



THE IMPACT OF WORKING CAPITAL POLICIES ON THE FIRM  
PERFORMANCE: A PRACTICE OVER BIST 100

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*Abstract*

*In this study the relationship between working capital policies and financial performance of firms which carry on business on Istanbul Stock Exchange 100 Index is analyzed. Floating Assets/Total Assets ratio is used to determine the working capital investment policy while the financial policy is determined through Short Term Liabilities/ Total Assets ratio. The financial performance, the dependent variable of the study, is measured through Return on Assets (accounting based) and Tobin's q (market based). The data of 38 firms carrying out active business in the real sector during the period of 2010-2015 on Istanbul Stock Exchange 100 Index (BIST 100) are evaluated within analyses in the study aiming to reveal the relationship between working capital policies and financial performance of firms. As a result of the study, a statistically significant and negative relationship is determined between the financial policy and ROA. Furthermore, it is identified that there is a negative and statistically significant relationship among investment and working capital investment policies and TQ while there is a statistically significant and positive relationship between financial policy and TQ.*

*Index terms- working capital policies, financial performances, Istanbul Stock Exchange*

## **I. INTRODUCTION**

Working capital management includes the investment which firms make in floating assets and the financing of these floating assets. Enterprises, finance some of their current assets with short-term debts and some with long-term debt and equity. This basic financing balance is



important in terms of the liquidity, risk and profitability of the enterprise (Canbaş and Vural, 2012: 13). Working capital policies are the processes of determining the balance sheet items forming the floating assets that are necessary for the continuity of manufacturing activities of an enterprise and the proper amounts of them, and deciding which resources to use in order to finance these. Managing the floating assets using these policies is called working capital management (Sariaslan and Erol, 2008: 354).

The financing of working capital is also an important element in the management of working capital. There has to be a concordance between the term of financial resources and the assets which these resources are invested in. In this case, short term investments should be financed with short term resources, and long term investment with long term resources. There are different policies in financing the working capital because of the working capital is separated as temporary and permanent, and the investments are made in accordance with the maturity match (Altan and Şekeroğlu, 2013:224). There are basically 3 finance strategies;

- Conservative financing policy,
- Balanced (Moderate) financing policy,
- Aggressive financing policy

In the conservative financing policy, while almost all the planned funds are met with long term liabilities or with shareholder's equity, short term liabilities are only used when there is an unexpected funding need. (Okka, 2012: 588, 589). In the balanced financing policy, while fixed assets and continuous working capital are met with long term liabilities or with shareholder's equity, floating part of the working capital is financed with short term liabilities. In the aggressive financing policy, firms prefer short term financial resources. This increases the risk. However, the increased risk leads to an increase in the profit, as well.

The relationship between working capital policies and financial performances of firms which carry on business on Istanbul Stock Exchange 100 Index is analyzed in this study. Floating Assets/Total Assets rates are used to determine the working capital investment policy while the financial policy is determined through Short Term Liabilities/ Total Assets rates. The financial performance, the dependent variable of the study, is measured through Return on Assets (accounting based) and Tobin's q (market based). The rest of the study is structured as follows. In section 2, the literature on the subject will be examined. Subsequently, in section 3, the study will be terminated by including research method, application and findings.

## II. LITERATURE REVIEW

The first research on the relationship between the working capital management and firm's performance was carried out by Jose et al. in 1996, and it was observed that shortening the cash conversion cycle leads to improved performance of the firms.

Shin and Soenen (1998) tried to define the efficiency of working capital management on the basis of the relationship between net trade cycle and corporate profitability by using the data of 59.985 firms for the period of 1975-1994. The results indicated a negative relationship between the net trade cycle and profitability.

Yücel and Kurt conducted a research on 167 firms whose stocks were listed at Istanbul Stock Exchange (IMKB) in 2002, and investigated the relationship of cash conversion cycle with



profitability, liquidity and debt structure using data of the related firms for the period of 1995-2000. The results of this study indicated that there is a positive relationship between the cash conversion cycle and liquidity while there is a negative relationship between the return on assets and return on equity. It was also observed that high leverage ratio negatively effects firm liquidity and profitability.

Amir and Sana (2006), who studied the effects of the working capital management on profitability, conducted correlation and regression analyses on 7 firms that were active in fuel and gas sectors in Pakistan. Their findings suggested that there is a negative relationship between cash conversion cycle, stock turnover and debt collection period. Furthermore, there is also a negative relationship between the increase in sales and profitability.

Lazaridis and Tryfonidis (2006) analyzed the relationship between the working capital management and profitability using data of 131 firms that they included in their research for the period of 2001-2004. As a result of their analysis, they confirmed that there is a negative relationship between the cash conversion cycle and gross operating profitability. They concluded that the profitability can be improved by keeping the working capital elements at optimal level.

In regard to this matter, Öz and Güngör (2007) used the accounts receivable turnover, accounts payable turnover, stock turnover and net trade cycle as variables in the study they carried out using data of 68 manufacturing firms for the period of 1992-2005. According to their findings, there is a negative correlation between the accounts receivable turnover, accounts payable turnover, stock turnover, and net trade cycle and profitability while there is a positive and significant relationship between growth in sales, and amount of financial fixed assets and the profitability.

Nazir and Afza (2009) tried to measure the relationship between the working capital policies and firm's performance over the sample consisting of the data of 204 manufacturing firms listed at Karachi Stock Exchange for the period of 1998-2005, and they investigated the interaction of the aggressive and balanced working capital policies with ROA (Net Profit/Total Assets) and Tobin's Q. According to the results of the study, since the necessity for working capital differs from industry to industry, there are differences in financial policies, as well. Therefore, there is a negative relationship between the applied working capital policies and firm's performance.

Raheman et al. (2010) investigated the relationship in question using the data of 204 manufacturing firms listed at Karachi Stock Exchange for the period of 1998-2007. The study they conducted showed that cash conversion cycle, net trading debt discharge period and stock turnover have an impact on firm's profitability. Moreover, they also indicated that the firms adopting protective policies can improve the performance by focusing on the receipt and payment policies.

Şahin (2011) investigated the relationship between working capital policies and firm performance in his research using the data of firms whose stocks were listed at Istanbul Stock Exchange (IMKB) during the period of 2005-2010. Floating Assets/Total Assets ratio is used as the determinant of the working capital investment policy while the financial policy is determined through Short Term Liabilities/ Total Assets ratio. On the other hand, ROA (Net Profit/Total Assets), ROE (Net Profit/Equity) and Tobin's Q are used as performance criteria.



The results of the study suggest that the protective working capital policy has a performance enhancing impact.

Akbulut (2011) investigated the effect of working capital management on the profitability is the study he carried out on 127 manufacturing firms whose stocks were listed at IMKB. He took debt collection period, stock turnover period and cash cycle as independent variables; return on assets as dependent variable, and finally size of assets, growth rate and leverage ratio as control variables. The results of the analysis pointed out that there is a negative relationship between the working capital management and profitability while there is a positive and significant relationship between the size of assets, leverage ratio, the growth rate of net sales and profitability.

Nyamao et al. (2012) investigated the issue over 113 SMEs in Kenya. In the this research where they used the approach of cross-sectional analysis, the efficiency of cash, debt and stock management is used as the criteria for the working capital management, and the growth in sales, increase in total assets, growth in net profit and in the market share are used as performance criteria. The results of the study indicated that activity in stock management has the most powerful effect on the firm's performance.

Altan and Şekeroğlu (2013) investigated the relationship between working capital financial policies and firm's profitability through the analysis they performed on 16 firms from textile industry for the period of 2003-2012. The result they reached indicated that aggressive strategy is the working capital financial strategy that increases the profitability the most. Altan and Şekeroğlu (2013) used current ratio as independent variable, and return on assets as the dependent variable in their study.

### III. RESEARCH METHODOLOGY AND FINDINGS

The information and obtained findings regarding the study carried out to identify the relationship between the working capital policies and financial performances of firms included in this research are as follows.

#### Objective, Scope and Data Set

This study aim to reveal the relationship between firms' working capital policies and financial performance. For this purpose data of 38 firms carrying out active business in the real sector listed on Istanbul Stock Exchange 100 Index (BIST 100) for the period of 2010-2015 are employed. The firms included within the study are demonstrated in Table 1.

TABLE I. Research Firms Included

	BIST CODE	FIRMS		BIST CODE	FIRMS
1.	AEFES	ANADOLU EFES BIRACILIK	20.	KARSN	KARSAN OTOMOTIV SAN TIC
2.	AFYON	AFYON CIMENTO	21.	KARTIN	KARTONSAN
3.	AKENR	AK ENERJI ELEKTRIK URETIM	22.	KOZAA	KOZA ANADOLU METAL MADENCILIK
4.	AKSA	AKSA AKRILIK	23.	KRDMD	KARDEMIR D GRUBU
5.	ARCLK	ARCELIK	24.	MGROS	MIGROS TICARET
6.	ASELS	ASELSAN	25.	NETAS	NORTEL NETWORKS NETAS TELEKOM
7.	AYGAZ	AYGAZ	26.	NTTUR	NET TURIZM TIC VE SAN



8.	BAGFS	BAGFAS	27.	OTKAR	OTOKAR OTOMOTIV VE SAVUNMA SN
9.	BFREN	BOSH FREN SISTEMLERI	28.	PETKM	PETKIM
10.	<b>BIMAS</b>	BIM BIRLESIK MAGAZALAR	29.	PRKME	PARK ELEKTRIK URETIM MAD SAN
11.	BJKAS	BESIKTAS FUTBOL YAT SAN VE TIC	30.	TCELL	TURKCELL ILETISIM HIZMETLERI
12.	DOAS	DOGUS OTOMOTIV	31.	THYAO	TURK HAVA YOLLARI
13.	ENKAI	ENKA INSAAT VE BAYINDIRLIK	32.	TOASO	TOFAS TURK OTOMOTIV FABRIKASI
14.	EREGL	EREGLI DEMIR CELIK	33.	TRKCM	TRAKYA CAM
15.	FENER	FENERBAHCE FUTBOL	34.	TTKOM	TURK TELEKOMUNIKASYON
16.	FROTO	FORD OTOMOTIV SANAYI	35.	TUPRS	TUPRS TURKIYE PETROL
17.	GOLTS	GOLTAS GOLLER BOLGESI CIMENTO	36.	ULKER	ULKER BISKUVI SANAYI
18.	GSRAY	GALATASARAY	37.	ZOREN	ZORLU ENERJİ ELEK URET OTOPRD GR
19.	GUBRF	GUBRE FABRIKALARI	38.	KONYA	KONYA ÇİMENTO SANAYİİ

Resource: www.kap.org.tr

The secondary data regarding the working capital and financial performance variables of the firms are obtained from the websites of Istanbul Stock Exchange (www.borsaIstanbul.com) and Public Disclosure Platform (www.kap.org.tr). The working capital policies, as the independent variable of the study, are addressed under two topics as investment and financial policies. The working capital investment policy is represented with Floating/Total Assets ratio; the financial policy is demonstrated with Short Term Liabilities/ Total Assets ratio. The financial performance, the dependent variable of the study, is measured through Return on Assets (accounting based) and Tobin's Q (market based). In addition, the Logarithm of Total Assets, considered to have an impact on the financial performance, is included to the analysis as the control variable. The variables used in the study are determined in parallel with the ones used in the studies carried out by Nazir and Afsa (2009), Şahin (2011), Coşkun and Kök (2011), and Altan and Şekeroğlu (2013). The information regarding these variables are given in Table 2.

TABLE II. Variables Used in the Research

Variables		Account Form	Notation
Dependent variable	Return On Assets	Net Profit / Total Assets	ROA
	Tobin's Q	(Total Assets+Equity Marketing Value - Equity Carrying Amount) / Total Assets	TQ
Independent variable	Investment policies	Floating/Total Assets	YP
	Financial policies	Short Term Liabilities/ Total Assets	FP
Control variable	Firm size	Logarithm of Total Assets	BUY

### Methodology and Models Used in the Study

Panel data analysis is used in determining the relationship between the working capital policies and financial performance. Panel data analysis is used to estimate the degree and direction of the relationship between the variables included in the model by merging the cross section and time-series dimensions of data together (Yerdelen, Tatoğlu, 2012: 4). The time series data must be stationary in order to be used in any regression and/or panel data analysis (Gujarati, 2003). The time series properties of the data and the deterministic components that must be used in the model is investigated with Im-Pesaran-Shin W statistics, Fisher-ADF and Levin, Lin and Chu t tests. Whether there are problems of autocorrelation and heteroscedasticity is determined with Breusch-Godfrey LM and Breusch-Pagan-Godfrey tests.



As for the determination of what to use for the model estimation among fixed effects, random effects or pooled estimation models, Hausman test, F test, and Breusch-Pagan LM test are used. The models formed by using two dependent, two independent variables and one control variable are demonstrated as follows.

$$Y_{it} = \alpha_{0it} + \beta_{1it}YP_{it} + \beta_{2it}FP_{it} + \beta_{3it}BUY_{it} + \epsilon_{it} \longrightarrow \text{Model 1 (ROA)}$$

$$Y_{it} = \alpha_{0it} + \beta_{1it}YP_{it} + \beta_{2it}FP_{it} + \beta_{3it}BUY_{it} + \epsilon_{it} \longrightarrow \text{Model 2 (TQ)}$$

### Application, Findings and Evaluation

The data related to average, median, maximum, standard deviation, skewness and kurtosis coefficients, which are the definitive statistics regarding the dependent, independent and control variables used in the models are indicated in Table 3. When the average values regarding the variables are examined, it is understood that about 45% of total assets of the firms listed on BIST 100 Index consist of floating assets in terms of working capital investment policies. On the other hand, about 37% of total assets are financed by short term liabilities. This indicates that some part of floating assets is provided with long term liabilities and equity. In this case, it is possible for the firms to have a problem of term-return inconsistency. Return on assets is calculated as about 4%. This finding demonstrates that firms make use of their resources in profitable investments, and that they derive profit over their assets. The average TQ value of the firms listed on BIST 100 Index is 1.995. The fact that TQ ratio is greater than 1 signifies that the market value of the firms is higher than the substitution cost of present assets. The average value of BUY variable, which is the size of the firm; that is, the logarithm of total assets is calculated as 2.143.

TABLE III. Descriptive Statistics

	YP (DV/TA)	FP (KVYK/TA)	ROA	TQ	BUY
Mean	0.448	0.366	0.036	1.995	2.143
Median	0.465	0.273	0.066	1.381	2.162
Maximum	0.881	3.037	0.506	1.009	2.458
Minimum	0.037	0.048	-1.375	0.275	1.767
Std. Dev.	0.177	0.376	0.187	1.674	1.576
Skewness	-0.040	4.019	-4.192	2.400	-0.324
Kurtosis	2.527	2.361	2.741	8.859	2.456
Obs.	228	228	228	228	228
Note: Table; Investment policies (YP), Financial policies (FP), Return On Assets (ROA), Tobin's Q (TQ) ve Firm Size (BUY) .					

The correlation analysis regarding the variables used in the study is presented in Table 4. As a result of the analysis, it is observed that there are statistically significant relationships between dependent and independent variables at a significance level of 1%.



TABLE IV. Correlation Table Regarding Dependent, Independent and Control Variables

	TQ	ROA	YP	FP	BUY
TQ	-----				
	-----				
ROA	-5.727712	-----			
	0.0000***	-----			
YP	3.915082	4.676278	-----		
	0.0001***	0.0000***	-----		
FP	9.197061	-19.89566	0.415122	-----	
	0.0000***	0.0000***	0.6784	-----	
BUY	-10.18514	3.922717	-3.521943	-4.140826	-----
	0.0000***	0.0001***	0.0005***	0.0000***	-----

**Note 1:** \*\*\* Significant at 1% Level \*\* Significant at 5% Level \* Significant at 10% Level  
**Note 2:** Table; Investment policies (YP), Financial policies (FP), Return On Assets (ROA), Tobin's Q (TQ) ve Firm Size (BUY).

Stationarity of the series is tested with Im, Pesaran and Shin (IPS), Fisher-ADF and Levin, Lin & Chu (LLC) unit root tests within the scope of constant term and constant/trend models. The results of the unit root tests indicated that some series are not stationary in level in other words they are integrated of degree one I(1). It is identified according to the results of the equation with constant term and constant and linear trend that the investment policy, financial policy and growth variables are non-stationary in level at the 1% significance level. On the other hand the series related to other variables are stationary in level I(0) and do not include a unit root (Table 5).



TABLE V. Unit Root Test Results

Model with constant term												
Variables	Im-Peseran-Shin				Fisher-ADF				Levin, Lin ve Chu t			
	Düzey I(0)		Düzey I(1)		Düzey I(0)		Düzey I(1)		Düzey I(0)		Düzey I(1)	
	T	P	T	P	T	P	T	P	T	P	T	P
YP	-2.61231	0.0045***			119.131	0.0012***			-15.7949	0.0000***		
FP	-0.56320	0.2866	-7.26868	0.0000***	83.2694	0.2658	151.312	0.0000***	-7.83881	0.0000***	-18.3990	0.0000***
ROA	-3.15378	0.0008***			122.488	0.0006***			-19.2813	0.0000***		
TQ	-5.95932	0.0000***			160.938	0.0000***			-29.2316	0.0000***		
BUY	2.75089	0.9970	-5.77015	0.0000***	65.5545	0.7981	139.698	0.0000***	-6.41109	0.0000***	-20.0823	0.0000***
Constant term and trend												
Variables	Im-Peseran-Shin				Fisher-ADF				Levin, Lin ve Chu t			
	Düzey I(0)		Düzey I(1)		Düzey I(0)		Düzey I(1)		Düzey I(0)		Düzey I(1)	
	T	P	T	P	T	P	T	P	T	P	T	P
YP	0.16890	0.5671	-3.23136	0.0006***	79.3515	0.3738	116.591	0.0019***	-17.2458	0.0000***	-17.1886	0.0000***
FP	-0.31262	0.3773	-8.10916	0.0000***	89.4006	0.1396	145.726	0.0000***	-17.0064	0.0000***	-53.6192	0.0000***
ROA	-1.84597	0.0324			122.073	0.0006***			-20.3866	0.0000***		
TQ	-2.26217	0.0118			140.095	0.0000***			-26.7717	0.0000***		
BUY	0.41006	0.6591	-3.33124	0.0004***	81.3105	0.3174	108.292	0.0088***	-15.3402	0.0000***	-18.9459	0.0000***
<p>Note 1: *** Significant at 1% Level ** Significant at 5% Level * Significant at 10% Level</p> <p>Note 2: Table; Investment policies (YP), Financial policies (FP), Return On Assets (ROA), Tobin's Q (TQ) ve Firm Size (BUY)</p>												





First of all, Breusch-Godfrey LM and Breusch-Pagan-Godfrey Tests have been used to analyze whether there are problems of autocorrelation and heteroscedasticity in series in order to make correct estimations using panel data analysis. Afterwards, Breusch-Pagan LM, Hausman and F tests have been performed in order to decide which model estimation method to use. The results of analysis are demonstrated in Table 6.

TABLE VI. Diagnostic and Prediction Model Selection Test Results

<b>Model 1</b>			
<i>Diagnostic Test Results</i>			
Breusch-Godfrey LM Testi	Otocoralation	Prob. F(1,222)	0.0000
		Prob. Chi-Square(1)	0.0000
Breusch-Pagan-Godfrey Testi	Heteroscedasticity	Prob. F(3,223)	0.6210
		Prob. Chi-Square(3)	0.6165
<i>Prediction Model Selection Test Results</i>			
Breusch-Pagan LM test			
Cross-section Test Hypothesis Time Both		190.0444	0.0000
		1.624393	0.2025
		191.6688	0.0000
Hausman Test			
Cross-section random	Chi-Sq. Statistic	18.881665	
	Chi-Sq. d.f.	3	
	Prob	0.0003	
F Testi			
Cross-section F	Statistic	15.161723	
	d.f.	(37,149)	
	Prob.	0.0000	
Cross-section Chi-square	Statistic	296.646201	
	d.f.	37	
	Prob.	0.0000	
<b>Model 2</b>			
<i>Diagnostic Test Results</i>			
Breusch-Godfrey LM Testi	Otocoralation	Prob. F(1,222)	0.0000
		Prob. Chi-Square(1)	0.0000
Breusch-Pagan-Godfrey Testi	Heteroscedasticity	Prob. F(3,223)	0.1838
		Prob. Chi-Square(3)	0.1820
<i>Prediction Model Selection Test Results</i>			
Breusch-Pagan LM testi			
Cross-section Test Hypothesis Time Both		290.2292	0.0000
		1.854183	0.1733
		292.0834	0.0000
Hausman Test			
Cross-section random	Chi-Sq. Statistic	3.730940	
	Chi-Sq. d.f.	3	
	Prob	0.2920	
F test			
Cross-section F	Statistic	39.289129	
	d.f.	(37,149)	
	Prob.	0.0000	
Cross-section Chi-square	Statistic	451.344484	
	d.f.	37	
	Prob.	0.0000	



When the results of the analysis were evaluated, it was found that there was autocorrelation problem in Model 1 and Model 2, but the problem of heteroscedasticity was not observed in neither of them. According to the results of the analysis performed for the selection of estimation model, while the pooled estimation model is eligible for Model 1 according to Breusch-Pagan LM test, fixed effects model estimator is eligible according to the results of Hausman and F test. Accordingly, fixed effects estimation model is performed within the framework of Model 1. As for Model 2, the pooled estimation model has been found to be eligible according to Breusch-Pagan LM test, while random effects model is found to be eligible according to Hausman test, and fixed effects model according to F test. As a consequence of that, fixed effects estimation model is performed for Model 2 as is the case with Model 1.

Autocorrelation problem is identified in both models in accordance with the results of diagnostic analysis results. Period SUR and Ordinary Panel EGLS methods that can make estimation taking this problem into consideration have been used in this study in order to reach correct and credible results in the panel data analysis. Panel EGLS estimation results for both models are presented in Table 7.

TABLO VII. Panel Egls Prediction Results

Variable	(ROA) Model 1			
	Coefficient	Std. error	t-ist.	Prob.
YP	0.071899	0.053532	1.343105	0.1809
FP	-0.253535	0.022020	-11.51368	<b>0.0000***</b>
BUY	0.009973	0.021573	0.462305	0.6444
C	0.034189	0.013360	2.559009	0.0113
R-squared	0.457219		Mean dependent var	0.198151
Adjusted R-squared	<b>0.436343</b>		S.D. dependent var	1.369863
S.E. of regression	1.004495		Sum squared resid	183.6399
F-statistic	21.90144		Durbin-Watson stat	1.876470
Prob(F-statistic)	<b>0.000000***</b>			
Variable	(TQ) Model 2			
	Coefficient	Std. error	t-ist.	Prob.
YP	-0.658797	0.332591	-1.980801	<b>0.0491**</b>
FP	0.277736	0.146099	1.901006	<b>0.0589*</b>
BUY	-0.372201	0.160167	-2.323831	<b>0.0212**</b>
C	-0.658797	0.332591	-1.980801	0.0491**
R-squared	0.151268		Mean dependent var	0.391457
Adjusted R-squared	<b>0.118624</b>		S.D. dependent var	1.126959
S.E. of regression	0.974886		Sum squared resid	172.9734
F-statistic	4.633931		Durbin-Watson stat	1.896963
Prob(F-statistic)	<b>0.000085***</b>			
<b>Note 1:</b> *** Significant at 1% Level ** Significant at 5% Level * Significant at 10% Level				
<b>Note 2:</b> Table; Investment policies (YP), Financial policies (FP), Return On Assets (ROA), Tobin's Q (TQ) ve Firm Size (BUY)				



In the evaluation of Table 7 where the results of analysis regarding the impact of the working capital on financial performance are demonstrated, it is identified that the probability value of F statistic of Model 1 which is created based on ROA is significant at a confidence interval of 99%. It is also confirmed that independent variables expressing the working capital policies in Model 1 explain 44% of variations occurring in ROA dependent variables. Accordingly, there is a statistically significant and negative relationship between the financial policy and ROA in Model 1. A one-unit change in the financial policy leads to a decrease of 0.25 unit in ROA. In other words, the fact that firms take advantage of short term liabilities to finance total assets decreases the financial performance. The increase in short term liabilities results in nonpayment of short term debts, and therefore decrease in return on assets. This finding shows parallelism with the results of the studies carried out by Nazir and Afsa (2009), and Şahin (2011). On the other hand, there is no statistically significant relationship between investment policy and the size of firm, and ROA.

When the analysis results for Model 2 which is created based on Tobin's Q are evaluated, it is found that the probability value of F statistic of the model is found to be significant at a confidence interval of 99%. It is also confirmed that independent variables referring to the working capital policies in Model 2 explain 44% of variations occurring in ROA dependent variables. There is a statistically significant and negative relationship between the working capital investment policy and TQ in Model 2. A one-unit change in the investment policy leads to a decrease of 0.66 unit in TQ. As the amount of investment in floating assets increases in total assets, firm adopts aggressive financial policy, and this increases the firms' risks. It is because the fact that investment in floating assets is high presents firms with the problem of not fulfilling the requirements of having short term debts. This finding is different from the results of the studies carried out by Nazir and Afsa (2009), and Şahin (2011).

A significant and positive relationship between financial policies and TQ has been demonstrated. A one-unit change in the working capital financial policy leads to an increase of 0.28 unit in TQ value. In other words, an increase in the usage of short term liabilities signifies firm's credibility from the perspective of investors, and that the firm has a high potential for investment and profitability. Thus, these kinds of firms receive more investment, and get higher appreciation in terms of market values. This result of the study is similar with the findings of the studies carried out by Nazir and Afsa (2009). Also, a statistically significant and negative relationship between the size of the firm, which is the control variable of the study and considered to affect the financial performance, and TQ has been demonstrated.

#### IV. CONCLUSION

In this study, the relationship between firms' working capital policies and financial performances is examined through the panel data analysis method by using the data of 38 firms of real sector regularly listed on Istanbul Stock Exchange 100 Index for the period of 2010-2015 are used. In the analysis, working capital policies are demonstrated with investment and financial policies while financial performance is represented with return on assets (ROA) and Tobin's Q. The investment policy is measured with Floating Assets/Total Assets ratio while the financial policy is measured with Short Term Liabilities/ Total Assets ratio.



Two regression models have been formed in accordance with the dependent variables of the study. There is a statistically significant and negative relationship between the financial policy and ROA in Model 1 which is created based on ROA. This finding shows parallelism with the results of the studies carried out by Nazir and Afza (2009), and Şahin (2011). On the other hand, there is no statistically significant relationship between the investment policy and the size of firm, and ROA.

As for Model 2 which is created based on Tobin's Q, it is identified that there is a statistically significant and negative relationship between the working capital investment policy and TQ. This finding is different from the results of the studies carried out by Nazir and Afza (2009), and Şahin (2011). A significant and positive relationship between financial policies and TQ has been demonstrated. This result is similar with the results of the study conducted by Nazir and Afza (2009). Also, a statistically significant and negative relationship between the size of the firm, which is the control variable of the study and considered to affect the financial performance, and TQ has been demonstrated.

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