

# Two Dimensional Analyses for the Company's Profitability Under the Working Capital Management: Evidence From Egypt

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## Abstract

The current study focused on the impact of working capital management on the financial profitability of Egyptian companies which lasting at EGX according two dimensional analyses; these dimensional are real assets level measured according to "Return on Assets" with financial assets level measured according to "TOBIN Q" during 2011 to 2018 for 23 companies. The study used unbalanced panel data analysis to examining the impact of the working capital management on the profitability. Finally, the study found two dimensional for the impact of working capital management and corporate's profitability; first according to Cost-Benefits analysis at real assets level measured through "Return on Assets"; second according to Risk Return Trade Off at financial assets level measured through "TOBIN Q".

**Keywords:** Working capital management, Return on assets, TOBIN Q, EGX & Egypt

## 1. Introduction

Working capital management is important to finance which takes considerable time to achieve the perfect balance between profitability and liquidity, and its place in the performance corporate and common stock. The working capital requirement can be specified in accordance by the quantity of funds that a business required to adequately finance operation costs and expenses operation. Companies establish different capital needs, and then no optimal working capital model exists. The main subject of the Working Capital Theory (WCM) is the interaction between current (CA) and existing (CL) assets.

There is a relationship between companies' performance on the level of real assets and the performance of their common stock on the level of financial assets. The company's stock is important in the measure where it generates cash flow; the timing of cash flows matters; the money received is much better as it can be reinvested to produce extra profits or otherwise returned to investor; Thanks to these three realities, managers will raise stock prices for their businesses through improved cash flows and accelerated collection and risk reduction, Working capital management is necessary if a company wants to compete, but sometimes found a conflict between working Capital Terminology like Working capital, sometimes called gross working capital" the current assets used in operations"; Net working capital " current assets minus current liabilities" and Net operating working capital (NOWC) " operating current assets minus operating current liabilities". The company will borrow to purchase the stock, sell the inventory to repay the bank loan, and then restart the process under the principle of working capital management. The definition is extended to more dynamic organizations in which the efficiency of the working capital management of a company was evaluated. Companies usually buy stock, sell goods on loan and receive receivables throughout a period. This process is known as the Cash Conversion Cycle; the working capital strategy aims at reducing the time between product cash spending and sales money accumulation (Brigham and Ehrhardt, 2002).

Under the principle of working capital management, there are many related practices, including the following:

- A. Cash Management
- B. Inventory Management
- C. Receivables Management
- D. Accruals and Accounts Payable Management
- E. Short-Term Financing

So; the current study are measured the profitability of companies through two levels under Working Capital Management. The study expect find an impact of working capital management on real assets level measured according to "Return on Assets" with financial assets level measured according to "TOBIN -Q".

## **2. Literature Review**

Working capital is the corporate's power for conducting the daily operations activities according to consists of the current assets and the current liabilities; efficient working capital management is becoming important for corporates in cases of increased economic uncertainty; so There are multiple studies related to working capital management (WCM), ales the real two main attitudes in the working capital studies, the first for small and medium enterprises (Pais and Gama, 2015; Afrifa and Padachi, 2016; Tran et al., 2017; Afrifa and Tingbani, 2018; Elbadry 2018) and the second one for corporate (Aktas et. al., 2015; Lyngstadaas & Berg 2016; Kasozi 2017), the method in which working capital is managed will have an impact on the company's profitability. According to Deloof (2003) Managers will increase the

profitability of companies by reducing the number of accounts receivable days and inventory. More profitable companies are waiting longer for their bills to pay.

The general results indicate that a decrease in the inventories held, in the number of days that firms take to settle their commercial liabilities & cash conversion cycle, in addition, increase in the number of collect payment days are associated to maximize corporate profitability. Stated Aktas et al., (2015) there an optimal value of working capital. The corporate that converge to that optimal value either through change its investment in working capital & it's financing in short-term to improve their operating performance. that agree with Small and Medium Enterprises according to Afrifa & Padachi (2016) under the limited resources of Small and Medium Enterprises, the main focus of managers should be on the set of the specific target value for Working Capital Management so as to increase profitability. That agrees with Mun & Jang (2015) when the findings ascertain a strong inverted U-shape relationship between working capital and corporate's profitability.

According to Filbeck & Krueger (2005) there significant differences exist between industries in working capital measures across time. In addition, we discover that these measures for working capital change significantly within industries across time.

Today, the financial thought of working capital management did not stand at objectives of profitability and liquidity; according to Masri & Abdulla (2018) propose a multiple objective stochastic programming model to select an efficient working capital strategy that takes into consideration not only the conflicting impact of working capital policy on the two firm objectives of liquidity and profitability but also the interrelationships and stochastic aspects of the components of working capital.

In general, working capital policy has an impact on profitability & liquidity (Singh et. al., 2017); Working capital management & their policy are a link between operational activities of corporates and macroeconomic changes in cases of boom, recession or crisis; According to Ramiah et al., (2014) the financial crisis has an effect on working capital management practices.

There is another attitude in the working capital studies; it was the determinants of their impact or call control variables such as corporate size (Lyroudi & McCarty, 1993; Jose et. al., 1996; Moss & Stine, 1993; Opler et. al., 1999; Ebben & Johnson, 2011; Shrivastava et. al., 2017). The current study adds other control variables including asset structure, asset management ratios & debt ratio.

### *2.1 Study Layout*

The tremendous changes that have occurred on the stock prices are due to changes in the company's profitability, which are reflection by the practices of working capital management. When company leaders interest efficient resource utilization, we expect these companies to have a stronger and smoother income stream, for example work capital management, which may lead to the creation of added value and at the same time smoother changes in stock price, thus reducing high stock price volatility.

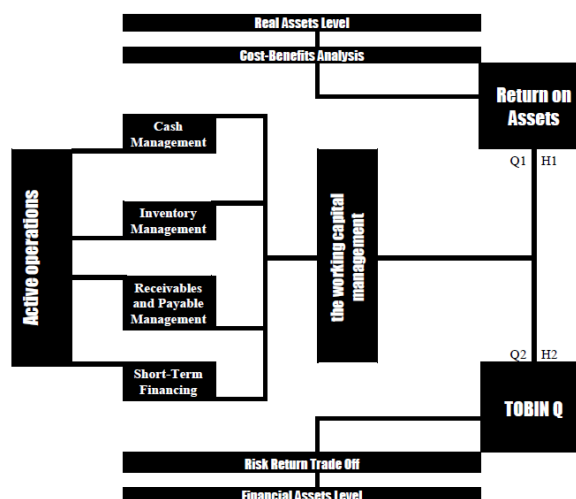


Figure 1. Study layout

The study found two dimensional for the impact of working capital management and corporate's profitability; first according to Cost-Benefits analysis at real assets level measured through "Return on Assets"; second according to Risk Return Trade Off at financial assets level measured through "TOBIN Q"

## 2.2 Study Problem

This study focused on the relationships between working capital management and corporate's profitability as real & financial asset through analyzing two level of profitability. So, the study has the following questions:

Q<sub>1</sub>: Is there an impact of working capital management on return on assets?

Q<sub>2</sub>: Is there an impact of working capital management on TOBIN Q?

## 2.3 Study Aims

The study aims to examine the impact of working capital management on the performance of Egyptian companies; the company's performance will be expressed by profitability (Return on Assets) and stockholder's wealth (TOBIN Q).

## 2.4 Study Importance

The study is designed to bridge the gap in literature by presenting empirical evidence of the management of working capital and its effect on exchange listed companies ' quality from a market value on one hand and profitability on other hand. For key stakeholders, such as managers, lenders, financial analysts and bankers, the findings of this study should be of great importance. Good use of the company's assets increases efficiency and reduces uncertainty, reducing the risk of default and therefore increasing the value of the company.

## 2.5 Study Hypotheses

The Study Hypotheses can be formulated as follows:

H<sub>1</sub>: There is no significant impact of Working Capital Management (WCM) on Return on Assets (ROA)

H<sub>2</sub>: There is no significant impact of Working Capital Management (WCM) on TOBIN Q

### 3. Study Methodology

The study used unbalanced panel data analysis to examining the impact of the working capital management on the profitability according to EViews. The following analyses techniques are descriptive Statistics according to Jarque-Bera test, Unit root test and Tau-statistic Co-integration test.

#### 3.1 Data Collection

This study is based on secondary data collection. The data for this study was collected from the audited annual financial report published; the annual data for the listed companies during 2011 to 2018. All data were hand collected from the Egyptian Exchange (EGX) and the annual financial reports of each company. Because of the different existence of their activities, financial institutions and financial companies are excluded from the study. The sample is shown in Table 1.

Table 1. The sample

No.	COMPANY	ISIN CODE
1	Abou Kir Fertilizers	EGS38191C010
2	ALEXANDRIA CONTAINERS & GOOD	EGS42111C012
3	Arabian Cement Company	EGS3C001C016
4	Arabian Cement Company	EGS3C001C016
5	Cleopatra Hospital Company	EGS729J1C018
6	Edita Food Industries S.A.E	EGS30511C011
7	Egypt Aluminum	EGS3E181C010
8	Egyptian Chemical Industries (Kima)	EGS38201C017
9	Egyptian Financial & Industrial	EGS38381C017
10	EL Ezz Aldekhela Steel - Alexandria	EGS3D041C017
11	El Ezz Ceramics & Porcelain	EGS3C071C015
12	Ezz Steel	EGS3C251C013
13	GB Auto	EGS673T1C012
14	Global Telecom Holding	EGS74081C018
15	Ibsina Pharma	EGS51201C012
16	Juhayna Food Industries	EGS30901C010
17	Misr Chemical Industries	EGS38211C016
18	Obour Land For Food Industries	EGS30AL1C012
19	Oriental Weavers	EGS33041C012
20	Paint & Chemicals Industries (Pachin)	EGS38311C014
21	Raya Holding For Technology And Communications	EGS690C1C010
22	Sidi Kerir Petrochemicals	EGS380S1C017
23	Suez Cement	EGS3C181C012

### 3.2 Definition of Variables and Measurements

The variables were divided into two groups, which are independent, and dependent variables as shown in Tables 2 & 3.

Table 2. Dependent variables

No.	Variable name	Symbols
1	Return On Assets	Y1
2	TOBIN Q	Y2

Table 3. Independent variables

No.	Variable name	Symbols
1	Current Ratio	X1
2	Quick Ratio	X2
3	Cash Ratio	X3
4	Working Capital	LN <sub>X4</sub>
5	Net Working Capital	LN <sub>X5</sub>
6	Current Assets to Total Assets	X6
7	Total Assets Turnover	X7
8	Current Assets turnover	X8
9	Fixed Assets Ratio	X9
10	Debt Ratio	X10
11	Current Liabilities to Total Assets	X11
12	LN Sales	X12
13	Inventory turnover	X13
14	Account Receivables turnover	X14
15	Account Payable turnover	X15
16	Average Inventory Period	X16
17	Average Collection Period	X17
18	Average Payable Period	X18
19	Cash Conversion Cycle	X19
20	Operating Cycle	X20

Source: EViews output.

### 3.3 Descriptive Statistics

The study measures the normality distribution of independent and dependent variables indicators according to Jarque–Bera test.

Table 4. Descriptive statistics for Independent variables

	X1	X2	X3	LNx4	LNx5	X6	X7	X8	X9	X10
Mean	1.822459	1.208319	0.015873	15.91446	15.53312	0.531856	0.501157	0.350879	0.297247	6.955705
Median	1.538118	1.185666	0.015533	15.63337	15.43075	0.574212	0.459636	0.295106	0.278950	6.822836
Maximum	3.947204	2.433380	0.043286	18.89245	17.94623	0.994792	1.324901	0.887804	0.838711	8.367822
Minimum	0.003994	-0.009081	0.000000	12.53724	12.38587	0.001157	0.005208	0.000000	0.000000	5.577971
Std. Dev.	0.982536	0.611470	0.011713	1.429844	1.373188	0.283674	0.333043	0.246468	0.228709	0.609723
Skewness	0.369542	0.202503	0.456460	0.127310	-0.221533	-0.167157	0.510903	0.459601	0.689871	0.347236
Kurtosis	2.506381	2.396385	2.290915	2.573650	2.461535	1.901047	2.544360	2.175517	2.664322	2.970644
Jarque-Bera	3.521656	2.355694	5.957336	1.099452	2.147614	5.882613	5.580474	6.797646	8.989646	2.154055
Probability	0.171902	0.307941	0.050861	0.577108	0.341705	0.052797	0.061407	0.033413	0.011167	0.340606
	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20
Mean	0.613881	1.223907	5.198274	2.819575	3.591154	100.6954	147.3100	80.86439	180.9688	241.8914
Median	0.616553	1.097830	3.053131	2.287211	3.353801	74.50319	106.2637	72.84044	153.3441	256.1446
Maximum	1.832266	2.759716	15.87470	7.909852	10.02317	318.5826	412.2196	258.4484	508.2700	441.8324
Minimum	0.000000	0.000000	0.348373	0.000000	0.000000	1.230489	4.282926	0.203205	-114.8044	23.64405
Std. Dev.	0.433244	0.686749	4.384389	1.928206	2.408298	79.32289	109.4177	65.65189	120.1547	119.5850
Skewness	0.489317	0.365612	0.907166	0.735994	0.490254	0.919447	0.720865	0.913014	0.403775	-0.081040
Kurtosis	2.761437	2.317680	2.539945	2.924759	2.566397	2.995908	2.545438	3.235843	2.731393	1.708324
Jarque-Bera	4.523597	4.459445	15.61954	9.685332	5.124436	15.07607	10.18824	15.11376	3.229109	7.555527
Probability	0.104163	0.107558	0.000406	0.007886	0.077133	0.000532	0.006133	0.000523	0.198979	0.022874

Source: EViews output.

From Table 4 it can be referred The normality distribution of all Independent indicators by using the Jarque-Bera test at a significant level greater than (0.05) in terms of These Independent variables (Current Ratio, Quick Ratio, Cash Ratio, Working Capital, Net working Capital, Current Assets to Total Assets, Total Assets Turnover, Current Assets turnover, Fixed Assets Ratio, Debt Ratio, Current Liabilities to Total Assets, LN sales, Inventory Turnover, Account receivables Turnover, Account payable Turnover, Average Inventory Period, Average Collection Period, Average Payable Period and Cash Conversion Cycle ) Except (Operating Cycle); it is at a significant level less than (0.05).

Table 5. Descriptive statistics for dependent variables

	Y1	Y2
Mean	5.484075	3.147163
Median	4.693785	2.855864
Maximum	16.35761	7.230766
Minimum	-7.380056	0.232906
Std.Dev.	4.859809	1.677844
Skewness	0.228181	0.648882
Kurtosis	2.645510	2.695381
Jarque-Bera	1.488766	7.922389
Probability	0.475027	0.019040

Source: EViews output.

From Table 5 it can be referred the normality distribution of Return on Assets by using the Jarque-Bera test at a significant level Greater than (0.05); but (TOBIN Q) because it is at a significant level Less than (0.05).

studies the stationary of time series in order to ensure that the mean and variance are invariant over time according to Unit root test, and the Covariance value between two time periods only depends on the distance between the two periods and not the actual time at which the covariance is computed of the basic all independent and dependent indicators, and this is through the following statistical techniques: Augmented Dickey-Fuller (ADF), Philips-Perron (PP), Im, Pesaran and Shin W-stat (IPSW), Levin, Lin and Chu t (LLC).

Table 6. Output of unit root test for independent and dependent variables

Group unit root test: Summary: level(0)+individual intercept		
Series: X1, X2, X3, LNX4, LNX5, X6, X7, X8, X9, X10, X11, X12, X13, X14, X15, X16, X17, X18, X19, X20, Y1, Y2		
Sample: 1 107		
Exogenous variables: Individual effects		
Automatic selection of maximum lags		
Automatic lag length selection based on SIC: 0 to 2		
Newey-West automatic bandwidth selection and Bartlett kernel		
Method	Statistic	Prob.**
Null: Unit root (assumes common unit root process)		
Levin, Lin & Chu t*	-15.9783	0.0000
Null: Unit root (assumes individual unit root process)		
Im, Pesaran and Shin W-stat	-17.8441	0.0000
ADF - Fisher Chi-square	416.004	0.0000
PP - Fisher Chi-square	400.427	0.0000
** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.		

Source: EViews output.

From Table 6 it can be referred that: It can be revealed that stationary of the time series of the basic independent and dependent indicators at level zero according to the constant level, and this is through the following statistical techniques: Augmented Dickey-Fuller (ADF), Philips-Perron (PP), Im, Pesaran and Shin W-stat (IPSW), Levin, Lin and Chu t (LLC) at a significant level less than (0.05).

The study measures the existence of long-run equilibrium relationships among no stationary time series variables of basic independent and dependent indicators according to Tau-statistic Co-integration test.



Table 7. Output of tau-statistic co-integration test

Series: X1 X2 X3 LNX4 LNX5 X6 X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20 Y1 Y2				
Sample (adjusted): 2 107				
Included observations: 106 after adjustments				
Null hypothesis: Series are not cointegrated				
Cointegrating equation deterministics: C				
Automatic lags specification based on Schwarz criterion (maxlag=12)				
Variables	tau-statistic	Prob.*	z-statistic	Prob.*
X1	-7.066169	0.0117	-64.80613	0.0204
X2	-6.997674	0.0140	-67.71279	0.0116
X3	-5.618779	0.2369	-49.27628	0.2207
LNX4	-7.505371	0.0035	-73.52171	0.0033
LNX5	-7.268434	0.0068	-69.46200	0.0081
X6	-7.094430	0.0109	-68.39209	0.0101
X7	-8.255935	0.0004	-82.40364	0.0004
X8	-7.408222	0.0048	-225.1804	0.0000
X9	-8.794080	0.0001	-131.1580	0.0000
X10	-8.642752	0.0001	-86.34771	0.0001
X11	-10.87319	0.0000	-111.5282	0.0000
X12	-8.315358	0.0003	-83.06658	0.0003
X13	-7.836533	0.0013	-78.16465	0.0011
X14	-7.849060	0.0013	-80.37911	0.0006
X15	-7.377415	0.0051	-71.01750	0.0058
X16	-7.356417	0.0054	-72.21619	0.0045
X17	-7.857948	0.0012	-77.76871	0.0012
X18	-7.946138	0.0009	-79.68420	0.0008
X19	-8.727970	0.0001	-154.9325	0.0000
X20	-7.549889	0.0031	-74.66098	0.0026
Y1	-7.302436	0.0062	-70.89546	0.0060
Y2	-6.128491	0.0989	-55.90859	0.0915

Source: EViews output.

From Table 7 it can be referred that :It can be revealed that there are long-term equilibrium relationships among the basic Independent and Dependent indicators, according to the Tau-statistic, Z-statistic criteria at a significant level less than (0.05) Except The Variables

(Cash Ratio and TOBIN Q) Because of the Tau-statistic, Z-statistic criteria at a significant level greater than (0.05).

#### 4. Examining the Impact of the Working Capital Management on ROA

In next table can show the Output of Kao Residual Cointegration Test for Return on Assets

Table 8. The output of Kao residual Cointegration test for return on assets

Kao Residual Cointegration Test		
Series: Y1 X1 X2 X3 LNX4 LNX5 X6 X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20		
Sample: 2011 2018		
Included observations: 107		
Null Hypothesis: No cointegration		
Trend assumption: No deterministic trend		
User-specified lag length: 1		
Newey-West automatic bandwidth selection and Bartlett kernel		
	t-Statistic	Prob.
ADF	-3.670435	0.0001
Residual variance	11.08698	
HAC variance	7.441133	

Source: EViews output.

According to Kao Residual Cointegration Test for Gross Profit Margin, the study can be revealed that there are long-term equilibrium relationships among Working Capital Management (WCM) and Return on Assets at a significant level less than (0.05). In next table can show the Output of Redundant Fixed Effects Tests for Return on Assets

Table 9. Output of panel least squares for return on assets

Dependent Variable: Y1				
Method: Panel Least Squares				
Sample: 2011 2018				
Periods included: 8				
Cross-sections included: 23				
Total panel (unbalanced) observations: 107				
White cross-section standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
X2	0.966689	0.485933	1.989348	0.0504
X7	2.073051	1.108524	1.870100	0.0655
X11	6.945821	1.749681	3.969765	0.0002
X12	-2.235380	0.910006	-2.456445	0.0164
C	1.749070	0.865846	2.020070	0.0470
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.783107	Mean dependent var	5.484075	
Adjusted R-squared	0.685060	S.D. dependent var	4.859809	
S.E. of regression	2.727302	Akaike info criterion	5.097647	
Sum squared resid	542.9868	Schwarz criterion	5.946957	
Log-likelihood	-238.7241	Hannan-Quinn criteria.	5.441946	
F-statistic	7.987029	Durbin-Watson stat	1.965134	
Prob(F-statistic)	0.000000			

Source: EViews output.

According to panel estimation model using least squares, it can be concluded that The Variables of Working Capital Management (WCM) were accepted in the model (Quick Ratio, Total Assets turnover, Current Liabilities to Total Assets and LN Sales) explain (78.3% ) from total variation of Return on Assets ( ROA), and the rest percent due to either the random error in the regression model or other Variables of Working Capital Management (WCM) excluded from regression model.

F test is a test to determine if there is a linear relationship between Return on Assets and a subset of Working Capital Management Variables. Since the value of "F test" is (7.98) with significant at the (.001) level, then the researcher concludes that the Variables of Working Capital Management (WCM) were accepted in the model have been affected on the level of Return on Assets.

It would be useful to determine the significant value of each of The Variables of Working Capital Management coefficient in the regression model. The most significant The Variables of Working Capital Management (WCM) were accepted in the model are Quick Ratio, Total

Assets turnover, Current Liabilities to Total Assets and LN Sales with the significant level at less than (0.05).

Since the significance value of the test statistic ( $\geq 0.05$ ); (0.100016), then we would not reject the null hypothesis (H0): Errors are normally distributed, and we conclude that the observed distribution corresponds to or equal the theoretical distribution, i.e. the observed errors are normally distributed.

### 5. Examining the Impact of the Working Capital Management on TOBIN Q

In next table can show the Output of Kao Residual Cointegration Test for TOBIN Q

Table 10. The output of Kao residual Cointegration test for TOBIN Q

Kao Residual Cointegration Test		
Series: Y2 X1 X2 X3 LNX4 LNX5 X6 X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20		
Sample: 2011 2018		
Included observations: 107		
Null Hypothesis: No cointegration		
Trend assumption: No deterministic trend		
User-specified lag length: 1		
Newey-West automatic bandwidth selection and Bartlett kernel		
	t-Statistic	Prob.
ADF	-2.996613	0.0014
Residual variance	0.765279	
HAC variance	0.672808	

Source: EViews output.

According to Kao Residual Cointegration Test for Gross Profit Margin, the study can be revealed that there are long-term equilibrium relationships among Working Capital Management (WCM) and TOBIN\_Q (Y2) at a significant level less than (0.05).

Table 11. Output of panel least squares for TOBIN Q

Dependent Variable: Y2				
Method: Panel Least Squares				
Sample (adjusted): 2012 2018				
Periods included: 7				
Cross-sections included: 23				
Total panel (unbalanced) observations: 84				
White cross-section standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Y2(-1)	0.255940	0.160664	1.593008	0.1173
X1	-0.466287	0.170214	-2.739412	0.0085
X3	39.95494	20.31369	1.966898	0.0546
X6	3.312081	0.891801	3.713923	0.0005
C	0.708532	0.504740	1.403756	0.1665
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.829542	Mean dependent var	3.119675	
Adjusted R-squared	0.722588	S.D. dependent var	1.671265	
S.E. of regression	0.880254	Akaike info criterion	2.869511	
Sum squared resid	39.51723	Schwarz criterion	3.824475	
Log-likelihood	-87.51948	Hannan-Quinn criteria.	3.253399	
F-statistic	7.756051	Durbin-Watson stat	1.734561	
Prob(F-statistic)	0.000000			

Source: EViews output.

The Variables of Working Capital Management (WCM) were accepted in the model (Current Ratio, Cash Ratio and Current Assets to Total Assets) explain (82.95% ) from total variation of dependent variable (TOBIN Q), and the rest percent due to either the random error in the regression model or other The Variables of Working Capital Management (WCM) excluded from regression model.

F test is a test to determine if there is a linear relationship between TOBIN Q and a subset of the Variables of Working Capital Management (WCM). Since the value of "F test" is (7.75) with significant at the (.001) level, then the researcher concludes that the Variables of Working Capital Management (WCM) were accepted in the model have been affected on the level of TOBIN Q

According to t-test; it would be useful to determine the significant value of each of the individual The Variables of Working Capital Management (WCM) coefficient in the regression model. The most significant The Variables of Working Capital Management (WCM) were accepted in the model are Current Ratio, Cash Ratio and Current Assets to Total Assets with the significant level at less than (0.05).

According to The Jarque-Bera Test; Since the significance value of the test statistic not ( $<0.001$ ); ( $0.001$ ), then we would reject the null hypothesis ( $H_0$ ): Errors are normally distributed, and we conclude that the observed distribution corresponds to or equal the theoretical distribution, i.e. the observed errors are not normally distributed.

So; the study has an Evidence from Egyptians companies for impact of Working Capital Management (WCM) on TOBIN Q; the sources this impact from Current Ratio, Cash Ratio and Current Assets to Total Assets & this impact has explain (82.9%) from total variation of TOBIN Q.

## 6. Discussion and Conclusions

Efficient use of resources and funding sources contributes to the value creation. In the current study, the effect of working capital management on the performance; According two dimensional analyses; these dimensional are real assets level measured according to "Return on Assets" with financial assets level measured according to "TOBIN Q"; in one emerging market was empirically investigated. The study also speculated the rise in the productivity of working capital management. With the use of a sample of 23 companies on the Egyptian Exchange for the 2011-2018 period,

the study has an Evidence from Egyptians companies for impact of Working Capital Management (WCM) on TOBIN Q; the sources this impact from Current Ratio, Cash Ratio and Current Assets to Total Assets & this impact has explain (82.9%) from total variation of TOBIN Q; this conclusion agree with Mohamad and Saad; 2010 and Eldomiaty et. al., 2016. In addition to impacting the profitability of companies this conclusion agree with Shin and Soenen; 1998, Lazaridis and Tryfonidis; 2006; Raheman and Nasr; 2007, Mohamad and Saad; 2010 and Singh et al., 2017.

There is a correlation between the investing at working capital on one hand with production facilities on other hand; if the company's working capital is small, it will lose most good odds of investment and suffer from major liquidity shortages. This effectively utilizes work resources and displays the advantages of flexibility, solvability, productivity, competitiveness and asset maximization of investors. If the managers conduct the cash conversion process and optimize the accounts receivables, they make good profits for the company. The managers increase the shareholder's value and make high profits.

According to Panda and Nanda (2018) that convex relationship between working capital financing and company's profitability; this conclusion agree with study layout for real assets level; but according to Mulyono et al. (2018) Companies must maintain the sustainability of their business. The profitability of many Companies fluctuates and tends to decrease every year. One of the causes is inefficient working capital management.

According to Pirttilä et al. (2019); company's operating with efficient Working Capital Management models are typically the pioneers and the most dominant on-screen characters in the store network. Further, the most productive firms are those that pay their providers expeditiously. On other hand that different WCM models are applied within the supply chain, and many companies reduced their current assets (Lind et al., 2019). So the study found

Knowledge gap at efficient working capital management, the study recommend that it be the field of future research.

Finally; The study found two dimensional for the impact of working capital management and corporate's profitability; first according to Cost-Benefits analysis at real assets level measured through "Return on Assets"; second according to Risk Return Trade Off at financial assets level measured through "TOBIN Q".

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