The Impact of Working Capital Management Policies on Financial Performance of Mining and Extraction Companies Listed on Amman Stock Exchange

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This study aimed to find out the impact of conservative, aggressive and moderate policies of working capital management on financial performance measured by return on equity, in addition to find the differences between policies adopted in working capital management. To achieve the objectives of the study, the descriptive analytical approach was used, where this study was applied to the Jordanian Mining and Extraction Companies Listed on Amman Stock Exchange which comprise (15) companies, where (11) companies were selected depending on the purposive sample (the conditions of selecting the study sample). This study found a number of results, the most important of which is: there are statistically significant differences between the policies adopted in working capital management of Mining and Extraction Companies, in addition to the statistically negative impact of applying a conservative policy in working capital management on financial performance measured by return on equity of Mining and Extraction Companies, while there was a statistically significant positive impact of applying both aggressive and moderate policies of working capital management on financial performance measured by return on equity of Mining and Extraction Companies Listed on the Amman Stock Exchange. The study concluded a number of recommendations, the most prominent of which is: the management of the Jordanian Mining and Extraction Companies should follow an aggressive policy in working capital management because of its significant positive impact on financial performance, taking into account that the management of companies should study the risks of applying this policy well in order to control their risks as much as possible, so they can improve their financial performance while avoiding the occurrence of these risks.

Introduction

Working capital has a great importance in business enterprises in general and industrial enterprises in particular because it constitutes a large percentage of its assets exceeding 70% of the total assets, where the working capital includes both the current assets and the current liabilities. Therefore, the departments should have competent management that reflects its results on the company's performance and this is reflected in the return, as the relationship between these two variables is a reciprocal relationship because the increase in risks lead to an increase in the required rate of return, while the decrease in risks indicate to a decrease in this rate (Al-Jarjari, 2016).

Achieving and maximising profits is considered as one of the main goals that companies seek. It is necessary for its continuity and survival, it is the primary goal for investors, it is an indicator that creditors are interested in, and it is an important indicator to measure the efficiency in the use of existing resources. Although cash flow is a means to achieve this goal, it is not a goal in itself, because the investor seeks primarily to achieve profits not only cash flow which can be described as a financial goal for the enterprise that contributes to serving the strategic goal which is achieving profits (Al-Armouti, 2017).

The decisions of working capital management have always aimed at increasing wealth and since maintaining current assets can easily lead the company to achieve this goal in the short term, it is likely to lead to failure of the company on the long term (Mathuva, 2009).

The working capital management policy is the method of the company of investing and using its current assets, which is known as the working capital investment policy in the short term, and its liabilities to fund the company's assets known as the working capital financing policy. In theory, the company can adopt different working capital management practices on the basis of investment and financing, those different policies and practices affect profitability, liquidity and risks (Watson & Head, 2010).

In general, companies can follow one of three policies in working capital management: a conservative policy as the ratio of current assets is reduced to total assets and in this case the risk is low and the expected return is low; an aggressive policy by maintaining a high level of the current liabilities to the total liabilities and here the risks become significant, therefore it is expected to obtain a large return; or the moderate policy which indicates to the moderation in the percentage of current assets held by the enterprise in order to face the increase in

growth in sales so that this ratio is not high or low, where it represents the average size of investment in the assets and in this policy the risks are moderate and therefore it is expected to obtain an average financial return and the policies adopted by the company can have an impact on the company's liquidity and thus on its profitability (Deloof, 2003).

The mining and extraction sector is considered as one of the most important strategic sectors, where the extracted wealth is necessary for the economic and social development of any country because it mainly and effectively contributes to the operation of the local labour and coverage of the market need of primary, intermediate and final products related to the sector in addition to supply the national income in hard currency.

The extraction sector is the most important Jordanian natural resource. The sector consists mainly of large industries in terms of the volume of investments, where many companies have started investing in this promising sector, which is the third largest industrial sector in terms of the capital size of industrial establishments (according to the data of the chambers of industry for the year 2014).

According to the above, this study will try to find the impact of working capital management policies on the financial performance of mining and extraction companies listed on Amman Stock Exchange.

The Study Problem and Its Questions

Despite the great importance of working capital management policies in many companies, especially industrial companies, the management of some of these companies suffers from problems in managing the necessary resources and their impact on achieving their goals and thus its continuity in work, growth, development and ability to compete; especially the current environment which is a highly competitive environment where financial management in all companies must adhere to a high degree of accuracy when making decisions related to the size of investment in working capital and its reflection on the financial performance of the company. The importance of the study lies in the fact that it investigates the mining and extraction sector, which is considered as the third largest industrial sector in terms of the size of capital for industrial establishments (according to data from the chambers of industry for the year 2014). Based on the previous explanation, the study problem can be formulated in the following questions:

1) Are there differences between the policies used in working capital management on financial performance of mining and mining companies listed on the Amman Stock Exchange?

1) Are there differences between the policies used in working capital management on financial performance of mining and extraction companies listed on Amman Stock Exchange?

2) Is there an impact of the application of (conservative policy, aggressive policy and moderate policy) in managing working capital on the financial performance of mining and extraction companies listed on Amman Stock Exchange?

Importance of the Study

The importance of the study lies in the fact that the policies of working capital management have great importance in the failure or continuity of the company in the long term, where there is a belief that the company's success in managing the components of working capital has a fundamental role in raising the market value of the company's shares and this in turn affects the financial performance of the company (Rady, 2009).

Based on the foregoing, efficient policies for working capital management include planning and control of current assets and liabilities in a manner or method that reduces the risk of not being able to meet short-term financial obligations on the one hand, and avoids excessive investments in current assets on the other (Elglly, 2004).

Objectives of the Study

This study aimed to find the effect of working capital management policies that administrators follow on financial performance of mining and extraction companies, and therefore this study seeks to achieve several goals, which are as follows:

* Finding the differences between the policies used in working capital management on financial performance of mining and extraction companies listed on Amman Stock Exchange.

* Finding the effect of applying the policies used in working capital management represented by (conservative policy, aggressive policy and moderate policy) on financial performance of mining and extraction companies listed on Amman Stock Exchange.

Study Hypotheses

To answer the questions of the study problem, hypotheses can be formulated as follows.

HO1: There are no statistically significant differences between the policies used in working capital management of mining and extraction companies listed on Amman Stock Exchange. It has three sub-hypotheses, as follows:

HO2: There is no statistically significant negative effect of applying the conservative policy in working capital management on the financial performance measured by return on equity management of mining and extraction companies listed on Amman Stock Exchange.

HO3: There is no statistically significant positive effect of applying the aggressive policy in working capital management on the financial performance measured by return on equity management of mining and extraction companies listed on Amman Stock Exchange.

HO4: There is no statistically significant positive effect of applying the moderate policy in working capital management on financial performance measured by return on equity management of mining and extraction companies listed on Amman Stock Exchange.

Theoretical Framework and Previous Studies
Working Capital Policies

Net working capital is defined as current assets minus current liabilities. In other words, it is the surplus between current assets and current liabilities. The importance of this definition lies in the fact that it gives a clear quantitative measure to identify the firm's financial position and its ability to fulfil its current liabilities at maturity date (Subramanyam & Wild, 2015).

There are two types of policies and each type has three alternatives so that companies can follow one alternative for each type of these policies, as follows:

Investment Policies

The determination of investment level in current assets represents a reciprocal process between risk and return, and thus the decision to estimate the investment level depends on the relationship of preference between risk and return for management.

There are three alternative policies for investment level in current assets which are (Afza & Nazir, 2007):
a. Conservative policy: under this policy, the enterprise maintains a high percentage of current assets and the ratio of current assets to total assets is high and is the measure of the policy. It is characterised by low returns and low risk. Accordingly, this policy means an increase in the volume of investment in current assets.
b. Moderate policy: indicates a moderation in the ratio of current assets held by the enterprise so that this ratio is not high or low where it represents an average for the volume of the investment in the current assets.
c. Aggressive policy: indicates that the enterprise maintains low current assets, which means a low ratio of current assets to total assets. This policy is characterised by a high return and high risk. The three policies of the company are chosen given that the company's prediction

in the future is accurate, and since prediction is rare in real life, the company considers the amount of current assets identified is the minimum necessary for the company.

Financing Policies

The main decision of working capital management policy in financing is in choosing between using short-term versus long-term financing.

The determination of short and long-term financing to finance the company's investments is a reciprocal process between risk and return, but in the field of financing, short-term financing risks are higher than the long-term financing risks because when the company's debt maturity period becomes shorter, the risk of not having the company's cash flow to face interest payments and loan repayment increases, and vice versa. As for the return, financing short-term loans is less expensive than financing long loans and more profitable.

There are three alternative policies for short and long-term financing of working capital financing which are:

Conservative policy, in light of this policy the company relies on long-term financing. Using this policy reduces the risk to the maximum extent but it is high-cost financing which is reflected in the low return and moderate policy. Financing in this policy is moderate between long and short term financing, therefore, following this policy makes financing risk within certain limits and maintains a certain level of profitability and aggressive policy. According to this policy, the company relies on short-term financing and this financing is characterised by lower cost and high risks, therefore, his policy is characterised by high return and high risks at the same time (Khalid & Ikram, 2011).

Financial Performance

Financial performance is defined as an indicator of the contribution of activities in creating efficiency and effectiveness in the use of available financial resources, through achieving financial goals at the lowest possible financial costs (Dadan & Haksy, 2014).

The financial performance represents a reflective mirror of the company's performance as it: focuses on using financial indicators to measure the extent of achieving the goals; expresses the performance of companies as it is the primary support for the various businesses that the company practices; and contributes to providing financial resources and providing the company with investment opportunities in various fields of performance that help to meet the needs of stakeholders and achieve their goals (Al-Khateeb, 2010).

There are several measures that can be used to know the company's financial performance which are: return on assets (ROA), net income (NI), and return on equity (ROE). ROE was used as a measure of financial performance in this study.

ROE is the net income for shareholders' equity and return on shareholders' equity estimates the profitability of the commercial enterprise by showing the amount of profits the company makes with money invested by the shareholders and represents return on shareholders' equity by a percentage. Return on equity scale is a comprehensive measure of the financial performance of companies, as it measures the financial return achieved from the company's investments and is an indicator of the company's ability to attract investments, given that the return on investment is a major determinant of investment decisions for investors (Masuda & Khashan, 2016).

Previous Studies

There are a large number of studies that dealt with working capital policies. The study of Alnaboot (2019), aimed at investigating the effect of working capital management strategies (conservative, moderate and aggressive) on profitability of Jordanian food companies listed on Amman Stock Exchange. Profitability was measured by the rate of return on investment, and the study was conducted on 9 companies from 11 companies listed on Amman Stock Exchange during the period 2010-2017. The study found that there is a negative effect of both aggressive policy and conservative policy in working capital management on profitability of companies. Also, there is a positive impact of moderate policy in working capital management on profitability of Jordanian food companies listed on Amman Stock Exchange. The study recommended following the moderate policy in working capital management through reducing inventory, reducing accounts receivable period and increasing payment period.

The study of Jędrzejczak (2016), aimed at investigating the management strategies of net working capital of construction companies listed on New Connect Stock Exchange in Poland. The study was conducted during the period 2009-2014 on 12 construction companies listed on New Connect Stock Exchange. The study concluded that companies followed the moderate policy in managing their current assets and followed the aggressive policy in managing their current liabilities. Also, the study concluded that the companies were using all the adopted policies and were not following one policy, as they were using aggressive and moderate policy in managing their current assets and using conservative and aggressive policy in managing their liabilities.

Also, the study of Maswadeh (2015), aimed at finding the relationship between working capital management strategies and profitability on Jordanian industrial pharmaceutical

companies listed on Amman Stock Exchange. The study was conducted on all 8 companies listed on Amman Stock Exchange for 5 years during the period 2009-2013. The results indicated that there is a significant impact between working capital management strategy which is aggressive policy and moderate policy with profitability, but the relationship was greater between profitability and moderate policy. As for conservative policy, there was no study company following this policy. The study recommended the preference between risk and profitability where companies that followed the moderate policy were able to achieve profits in the long term in addition to maintaining the value of the company and the value of the shareholders.

Moreover, the study of Mulogoli (2015), aimed at finding the impact of working capital management policies on financial performance of non-financial companies listed on Nairobi Stock Exchange. To achieve the goal of the study, the data of 30 companies out of 41 companies listed on Nairobi Stock Exchange were tested. This sample was chosen using the simple random method and through the available data, as there are some companies listed on the stock exchange but they didn't have enough data for the study. The study period was 2010-2014. The study found that there is a positive and statistically significant relationship between working capital management policies and financial performance. It was also found that the dependent variable (ROA) was affected by independent variables by 25.7%.

Furthermore, the study of Nelima (2012), aimed at finding the effect of working capital management policy on the profitability of companies listed on Nairobi Stock Exchange. This study was conducted on a sample of 32 companies listed on Nairobi Stock Exchange. Data was obtained through the annual reports of companies, and this study was conducted on data for 5 years during the period 2007-2011. The study found that there is a negative relationship between measures of profitability and working capital policy which is aggressive in investment and financing. This study recommended companies: not to use an aggressive policy in emerging markets such as Kenya; try to reduce inventory; increase the repayment period of their debts; and reduce cash conversion cycle.

Also, the study of Vahid et al., (2012), aimed at finding the effect working capital management policies (aggressive and conservative) had on the profitability and value of the company using the annual data of 28 industrial companies listed on Tehran Stock Exchange for the period 2005-2009. The study found that following a conservative investment policy with high level of short-term investment has a negative impact on the profitability and value of the company, while a strong investment policy using long-term investment has a positive impact on the profitability and value of the company. As for financing policies (aggressive conservative), the results show that following the aggressive financing policy using more current liabilities to finance the company's activities will negatively affect the profitability and value of the company, while following conservative financing policy using more long-

term debts to finance the company's operational activities have a positive impact on affect the profitability and value of the company. Also, it was found the size of the company has a positive impact on the profitability and value of the company, while the result shows that sales growth has no impact on the value of the company, but it has a significant impact on profitability. The study recommended that debts should be funded in order to maximise the value of the company.

The Advantages of this Study

This study is different from previous studies that dealt with the three policies as independent variables were few. It was also characterised by measuring financial performance through return on assets, return on equity and net income, which was not discussed by researchers before. This study examined a very important sector, the mining and extraction companies which is considered as the fourth largest sector in terms of exports at the level of Jordan.

Study Methodology

The current study used the descriptive analytical approach and the secondary data represented by the financial statements of mining and extraction companies was used to collect and analyse data and information about the study variables adopted during the specified time period of 2014-2018.

Study Community and Sample

The study community consists of 15 Jordanian mining and extraction companies listed on Amman Stock Exchange until the end of 2018 and shown on the ASE website www.ase.com, during the period between of 2014-2018. The study sample consists of 11 mining and extraction companies listed on Amman Stock Exchange that were chosen using purposive sampling. The continuous companies with their available financial statements were selected during the study period (2014-2018) and there was no merger.

Measurement of Study Variables
First: Dependent Variable

The current study was limited to the dependent variable represented by financial performance. Return on equity ratio was used to measure financial performance, based on the following formula:

$$\text{Return on equity} = \frac{\text{Net profit after tax}}{\text{total equity}}$$

Second: Independent Variables

The study relied on the following independent variables:

* Average storage period: represents the average number of days between the date of purchase of the goods and the date of its sale. It was calculated with the following formula:

$$\text{Average storage period} = \frac{\text{Average inventory}}{\text{Cost of goods sold}} * 360$$

* Average period of accounts receivable: represents the average period of time between the date the company sells its goods and the date of collection. It was calculated with the following formula:

$$\text{Average period of accounts receivable} = \frac{\text{Average of accounts receivable}}{\text{Sales}} * 360$$

* Average repayment period for accounts payable: represents the average period of time between the date of purchase of the goods from the suppliers and the repayment date of their cost. It was calculated with the following formula:

$$\text{Average repayment period for accounts payable} = \frac{\text{Average of accounts payable}}{\text{Net purchases}} * 360$$

Note that net purchases are calculated by adding the cost of the goods sold to the stock at end minus stock at the beginning.

* Cash conversion cycle: represents the difference between the period of the operational cycle and the period required to pay the accounts payable. Cash conversion cycle was adopted to measure the efficiency of working capital management in the company. Cash conversion cycle was calculated with the following formula:

Cash conversion cycle = (Average storage period + Average period of accounts receivable) - Average repayment period for accounts payable.

Classification of the Sample Companies According to the Policies Used in Working Capital Management

In order to classify the sample companies according to policies used in working capital management represented by (aggressive policy, moderate policy and conservative policy), the One Sample T Test was used by comparing the average cash conversion cycle for each

company with the average cash conversion cycle for the industry based on the study of (Jędrzejczak-Gas, 2017), to judge whether the differences between the company's average cash conversion cycle and industrial standard are statistically acceptable significant differences at a significant level less or equal to 0.05. Therefore the decision rule is as follows:

1. The company is classified as applying a conservative policy in working capital management when its cash conversion cycle exceeds the average cash conversion cycle for the industry at a significant level less than to 0.05.

2. The company is classified as applying an aggressive policy in working capital management when its cash conversion cycle is less than the average cash conversion cycle for the industry at a significant level less than to 0.05.

3. The company is classified as applying a moderate policy in working capital management at a significant level less than to 0.05.

Statistical Analysis and Hypothesis Testing

This axis aims to present the results of the statistical analysis of the data collected for the study sample companies, which dealt with the impact of working capital management policies on financial performance of mining and extraction companies listed on Amman Stock Exchange.

Descriptive Tests

Descriptive analysis was conducted for the components of the length of cash conversion cycle represented by (storage period, collection period, repayment period, and cash conversion cycle), in addition to return on equity the Skewness and Kurtosis indicators for the study variables were calculated. According to Kim (2013), the variable data fulfils the normal distribution conditions when the value of Skewness indicator is between (1.5 and -1.5), and the value of kurtosis is between (3- and 3) where both indicators must pass the conditions required to fulfil the normal distribution condition. The following table presents the results of the descriptive analysis.

Table 1: Results of the descriptive analysis of the study variables

Variable/indicators	Skewness	kurtosis	Minimum	Maximum	Mean	Standard deviation
ROA	-1.39	1.10	-1.928	0.240	-0.071	0.347
Average storage period	1.42	2.63	18.31	627.50	181.98	124.94
Average period of accounts	1.09	2.82	24.39	453.07	84.17	74.43

receivable						
Average repayment period for accounts payable	1.22	0.81	14.51	345.57	100.02	78.62
Cash conversion cycle	1.06	1.75	-65.80	663.15	166.12	146.53

According to the results of the descriptive analysis presented in Table 1, it can be noted that the lowest value of return on equity of mining and extraction companies listed on Amman Stock Exchange represented by the study sample is (-1,928), which refers to Jordan Cement Factories Company in 2018. This indicates that there are companies in the study sample that have losses that reflect on their shareholders. The highest value is (0.2400), which refers to Northern Cement Company in 2014. This indicates that there are mining and extraction companies achieving profits during the study period that reflect on their shareholders. The value of the arithmetic mean is (0.071-) which indicates that the study sample companies are not able to optimally invest their return on equity to achieve profits through its investments, and the high value of the standard deviation indicates a high degree of variation in the rates of return on equity of the sample companies, which reached (0.347).

The results shown in Table 1 related to the average storage period indicate the highest value, which is ≈ (628) days and the lowest value, which is ≈ (18) days, and they indicate a difference in the storage period in the study sample companies which is confirmed by the high standard deviation that reached (124.94) days. Also, the value of the arithmetic mean is ≈ (182) days, which indicates that the sample companies recycle their storage twice annually. The results related to period of accounts receivable indicate the highest value which is ≈ (453) days and the lowest value which is ≈ (24) days where they indicate a clear discrepancy in the collection period in the study sample companies, and this is confirmed by the high standard deviation that reached (74.43) days, which indicates that the sample companies recycle their storage 4 times annually. Moreover, the results related to the average repayment period for accounts payable indicate the highest value which is ≈ (346) days and the lowest value which is ≈ (15) days, which indicates a clear discrepancy in the repayment period of the study sample companies. This is confirmed by the standard deviation that reached (78.62) days and the value of the arithmetic mean ≈ (100) days which indicates that the sample companies recycle their accounts payable three and a half times annually. Furthermore, the results related to the average cash conversion cycle indicate the highest value which is (663) days and the lowest value which is (66) days. This indicates a clear discrepancy in cash conversion cycle period in the study sample companies, and is confirmed by the high standard deviation that reached (146.53). The value of the arithmetic mean ≈ (166) days indicates that the sample companies recycle their cash twice a year. As for the Skewness and

Kurtosis indicators, t is noted from Table 1 that all variables fulfil the condition of normal distribution.

Classification of the Sample Companies According to the Strategies used in Working Capital Management

In order to determine the strategy followed by each of the study sample companies to test the study hypotheses, a test was conducted for each sample and the test results are presented in Table 2.

Table 2: Classification of the study sample companies

Average Cash conversion cycle for the industry = 96.384				Table (T) value= 2.1319		
No.	Company's name	Mean Difference	Mean	Value of (T) calculated	(Sig)	Type of policy followed
1	X1	22.262	118.646	0.877	0.430	Moderate
2	X2	21.154	117.538	1.333	0.253	Moderate
3	X3	-144.694	-48.310	-19.084	0.000	Aggressive
4	X4	-49.865	46.519	-11.449	0.000	Aggressive
5	X5	13.869	110.253	0.857	4.000	Moderate
6	X6	152.940	249.324	13.873	0.000	Conservative
7	X7	79.059	175.443	0.925	0.407	Moderate
8	X8	343.395	439.779	5.240	0.006	Conservative
9	X9	82.371	178.755	1.583	0.188	Moderate
10	X10	106.362	202.746	4.166	0.014	Conservative
11	X11	140.274	236.658	2.075	0.050	Moderate

Based on the Table 2 results it is noted that three companies follow the conservative strategy, two companies follow the aggressive strategy and six companies follow the moderate strategy.

Normal Distribution Test

Before starting to test the hypothesis of the first study that examines the existence of a difference in policies used by mining and extraction companies through one-way analysis of variance and other hypotheses that examine the impact of these policies on financial performance through simple regression, verification of the validity of data to conduct parametric tests was conducted by determining whether they were naturally distributed or not depending on Kolmogorov-Smirnov test (Li & Xu, 2010). The results were as follows in Table 3.

Table 3: The normal distribution test of the study categories

Variable	Policy	K-S	(Sig)
Cash conversion cycle	Aggressive	0.289	0.082
	Moderate	0.201	0.200*0
	Conservative	0.246	0.088
ROA	Aggressive	0.193	0.200*0
	Moderate	0.275	0.063
	Conservative	0.174	0.200*0

Based on the results of the Kolmogorov-Smirnov test presented in Table 3, it was found that data for all study variables in all the companies follow the normal distribution due to the high probability of each of them from (0.05) according to (Razali & Wah, 2011), thus the parametric tests can be used in order to test the hypothesis of the study.

اختبار فرضيات الدراسة
Test the Hypotheses of the Study

HO1: There are no statistically significant differences at the level of ($\alpha \leq 0.05$) between the policies used in working capital management for mining and extraction companies listed on Amman Stock Exchange.

Based on the division of the study sample companies according to their application to the three policies in working capital management (aggressive, moderate and conservative), it will be determined here whether there is a statistically significant difference between policies used in working capital management for mining and extraction companies listed on Amman Stock Exchange.

A one-way analysis of variance test was used to test the hypothesis. It was necessary before this test to ascertain the existence of homogeneity between the communities. First, the Levene test was conducted and its results are shown in Table 4, where its value is equal to (1.181) and its level of significance (Sig = 0.315), which is greater than the value of ($\alpha \leq$ 0.05) This indicates that there is a homogeneity between the three study communities that follow aggressive policy, moderate policy and conservative policy (Gastwirth et al., 2009), thus, it is possible to complete the one-way analysis of variance test, as shown in Table 4.

Table 4: Results of one-way analysis of variance of the study companies

Levene Sig: 0.315		*Levene Statistic*: 1.181		
	Between Groups	*Within Groups*		*Total*
Df	2	52		54
Sig:0.000	*F Distribution*: 22.661		*F Table*: 2.821	

According to the results of one-way analysis of variance presented in Table 4 it is clear that F calculated value (22.661) is greater than its tabular value (2.821), as its significant value reached (Sig = 0.000) and therefore it can be said that there are statistically significant differences in the three policies used in working capital management.

HO2: There is no statistically significant effect of applying the conservative policy in working capital management on the financial performance measured by return on equity of mining and extraction companies listed on Amman Stock Exchange.

In order to test the remaining study hypotheses, the simple regression test was carried out using the data of cash conversion cycle as an independent variable and the data of return on equity as a dependent variable to measure the financial performance of companies that apply the conservative policy in working capital management during the period of 2014-2018, where the value of Sig was used to accept or reject the hypothesis. Therefore the value of Sig must be less than 0.05 to assess if there is an effect and the value of Adjusted R Square was used to judge the accuracy of the conservative policy clarification of changes in return on equity. Table 5 shows the simple regression results for the second hypothesis.

Table 5: Results of the simple regression test for the second hypothesis

Coefficient	β	المتغير
--------------	7.986	الثابت
-0.658	-0.032	السياسة المتحفظة لدورة تحويل النقد
F-statistic	9.921	Sig. = 0.008
R-squared	0.433	T-Statistic = -3.150
Adjusted R-square	0.389		

ROE = β0 + β1* Conservative + ε

Table 5 shows the results of the simple regression test based on data of (cash conversion cycle period) and its effect on (the financial performance measured by ROE) for companies that follow the conservative policy in working capital management. The Coefficient value which reached (-0.658) indicates that there is a negative effect of conservative policy on the rate of return on equity of mining and extraction companies which follow conservative strategy, and the value of Sig which reached (0.008) indicates that this effect is statistically significant.

The value of Adjusted R Square is also good which reached (0.389), indicating the ability of conservative policy to explain changes in financial performance measured by ROE of mining and extraction companies listed on Amman Stock Exchange which apply the conservative policy in working capital management.

HO3: There is no statistically significant effect of applying the aggressive policy in working capital management on the financial performance measured by return on equity of mining and extraction companies listed on Amman Stock Exchange. Table 6 shows the results of the simple regression of the third hypothesis.

Table 6: Results of the simple regression test for the third hypothesis

Coefficient	β	المتغير
--------------	7.781	الثابت
0.680	0.082	السياسة المجازفة لدورة تحويل النقد
F-statistic	6.889	Sig. = 0.030
R-squared	0.463	T-Statistic = 2.625
Adjusted R-square	0.396	

ROE = β0 + β1* Aggressive + ε

Table 6 shows the results of the simple regression test based on data of (cash conversion cycle period) and its effect on (the financial performance measured by ROE) for companies that follow the aggressive policy in working capital management. The Coefficient value which reached (0.658) indicates that there is a positive effect of conservative policy on the rate of return on equity of mining and extraction companies which follow the conservative strategy, and the value of Sig which reached (0.030) indicates that this effect is statistically significant.

The value of Adjusted R Square is also good which reached (0.396), indicating the ability of aggressive policy to explain changes in financial performance measured by ROE of mining and extraction companies listed on Amman Stock Exchange which apply the aggressive policy in working capital management.

HO4: There is no statistically significant effect of applying the moderate policy in working capital management on the financial performance measured by return on equity of mining and extraction companies listed on Amman Stock Exchange. Table 7 shows the results of the simple regression of the fourth hypothesis.

Table 7: Results of the simple regression test for the fourth hypothesis

Coefficient	β	المتغير
--------------	-32.297	الثابت
0.390	0.214	السياسة المجازفة لدورة تحويل النقد
F-statistic	4.851	Sig. = 0.036
R-squared	0.152	T-Statistic = 2.203
Adjusted R-square	0.121	

ROE = β0 + β1* Moderate + ε

Table 7 shows the results of the simple regression test based on data of (cash conversion cycle period) and its effect on (the financial performance measured by ROE) for companies that follow the moderate policy in working capital management. The Coefficient value which reached (0.390) indicates that there is a positive effect of moderate policy on the rate of return on equity of mining and extraction companies which follow the moderate strategy, and the value of Sig which reached (0.036) indicates that this effect is statistically significant.

The value of Adjusted R Square is low which reached (0.121), indicating the ability of moderate policy to explain changes in financial performance measured by ROE of mining and extraction companies listed on Amman Stock Exchange which apply the moderate policy in working capital management.

Discuss the Findings and Recommendations
Results

In light of the results reached in the previous chapter, the most important results can be summarised as follows:

1. There are differences between the policies used in working capital management of mining and extraction companies listed on Amman Stock Exchange and the reason for this may be due to the different departments of these companies and thus the different directions, plans and policies that they follow in order to achieve their goals, as a result of the difference in the product that each of these Companies manufacture. Therefore it is natural that the import and export policies are different in each of these companies as a result of the different type, size and nature of raw materials and their availability, and the different places that export to them, with the difference in the size of the restrictions they face. Also all these companies operate within an emerging market that needs more instructions and standards in many areas. This result was similar to the results of (Jędrzejczak, 2016; Vahid et al., 2012).
2. There is a negative impact of applying the conservative policy in working capital management on the financial performance measured by return on equity of mining and extraction companies listed on Amman Stock Exchange. This result can be justified by the fact that although the application of the conservative policy in working capital management leads to reducing the risk that the company may face, it also leads to a decrease in the returns that the company achieves because it has non-invested liquidity, which reflects negatively on the performance of companies applying this policy. This result was similar to the results of (Alnaboot, 2019; Maswadeh, 2015; Mulogoli, 2015; Vahid et al., 2012).
3. There is a positive impact of applying the aggressive policy in working capital management on the financial performance measured by return on equity of mining and extraction companies listed on Amman Stock Exchange. This result can be justified by the

fact that the increased risk that occurs when companies follow the aggressive policy in working capital management leads to achieving high current returns. However it should be noted that the application of this policy may lead to significant losses due to the risk incurred by the company due to the application of this policy, especially when applying such a policy in an emerging market surrounded by an economically and politically unstable environment. Consequently, the aggressive policy in working capital management has a positive and important impact on the financial performance of companies at the present time. However, the risks involved in their application must be studied so that they are controlled as much as possible to avoid the occurrence of severe consequences later resulting from the lack of adequate study of these risks, which may impact negatively on their future performance. This result was similar to what was reached by (Maswadeh, 2015; Mulogoli, 2015; Vahid et al., 2012), while it differed from what was reached by (Alnaboot, 2019; Nelima, 2012).

4. There is a positive impact of applying the moderate policy in working capital management on the financial performance measured by return on equity of mining and extraction companies listed on Amman Stock Exchange. The reason for this is that the corporate departments face a moderate level of risk by applying a moderate policy in working capital management indicates that they achieve moderate returns, and although these returns may be less than the returns that they would achieve if they follow the aggressive policy, these returns in the long-term and continuous can be considered more guaranteed than the returns that can be achieved when applying aggressive policy, especially that the level of risk is less. Therefore, companies applying this policy face a moderate level of risk in order to achieve returns. This result was similar to what was reached by (Alnaboot, 2019; Maswadeh, 2015; Mulogoli, 2015; Vahid et al., 2012).

5. It can be concluded that the best policies for working capital management in Jordanian mining and extraction companies listed on Amman Stock Exchange are the aggressive policy and then followed by the moderate policy, due to their positive impact on financial performance.

Recommendations

According to the results presented, the study recommends that the departments of Jordanian mining and extraction companies tend to follow the aggressive policy in working capital management because of its significant positive impact on financial performance, taking into account that the departments of companies should study the risks of applying this policy well in order to control its risks as much as possible so that it works to improve its financial performance while avoiding risks. Also, the departments of Jordanian mining and extraction companies should be concerned with: reducing the size of their inventory in a manner consistent with the size of their activities; ensuring that their operations are continuous; reduce the period of accounts receivable as possible in a way that does not affect its relations with its customers; and increase the repayment period as possible in a way that does not

affect its relations with its suppliers in order to manage its working capital in the best possible way. Moreover, the study recommends increasing the awareness of investors in Amman Stock Exchange about the importance of the policies used by companies in working capital management, whether it is a conservative aggressive or moderate policy when making their investment decisions because of their impact on the financial performance of companies. Furthermore, the study recommends that the interest in Jordanian industrial sector should be increased and highlighted in order to support it, its continuity and its development because of its great economic importance in reducing imports and increasing exports in the country and because it is one of the largest economic sectors in Jordan.

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