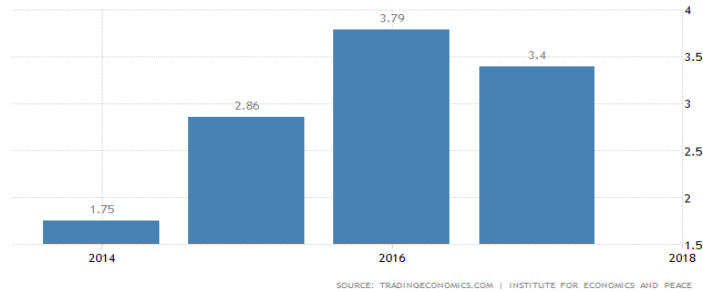


Figure 5: Jordan Terrorism Index (2011-2017).

Jordan Terrorism Index 2002-2018 Data: 2019-2020 Forecast: Chart: Calendar: News. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/terrorism-index>

As shown in **figure 5**; the Terrorism Index has decreased in 2017 from 3.79 (2016) to 3.40 caused by the surrounding situation, a lower value for 2014 and kept on increasing for 2015 and 2016 due to the political situation and the surrounding countries.

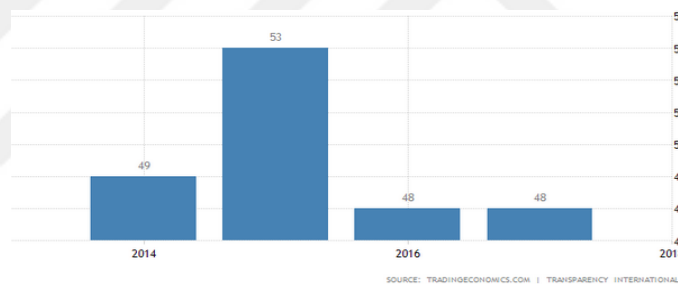


Figure 6: Corruption index (CI) (2014-2017).

Jordan Corruption Index 1996-2019 Data: 2020-2022 Forecast: Chart: Calendar. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/corruption-index>

The Corruption Perceptions Index (CPI) an annual report done by Transparency International since 1995 which ranks countries "by their perceived levels of public sector corruption, as determined by expert evaluations and opinion surveys. According to RIT's report "After reaching the third place in 2016; Jordan declined to the fourth country in the Arab world, after the UAE, Qatar and Saudi Arabia" Jordan times (2018). This means that the public sector is getting more corrupt which leads to difficulties for new companies to enter the market. Based on a World Bank report of 2018, Jordan has moved from 118th to 103rd spot which is a good sign that means the government's reforms have been paying off.

As shown in **figure 6**; Jordan has scored 48 out of 100 (0 meaning “highly corrupt” and 100 “very clean”) in the 2017 Corruption Perceptions Index, which was ranked 57th out of 176 countries; a stable rank from 2016. The local organization Rasheed for Integrity and Transparency (RIT) (Transparency International — Jordan) added that in 2018 Jordan fell to 59th place out of 180 countries.

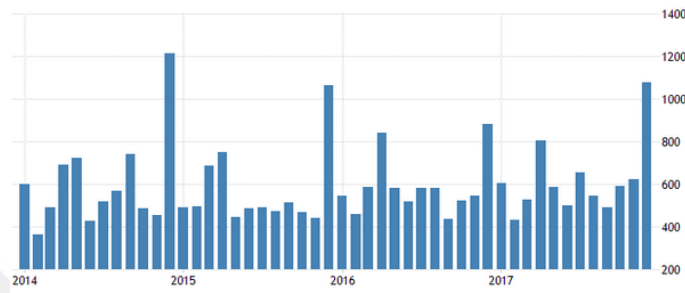


Figure 7: Government Revenues (2014-2017).

Jordan Government Revenues 1999-2019 Data: 2020-2022 Forecast: Chart: Calendar. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/government-revenues>

Government revenue, as well as government spending; are components of the government budget and important tools of the government's fiscal policy. Government revenue is what received from taxes and non-tax sources to enable it to undertake government expenditures. As shown in **figure 7**; since 2014 government revenues were gradually decreasing, reaching its highest in 2014 and lowest in 2017. These falls in revenue may mean that the government does not have enough resources that offer stable earnings or taxes are not collected as they should.

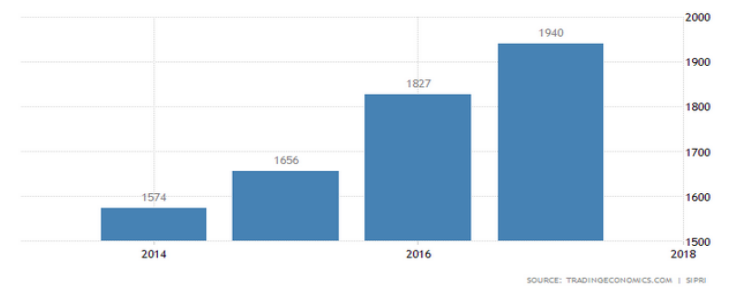


Figure 8: Military expenditures (2014-2017)

Jordan Military Expenditure 1967-2018 Data: 2019-2020 Forecast: Chart: Calendar. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/military-expenditure>

As shown in **figure 8**; the military expenditures for the government are continuously increasing from \$1574 m to \$1940 m; which is mainly due to the political situation surrounding Jordan during these years.

Economic: The Jordanian dinar is Jordan's official currency, which is pegged to the special drawing rights (SDRs) of the International Monetary Fund (IMF). An exchange rate of 1 US\$ per 0.709 dinar or roughly 1 dinar per 1.41044 dollars (Exchange Rate Fluctuations, 2004), which gives an opportunity for businesses as the currency is stable.

Limited resources of revenue, increasing costs of the government, depending on international aid, and foreign loans interests' are also weaknesses for Jordan in attracting foreign investment. Jordan's Gross Domestic Product (GDP) growth has also been weakened by the Great Recession and the instability caused by the Arab Spring, affecting trade, industry, construction and tourism. All of these are reasons that lead to a decrease in the FDI as mentioned previously.

GDP is the monetary value of all finished products and services produced within a country over a given period. It is a country's economic snapshot, used to measure the size of an economy and the rate of growth.

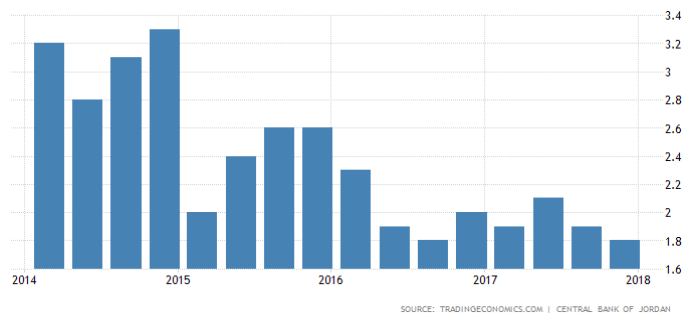


Figure 9: GDP annual growth rate (2014-2017)

Jordan GDP Annual Growth Rate 1993-2019 Data: 2020-2022 Forecast: Chart: Calendar. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/gdp-growth-annual>

Annual GDP growth averaged 6.5% from 2000 to 2009. But it shrank to just 2.5 percent annually from 2010 to 2016 and was just 2.0% in 2017, as seen in figure 9, adjustments since 2014. This slowdown has led to changes in economic policy that generated important political repercussions and shaken the status of the Hashemite regime. Since 2011, Jordan has passed through 7 prime ministers, and in the same period

of time a number was much higher than the 2 parliamentary elections. **Figure 10** shows that the GDP is increasing continuously since 2014. The economy stays burdened with the continuous uncertainty in Syria, slow trade relations recovery with Iraq, and an economic slowdown in the Gulf Cooperation Council (GCC); regardless of predictions of an increase in Jordan's economy from 2.0% in 2017 to 2.4% in 2018 (Werman, 2019).

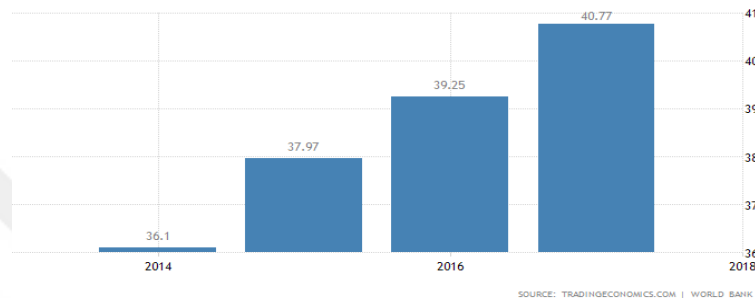


Figure 10: Jordan's GDP (2014-2017)

Jordan GDP 1965-2018 Data: 2019-2020 Forecast: Chart: Calendar: News. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/gdp>

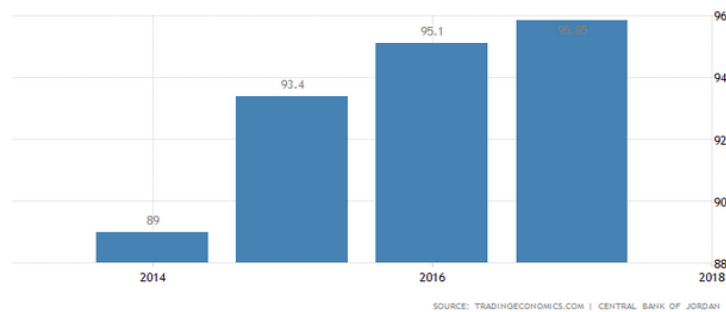


Figure 11: Debt to GDP (2014-2017)

Jordan Government Debt to GDP 1988-2018 Data: 2019-2020 Forecast: Chart: Calendar. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/government-debt-to-gdp>

Representing 60% of its GDP; In 2011 Jordan's total foreign debt was \$19 billion, and \$35.1 billion in 2016 representing 93% of it GDP. This considerable increase shown in **figure 11** is caused by the effects of the regional instability such as; decrease in tourist activity and foreign investments; increased military expenditures; the Egyptian pipeline attacks; collapse of trade with Syria and Iraq; refugee's expenses and

accumulated loans interests (Sowell, 2016). Also losing Jordan's primary agricultural market in Syria for instance, a 35% decline in the agricultural exports to Syria, and 30% in imports (MOPIC, 2013). According to Obeidat (2016); a restructuring plan was introduced by the government aiming to decrease the debt-to-GDP ratio to 77% by 2021. This plan was successful in preventing the increase of debt above 95% in 2018 (Sowell, 2018).

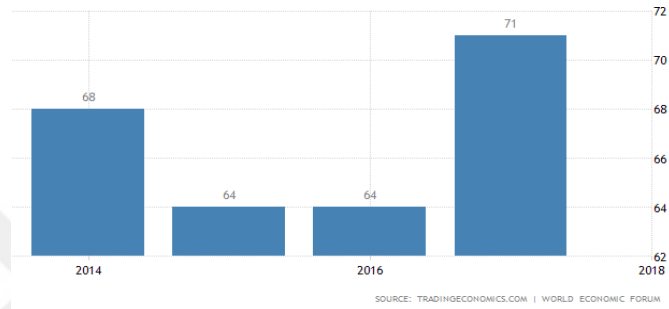


Figure 12: competitiveness rank (2014-2017).

Jordan Competitiveness Rank 2007-2019 Data: 2020-2022 Forecast: Chart: Calendar. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/competitiveness-rank>

Figure 12 shows the competitiveness rank of Jordan; scoring 68th country and decreasing in 2015 and 2016 to 64th rank. In 2017 edition of the Global Competitiveness Report published by the World Economic Forum, Out of 140 countries; Jordan was ranked 71 of the most competitive nations of the world These numbers are kind of moderate (no high neither low), and working more on attracting foreign investment may increase this rank to better.

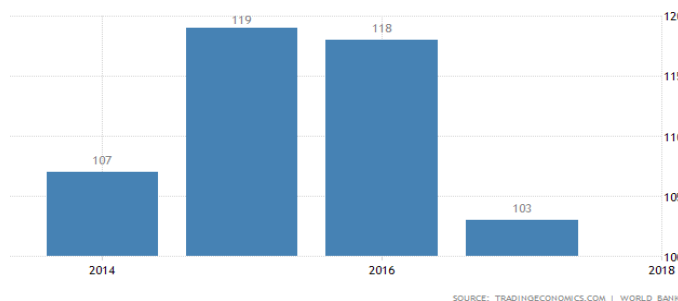


Figure 13: Ease of doing business (2014-2017)

Ease of Doing Business in Jordan 2008-2019 Data: 2020-2022 Forecast: Chart. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/ease-of-doing-business>

According to the latest World Bank annual ratings, out of 190 economies; Jordan is ranked 101 in the ease of doing business for 2017. Presented in **figure 13**; the rank of Jordan deteriorated to 103 in 2017 from 118 in 2016 and 119 in 2015.

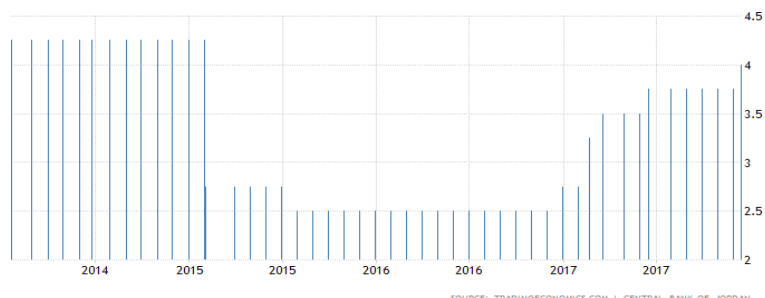


Figure 14: Interest rate (2014-2017)

Jordan Interest Rate 1965-2019 Data: 2020-2022 Forecast: Chart: Calendar: News. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/interest-rate>

During its meeting in 2018, the Central Bank of Jordan lowered its benchmark interest rate by 2.5 basis points (bps) to 4.25 with a view to supporting growth. The switch came after a quarter of a percentage point cut in rates by the US Federal Reserve. **Figure 14** shows that in 2014 interest rate was 4.25 bps, a fall in 2015 (2.5 bps) and again in 2016 (2.75), in 2017 there was an increase to 4 bps.

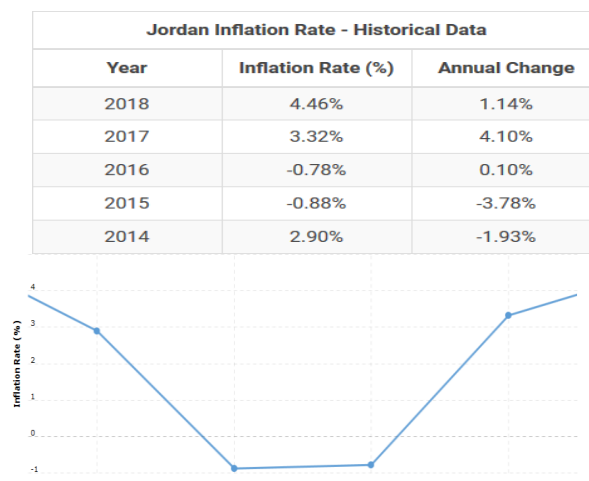


Figure 15: Inflation Rate (2014-2017)

Jordan Inflation Rate 1970-2020. (n.d.). Retrieved May 2019, from <https://www.macrotrends.net/countries/JOR/jordan/inflation-rate-cpi>

Inflation, as defined by the consumer price index, represents the annual percentage change in the cost to the average customer of purchasing a basket of products and services which can be set or adjusted at prescribed intervals, for example annually. **Figure 15** shows the inflation rate and the annual change for each year, in 2014 inflation rate was 2.9%; a fall in the following years, in 2015 and 2016 there was deflation that means a fall in the value of the currency; in this case Jordanian Dinar. In 2017, a 4.1% change raised the inflation rate to 3.32% which means that the currency got better and its value has increased.

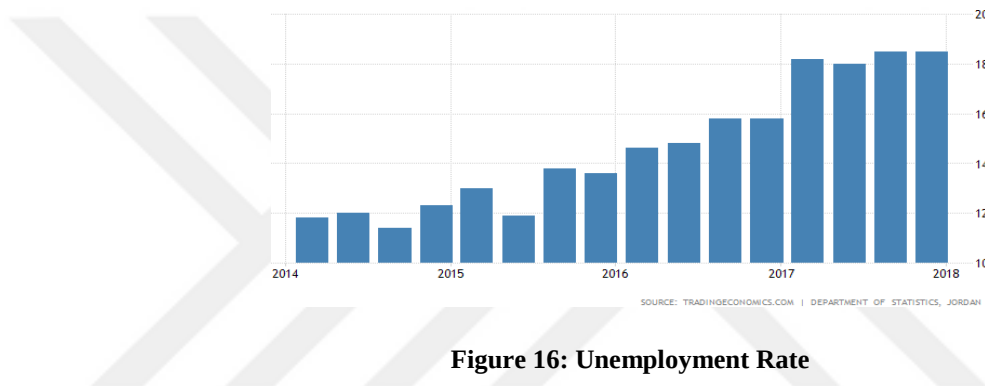


Figure 16: Unemployment Rate

Jordan Unemployment Rate 2005-2019 Data: 2020-2022 Forecast: Chart: Calendar. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/unemployment-rate>

As shown in **figure 16**, the unemployment rate has been increasing since 2014 reaching a high of 18.5 in 2017, unemployment is one of the main challenges that the youth is facing in Jordan and it is getting worse year after year. The population has been on a continuous increase for the last 50 years, and according to the Ministry of Education, youth (15-24) constitutes 23% of the population which is a big percentage. And as an effect, in 2017 Jordan had more than 267,000 undergraduate students, and 18,000 graduate students (Mahafzah, 2017). This high number of graduates increases the pressure and raises the unemployment rate.

Social: **Figure 17** shows the that population has faced an increase from 8.8 million in 2014 to 10.11 million in 2017, this increase of population caused by ordinary and other reasons; like expats who are coming back from the gulf, it has been an opportunity and a threat at the same time. An increase means that there is an increasing need for products. But on the other side, it is a threat if the country didn't have the ability to cover these

needs based on different tastes. The civil war in Syria has triggered an immense influx of Syrian refugees to other countries around the world including Jordan, as it received 1.2 million Syrian refugees (MOPIC, 2015). Addressing their needs has burdened the country's resources and had greatly impacted the economy, security, and quality of life (Nasser & Symansky, 2014).

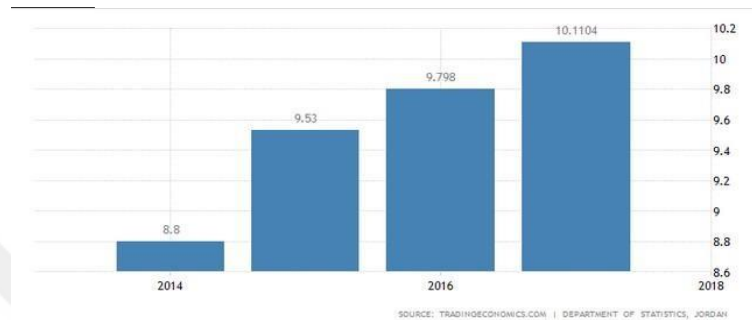


Figure 17: Population (2014-2017)

Jordan Population 1960-2018 Data: 2019-2020 Forecast: Chart: Calendar: News. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/population>

According to De Groot (2010) several scholars maintain that refugees are an economic burden as well as a political threat to the host community. Salehyan (2008) argues that the civil war is having a detrimental spillover in surrounding nations. This burden is magnified by poor and underdeveloped host countries, as refugees require humanitarian assistance and public services. Based on estimations from the Jordanian government, the total cost of Syrian refugees since the start of the crisis in 2011 to 2016 was around \$4.2 billion (Sharp, 2016). Therefore, Jordan's small size and lack of natural resources have worsened both refugees and the host community's living conditions. In addition, existing public spending has grown at the cost of investment spending, and that's like putting a spoke in Jordan's wheel of growth. Despite levying extra taxes on Jordanians, Jordanian state spending exceeds federal revenues. For example, Jordanian taxpayers experienced a 42% rise in taxes after the Syrian influx compared to taxes before the Syrian refugee influx (Jordan Central Bank, 2017).

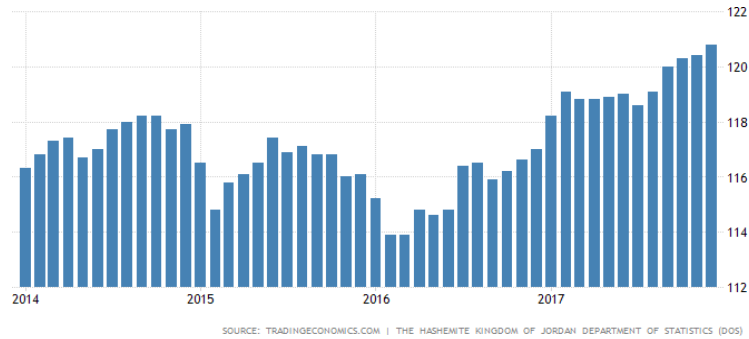


Figure 18: Consumer Price Index (CPI) (2014-2017)

Jordan Consumer Price Index (CPI) 1976-2019 Data: 2020-2022 Forecast: Chart. (n.d.). Retrieved May 2019, from <https://tradingeconomics.com/jordan/consumer-price-index-cpi>

Figure 18 shows an increase in the CPI reaching a high of 121 points in 2017, which means that people are spending more money on getting the same products which are a problem the people in Jordan are facing as they are losing their power of purchase. In 2015 the index decreased from 118 in 2014 to 117 in 2015 and continued to decrease in 2016 reaching 116.

During the last decade, there has been a change in the preferences and taste of the community in Jordan, as it started to get more open to the west with the help of social media. Those changes in the lifestyle and consumer tastes have been an opportunity for new business and to be open to wider markets.

Technological: Even though it is one of the smallest economies in the region, the ICT sector in Jordan is considered a fast-growing economy (Science and technology in Jordan, 2019). It is also considered one of Jordan's primary sectors; contributing 14% of the country's GDP and 1.25% of its total workforce. In the 2015 Global Information and Technology Report, Jordan ranks number 52 out of 143 countries on the ICT and Network Readiness Index, above most other countries in Middle East North Africa (MENA), such as Egypt (94), Lebanon (99), and Tunisia (81), as well as above some EU countries like Italy (55) and Greece (66) (World Economic Forum, 2015). Including telecommunications, IT, mobile online businesses, and game development, more than 50% is estimated of Jordan's startups are in the ICT sector (Growing Pains for Jordan's Tech Entrepreneurs, 2012).

Jordan is appealing to international investors as it has a highly trained population and is listed as a "good human capital" nation. Owing to a comparatively modern educational system; the proportion of well-educated and professional labor in Jordan is among the largest in the world in sectors such as ICT and industry. This attracted significant foreign investment in Jordan and allowed the country to export its workforce to the Persian Gulf countries; which have been an opportunity for the companies to benefit from these skilled and educated workforces.

After the ICT sectors' revenues dropped 14% in 2014, income tax rates on ICT services are reduced by 4%. In 2016 a new decision by the government was made in favor of the IT sector; which it declared that software development tools, smartphone applications, online platforms, outsourcing, interactive entertainment and electronic gaming, IT training and e-learning would be removed from sales tax and customs duties. Goods and services required for ICT infrastructure are also subject to zero sales tax. Such opportunities will help to drive ICT development and be an opportunity for companies whether foreign or local to continue their business in Jordan, which will also help in finding new jobs for new graduates, reducing unemployment rate (18.6 % annual average in 2018 compared to 18.3% in 2017).

Legal: Constitution, law, Islamic law (Sharia), and tradition are the foundations of the legal system. Sharia courts have authority over matters related to the legal status of Muslims, as well as cases involving blood money where parties are Muslim or where one side is Muslim and the other is in compliance with the Sharia Court (National Labour Law Profile: Jordan, 2011)

The Jordanian government released Law No. 34 of 2014 ("the latest tax law") on 31 December 2014, which takes effect on 1 January 2015, the new tax law changes are shown in **figure 19**. **Figure 20** and **figure 21** shows the changes for the corporate tax law since 2014.

New tax law	Old tax law
7% on JOD 0 – JOD 10,000 of taxable income	7% on JOD 0 – JOD 10,000 of taxable income
14% on JOD 10,001 – JOD 20,000 of taxable income	-
20% on JOD 20,001+ of taxable income	14% on JOD 10,001+ of taxable income

Figure 19: Income tax rates (Comparison between New and Old tax law)

Jordan passes new tax law, effective from 1 January 2015. (n.d.). Retrieved June 2019, from https://www.pwc.com/m1/en/tax/documents/2015/jordan_newsalert_january_2015.pdf



Figure 20: Corporate Tax rate (2014-2017)

Jordan Corporate Tax Rate 2006-2018 Data: 2019-2020 Forecast: Chart: Calendar. (n.d.). Retrieved June 2019, from <https://tradingeconomics.com/jordan/corporate-tax-rate>

End of service benefits are tax deductible in cases as follows:

A) 100% of the amounts prior to 31 December 2009 (as allowed for in the old tax legislation).

B) Amounts above JOD 5,000 are subject to income tax as of 1 January 2010 (previously, 50% of the profit is income tax liable).

C) The first JOD 3,500 in annual benefit contributions (previously JOD 4,000) is excluded from federal income tax.

D) Prize and lottery winners over JOD 1,000 are subject to a 15% income tax exemption, which is a total tax (previously 10%).

New tax law	Old tax law
14% for the industrial sector, no change in corporate income tax rate (previously taxed at 14% as “other companies”).	
24% for the main telecommunications companies, insurance and reinsurance companies, financial intermediation and brokerage firms, and financial companies, and corporate taxpayers who undertake financial leasing activities (no change in corporate income tax rate).	
24% for companies that generate and distribute electricity and companies that undertake mining raw material activities.	14%
35% for banks	30%
20% for other companies (not specifically mentioned above)	14%

Figure 21: Corporate income tax rates changes (Comparison between New and Old tax law)

Jordan places a new tax law, effective from 1 January 2015. (n.d.). Retrieved June 2019, from https://www.pwc.com/m1/en/tax/documents/2015/jordan_newsalert_january_2015.pdf

E) Maintenance costs paid during the fiscal year are now entirely exempt from taxes. Just 5% of the asset valuation had previously been exempt.

F) The net profit of overseas subsidiaries of Jordanian resident corporations (after international taxes) is now subject to a reduced rate of 10%. Such subsidiaries have historically been subject to 20% tax (PwC, 2015).

Article 56 Under labor law, work hours are defined to 48 hours under a six-day period. The seventh day is a weekly, paid holiday. Additional hours would be called overtime and count for 125% benefits above the daily wage, even working on a weekend day or on religious or public holidays the employee should get not less than 150% of his/her normal working payment.

The labor laws are effective in Jordan which guarantees the employees’ and employers’ rights, which is a benefit for companies that operate in Jordan. The minimum wage for the 48 working hours in Jordan is 310\$ as stated in 2017 which is considered low, which is a weakness for people who want to work.

Consumer protection is one of the most important issues that need to be resolved in countries with no specific regulatory framework to protect the customer (Ghazwi, Aljazi, & Jarrah, 2017). In Jordan, there is no legislation passed to protect consumers, although such a bill was written twice and submitted to the board of the Parliament in 2006 and, regrettably, in 2013, they failed to view it. In Jordan the problem of consumer protection is usually somewhat ignored. The Report of the Economic Dialog Committee in 2011 recommended improving consumer safety mechanisms and speeding up the

implementation of consumer protection regulations. In the view of the government, more commitment is required to implement and execute a consumer protection rule (OECD, 2013), which is a result it weakens the opportunity for companies, especially closely related to these fields to stay away from Jordan.

The Ministry of Industry and Trade of Jordan reported that the amended Patent Law No. 16 and the amended Patent Law No. 17 of 2017 were issued in Official Gazette No. 5760, and brought into effect on 16 June 2017. Such adjustments will greatly boost the Kingdom's patent protection system ("Amended Patent Law Comes into Force in Jordan", 2017). Intellectual property refers to rights which exist under the laws of patents, copyrights, trademarks, trade secrets, unfair competition and similar laws in works of the human mind. Laws on copyright promote the production of creative works, computer applications, imaginative works and national cultural expressions (Greenstein, Thorin, 2002). Jordan's record on protection of intellectual property rights (IPR) has strengthened to the point that abuses of intellectual property (IP) in Jordan are among the lowest in the MENA field, according to a 2013 Global Information Technology Study from the World Economic Forum. The study placed Jordan 47th in the global climate, with 144 countries ("Jordan - Protecting Intellectual Property", 2017).

Women's freedoms are not implemented, even though of a law that provides fair protection for all Jordanian citizens. For example, a program of education that guarantees fair access for young men and women, Jordan boasts a highly educated female population with the ability to advance economic, social and political growth in Jordan. However, still significant disparity between constitutional freedoms and appropriate societal standards for women, with traditional norms and cultural limitations continuing to restrict women's advancement. Jordan has one of the lowest levels of women's economic engagement in the region, with fewer than one-fifth of women working in the labor force. The Jordanian Commission on Fair Pay said the gender wage difference has hit 13.8% in the public sector and 14.2% in the private sector. The disparity was 31.8% in the educational sector, and it had hit 30.2% in private education ("Gender wage difference in the public sector hits 13.8 percent-commission", 2018).

Environmental/Ethical: Protection of the environment is a crucial issue not only to achieve development but also to maintain this development and enhance the welfare and human life quality (Hayajneh, 2012). Limited natural freshwater resources; deforestation; overgrazing; land erosion; desertification are primary environmental threats in Jordan. A study released by the Ministry of Environment reports that Jordan's key environmental issues are power, water; desertification, waste management and the depletion of biodiversity. The study also stated that climate change is one of the key threats confronting the Country, as it impacts the water and agriculture industries directly. This also referred to an rise in emission rates owing to the inability of some companies to abide by environmental legislation. The purpose of the Environmental Protection Law No. 6 of 2017 (EP Law) is to monitor the creation, activity and maintenance of any institution in Jordan that may have an environmental effect. The work of the Jordanian government is motivational for new environment-related businesses to start their journey in Jordan, due to the welcoming from the government to this kind of business.

Based on the latest Environmental Performance Index (EPI) report; Jordan's rank (from 180 countries) is 62nd, Air quality 3rd, Water and Sanitation 45th, Climate and Energy 107th, Air Pollution 20th, Water Resources 60th, Environmental Health 26th.

In the last couple of years, Jordan started to switch into electric and hybrid cars in order to reduce its oil expenses as it imports it from the outside. The government in Jordan encouraged citizens to switch to Electric vehicles (EVs) by providing financial or logistical incentives. The EV owners were exempted from registration fees for electric cars that could amount to at least an \$11,000 per and from customs and value-added taxes. According to a report at the Jordan Department of Statistics, there are 3,586 registered electric cars in the Kingdom as of May 2017 (El Issa, 2019).

1.5.3. Cases.

a. Royal Jordanian Airlines (RJAL).

A Royal Decree issued by His Majesty King Hussein, created Royal Jordanian (RJ) as the national air carrier of the Hashemite Kingdom of Jordan, on Dec. 15, 1963. King Hussein said: "I want our national carrier to be our ambassador of goodwill around the

world and a bridge across which we exchange culture, civilization, trade, technology, friendship and better understanding with the rest of the world.”

On 5 February 2001, Alia-the Royal Jordanian Airlines Corporation was licensed as a publicly listed company in Jordan. And in Dec 2007, after it privatized, it started listing its shares on the Amman Stock Exchange; Jordanians own majority shares and hence the firm retained its position as Jordan's national carrier. The Company's objectives are to carry out daily air travel operations to and from the Kingdom and to carry out aircraft management that arrive in and take off from Kingdom airports. RJ has contributed to the national economy since its foundation, contributing 3% to the country's GDP, taking in foreign currency and playing a key role in drawing visitors from all over the world (RJ annual reports 2014-2017). Royal Jordanian has a vision of "being the preferred airline that links Jordan and the Levant with the globe." In its 26 planes it hits 45 different destinations. Its headquarters are based Amman, and its flights originate from Queen Alia International Airport, with significantly upgraded connectivity and state-of-the-art facilities. Royal Wings, a subsidiary of RJ, is committed to charter business. Royal Jordanian entered the 'one-world' airline partnership in 2007, due to its credibility and despite the regional competition standard. The 13 foreign RJ partners that are members of the partnership give RJ passengers the ability to travel from/to Amman with one stop with more than 1,000 cities in 150 countries.

Achievements and changes 2014-2017 of RJ:

Financial: In 2015, the Board of Directors made an overall plan to restructure the business for the years 2015-2019, including raising revenue, reducing operational expenses, increasing the efficiency of passenger services and preserving the prestige and role as a leading airline in the Arab East and as Jordan’s successful national carrier for 52 years. 2016 was an exceptional year particularly for the Middle East airlines industry compared to the previous years. For example; until the beginning of the Syrian civil war in 2011, Royal Jordanian conducted two regular flights to Syria — one to Damascus and one to Aleppo's northern city (Afp, 2019). In 2016 RJ achieved getting a loan of \$275 million from different banks in several Middle Eastern countries. In order to contribute to the ongoing strategic of the carrier, merge and refinance RJ's current debt and further

endorse the continuing strategic development and restructuring strategies of the company in both short and medium terms.

In October 2017, the Chairman of the Board of Directors and RJ President/CEO proposed the five-year plan to the PM and the government's economic team that pulls the capital market and targets increasing operating margins, focusing on becoming a "consumer leader" by placing consumers first and offering positive customer service at all touchpoints, and being the "employer of preference" that recruits and maintains qualified and professional workers by ensuring the most successful preparation and career development and success management and compensation. RJ signed a codeshare agreement with Alitalia in February 2017 which allows RJ to extend its Italian offerings. RJ puts its flight code on the regular Amman-Rome route from Alitalia, and on the connections of the Italian carrier from Rome to the 16 domestic destinations that follow. Royal Jordanian's codeshare arrangements with Turkish Airlines, Oman Air and Malaysia Airlines have since extended.

Technical: In the second half of 2014, five modern Boeing 787 Dreamliner aircraft were introduced, in exchange for the exit of four Airbus 340 and one Airbus 330 aircraft. During 2014, Royal Jordanian suspended operations to Accra, Alexandria, Colombo, Milan, Al Ain, Bombay, Lagos, and Delhi after studying this decision, due to the weak commercial viability, the network lines were reduced to 52 instead of 60. Additionally, this year the company faced challenges resulting from the security and political conditions that the region is going through that affected its operational operations in some stations like Tripoli and Benghazi and Misrata as well as Mosul.

In 2015 RJ signed two agreements with Turkish Airlines and Qatar Airways to include more options for travelers. It has also renewed its servicing arrangement with Air France KLM Group, which offers fleet repair and technical assistance for airbus 330 aircraft spare parts. And a contract with German MTU Corporation to manage Airbus 320 engines was renewed. RJ offered online travel facilities to its passengers on their phones in early 2015, with the intention of allowing them to carry out their own travel procedures. RJ has received a permit to oversee the application of data protection requirements and, subsequently, data from electronic payment cards compliant with

Payment Card Industry Data Security Requirements (PCI-DSS). Which helps reduce the probability of penetration of payment cards by training users how to manage data safely at the highest level of technical quality and productivity in the world.

At the end of 2016, RJ added 7 new Boeing 787 to its fleet that will increase its competitiveness as these planes have a bigger capacity, feature high levels of comfort and luxury, and uses 20% less fuel. RJ became the first airline to join an agreement with AccesRail; this arrangement offers travelers the ability to fly by train and bus to more than 100 cities by AccessRail.

In 2107 Royal Jordanian had new agreements with Turkish Airlines Technic, Inc. and Lufthansa Technik in Engineering and Maintenance; whereby RJ would provide pool assistance and spare parts for V2500 engines built from TA on RJ's A320 family aircraft and supply components from Lufthansa for Royal Jordanian's 12 A320 aircraft.

Financial Analysis:

In this part, we will compare each company with the industry average and competitors for each ratio. The values for the comparison with the industry average are taken from 'www.readyratios.com'; a website that gives the average ratio for each industry internationally, and for competitors data; they are taken from 'www.macrotrends.net'; a website that counts the ratios for international companies. Also from gurufocus.com; that is a website that gives the financial data for companies worldwide. As for the cases' data; were taken from the annual reports of each company and the Amman Stock Exchange's website 'www.ase.com.jo', it was also used to take data for the competitors.

1. Profitability Ratios

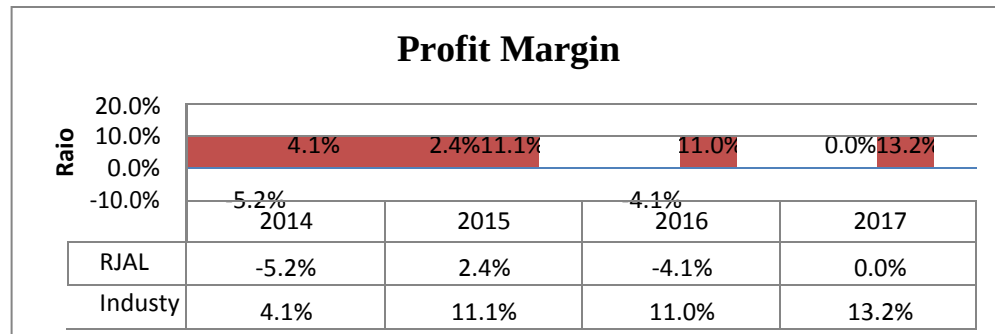


Figure 22: Profit Margin (PM) (2014-2017)

The profit margin (PM) ratio measures the percentage of profit we end up with from the sales revenue excluding all expenses. As shown in **figure 22** the situation is not good for RJ as there highest peak during 2015 is also considered low compared to the industry's average, also compared to 2014 and 2016 which were negative numbers. In 2015 they managed to achieve a little profit for the company. A decrease in operating costs by 21% as a result of a decrease in the number of passengers by 9% due to suspending some destinations for commercial reasons and safety reasons like Yemen. The drop in the number of passengers and a drop in ticket prices as a result of competition caused sales to also decrease. In 2016 RJ PM ratio reached (-4%) with a JD 24.6m loss mainly caused by the decrease in sales due to different reasons, caused by a decrease in the tickets' fares due to competition and a decrease in the number of passengers in the Levant and Arabian Gulf area as a result of tough competition by low-cost carriers operating these routes. A slight improvement is achieved in 2017's PM ratio as a result of passengers' growth of 7% that raised the sales by 4%, and mainly by turning the losses from foreign exchange differences into gain.

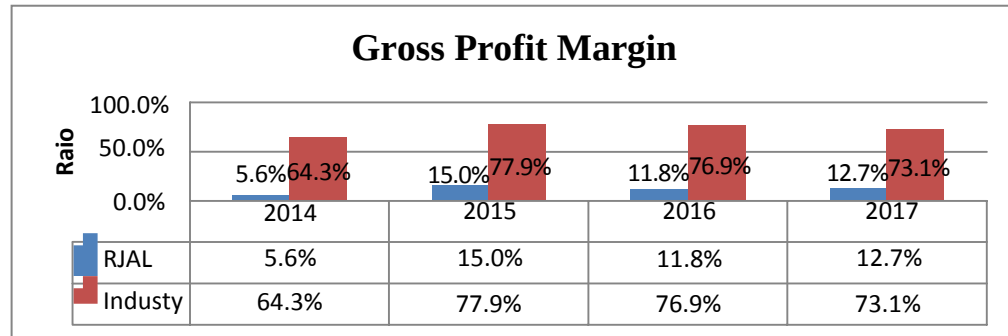


Figure 23: Gross Profit Margin (GPM) (2014-2017)

The Gross Profit Margin ratio measures the percentage left for net profit and to pay expenses after deducting costs. As shown in **figure 23**, the results for all the years are below the industry's average which means that the company does not have enough left to pay its expenses or to be a profit. The highest was in 2015 where RJ had the highest profit during the period 2014-2017 due to a 21% decrease in operating costs from 2014 which was the main reason to reach the lowest ratio for the period. In 2016 there was a slight decrease in the GPM ratio caused by the decrease in sales and an increase in costs specifically losses from foreign exchange differences. 2017 has a slight rise from 2016 resulted from an increase of 4% in sales.

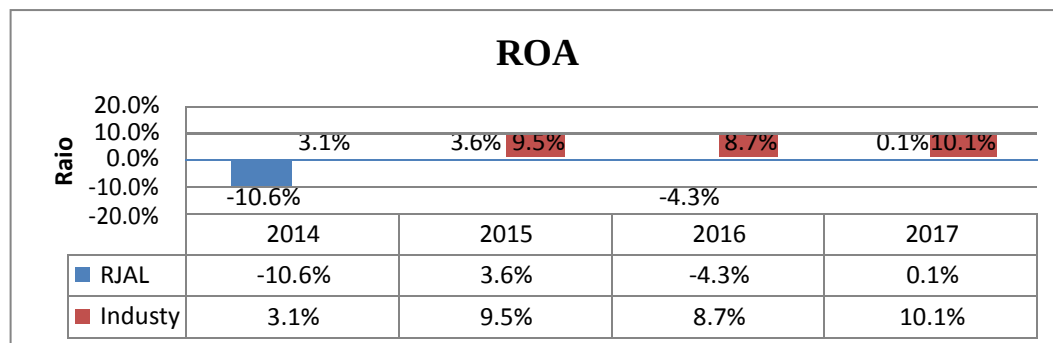


Figure 24: Return on Assets (ROA) (2014-2017)

A return on Assets ratio measures the amount returned to the founders of the business from the assets of the company. As shown in **figure 24**, the results show that the company's ROA is lower than the industry's average and in 2014 and 2016 the results are negative which means that the founders do not get any value from the assets for the moment due the losses the company had in these years. For 2015, RJ had a 4% ratio which was the highest for the period due to an increase in the assets and a reduction in

expenses as stated before. For 2017, the ratio was low but positive with a rise from 2016's (-4%) mainly due to the increase in sales of 4% too.

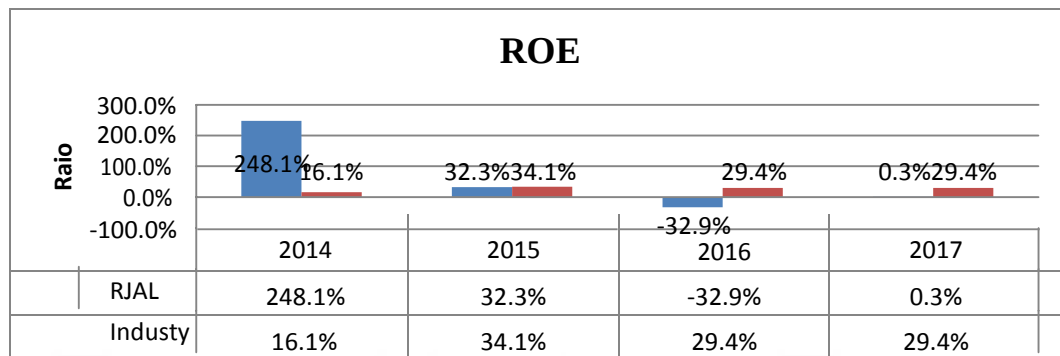


Figure 25: Return on Equity (ROE) (2014-2017)

Return on equity ratio calculates the proportion of return to shareholders (common stockholders) of earnings. As seen in **figure 25**, 2014 has a ratio of 248% that is very high relative to the industry average, and it indicates a risk facing the company. This large number is caused by the negative total shareholders' equity as a result of the accumulated losses from 2013. The best ratio compared to industry's average is 2015's of 32% (compared to 34%), and this improvement is a result of a 51% increase in equity (based on a plan to increase the capital has been made) and a 27% increase in assets (a new aircraft B787). Regardless of the increase in equity (34%), 2016 shows a negative ratio caused by the loss that RJ faced in 2016. In 2017, the ratio has become positive due to the profit achieved in 2017, but regardless of the increase of 16% in equity, the result of the ratio of 2017 is too low which considered a risk for the company.

2. Liquidity Ratios

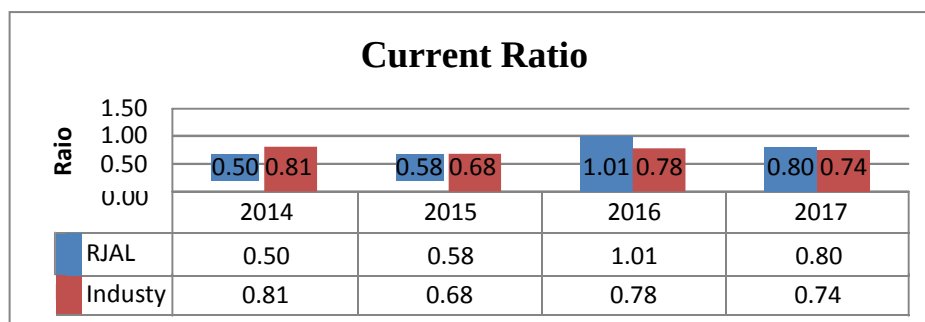


Figure 26: Current Ratio (CR) (2014-2017)

Current Ratio measures how many times the business pays its short-term liabilities from its short-term assets; it is an indicator of the security of the business. **Figure 26** shows that in the years 2014 and 2015 the values are lower than the industry's average this means that the organization needs adequate net funds to meet its existing obligations. In 2015, the existing liabilities rose by JD 255,7m owing to the rescheduling of the loans of the AirportInternational Group and Jordan Petroleum Refinery, the termination of the syndicate loan arrangement, and the launch of a new loan to fund the B787 aircraft purchased on a financial lease leading to higher current liabilities than current assets. RJ obtained the best value for the time of 2016 with an improvement primarily attributed to a reduction of existing liabilities as a consequence of debt rescheduling, which also suggests that the firm is willing to cover any of the current obligations from its capital assets, which means that the company has strengthened its financial status.

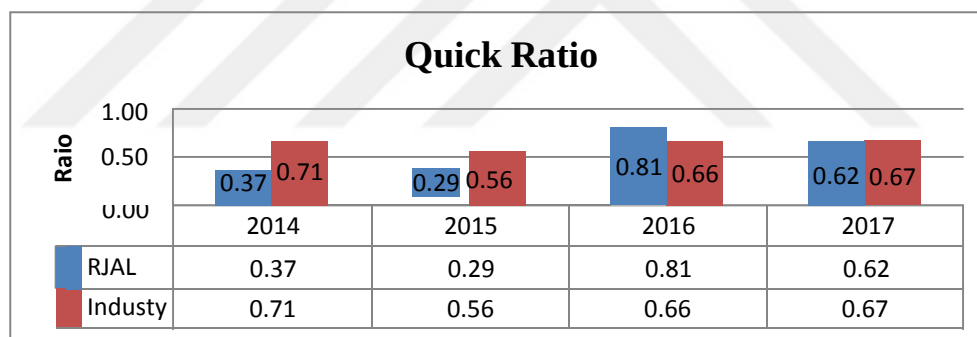


Figure 27: Quick Ratio (QR) (2014-2017)

Quick Ratio simply measures its ability to pay its debts when they come due to taking the most liquid short-term assets. **Figure 27** shows the highest QR for RJ was in 2016 reaching 81%, a value higher than the industry's average, which means that the company is stronger and can cover 81% of its liabilities through its most liquid current assets. The lowest ratio was in 2015, due to an increase in current liabilities and a decrease in the most liquid assets. 2015's value is better than in 2014 compared to the industry's average, in 2014 had also a low ratio due to high current liabilities. In 2017 the ratio decreased compared to 2016 but stayed in a good position compared to the industry which also means that the company can pay 62% of its liabilities from its liquid current assets.

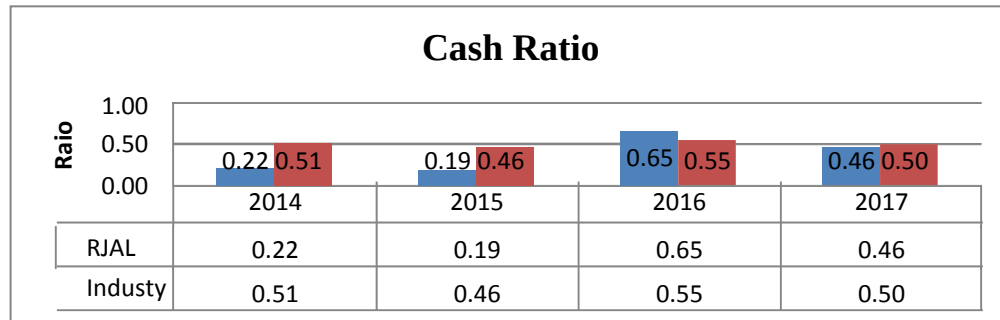


Figure 28: Cash Ratio (2014-2017)

Cash Ratio is the strictest of liquidity ratios, as it measures the ability to meet debts that are due in few days, and for this, you have to look only at cash in the bank and most liquid investments that can be turned into cash on-demand. Thus, the ratio measures a business's ability to meet current liabilities from all on-demand funds. Just like Current Ratio and Quick Ratio, the highest value for Cash Ratio was in 2016 (65%) due to two reasons, first; an increase in Cash and cash equivalents as a result of a rise of JD 70m in Cash and Bank Balances, second is a decrease in the Current Liabilities. **Figure 28** shows that in 2014 and 2015 the ratio was lower than the industry's average, which means that the company can't cover its current liabilities that are due in a few days from its most liquid assets. In 2017 the ratio has decreased compared to 2016 due to a decrease in cash and bank balances by JD40.6 million.

3. Leverage Ratios

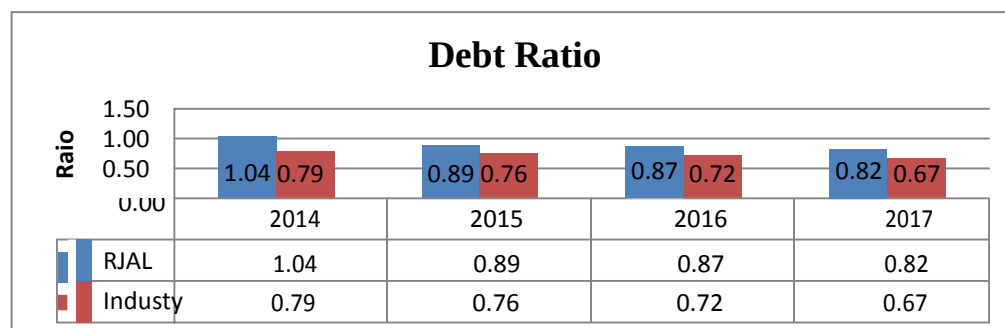


Figure 29: Debt Ratio (2014-2017)

Debt Ratio measures the level of liabilities in relation to assets, it tells the debt levels of a company but not in absolute terms; easier to compare it to different companies of different sizes. It also tells the proportion of assets that would be distributed to owners if

all assets have been sold and debts are paid off. In **figure 29** RJ had a Debt Ratio of (1.04) in 2014, a value higher than one means a risk that the company will have difficulty in getting loans for new projects or even an expansion of a project. For Debt ratio the less is better, in this case, 2017 is considered the best year with a ratio of 0.82 which means that 82% of the company's assets are financed by debts; this fall in the ratio was due to a decrease in the liabilities. In 2015 and 2016 RJ had higher values which are considered a bad sign as mentioned previously.

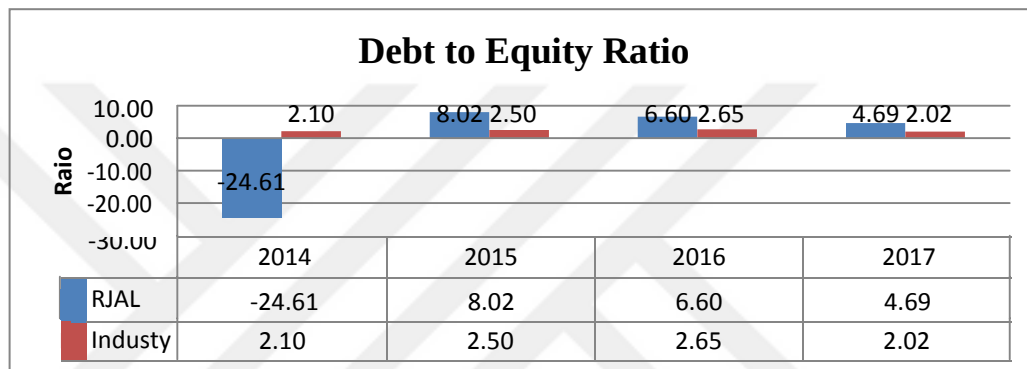


Figure 30: Debt to Equity Ratio (2014-2017)

Debt-to-Equity Ratio measures the use of debt to finance the business against using equity to finance it. **Figure 30** shows that in 2014 a negative value due to a negative value of shareholders' equity as a result of the loss RJ faced and has a meaning that the company had losses. In the coming year, the ratio got improved from the negative result but is still not considered a good ratio due to the high values compared to the industry, and like Debt Ratio; too high values are not preferred and means more risk. In 2015 the improvement was due to a 51% increase in Total Shareholders' Equity, 34% in 2016, and 16% in 2017. The best year for RJ is 2017 with the lowest acceptable value that means less risk for the company.

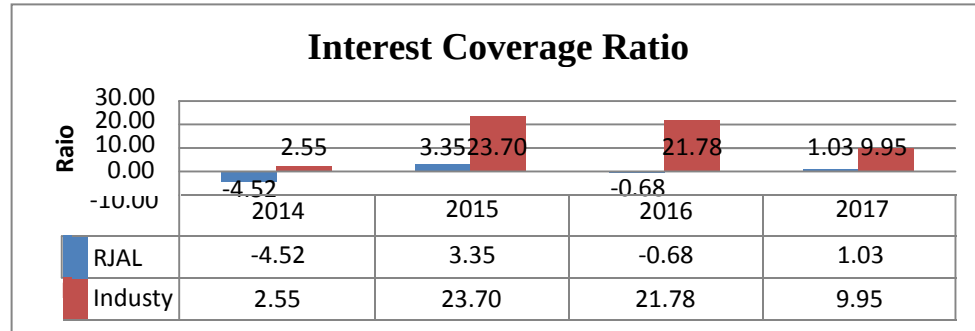


Figure 31: Interest Coverage Ratio (2014-2017)

Interest coverage ratio (also known as Times Interest earned) is purely a risk indicator which tells us how many times it is feasible to use earnings before interest and tax (EBIT) over a business to cover its interest payments. This formula informs us about debt serviceability, the higher the formula; the more often the interest cost can be covered over its EBIT, the better it can pay its debt and the healthier a company seems to be. **Figure 31** shows that for the years 2014 and 2016 the values are negative due to the losses RJ faced and undoubtedly it is a good indicator for the company. However, in 2015 and 2017 the values were positive but not even close to the industry average though it is not considered a bad ratio as it is above 2.5 for 2015. For 2017 the ratio increased compared to 2016's and decreased compared to 2015. And with a value of 1.03, it shows that the company is having a difficult time showing an increase in the risks the company is facing like a risk of default.

4. Efficiency Ratios

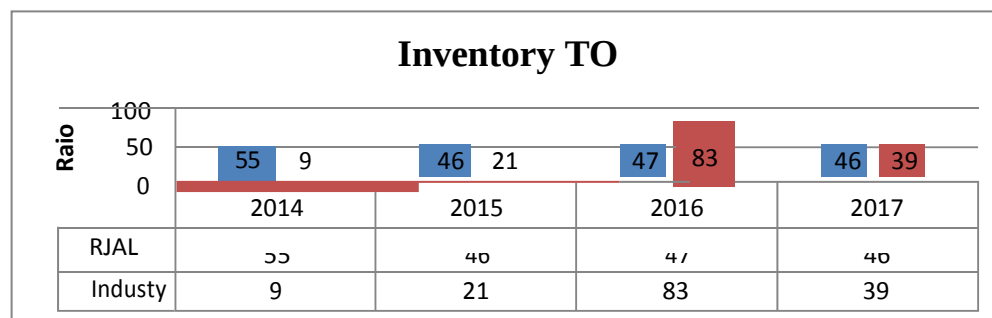


Figure 32: Inventory Turnover (Inventory TO) (2014-2017)

The Inventory TO ratio measures how efficiently management runs the business; in other terms, how effective it is in different places, a shift in this ratio is a improvement

in the inefficiency of the activities of the organization, and the higher the ratio is the better. Taking into consideration that RJ is an airline company and doesn't sell inventory, their inventory is the spare parts and supplies for airplanes. Shown in **figure 32**; the best value comparing to industry values is in 2017 which is due to the continuous decrease in the inventory from previous years as a result of an increase in the operating costs of 3% compared to 2016 caused by the increase in fuel prices from USD 1.56 to USD 1.87. 2016 and 2017 have close values that are considered good; means that the company is managing its operations well by not keeping an excess of inventory. For 2014 and 2015; the values are not good due to high costs especially for 2014.

Note: In the airline industry, available seats are commonly referred to as inventory.

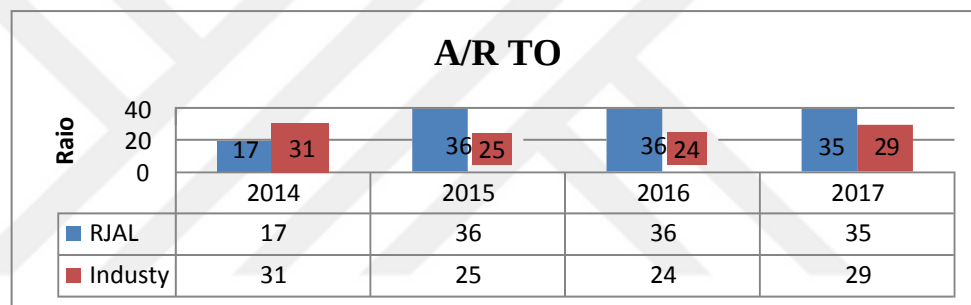


Figure 33: Accounts Receivables Turnover (A/R TO) (2014-2017)

A/R TO ratio tells how many times the company turned its accounts receivable (AR) balance into cash, this will assist in cash flow preparation and evaluate the performance level within the collection team. Overall, **figure 33** shows values for 2015, 2016 and 2017 are good values that show that RJ's management is efficient in collecting its receivables; a higher than industry value. Though in 2015 sales have dropped 13% due to a reduction in ticket prices as a result of competition, and in 2016 a 9% drop in sales also due to a reduction in ticket fares mainly as a result of competitors of low-cost carries.

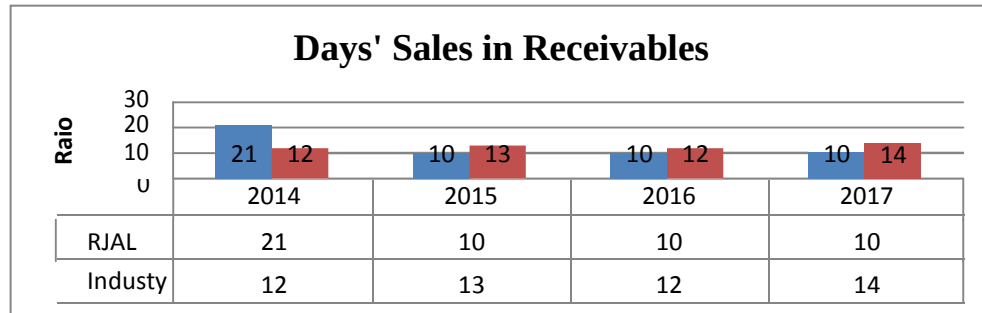


Figure 34: Days' Sales in Receivables Ratio (2014-2017)

Days' Sales in Receivables Ratio tells how many days on average it takes to turn the accounts receivable balance into cash. As it is based on the previous ratio; the values for 2015, 2016, and 2017 are very good values compared to the industry averages as showed in **figure 34**. In fact, they are better than the industry average as the lower the better for this ratio. In 2014 it is not a good ratio as it is higher than the industry's, meaning that the company needs 21 days to turn its receivables into cash which compared to the industry (12 days) is considered too high and also compared to the coming years which shows that the management has fixed some of the issues in this matter.

5. Valuation Ratios

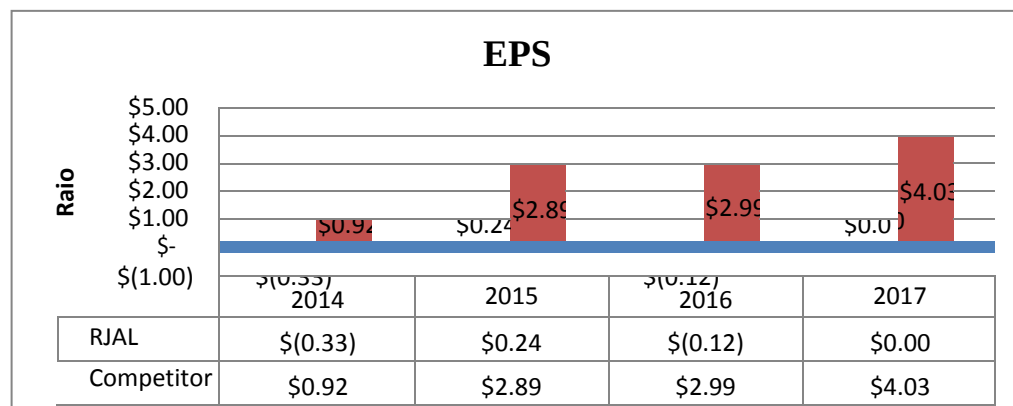


Figure 35: Earning Per Share (EPS) (2014-2017)

EPS ratio tells how much profit a shareholder gets from every common share outstanding. The most widely quoted ratio for listed companies worldwide, it is a quickly comparable measure across businesses. As mentioned previously and shown in **figure 35**; RJ had losses in 2014 and 2016 and due to that EPS was a negative value which means the loss per share and that shareholders don't get any profit for their share

in the company. Overall from the EPS ratio, we can figure that RJ is not having good financial years.

Note: The values for RJ's EPS have been converted into terms of dollars to make the comparison more accurate.

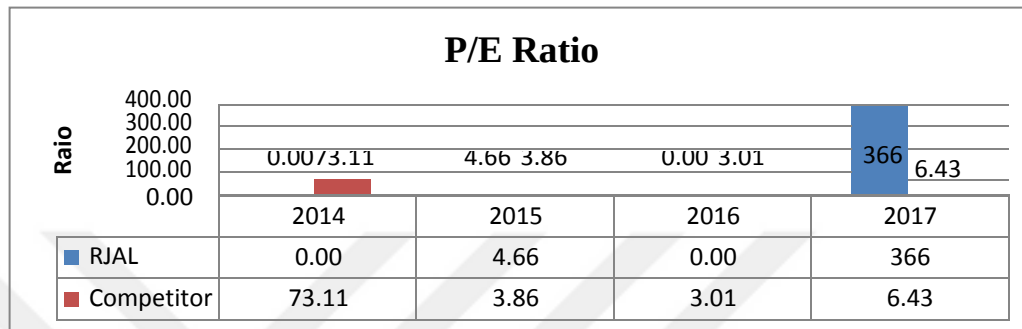


Figure 36: Price-Earnings Ratio (P/E) (2014-2017)

The P/E ratio also used as an indicator of how 'cheap' or 'high' a stock is compared to another index, which calculates the amount of time a company's EPS is compensated by the purchase price. As showed in **figure 36** in 2014 and 2016; the ratio is negative because the company had losses in those years; which is not applicable. In 2015; which is a year RJ had made some changes that led to profit; the ratio was good compared to the competitor with a value of 4.66, but in 2017 the ratio was too high due to the too low EPS for the same year. Generally, a high P/E ratio is considered a good sign but in this case, it is not. As in this case, it shows that the price/share is maybe overvalued.

Note: The values for BOJ's EPS have been converted into terms of dollars to make the comparison more accurate.

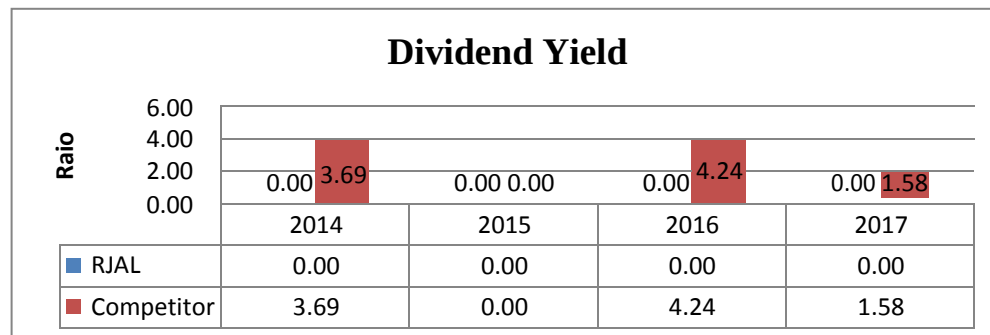


Figure 37: Dividend Yield (2014-2017)

The ratio gives a simple annual return on investment based on the level of dividends in relation to the stock price, it is widely used for investment comparison; dividends are the return on a stock market investment. RJ did not pay dividends for the whole period (2014-2017) which gives the ratio value of zero for the four years as showed in **figure 37**. RJ is not issuing any dividends as the management is using all of earning as an investment in the company in order to make improvements to the company, and in this case, RJ can attract any investors.

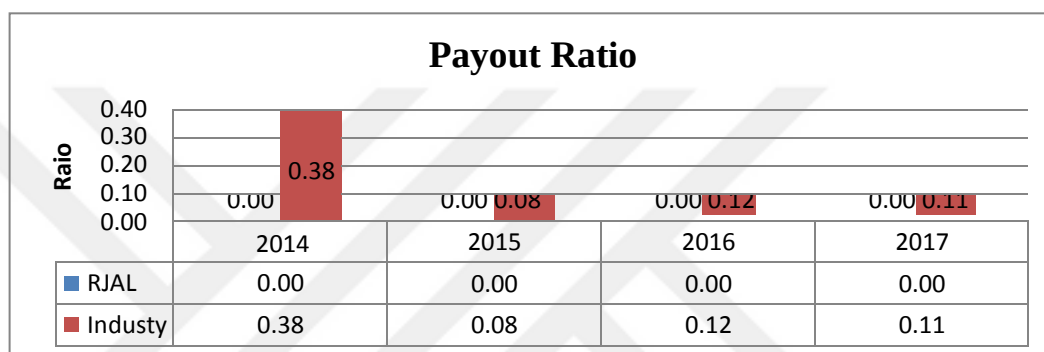


Figure 38: Payout Ratio (2014-2017)

The payout ratio shows the proportion of profits paid out in dividends; as a percentage of EPS, it reflects dividends per share; this ratio is a simple guide to how the company spends the profits, how the proceeds are distributed as dividends to the stockholders or held for potential development of the sector, and the greater the stronger it is. Based on the previous ratio; the result for the whole period is zero because there were no dividends in all of the years we are analyzing as shown in **figure 38**.

b. Jordan Phosphate Mines Company (JPMC).

The Jordan Phosphate Mines Company was created in 1949 and four years later in 1953 incorporated as a public company. The company's objectives are the exploration of phosphates and fertilizers. The company 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. By the year 2006, the company was privatized in order to enhance the national economy as part of the country's economic reform program strategy. In the time period between 2007 and 2013 the company was

charged for deals corruptions by the Jordanian Anti-Corruption Commission which believed to have an impact on its accounts (Alkhatib, Albzour, & Marji, 2015).

JPMC currently runs three phosphate rock mines in Jordan, and a downstream fertilizer and chemical plant in Aqaba, South of Jordan, generating phosphoric acid, diammonium phosphate ("DAP"), sulfuric acid and aluminum fluoride (Alnabhan, 2005). It is considered one of the most important phosphate countries in the world with more than 60% of it has phosphate bearing deposits, the world's fourth biggest phosphate rock exporter and also the main income exporter in the Jordanian economy. Phosphate can be contained in the land at different depths beginning from zero to twenty meters below the ground, make phosphate production very cost-effective and quite profitable in Jordan. In the south of Jordan, there are three mines that produced about 8 Mt of phosphate annually, of which around 1.5-2 Mt is used for fertilizers and acids (Tarawneh, 2016).

Achievements and changes 2014-2017 of JPMC:

Financials: Jordan Phosphate Mining Company (JPMC) invested in 2014 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. Regardless of the challenges JPMC had faced in 2014 like the fall of the international prices of phosphate and phosphate fertilizer markets, as well as raising the mining fees and land lease. JPMC managed to achieve positive results with total sales of rock reaching 7.3 million tons compared to 5.1 for the previous year 2013 and exporting 4.6 million tons (which is considered the highest since 2011) compared to 3.2 in 2013.

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). Continuing the plan of 2015 the JIFCO to be the largest plant for phosphoric acid

in the region and worldwide. Regardless of the ongoing downturn in foreign synthetic phosphate and phosphate fertilizer pricing in 2015, the Company reported good performance during the year as the overall marketed phosphate increased to 8.2 million tons (7.3 million tons for 2014) and 4.8 million tons (4.6 million tons) were exported.

2016 was a tough year 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%, fertilizer prices dropping by 27% and phosphoric acid prices falling by 28.4%. The sudden fall in commodity values has adverse implications for the company that resulted in a decrease in sales of rock phosphate from 8.2 (in 2015) to 7.9 million tons and a decrease from 4.8 (in 2015) to 4.7 million tons for exportation. 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.

JPMC suffered from a sustained rapid fall in their product prices in 2017. The price of raw phosphate has fallen by 26% in the last two years, as well as the price of phosphate fertilizers and compound fertilizers by 26.1%. In contrast, phosphoric acid prices have fallen by 30%, followed by a strong rise in Sulphur and ammonia rates. In accordance with the promises reached by both the Board of Directors 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.

Technical: Notwithstanding the adverse factors correlated with declining global product prices and a general downturn in demand for phosphate and fertilizers, JPMC stayed committed to its 2016 Production & Marketing Strategy and proceeded to implement development and marketing strategies to produce the best possible return. Although seeking to seek new opportunities, JPMC has increased its footprint in its

current developed markets. Al-Abyad Fertilizer Corporation began activities at its plants in 2017 following a two-year shutdown.

Financial Analysis

1. Profitability Ratios

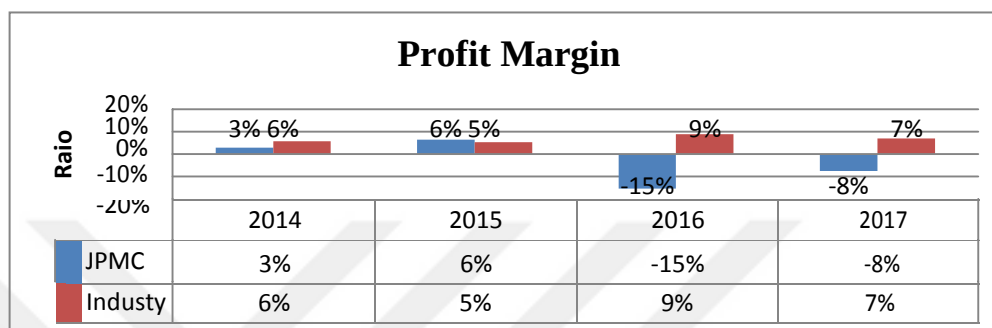


Figure 39: Profit Margin (PM) (2014-2017)

As mentioned before, the profit margin (PM) ratio measures the percentage of profit we end up with from the sales revenue excluding all expenses. As shown in **figure 39**; for 2014 and 2015 the numbers are fine but for 2016 and 2017 there are negative numbers and it is due to a loss for both years mainly is caused by a decline in sales due to a sharp decline in the prices of phosphate by 19%, fertilizers by 27%, and phosphoric acid declined by 28.4%. Back to positive years, in 2014 the ratio was a little lower than the industry average but is acceptable with a 3% profit the company gets after excluding all kinds of expenses. For 2015 the ratio was very good and higher than the industry's with a value of 6% mainly due to the high sales the company had in this period.

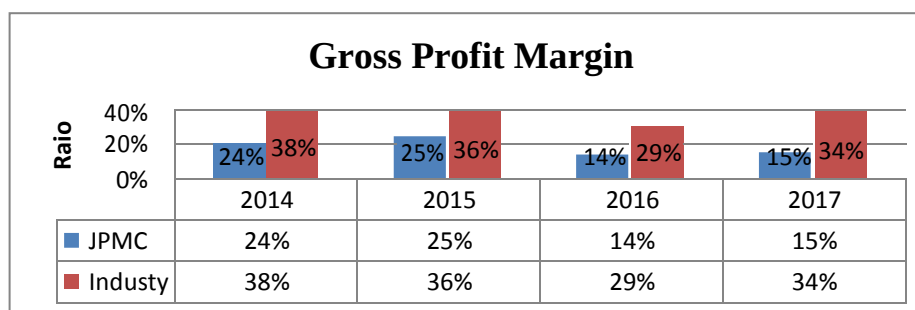


Figure 40: Gross Profit Margin (GPM) (2014-2017)

The Gross Profit Margin ratio measures the percentage left for net profit and to pay expenses after deducting costs. As shown in **figure 40**; for 2014 and 2015 the values are

considered fair enough as the company has almost quarter what it got to cover its expenses and for net profit. But for 2016 and 2017 the values decreased (also in 2016 the industry average also decreased), and this fall is as mentioned in the previous ratio was mainly due to the fall in sales due to a decrease in prices, which means that what's left for the profit and expenses is less than in 2014 and 2015.

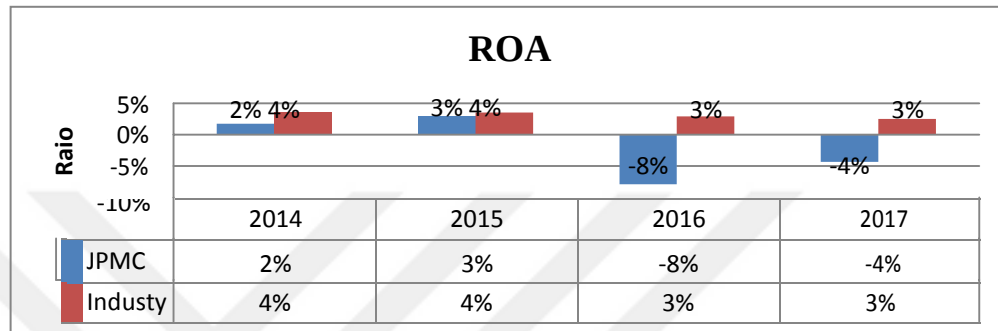


Figure 41: Return on Assets (ROA) (2014-2017)

A return on Assets ratio measures the amount returned on the assets of the company to the founders of the business and is considered one of the most fundamental measures of the success of a business. Shown in **figure 41** the best value is in 2015, and the main difference for the first part and the second part of the period is the company had losses for the years 2016 and 2017, which caused the ratio to be negative values. For 2014 and 2015, the value means that for every dollar in assets the founders get 2% and 3% respectively.

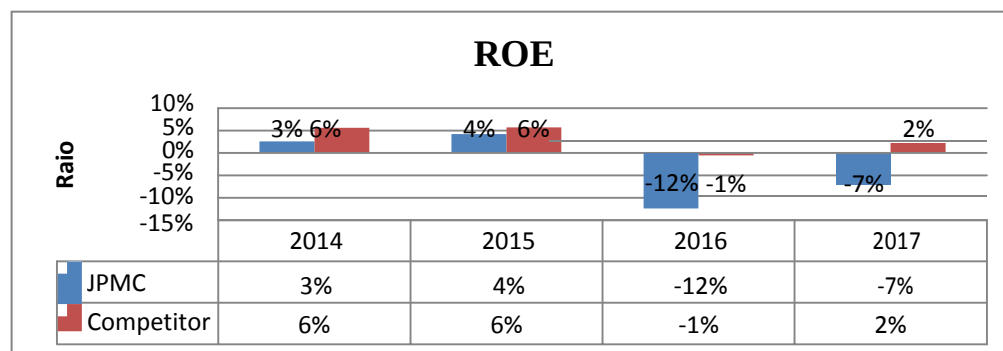


Figure 42: Return on Equity (ROE) (2014-2017)

Return on Equity ratio measures the percentage of the profit returned to the owners (common stockholders) and higher values are preferred. As shown in **figure 42**; in 2016 and 2017 the values are negative due to the losses JPMC faced in those years, but for

2014 and 2015 (has the highest value) the values are good compared to the competitor. The increase in 2015 was due to a 65% increase in the profit of the company which was a result of an increase in sales compared to 2014.

2. Liquidity Ratios

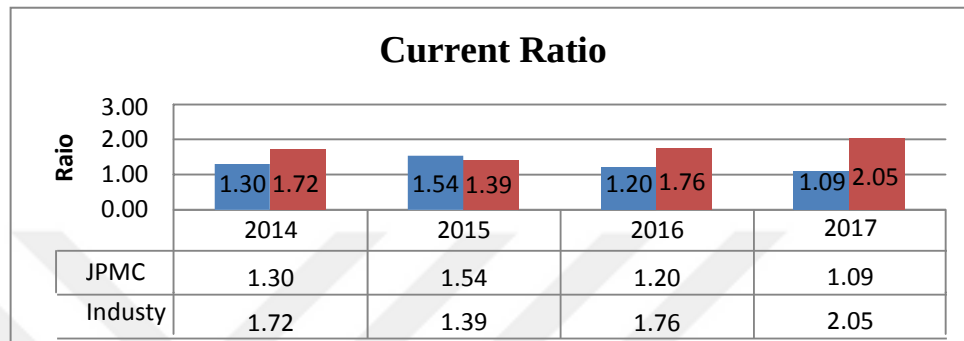


Figure 43: Current Ratio (2014-2017)

Current Ratio measures how many times the business pays its short-term liabilities from its short-term assets; it is an indicator of the security of the business. Overall, the values are good especially in the first part of the period (2014 and 2015) as shown in **figure 43**, as generally a value less than 1 means there is a problem meeting obligations, and a value higher than 3 indicates a liquidity surplus. The improvement in 2015 was due to a fall in the current liabilities of the firm, and regarding the fall in the ratio of 2016 and 2017, it was due to a continuous fall in the current assets and a continuous increase in the current liabilities. For 2017, it was the lowest which indicates that the company will have trouble meeting its short term obligations.

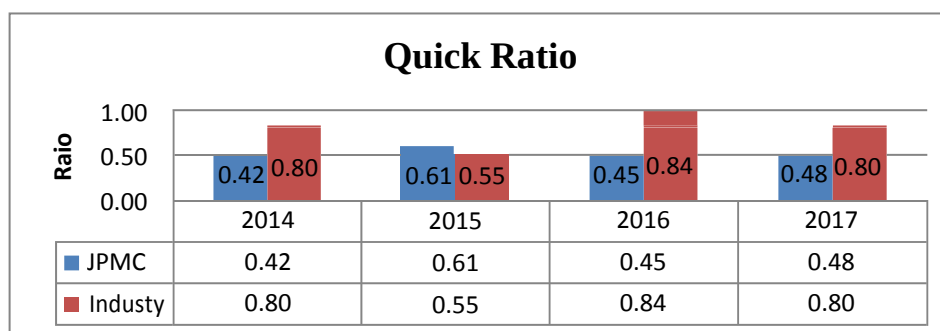


Figure 44: Quick Ratio (QR) (2014-2017)

Quick Ratio simply measures its ability to pay its debts when they come due to taking the most liquid short-term assets. Generally, the values are acceptable but in 2015 JPMC

had a good value that shows an increase in its ability to meet its obligations from its most liquid asset; which is mainly due to an increase in “cash on hand and banks” and a 21% decrease in current liabilities. As shown in **figure 44**, for 2016 and 2017 the values fell compared to 2015; due to a rise in current liabilities and a fall in the most liquid assets like “short-term investments” and “cash on hand and banks”.

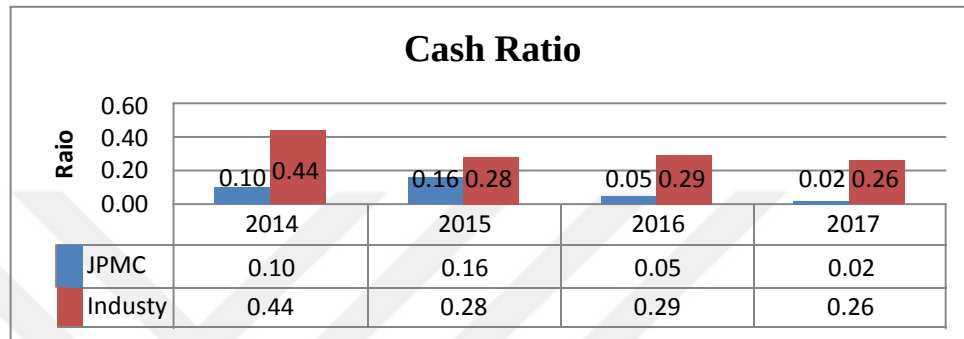


Figure 45: Cash Ratio (CR) (2014-2017)

Cash Ratio is the strictest of liquidity ratios, as it measures the ability to meet debts that are due in few days, and for this, you have to look only at cash in the bank and most liquid investments that can be turned into cash on-demand. Cash ratio is a narrower version of Quick Ratio and most values are affected like stated before. **Figure 45** shows that the values are not fairly good, but the best was in 2015 the best one mainly due to the increase in “cash on hand and banks” compared to 2014 as stated before, but the dramatic fall in 2016 and 2017 was due to a fall in “short-term investments” which became zero for both years, and “cash on hand and banks”. These values mean that JPMC is incapable of meeting its due-in-few-days-obligations.

3. Leverage Ratios

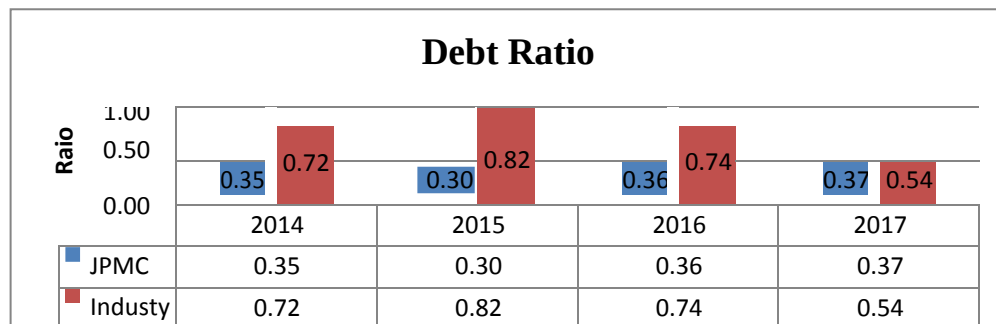


Figure 46: Debt Ratio (2014-2017)

It is both a risk ratio in regards to solvency as well as strategy ratio as it can view the level of assets financed by debts. Debt Ratio measures the level of liabilities in relation to assets, it tells the debt levels of a company but not in absolute terms; easier to compare it to different companies of different sizes. It also tells the proportion of assets that would be distributed to owners if all assets have been sold and debts are paid off. Generally, the values are good as they are between 0 and 1, and compared to the industry average they're very good as in debt ratio lower percentages are preferred. As shown in **figure 46**; the best value for this period was in 2015 with a ratio of 30%; which means that 30% of JPMC's assets are financed by debts, and this value decreased compared to 2014 due to a 20 decrease in the liabilities. For 2014, 2016 and 2017 the values are close to each other with a slight increase in liabilities values and a constant decrease in the total assets since 2014, these values are fairly good too.

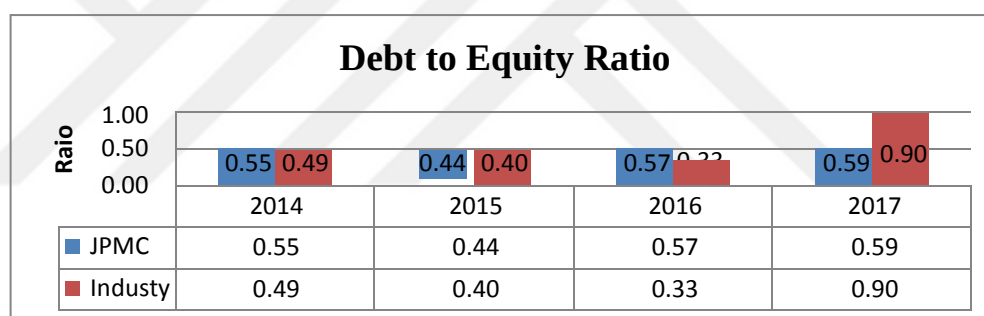


Figure 47: Debt to Equity Ratio (2014-2017)

Debt-to-Equity Ratio measures the use of debt to finance the business against using the equity to finance it, and lower values are preferred as it means less risk for the company. Generally, **figure 47** shows that the values are higher than the industry average which is a bad sign, and like the previous ratio; 2015 has the best value and the closest to the industry's values; meaning that 44% of the equity is financed by debts. For 2016 and 2017 the values were increasing as a result of an increase in total liabilities and a decrease in total assets at the same time.

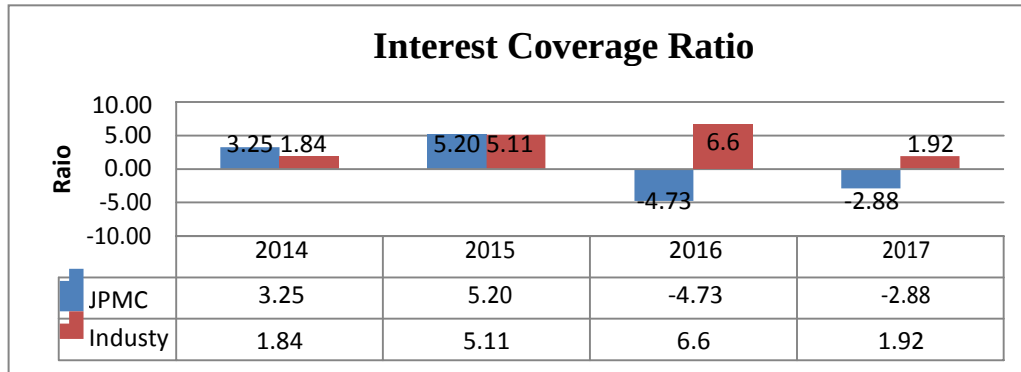


Figure 48: Interest Coverage Ratio (2014-2017)

Interest coverage ratio (also defined as Times Interest earned) is a risk metric that shows us how many times over a company's earnings before interest and tax (EBIT) can be used to fund its interest costs, the higher the figure; the more times over the EBIT it can reach the interest cost, the faster it can finance its debt and the healthier a corporation is. A change in EBIT ratio means that the margin of safety (risk) is changing, **figure 48** shows that for 2016 and 2017 the values are negative due to the losses JPMC faced. But in 2014 the value is fairly good and it has improved in 2015 which means that JPMC would easier service its debts from earnings and allow for further growth or investments, and this increase in 2015 is a result of a rise in the income the company had.

4. Efficiency Ratios

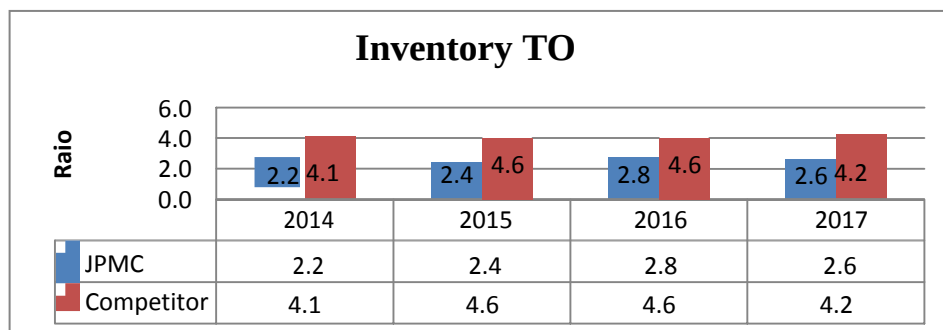


Figure 49: Inventory Turnover (Inventory TO) (2014-2017)

The Inventory TO ratio calculates how many times a firm will sell the typical inventory volume in a specified timeframe, a change in that ratio is a shift in the inefficiency of the company's activities, and a high ratio is preferred. Overall, as shown

in **figure 49** the values are fairly good but lower than the competitor's average. The highest was in 2015 as a result of a small increase in the cost of sales and a decrease in the average inventory for the same year; which had a continuous decline since 2014, and it was the main reason for the increase in 2015, 2016, and even 2017 (compared to 2014).

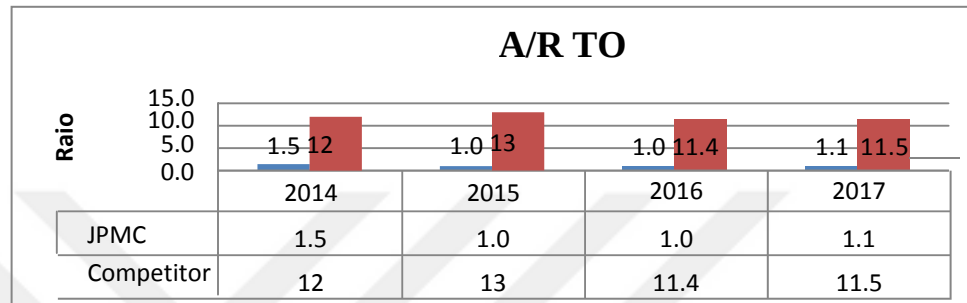


Figure 50: Accounts Receivables Turnover (A/R TO) (2014-2017)

A / R TO ratio tells how many times the company has turned its account receivable (AR) into cash, helps with cash flow planning and assesses the success level within the collections department. Overall, as shown in **figure 50** the values are low and somehow stable for most of the period though there have been some changes in the credit sales. The highest value was in 2014; which was due to the low accounts receivables for this year and the year before it, 1.5 means the business turned their complete accounts receivable balance into cash 1.5 times. For the other years; the value decreased in 2015 and stayed almost the same for the following years which states that the company had not changed its collection policy or perhaps management is dedicating less time and effort on managing a key aspect of cash flow control.

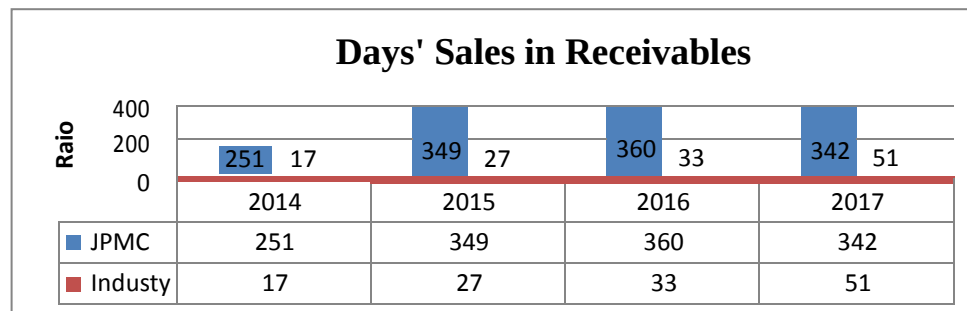


Figure 51: Days' Sales in Receivables Ratio (2014-2017)

Days' Sales in Receivables Ratio tells how many days on average it takes to turn the accounts receivable balance into cash, and the lower the better is the ratio is. The values for JPMC are too high even for the industry, **figure 51** shows in 2014 (least value) JPMC needs 251 days to turn its accounts receivables into cash which is considered too high. And as said previously this shows that the management is not taking the efforts to manage its cash flows better, the increases in 2015, 2016, and 2017 (compared to 2014) are mainly due to the decrease in the accounts receivables, but the decrease in 2017 compared to 2016 is due to the increase in sales generally and credit sales specifically.

5. Valuation Ratios

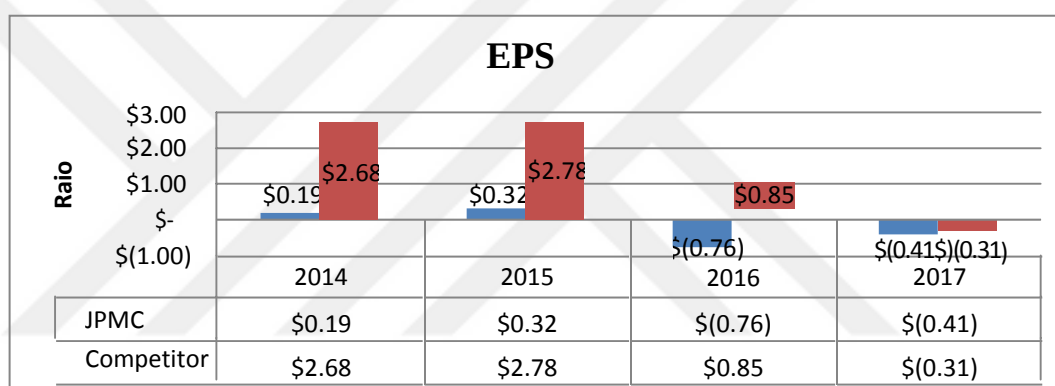


Figure 52: Earning Per Share (EPS) (2014-2017).

EPS ratio tells how much profit a shareholder gets from every common share outstanding, it is the most widely quoted ratio for listed companies worldwide. As shown in **figure 52**; EPS for JPMC is low but is acceptable for 2014 and 2015, but for 2016 and 2017 the values are negative due to losses the company had in those years as mentioned earlier; which was a result of a decrease in sales as a result of the fall in the prices of phosphate and other products.

Note: The values for JPMC's EPS have been converted into terms of dollars to make the comparison more accurate.

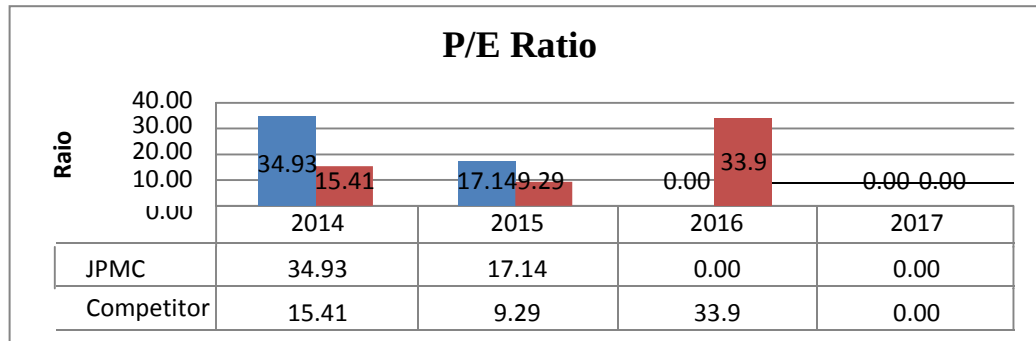


Figure 53: Price-Earnings Ratio (P/E) (2014-2017)

The P/E ratio also used as a indicator of how 'cheap' or 'high' stock is compared to another index, which calculates the amount of times a company's EPS is covered by the stock price. **Figure 53** shows a high P/E ratio is favorable; as in 2014 the ratio was acceptable and even higher than the competitors P/E ratio, but for 2015 it decreased due to a decrease in the price/share. And for 2016 and 2017 it became zero due to the losses for these years.

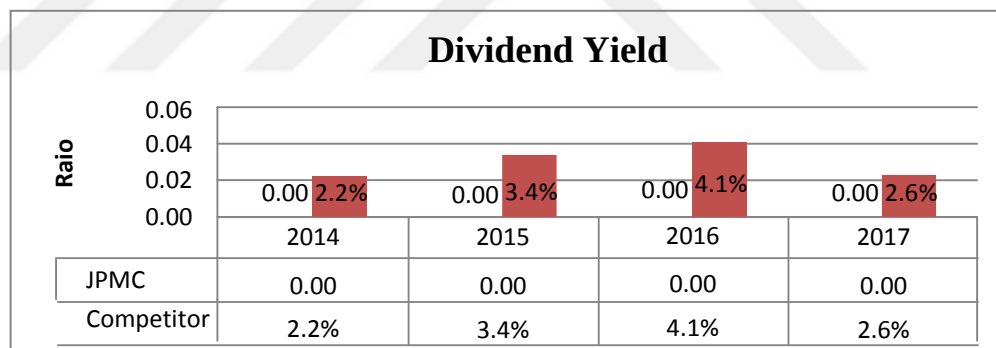


Figure 54: Dividend Yield (2014-2017)

The formula provides a clear average return on investment based on the level of dividends proportional to the stock price, it is commonly used for income comparison; dividends are the yield on expenditure in the equity market. **Figure 54** shows that since 2014 JPMC had not issued any dividends, and this is why the values are zero for the whole period. Not issuing any dividends for a long period of time would not attract any investors.

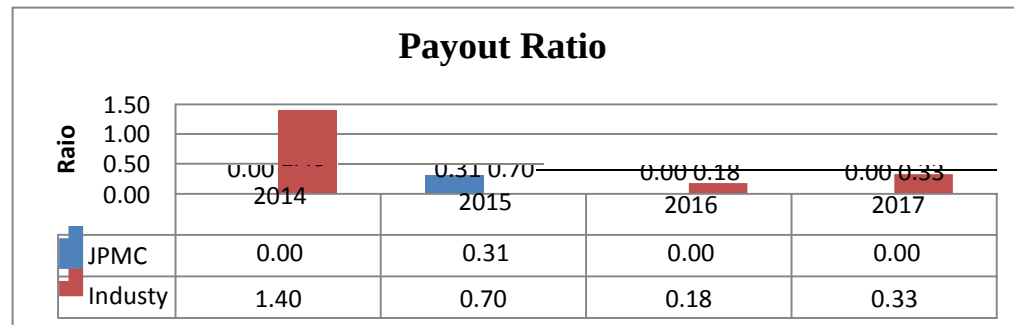


Figure 55: Payout Ratio (2014-2017)

The distribution ratio shows the proportion of profits paid out in dividends; as a percentage of EPS, it reflects dividends per share. The payout ratio is a simple guide to how the company manages its profits, whether profits are distributed to the owners as dividends or held for potential development or investment for the business; and the higher is the ratio the better it is. And as shown in **figure 55**; in 2015 where JPMC had a profit of JD34M, the company increased its capital by 10 %, issuing the bonus shares. But for the rest of the years, the values are zero as there no change and no dividends paid as mentioned in the previous ratio.

c. Bank of Jordan (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 (Bank of Jordan website, 2019)

Achievements and changes 2014-2017 of BOJ:

The key company growth in the second quarter of 2014 was developing the Capital Markets Department. On the basis of criteria implemented by international investment funds, the department oversees investments in high quality global equities in different markets. This move would allow the Bank to seize attractive low-risk prospects on the

stock markets and increase its earnings from foreign assets (Bank of Jordan annual reports, 2014)

Owing to this evolving climate of the Year 2015, the problems faced by Jordanian banks were mainly linked to the extreme decline in interest rates that Jordan's Central Bank charges for overnight deposits and other monetary policy instruments. Furthermore, domestic government funding from USD and JOD stayed at somewhat elevated rates, while other governmental and pseudo-governmental entities increased funding (locally) in US dollars. These factors created excess liquidity from Jordanian Dinar that could not be properly deployed in the private sector due to the above-mentioned circumstances affecting the demand for corporate loans for efficiency.

Last but not least, regulatory changes have impacted operating earnings for the financial industry. Changes in tax legislation for 2015 culminated in a 35% rise in the tax rate on banking profits from its 30% rate in 2014; generating a substantial 17% change in the tax burden related to this element alone. In fact, administrative adjustments to the accounting framework were imposed by the both financial regulators in Jordan and Palestine. Interest rates in the Jordanian Dinar in 2016 continued to be influenced by increasing US levels as well as the assumption that more rises in Federal Reserve levels are coming. Bank of Jordan plans to pay 18 piasters per share as dividends for an effective dividend yield of 6.25% depending on the closing balance at the end of the year, following approval by the Shareholders General Assembly. The Bank has provided numerous lending services in an attempt to draw clients, including the auto finance program, whereby consumers may be given a loan without a down payment in a matter of hours (Bank of Jordan annual reports, 2015).

Technical: BOJ developed new services within its electronic payment gateways in 2014, thereby improving the customer experience and providing increased flexibility. The goal was to save the customers time and effort while retaining high efficiency and security. A further landmark was the introduction of the custody program in 2014, rendering BOJ the first central bank to offer the facility. The move would help the Bank fulfill international fund and portfolio requirements and include other relevant resources including safekeeping and settlement, monitoring, executive activities, receipt and

delivery of dividends, and marketing details. Additionally, the newest "Marathon" saving program was released in April 2014, targeting consumers aged 18 and over. The Bank has progressed on with its growth plan, opening two more branches in Amman and a third in Zarqa to ensure that its offerings meet all possible segments of the market.

In due course, the Automated Clearing House (ACH) was implemented in compliance with the specifications of the CBJ, providing a fast and safe transfer of interbank funds. This would also be connected to the latest Internet Banking Network to provide different services for business clients in particular. Concerning SMS applications, three countries were introduced to the list of places where subscribers would access the device, including Egypt, the UAE and Iraq. GASPER Monitoring Program has now been enabled to track Automated Teller Machines (ATM) and to collect Uptime and Downtime Reports to ensure round-the-clock ATM performance.

Corporate Social Responsibility: BOJ has given 10 scholarships in the education field at the UNRWA-run Faculty of Educational Sciences and Arts. In collaboration with the Ministry of Higher Education and Scientific Research a further 33 university scholarships were funded by the Bank of Jordan Foundation.

Bank of Jordan has reached another milestone in the regional expansion plan for 2017 by opening a traditional wholesale branch in the Kingdom of Bahrain that provides access to the entire GCC sector. The new division started operations in January 2018 to support a wide variety of organizations throughout the MENA area. In turn, two additional divisions were added in Irbid Governorate and the capital Amman, and operations started at the King Hussein Bridge departures terminal with an exchange desk. It is worth remembering that by the end of 2017, in Jordan and Palestine, the number of ATMs servicing clients had exceeded 174. In appreciation of the activities of Bank of Jordan, the Union of Arab Banks has granted BOJ the Innovation & Excellence Award for 2017. The bank has also won the Innovation Award for becoming the first bank in the Kingdom to give all its credit cardholders the One-Time Password (OTP) service in 2017. A further achievement in 2017 was the implementation of solar photovoltaic cells in northern and southern Jordan, amid efforts by the Bank to harness

solar power to generate electricity. The move is expected to further high the medium and long-term high energy bill of the Bank (Bank of Jordan annual reports, 2017).

A massive network upgrade was also carried out. Similarly, the International Comprehensive Banking System (ICBS) and Fair Isaac Corporation (FICO) systems were upgraded. The PCI-DSS v3.2 certificate was also acquired in 2017, a protection vulnerability review was carried out and mitigation mechanisms were checked to ward off any cyber-attacks. There were also new Flex servers designed to handle the scale of the latest e-services on sale. The Bank has made yet another step forward: it has set up Marketing Institute to support selling managers meet revenue objectives. The teaching facility; run by a professional consulting firm. The Bank has reached an arrangement to create a Credit Academy with Moody's Investor's Service. Under the agreement, the Corporate Business Planning Team and Small & Medium-size Enterprises (SMEs) have launched a comprehensive training system to improve employee specific skills and awareness relevant to credit activities.

Financial Analysis

1. Profitability Ratios

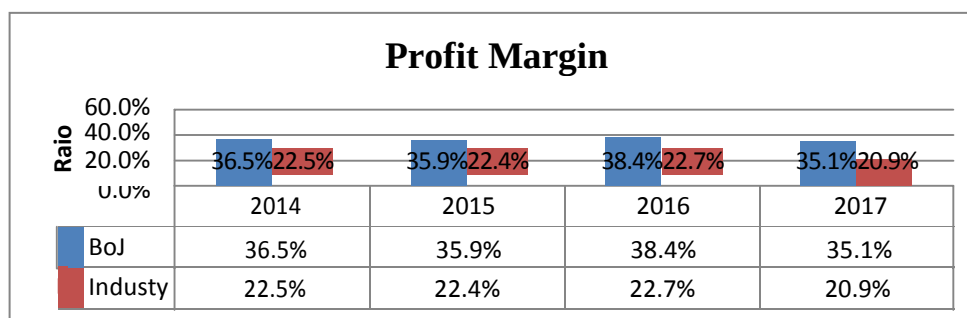


Figure 56: Profit Margin (PM) (2014-2017)

The profit margin (PM) ratio measures the percentage of profit we end up with from the sales revenue excluding all expenses. In general; BOJ (Bank of Jordan) has very good values for the whole period that means that they are managing their costs. As shown in **figure 56**; the highest value was in 2016 (38%) mainly due to a decrease in the expenses (17,153,738) compared to 2014 (JD 30,139,957) and 2015 (JD 20,826,542); which means that the company has control over its costs. Even though sales are the

highest in 2017 whereas net income was also the highest; the ratio was the lowest in that year as a result of the big increase in the expenses of 2017.

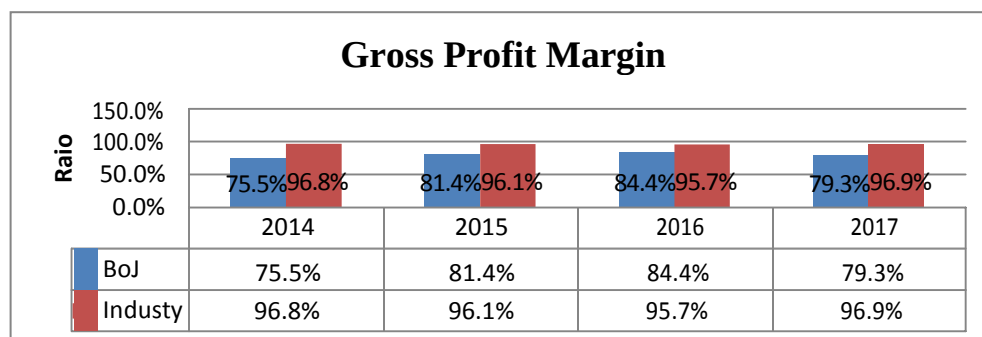


Figure 57: Gross Profit Margin (GPM) (2014-2017)

The Gross Profit Margin ratio measures the percentage left for net profit and to pay expenses after deducting costs. Overall, the values are very good even though lower than the industry averages. As shown in **figure 57**; the highest value was in 2016 as a result of a decrease in the expenses as mentioned in the profit margin, and for the lowest which was in 2014; it was also a result of an increase in the expenses. This would mean that BOJ has improved its control over the costs through the years.

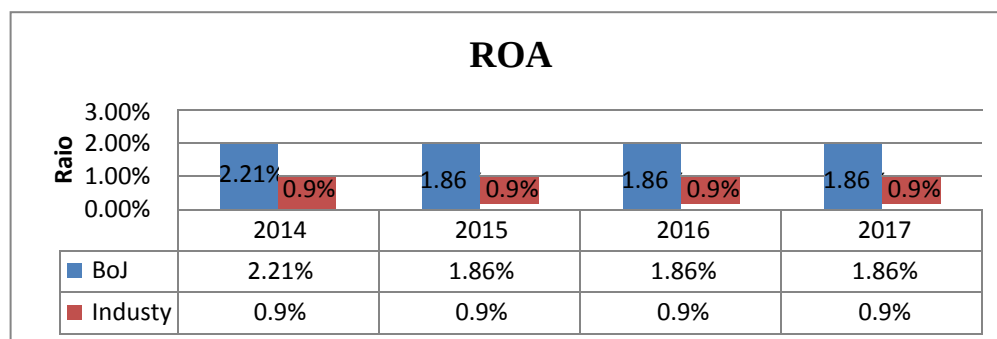


Figure 58: Return on Assets (ROA) (2014-2017)

A return on Assets ratio measures the amount returned to the founders of the business, Presented as a percentage it tells the generated return by the assets for who funded the assets, like stockholder and creditors. Generally, a ROA ratio of 5% and higher is preferable; but as shown in **figure 58** BOJ has values higher than the industry and this is a good sign, and like the chairman and CEO of the company said: “hence marking one of the best ratios in the banking industry”.

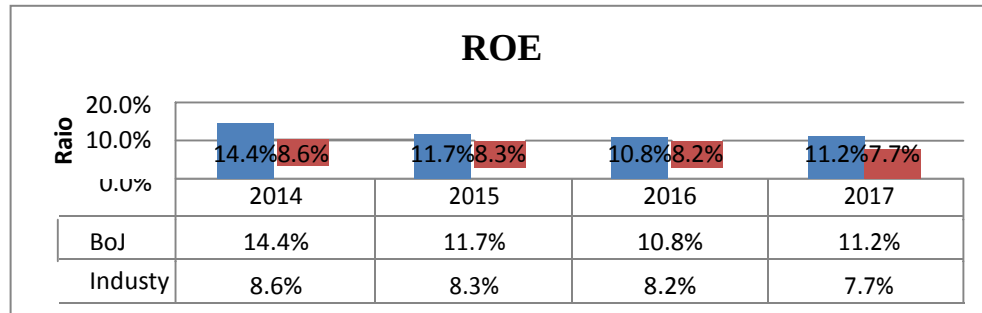


Figure 59: Return on Equity (ROE) (2014-2017)

Return on Equity ratio measures the percentage of the profit returned to the owners (common stockholders). Similar to the ROA, but it specifically focuses on the return of one group of the business financiers, common stockholders, and the owners. Generally, the values of BOJ are very good values and higher than the industry average, which means higher profit for the shareholders, the highest was in 2014 due to the high net profit the company had that year. Shown in **figure 59**; in 2015 there is a decrease in the ratio; which means that Net profit has fallen in relation to common stockholders' equity which is not a good sign that gives the idea of inefficient management. In 2016, shareholders' equity increased by 11.9% from 2015, and in 2017 it increased by 7% with also an increase in Net profit by 13%; which we can explain as the reason for the rise in the ratio compared to 2016.

2. Liquidity Ratios

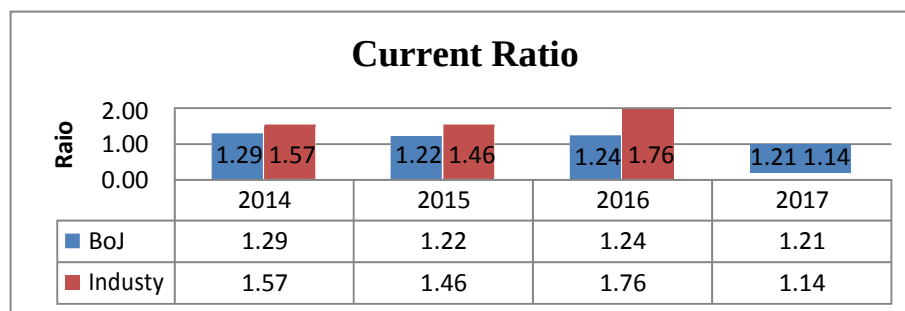


Figure 60: Current Ratio (CR) (2014-2017)

Current Ratio calculates how many days a company spends its short-term assets; it is an index of market stability, a strong current ratio usually implies a more stable business; and it applies for most businesses. **Figure 60** shows the values of BOJ are good especially in 2014; which is the highest value due to the good difference between

Current assets (high) and current liabilities (low). There is a decrease in 2015 and 2017's; for 2015 it was due to a decrease in the current assets and an increase the current liabilities, but for 2017 it was due to the high increase in the current liabilities compared to the change in current assets, and for that reason 2017 had the lowest ratio.

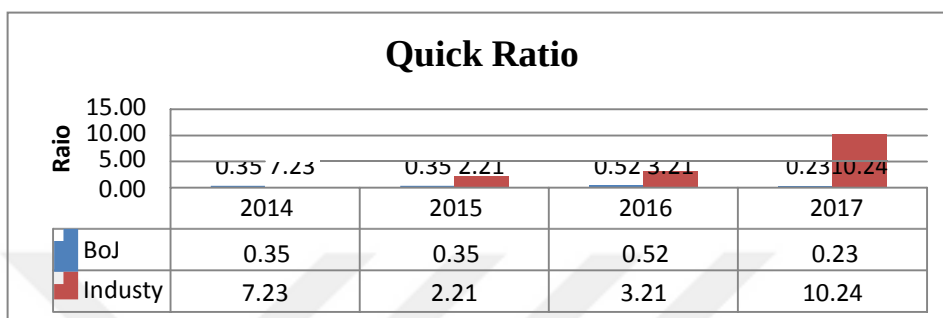


Figure 61: Quick Ratio (QR) (2014-2017)

Stricter than CR, and only takes more liquid assets to cover the current liabilities, Quick Ratio simply measures its ability to pay its debts when they come due to taking the most liquid short-term assets. Values of ratios are considered well even though are less than the industry average. In **figure 61**; the highest value was in 2016, a good ratio which is due to an increase in the highly liquid assets ('cash and cash equivalent' and current receivables) and at the same time a decrease in the current liabilities. An increase in the ratio means that the business is stronger and safer financially, and the chance that the company will collapse due to insolvency is less. For the lowest value which is 2017; a huge decrease happened as a result of almost 50% increase in current liabilities, this decrease in the ratio may mean that the managers may need to make more effort and restructuring of cash or at least improve the liquidity so it can meet its short-term debts. This may entail selling long-term assets for cash or increasing cash through a capital rises. For 2014 and 2015 the ratio stayed stable with acceptable values.

Note: There were 0 short-term investments for the whole period.

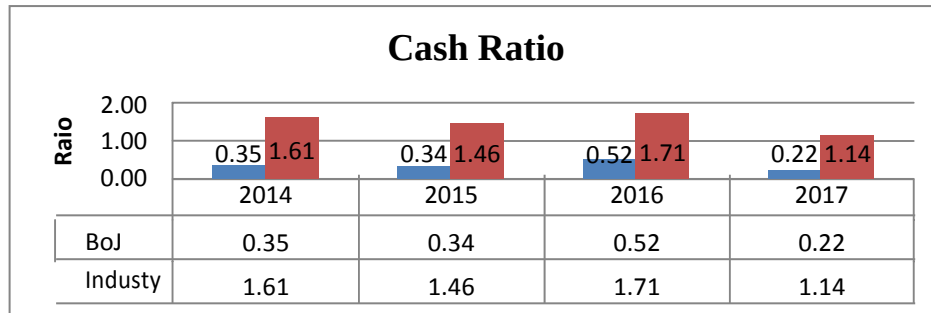


Figure 62: Cash Ratio (2014-2017)

Cash Ratio is the strictest of liquidity ratios, as it measures the ability to meet debts that are due in few days, and for this, you have to look only at cash in the bank and most liquid investments that can be turned into cash on-demand. Thus, the ratio measures a business's ability to meet current liabilities from all on-demand funds. As shown in **figure 62**; the value of 2016 fairly good value, but for the rest of the years, the ratio is considered low but is acceptable. The decrease of 2015 was a result of an increase in current liabilities higher than the increase in the cash and cash equivalent. The rise of the ratio in 2016 was due to a fall in current liabilities and an increase in cash and cash equivalents at the same time. An increase in Cash ratio means that the ability to pay debts when they fall due is improving, and a decrease means the uncertainty of how the business will meet its short-term obligation without asset restructure or conversion is increased. For 2017, as mentioned in the previous ratio, the hard decrease is due to a hard increase in the current liabilities.

3. Leverage Ratios

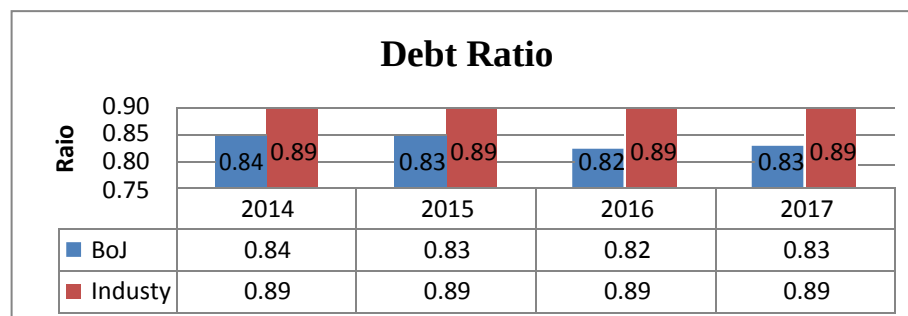


Figure 63: Debt Ratio (2014-2017)

Debt Ratio measures the level of liabilities in relation to assets, it tells the debt levels of a company but not in absolute terms; easier to compare it to different companies of

different sizes. It also tells the proportion of assets that would be distributed to owners if all assets have been sold and debts are paid off. **Figure 63** shows the values of BOJ are very good and lower than the industry; it shows the level of debts compared to assets. As shown in the figure above the ratio had a slight fall in 2015 and 2016, which is a good sign means that the company is improving and getting safer by lowering its chances of failure because it has more assets to sell when needed to meet its debt payments; and this happened as a result of an increase in the total assets for the specified years. In 2017 the ratio had a slight increase due to an increase in the total liabilities.

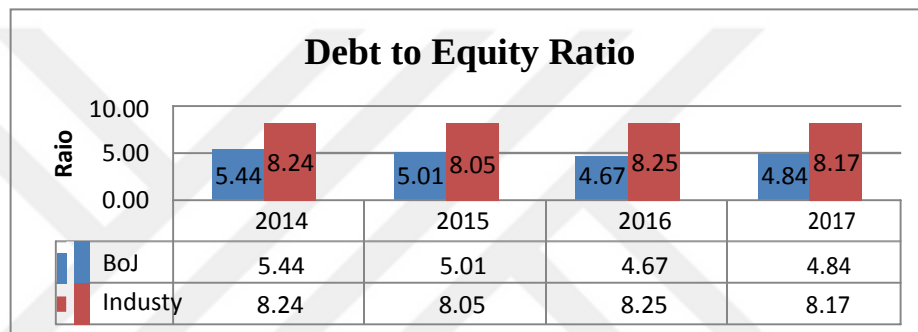


Figure 64: Debt to Equity Ratio (2014-2017)

Debt-to-Equity Ratio compares the usage of debt to support the company versus the use of equity to finance it; it tests the amount of borrowing within a corporation. A shift in this ratio implies a shift in the leverage; this happens because of a change in how the company can finance its production. **Figure 64** shows the lower the ratio the better it is, and the best ratio of this period was in 2016 due to an increase in Total equity as there was a continuous increase since 2014 which was also the reason for the decrease of the ratio in 2015 also. Generally, the values are good compared to the industry average but still considered high. For 2017, the ratio increased due to an increase in Total liabilities higher than the increase in total equity.

Note: A plan to increase the capital was made in 2015 and applied throughout 2016 and 2017 with an increase of JD 50 million for each year.

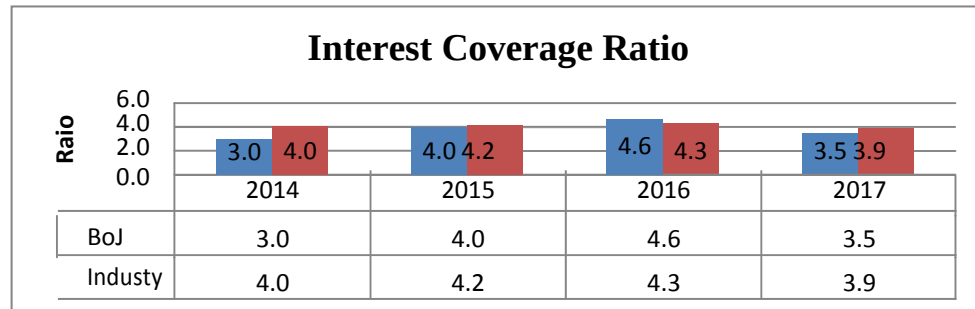


Figure 65: Interest Coverage Ratio (2014-2017)

Interest coverage ratio (also defined as Times Interest earned) is simply a risk measurement tool that shows us how many times earnings before interest and tax (EBIT) of a business will be used to fund the interest payments. A change in the times' interest earned ratio represents a change in debt serviceability based on EBIT. **Figure 65** shows the values of BOJ are very good; shows that the company can easily pay its debts from its earning and allow for further investments, this applies mostly on 2015 and 2016 as in both years the ratio has a good increase; due to the increase in the income the company had and it was in a continuous increase since 2014. For 2017; the ratio has decreased as a result of a 36% increase in interest expenses.

4. Efficiency Ratios

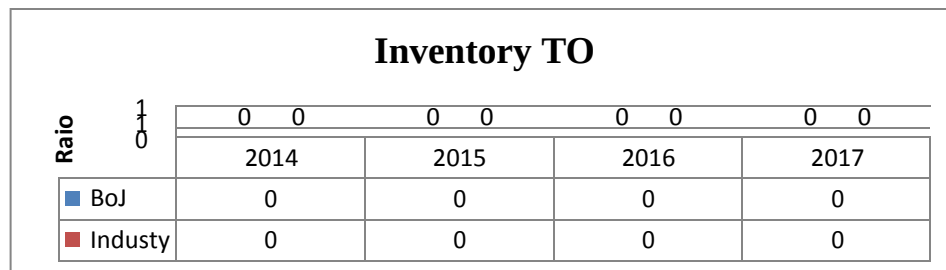


Figure 66: Inventory Turnover (Inventory TO) (2014-2017)

The Inventory TO ratio measures how efficiently management operates its business; that is. A change in this ratio is a change inefficiency of the company's operations, and the higher the ratio is the better. Since banks do not have an inventory; the ratio is not important and cannot be calculated as shown in **figure 66**.

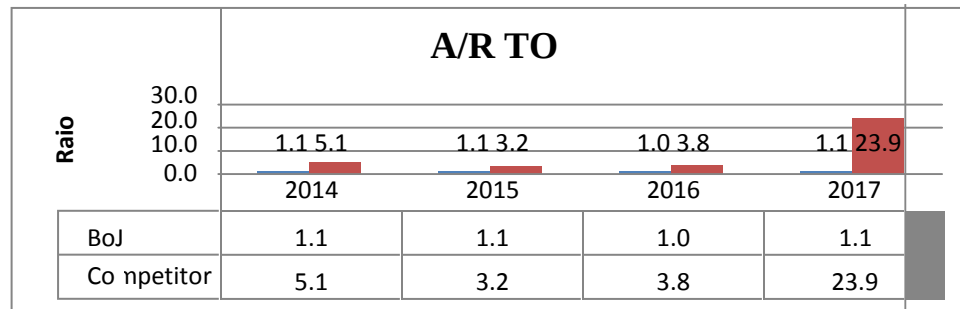


Figure 67: Accounts Receivables Turnover (A/R TO) (2014-2017)

A / R TO ratio shows how many times the organization has converted its accounts receivable (AR) into cash, may help in cash management forecasting and measure the department's level of performance. Generally, as shown in **figure 67**; the values of the ratio are too low; and compared to the competitors values they are also low. These low values may mean that the company's policies for collecting account receivables are not good enough or not active, or that the collections team is performing worse or the accounts department (or perhaps management) is dedicating less time and effort on managing. The values are stable for most of the years, except 2016 which had a slight decrease that was a result of a decrease in the credit sales and an increase in the average accounts receivables of that year. For the rest of the period, the values stayed the same due to an equal increase in credit sales and the average accounts receivables.

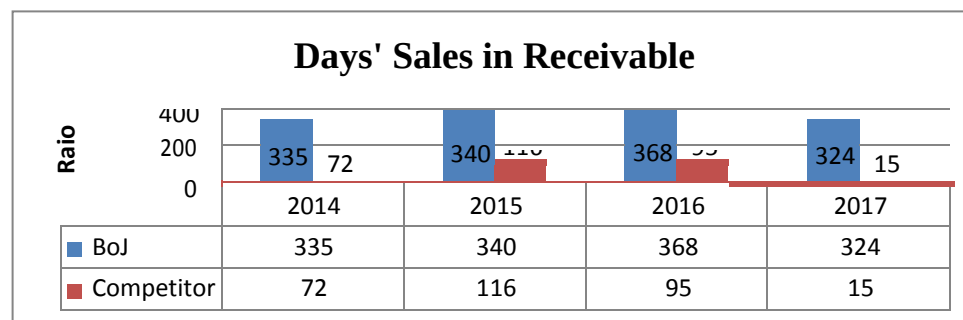


Figure 68: Days' Sales in Receivables Ratio (2014-2017)

Days' Sales in Receivables Ratio tells how many days on average it takes to turn the accounts receivable balance into cash, and lower is preferred. **Figure 68** shows the values for BOJ are not good for all the years and too high compared to the competitor's values. As shown in the figure above, 2017 has the lowest value compared to the

previous years; which is considered better, but compared to the competitor 2015 is the best value.

5. Valuation Ratios

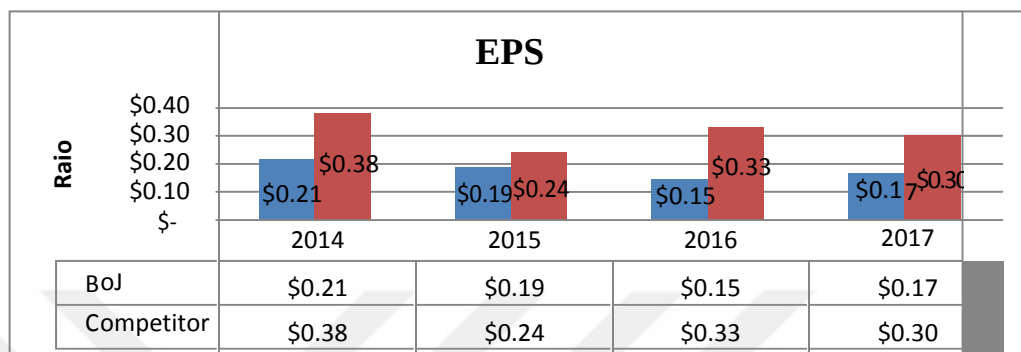


Figure 69: Earning Per Share (EPS) (2014-2017)

EPS ratio tells how much profit a shareholder gets from every common share outstanding. In this ratio we compare BOJ to a competitor for better results, there are no limits for EPS and the higher the better it is; though we should study the ratio and make sure it is not manipulated or anything else. **Figure 69** shows that the EPS ratio for BOJ is very good; however, there are some ups and downs as in 2015 and 2016 EPS has decreased and 2017 slightly increased. Compared to the competitor; 2015 has the best value. The highest EPS of 2014 was due to a high income than the other years; in 2015 the decrease was due to a fall by almost 13% in Net income. In 2016 the capital was increased to 200,000,000 from 155,100,000; a change in common stockholder equity would possibly cause a decrease in EPS because Net income stayed almost the same. In 2017; EPS increased to \$0.17 from \$0.15 in 2016, this increase is due to an increase in Net income of the same year. An increase in EPS may mean that the company is doing well, or the economy is in a good situation which would positively affect the company. And a decrease may hint that there is a problem in the management.

Note: The values for BOJ's EPS have been converted into terms of dollars to make the comparison more accurate.

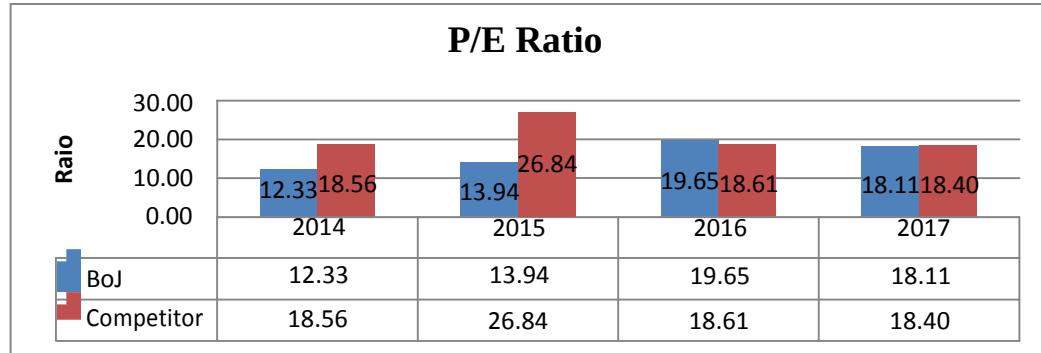


Figure 70: Price-Earnings Ratio (P/E) (2014-2017)

The P/E ratio also used as a indicator of how 'cheap' or 'high' equity is compared to another index, which calculates the amount of days a company's EPS is compensated by the stock price. Generally, the P/E ratio for BOJ is very good as shown in **figure 70**; especially in 2016 and 2017 as higher is preferred, and the highest is 2016 which is higher than the competitor. For 2016 and 2017 the values increased due to an increase in the stock price.

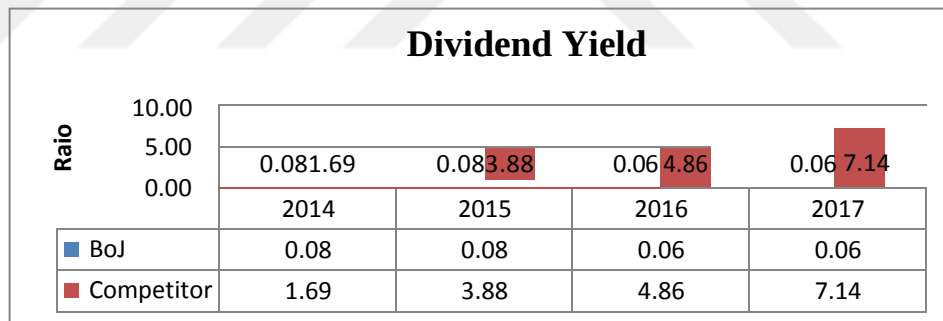


Figure 71: Dividend Yield (2014-2017)

The formula provides a clear average return on investment dependent on the amount of dividends compared to the stock price, it is commonly used for income comparison; dividends are the yield on an investment in the stock market. The values are low compared to the competitor's values, but are generally acceptable. As shown in **figure 71**; the ratio was stable for the first part of the period, and then it had a fall that also stayed stable for the second part. One of the reasons that a Dividend yield ratio changes are a change in a stock price; in case of the decrease in 2016 and 2017 the reason was a fall in the stock price and the dividend per share.

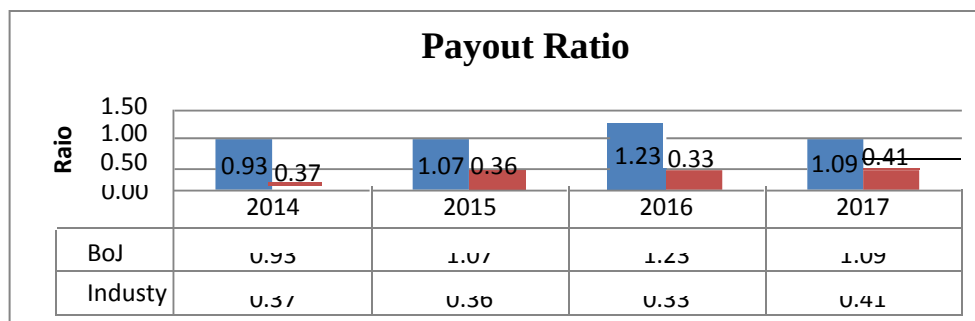


Figure 72: Payout Ratio (2014-2017)

The payout ratio shows the proportion of profits paid out in dividends; as a percentage of EPS, it reflects dividends per share. **Figure 72** shows the payout ratio of BOJ is good with very high values; which means that the company is sharing its earnings with the shareholders which could be a good sign that the company is doing good. Since 2014 there was a continuous increase that was as a result of a decrease in EPS, in 2017 the ratio fell due to an increase in EPS.

2. Research Method and Data collection

This chapter attempts to provide the reader an outline of the methodology that is chosen to be used in this study. This chapter covers the research approach, research, data collection , data analysis.

3.1. Research approach

Research includes two types: quantitative and qualitative. The aim of quantitative analysis is to analyze empirical numerical data whereas qualitative study is concerned with subjective data provided by the minds of respondents or interviewees (Welman, et al. 2001:8). A hybrid qualitative-quantitative approach is used to structure this analysis. Mixed-method research works extremely well for case study research, since it allows the researcher to take data from case studies and apply either quantitative or qualitative methods to the data (Kitchenham, 2009:1). To make a clear qualitative research a researcher should follow the step:

a. Preparing the research:

Through deciding the question of the study or what the goal of the study is, then to study previous researcher's work about the same subject. After this a researcher should evaluate if the qualitative research is the right thing to use; in this case he should ask if the study question can be answered by a simple yes or no hypothesis (*How to Do Qualitative Research*, 2019). Qualitative scholars are said to investigate the questions of 'why' and 'how' and not just the questions of 'what,' 'when' and 'when.' That is why qualitative researchers are requesting smaller but more oriented samples rather than large random samples (Hossain, 2011). The fourth step is choosing the ideal sampling size without relying on large samples just like in quantitative research cases. The last step in preparing the research is to choose the research approach that will be used whether it is a Case study, Grounded theory, Phenomenology, Ethnography and, Narratives Case study, Grounded theory, Phenomenology, Ethnography or, Narratives as stated by (Creswell, 2003). After you have decided that a qualitative case study is the best way to address the research question and the case and its parameters have been decided, then you must decide what kind of case study will be conducted. The overall research aim will drive the selection of a particular type of case study design (Baxter &

Jack, 2010). Yin (2003) categorizes case studies as descriptive, exploratory, or explanatory. He also distinguishes between single, holistic case studies and studies with multiple cases.

b. Collect and analyze data:

The type of data collection may depend on the methodology of research. Case study research, for example, is typically focused on interviews and documentary resources, while ethnography research requires extensive fieldwork (*How to Do Qualitative Research*, 2019). After collecting the data, start with the analysis of it and coming up with answers about the research question (*How to Do Qualitative Research*, 2019).

Case study: According to Willig (2001), the case study is not itself a research method, but rather it entails and approaches the study of particular individuals, and can require the use of a broad variety of various data collection and analysis techniques. The case study focuses on a single entity, and that is the case. An entity, a region, a group of individuals, a population, a patient, a school etc. may be a case (Willig, 2001). Defined by the studied social unit, the case study whether it is an individual, a program, a corporation, a condition or anything else (Maylor and Blackmon, 2005). Neuman (1997) notes that a qualitative researcher can use a case study approach where the researcher can collect a significant amount of data on one or more cases, go into greater detail, and get more knowledge about cases being studied. The case study helps the holistic and substantive aspects of real life activities, such as human life cycles, corporate and administrative structures, neighborhood transition, international relations, and market maturation, to be preserved through an investigator (Yin, 1994).

This research adopts the case study approach to study the financial situation of three companies of three different industries using the financial ratio analysis. Ratios analysis is a technique widely used for evaluating the financial condition and performance of a firm. These cases were selected because of their strong and large contribution in the economy of Jordan; RJ as the national air carrier of the Hashemite Kingdom of Jordan. 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.

3.2. Collecting data

The data used for each company is secondary data; collected from the company's audited financial reports and the Amman stock exchange website. These data were available as the companies are publicly held the stock exchange market of Jordan. The data range was 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, also 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.

3. Results

This paper seeks to study three companies and the financial crisis they are facing, to know how the management acts towards this crisis using financial ratios, and what did the management does to get through the crisis the company is facing. The analysis and interpretation of the financial statements is used to determine the financial health and position of a company. Multiple tools were used to analyze the cases which are as follow: comparative statement analysis, common-size statement analysis, and trend analysis for each of the financial statements (Balance sheet, income statement, and cash flow statement); and the most important is the ratio analysis. 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. Analyzing each company's financial statement using the financial ratios we could specify which company is in crisis, where the problems are, and which stage of crisis the company is dealing with.

1. RJAL

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 73**.

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 73: RJAL Profit and Loss

From the profitability ratios we understand that the company is having losses for two years (2014 and 2016), for instance, PM was -5.2% in 2014 and -4.1% in 2016, 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, for instance, current ratio for 2014-2017 was 0.5, 0.58, 1.01, and 0.8 respectively, this shows an improvement in 2016 and 2017 caused by a better control on the liabilities of RJ. But when it comes to meeting its short-term-due-in-few-days obligations, for instance, the cash ratio for 2014 and 2015 was 0.22 and 0.19 respectively, but the ratio increased for 2016 (0.65) and 2017 (0.45) 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.

Efficiency ratios measure the company's ability to use its assets and manage its liabilities effectively in the short-term. Generally, inventory for airline industry is the available seats in its flight; therefore, RJ has high inventory turnover ratio, for example; 55 for 2014 and 46 for the following years and this means that the company needs more time to sell its inventory (in this case to fill the available seats in its flights).

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 a warning sign that a company is facing adverse economic conditions or financial hardships which is the case for RJ.

2. JPMC

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 74**.

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 74: JPMC Profit and Loss

The profitability ratios for JPMC show that the company is having a financial distress in the years 2016 and 2017 with a PM of 3% and 6% for 2014 and 2015, and in 2016 and 2017 PM ratio decreased to -15% and -8% respectively. Also ROA (-8%,-4%) 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.

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, and cash ratio (0.10, 0.16, 0.05, and 0.02) 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 measure the company's ability to use its assets and manage its liabilities effectively in the short-term. 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.

3. BOJ

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 75: BOJ Profit margin (2014-2017)

The final case is 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 75** 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. ROA (2.21% in 2014, 1.86% stable from 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 current ratio for the years was 1.29, 1.22, 1.24, 1.21 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 efficiency ratios, as banks don't have inventory the concentrations is on the accounts receivables of BOJ. Looking at the ratios A/R and A/R in term of days show that BOJ has a weak policy regarding collecting its receivables with number of days higher than its competitor. 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.

4. 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 new ways to manage their customer relationships to optimize customer loyalty and revenues 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.

This study taught me that a financial analysis could tell a lot about a company, and big numbers or values are not always preferred and doesn't always mean a good thing.

Also that management has a hard job to avoid financial crises, and that they should be knowledgeable about how to detect and to deal with a crisis.



Limitations and Recommendations

Limitations

The lack of data for other companies to compare with which was due to the lack of case studies related to our research especially in Jordan. Also a more professional system would have given better and fast results,

Recommendations

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.

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