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Cash Conversion Cycle and Profitability

Evidence from Jordan

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Abstract

This study investigates the impact of working capital management and its components on profitability as a practical aspect, and how is compatible with the theoretical aspect. Besides, it examines other financial factors that may affect profitability by using a sample of Jordanian manufacturing firms listed in the Amman Stock Exchange for the period (2016-2018). Theoretically, manufacturing firms that have been studied have current assets over half of their total assets. Therefore, the working capital management role will be clearer on firm profitability.

Practically, the results indicate that there is a significant relationship between the cash conversion cycle, which is considered as a proxy of working capital management, and profitability of the manufacturing firms. This provides an opportunity to create value for shareholders by decreasing receivable accounts and inventory, enhancing the profitability of the firms and reducing the collection period and by adopting effective credit policy.

Keywords: Cash Conversion Cycle, Components, Profitability, Working Capital Management

1. Introduction

Almost firms around the world seek to increase profitability to maximize shareholders wealth. Thus, their managements traditionally focus on how to make typical financial decisions to ensure the financial soundness of a firm, which includes both the financial position and economic performance. Working capital management is the most important aspect of the economic performance of a firm that contributes to enhancing profitability and providing directly liquidity to the firm (Chary & Kumar, 2011).

In theory, planning and controlling current assets and liabilities are considered as responsibilities of efficient working capital management that contributes to eliminating the inability risk of the meeting short-term obligations and to avoiding excessive investment in these assets (Eljelly, 2004). According to Alipour (2011), the definition in the literature that best describes the effective working capital management is:

"Increasing cash flow speed, decreasing irrecoverable receivables and decreasing the costs to create opportunities to maximize the wealth".

According to this definition, working capital management also requires making a trade-off between risk and return. It is known that the nearer the asset to the cash state the lower its riskiness and the lower its expected return.

According to (Trinh, 2011), short-term finance is related to patterns of cash inflows and outflows that are both unsynchronized and uncertain. Short-term operating activities represent both the operating cycle (OC) and a cash conversion cycle (CCC). The OC is the interval between the order of inventory stock and the date when cash is collected from receivables. In addition, the CCC begins when the company pays cash to suppliers for the materials purchased and ends when cash is collected from customers for credit sales. Alternatively, the CCC is the sum of the inventory period (IVP) and accounts receivables accounts period (RVP) subtract accounts payable period (PYP) as follows:

$$CCC = OC - PYP \quad (1)$$

$$CCC = (IVP + RVP) - PYP \quad (2)$$

Cash conversion cycle (CCC) is a performance indicator of working capital management efficiency, measuring the number of days that funds are committed to inventories and accounts receivable minus the number of days that payment to suppliers is deferred (Gitman, 1974). The objective of working capital management is to maintain the optimum balance of each receivable, inventory and payable accounts that influence firm performance (Filbeck & Krueger, 2005).

With the leaving other things constant, level of investment in current assets has a bearing on the profitability of the firm. Excess of investment in working capital has a negative impact on the profitability of a firm and positive impact on the liquidity (Van Horne & Wachowicz, 2006).

When the CCC has a positive influence on company profitability due to a chain of positive

impacts of IVP and RVP with a negative impact of PYP on company profitability. The longer the IVP, the lower the cost involved in procrastinating of goods and/or service supply. In the same time, the longer the RVP, the higher credit sales earned. In addition, the lower the PYP, the higher reputation earned for borrowing opportunities. In contrast, shortening CCC could harm the company profitability. The company could face inventory shortages as reducing inventory conversion period, lose good credit customers as reducing RVP, and hamper its credit reputation as lengthening the PYP (Trinh, 2011). This logic is consistent with the definition contained of working capital management.

Profitability, which each firm seeks to achieve it, is measured with income and expenses. Income is money from the company's activities. However, some activities like borrowing money do not create income. In contrast, expenses are the cost of resources used up or consumed by the activities of the business. Profitability can be defined as either accounting profits or economic profits (Ross et al. 2010) as follows:

- Accounting profits traditionally provide a clear view of the viability of the business. Although one year of losses may not harm the business, years of losses may jeopardize the viability of the business.

- Economic Profits provide a long-term view of the business to examine whether you want to continue the business.

Increasing profitability is one of the most important tasks of business managers to maximize shareholders wealth. Without profitability, the business will not survive in the end. Therefore, measuring current and past profitability and expecting future profitability is very important (Debi'e, 2011). On the other hand, many economists, researchers and managers seek to examine other financial factors, which may have influence either positively or negatively on firms' profitability. Several empirical studies have either examined the relationship between working capital management and profitability as a main independent factor affecting the profitability (e.g., Deloof, 2003) or have studied other financial factors that showing the impact on profitability (e.g., Burja, 2011) such as: debt ratio (LEV), fixed assets ratio (FAR), expenses revenue ratio (ERR) and firm size (FS) . However, few empirical studies have addressed this relationship in Jordan (Debi'e, 2011). This study is complementary to prior studies by showing the theoretical aspect of working capital management, examining empirical aspect about the effect of working capital management on profitability for manufacturing firms of Jordan and exploring other financial factors that may have an impact upon profitability.

According to Shin and Soenen (1998), Working capital management's efficiency can have a significant effect on a company's liquidity and profitability. For the liquidity, lacking working capital can account for inefficiencies in a company operation when it is not able to pay off its due obligations and it will not be able to provide goods or services required to customers due to a lack of money. The company profitability can be jeopardized as results (Tring, 2011). Sometimes, the firms do not have a clear policy of managing their working capital where they focus on the liquidity more than profitability in order to meet their obligations, especially, they

concentrate on reputation earned for borrowing opportunities that may ensure financing resources as it needed. In the business environment of Jordan, it may notice the lack of financial awareness and ability to build a perspective strategy due to unclear policy of managing working capital.

Theoretically, the variables, together with theoretical their predictions and the direction of their influence, are related to profitability. This study contributes to the literature on the relationship between the cash conversion cycle (CCC), which is a proxy of working capital management, and the firm's profitability in Jordan by determining the relationship between CCC and profitability in manufacturing firms of Jordan to find out the shortcomings in this relationship. Accordingly, the problem statement is:

- What is the effect of CCC on profitability of Jordanian manufacturing firms listed in ASE during (2016-2018)?

After achieving the first objective, I can move to the second one through the need to identify the effect of each component of the cash conversion cycle (CCC) on manufacturing firms according to the business environment of Jordan. The problem statement is:

- What is the effect of each components of CCC on profitability of Jordanian manufacturing firms listed in ASE during (2016-2018)?

Finally, this study seeks to identify the effect of other financial factors on profitability of manufacturing firms of Jordan. Accordingly, the problem statement is:

- What is the effect of other financial factors on profitability of Jordanian manufacturing firms listed in ASE during (2016-2018)?

The importance of this study lies in the knowledge of the relationship between working capital management and profitability for manufacturing firms of Jordan and identifies the role of other financial factors influencing profitability. The manufacturing sector has been selected because, for one thing, the current assets of the manufacturing firms are over half of its total assets. Therefore, the influential role of working capital management will be clearer on firm profitability. For this reason, I have excluded both service and financial sectors because working capital management does not have a large proportion of total assets that could affect profitability explicitly. I can define the research objectives through these main points as following:

- To examine the effect of the cash conversion cycle (CCC) on profitability for Jordanian manufacturing firms.

- To examine the effect of working capital management components on profitability for Jordanian manufacturing firms.

- To examine the effect of other financial factors on profitability for Jordanian manufacturing firms.

This study is motivated by the fact working capital management is very important part of firm's annual financial statement and of significant important to investors, creditors and other users of financial statements. Most prior related studies were carried in developed economies. This study shows the theoretical aspect of working capital management examines empirically the effectiveness of working capital management on profitability for manufacturing firms of Jordan and finds out other financial factors that have an impact upon profitability. However, I should look at another side including the empirical studies related to the research issue to see how each match of the theoretical and empirical sides in Jordanian environment.

2. Literature Review & Previous Studies

Paul and Mitra (2018) examined the impact of working capital management on the profitability of the firms of the Indian steel industry. The result of the study indicates that the impact of working capital management on the profitability of the firms of the Indian steel industry has been significant. Boțoc and Anton (2017) examined the relationship between working capital management and firm profitability. The findings indicate that the firms should maintain the optimal working capital level that maximizes their profitability. Bhatia and Srivastava (2016) investigated the relationship between working capital management and firm performance in an emerging market in India. They observed a negative association between working capital management and firm profitability, indicating the need to manage working capital efficiently in order to improve profitability. Nasreen et al. (2014) pointed out a significant impact between working capital management and profitability of firms in Pakistan. Makori, D. & Jagongo (2013) indicated a negative association between profitability and number of day's accounts receivable and cash conversion cycle. In contrast, there is a positive association between profitability and number of days of inventory and number of day's payable. Tufail (2013) investigated the impact of working capital policies on profitability. Findings are that aggressiveness of working capital management policies is negatively associated with profitability. Moreover, liquidity and size of the firm have positive relation profitability whereas debt to equity ratio is negatively correlated with profitability. Mestrado (2013) investigated the relationship between working capital management and firm profitability for Portugal. He found that there is a concave relationship between working capital management and profitability, indicating that firms have an optimal working capital level where firms should stand to maximize profitability. Arshad and Gondal (2013) examined the empirical impact of the relationship between working capital management and profitability of Pakistan cement sector. They found that there is a significant negative relationship between working capital management on the profitability of the firms. Thuvarakan (2012) examined whether the working capital components trade receivable, inventories and trade payable are affecting the gross operating income of firms listed on the London stock exchange (LSE). They found that there is a negative relationship between the profitability of the firms and working capital components. However, there is no significant relationship between the working capital components receivable days, payable days, inventory days, cash conversion cycle and profitability of the firm. Rehn (2012) investigated of how working capital management can add to corporate profitability and shareholders' value through the cash conversion cycle as a proxy

of working capital management and two variables of profitability in Finnish and Swedish corporations. He found that this is significant evidence that by effectively managing each part of working capital, a company can increase the net present value of its cash flows, thus adding to shareholder value. Chary and Kumar (2011) focused on the relationship between profitability and working capital management. They found that current assets with a larger proportion in total assets have shown a high degree of negative correlation and the current assets with considerable proportion in gross working capital have shown a moderate degree of correlation with the profitability confirms the theory that excess of working capital results in low profitability. Alipour (2011) examined the relationship between working capital management and profitability depending on cash conversion as a measure to calculate the efficient working capital management. He found that there is a negative significant relationship between the number of day's accounts receivable and profitability, a negative significant relation between Inventory turnover in days and profitability, a direct significant relationship between the number of day's accounts payables and profitability and there is a negative significant relationship between cash conversion cycle and profitability. Al-Debi'e (2011) examined the relationship between profitability and working capital management measures for industrial companies listed on ASE. He found that there is a significant relationship between working capital management and profitability. Teruel and Solano (2004) provided empirical evidence about the effects of working capital management on the profitability on the Spanish firms. By using multiple regression, they demonstrated that managers can create value by reducing their firm's number of days accounts receivable and inventories. It also improves the profitability of the company by shortening the cash conversion cycle. Deloof (2003) investigated how working capital management can influence the profitability of Belgium firms. He observed that there is a significant negative correlation between gross operating income and number of day's receivable accounts, inventories, and accounts payable in Belgium. In order to create value for shareholders, he suggested reducing the number of day's accounts receivable and inventories to a reasonable minimum.

3. Hypotheses of research

Through the theoretical perspective, it lies on the certainty about the presence of a relationship between the working capital management and the firm profitability with staying other variables constant. As I mentioned earlier by explaining the CCC that is the main performance criterion of effective working capital management. The CCC begins when the company pays cash to suppliers for the materials purchased and ends when cash is collected from customers for credit sales. The first hypothesis including all components of CCC as measure of working capital management is:

H01: The CCC has no relationship with profitability of Jordanian manufacturing firms listed in ASE.

Since the CCC is based on three key components. Where the CCC is the sum of the IVP and RVP subtract PYP. It must be hypothesized that each component has a relationship with the firm profitability (Melicher & Leach, 2009; Huuynh & Vergeer, 2011) as followed:

H02: Each component of CCC has no relationship with profitability of Jordanian manufacturing firms listed in ASE.

Company performance's information, primarily about its profitability is invaluable in substantiating management decisions about potential changes in economic resources that will allow the firm to achieve superior economic results that will improve the competitiveness of the firm and satisfy the interests of shareholders. Several studies have addressed other financial ratios that may have an impact on profitability (Burja, 2011). Exclusively and not inclusively, I have used some financial ratios as factors that may have the effect or not on profitability. Thus, the second hypothesis is:

H03: The financial factors have no relationship with profitability of Jordanian manufacturing firms listed in ASE.

4. Research Methodology

The research population that consists of Jordanian manufacturing firms listed at ASE during the period 2016-2018 was characterized by heterogeneity within firms. Of the 63 companies, only 38 were extracted. The sample that has been employed after adjusting its extreme values is characterized by more homogeneity among firms. I have excluded both service and financial sectors because working capital management does not have a large proportion of total assets that could affect profitability explicitly. In addition, I have used the annual financial statements published on the website of ASE to compute the study variables.

4.1 Measurement of variables

The cash conversion cycle (CCC) was propounded by Hager (1976) and it was used by many researchers (Thuvarakan, 2012). The correct policy of working capital management is minimizing the time between expenses for getting inventory and cash reception resulted from selling it (Banomyong, 2005). The CCC is the sum of inventory period (IVP) and accounts receivables period (RVP) subtract accounts payable period (PYP) as mentioned earlier in the equation (2), where

$$\text{IVP} = (\text{Average Inventory} / \text{Annual Cost of Goods Sold}) \times 365 \quad (3)$$

$$\text{RVP} = (\text{Average Receivables} / \text{Annual Sales}) \times 365 \quad (4)$$

$$\text{PYP} = (\text{Average Payables} / \text{Annual Cost of Goods Sold}) \times 365 \quad (5)$$

For profitability, the return on assets (ROA) indicator expresses the company's ability to generate profit because of the productive use of resources and efficient management. ROA is employed in many prior studies as a proxy for performance (e.g., Tufail, 2013):

$$\text{ROA} = \text{Net Income} / \text{Average Total Assets} \quad (6)$$

Decision making in maximizing profitability is very much susceptible issue to all firms due to its internal and external effects on firms. Several empirical studies have either examined the relationship between working capital management and profitability as a main independent

factor affecting the profitability (Deloof, 2003) or examined other financial factors that showing the impact on profitability (Burja, 2011) such as: debt ratio (LEV), fixed assets ratio (FAR), expenses revenue ratio (ERR) and firm size (FS) as follows:

$$LEV = \text{Total debt} / \text{Total Assets} \quad (7)$$

$$FAR = \text{Fixed Assets} / \text{Total Assets} \quad (8)$$

$$ERR = \text{Operating Costs} / \text{Operating Income} \quad (9)$$

$$FS = \text{Log of Total Assets} \quad (10)$$

4.2 The General Research Model

The following model the must be tested the relationship between working capital management (WCM) and other financial factors related to WCM having impact upon profitability is:

$$ROA = \alpha + \beta 1\ (WCM) + \beta 2\ (LEV) + \beta 3(\ FAR) + \beta 4\ (ERR) + \beta 5\ (FS) + \varepsilon$$

5. Analysis and Results

As I mentioned before, the research population that was characterized by heterogeneity within firms consists of Jordanian manufacturing firms listed at ASE during the period 2016-2018. Of the 63 companies, only 38 were extracted. Even the sample that has been employed has been adjusted by treating its extreme values through demonstrating the 1.5 IQRs to be more homogeneity among firms.

Table 1. Descriptive analysis

Variables	Mean	Std. Deviation
ROA	-0.019	0.060
IVP	206.897	168.105
RVP	120.756	93.306
PYP	86.442	33.714
CCC	249.730	182.590
LEV	0.412	0.332
FAR	0.413	0.212
ERR	1.157	0.905
FS	7.292	0.634

Table (1) presents descriptive statistics for 38 manufacturing firms of Jordan in the period of three years from 2016 to 2018, and for 114 observations. Results of descriptive statistics in the table (1) indicate that the mean value of ROA is - 1.9 %, and the standard deviation is 6%. It means that the value of the profitability can deviate from mean to both sides by 6%. The

average of inventory period (IVP) for firms is 207 days which shows that firms take on average 207 days from purchasing the inventory and converting it into sales. Average of accounts receivable period (RVP) values is 121 days, which shows that firms receive their receivables from customers company through four months, which is considered a relatively long period. Mean value of accounts payable period (IVP) for the firms on average is 86 days, which indicates that on average firm, pays to its creditors after 86 days. The mean value of the cash conversion cycle (CCC) is 250 days to convert the firm's inventory into cash flows from sales. For the firm size (FS)'s descriptive analysis, the mean value of log of sales is 7.29 while the standard deviation is 0.63. For the leverage (LEV)'s descriptive analysis, the mean value of financial leverage is 0.41 while the standard deviation is 0.33. For the fixed assets ratio (FAR)'s descriptive analysis, the mean value of fixed assets ratio is 0.41 while the standard deviation is 0.21. For the operating expenses to operating income ratio (ERR)'s descriptive analysis, the mean value of expenses revenue ratio is 1.16 while the standard deviation is 0.91.

Table 2. Pearson Correlation

Variables	***ROA***	***IVP***	***RVP***	***PYP***	***CCC***	***LEV***	***FAR***	***ERR***	***FS***
ROA	1								
p-value									
IVP	-.585**	1							
p-value	0.000								
RVP	-.290**	-0.045	1						
p-value	0.002	0.638							
PYP	-0.073	0.039	.246**	1					
p-value	0.443	0.68	0.008						
CCC	-.661**	.839**	.431**	0.03	1				
p-value	0.000	0.000	0.000	0.75					
LEV	-.342**	.207*	0.152	-0.016	.259**	1			
p-value	0.000	0.027	0.105	0.863	0.005				
FAR	-.227*	0.158	-0.066	-0.157	0.122	.297**	1		
p-value	0.015	0.093	0.487	0.095	0.196	0.001			
ERR	-.266**	0.065	.285**	.192*	.218*	.222*	.368**	1	
p-value	0.004	0.491	0.002	0.041	0.02	0.018	0.000		
FS	0.173	-0.126	-.238*	-0.022	-.243**	-0.066	-0.117	-0.174	1
p-value	0.066	0.182	0.011	0.812	0.009	0.482	0.215	0.063	

Significant at 5% * and significant at 1%**

In Table (2), I have assessed the nature and amount of association between the variables of the study and the profitability proxy (ROA) through Pearson correlation coefficients of the selected manufacturing firms. The results describe a high level of significant negative relationship between CCC, IVP, RVP and the measure of profitability (ROA). The significant association between ROA and CCC reveals that the profitability of most of the manufacturing firms of Jordan increased with the decrease in CCC and vice versa ($p < 0.01$).

In details, the table describe that the coefficients of both inventory period (IVP) and accounts receivable period (RVP) were negative and statistically significant at 1% ($p < 0.01$), while the coefficients of accounts payable period (PYP) was negative and insignificant at either 5% or 1% respectively for ROA. Here, the results suggest that the relationship between ROA and account receivable period (RVP) in the majority of the manufacturing sector were adversely related to each other. This gives the impression that the shorter the inventory period (IVP) of the company, the shorter the accounts receivable period (RVP), the higher the firm profitability (ROA). In contrast, there is no relationship between ROA and accounts payable period (PYP). Firms focus on the liquidity more than profitability in order to meet their obligations, especially, they concentrate on reputation earned for borrowing opportunities that may ensure financing resources as it needed.

To assess other control variables quickly, the coefficients of both leverage (LEV) and operating costs to operating income ratio (ERR) were negative and statistically significant at 1% ($p < 0.01$). While the coefficients of fixed assets ratio (FAR) was negative and statistically significant at 5% for ROA ($p > 0.05$). In contrast, there is no relationship between firm size (FS) and profitability (ROA).

Regression analysis is used to find the impact of independent variables on dependent variables. In this study, working capital management that represents the cash conversion cycle (CCC) and its components separately are taken as independent variables, in general, and firm profitability is considered as a dependent variable. Each hypothesis is tested using regression analysis.

Table 3. Model Summary a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.704a	0.495	0.457	0.043943

a. Predictors: (Constant), ***FS, PYP, LEV, IVP, ERR, RVP, FAR, CCC***
b. Dependent Variable: ***ROA***

In table (3), the value of R (correlation coefficient) that measures the strength of the relationship between variables is 0.704. It means that a strong relationship exists between CCC and ROA. In addition, the value of R square measures that if the change occurs in independent variables (e.g., CCC), and how much dependent variable (ROA) will change. The value of R square shows that 49.5% variability in the ROA can be explained by the changeability in independent

variables used for measuring working capital management but does not know which variable this change happens.

Table 4. ANOVA b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.199	8	0.025	12.867	.000a
	Residual	0.203	105	0.002		
	Total	0.402	113			

a. Predictors: (Constant), ***FS, PYP, LEV, IVP, ERR, RVP, FAR, CCC***

b. Dependent Variable: ***ROA***

Table (4) tells about the statistical significance of the whole model used in this study for measuring the impact of CCC (independent variable) and its components on the firm's ROA (dependent variable). Value of F measures that either value of R square shown in table (3) is due the chance or not and term (Sig.) refers to p-value which is used to measure the statistical significance, if p-value is less than 0.05 it indicates that working capital management as a whole has statistically significant impact on ROA of firms. In the table (4), the value of F is 12.867 and the value of p is 0.000, which is less than 0.05 means that CCC as a whole has significant influence the ROA firms.

Table 5. OLS Regression Results

Model	Model 1		Model 2		Model 3		Model 4	
	COEFF	P	COEFF	P	COEFF	P	COEFF	P
CCC	-0.598	0.000						
IVP			-0.525	0.000				
RVP					-0.217	0.023		
PYP							-0.062	0.503
LEV	-0.146	0.054	-0.185	0.019	-0.246	0.008	-0.277	0.003
FAR	-0.085	0.273	-0.018	0.825	-0.126	0.197	-0.089	0.373
ERR	-0.074	0.338	-0.174	0.031	-0.09	0.359	-0.139	0.163
FS	-0.005	0.944	0.062	0.405	0.074	0.407	0.118	0.186
R	.695a		.657a		.461a		.421a	
R^2	0.482		0.431		0.213		0.177	
F	20.136		16.385		5.832		4.647	
Sig.	.000a		.000a		.000a		.001a	

Model (1) tests the hypothesis that the CCC has no relationship with the profitability of manufacturing firms in Jordan. The regression results indicate that the coefficient of CCC is negative with -0.598, and P-value of CCC is 0.000 ($p<0.05$) which means that the CCC has a significant impact on the ROA of firms in Jordan. In addition, the overall model is statistically

significant, as it is indicated by the F-value of 20.136 with ($p<0.01$). The model's adjusted R Square implies that 48.2% of the variation in the profitability of the firms can be explained by the model. Thus, Ho1 hypothesis is rejected and is concluded that the CCC is statistically significant at 1% significance level ($p<=0.01$).

Model (2) tests the hypothesis that the IVP, which is one of CCC components, has no relationship with the profitability of manufacturing firms in Jordan. The regression results indicate that the coefficient of IVP is negative with -0.525, and P-value of IVP is 0.000 ($p<0.05$) which means that the IVP has a significant impact on the ROA of firms in Jordan. Thus, Ho2 hypothesis is rejected and is concluded that the IVP is statistically significant at 1% significance level ($p<=0.01$).

Model (3) tests the hypothesis that the RVP, which is one of CCC components, has no relationship with the profitability of manufacturing firms in Jordan. The regression results indicate that the coefficient of RVP is negative with -0.217, and P-value of RVP is 0.023 ($p<0.05$) which means that the RVP has a significant impact on the ROA of firms in Jordan. Thus, Ho2 hypothesis is rejected and is concluded that the RVP is statistically significant at 1% significance level ($p<=0.05$).

Model (4) tests the hypothesis that the PYP, which is one of CCC components, has no relationship with the profitability of manufacturing firms in Jordan. The regression results indicate that the coefficient of PYP is negative with -0.062, and P-value of PYP is 0.503 ($p>0.05$) which means that the PYP has insignificant impact on the ROA of firms in Jordan. Thus, Ho2 hypothesis is not rejected and is concluded that the PYP is statistically insignificant at 1% significance level ($p>0.05$).

Control variables' values of regression beta coefficients have the direct or indirect impact of on the ROE by giving a positive or negative value. Some of them have either significance or insignificance impact on ROE of the firm in the manufacturing sector in Jordan. P-value of LEV is 0.019, 0.008, 0.003 in model 2, 3 and 4 respectively, these findings show that the leverage (LEV) has a significant impact on ROE of the firm, therefore the third hypothesis is rejected on the basis of these findings. Moreover, p-value ERR is 0.031 in model 2, these findings show that the operating expenses to operating income ratio (ERR) has a significant impact on ROE of the firm, therefore the third hypothesis is rejected on the basis of these findings. In contrast, both fixed assets ratio (FAR) and firm size (FS) have an insignificant impact on ROE of the firm.

6. Findings & Conclusions:

This study investigates the impact of working capital management and its components on profitability as a practical aspect, and how is compatible with the theoretical aspect. In addition, it examines other financial factors that may affect profitability by using a sample of Jordanian manufacturing firms listed in the Amman Stock Exchange for the period (2016-2018). Results indicate that working capital management that represents the cash conversion cycle has a significant impact on the profitability of firms in the manufacturing sector, therefore, the first

null hypothesis was rejected and the alternative hypothesis is accepted. The second null hypothesis was rejected and the alternative hypothesis is accepted because the results provide evidence that the components of the cash conversion cycle have a significant impact on the firm' profitability. This finding indicates that the shorter the inventory period of the company, the shorter the accounts receivable period, the higher the firm profitability. In contrast, there is no relationship between the profitability and the accounts payable period. Due to the firms focus on the liquidity more than profitability in order to meet their obligations, especially, they concentrate on the reputation earned for borrowing opportunities that may ensure financing resources as it needed. Finally, the third null hypothesis was rejected and the alternative hypothesis is accepted because the results provide evidence that some of the financial factors have a significant impact on the firm profitability. This study is conducted in the manufacturing sector, future studies should be done within a large sample of Jordan to provide robust evidence.

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