

## STUDYING THE EFFECT OF FINANCING METHODS ON THE AMOUNT OF PROFITABILITY OF INDUSTRIAL FIRMS ENLISTED IN TEHRAN STOCK EXCHANGE

Fathieh Vatanparast<sup>1</sup>, Nourollah Salehi<sup>2</sup> and Mojtaba Bahmani<sup>3</sup>

**Abstract:** *The present research is going to investigate about the effect of financing methods on profitability of industrial firms enlisted in Tehran Stock Exchange. In this research financing methods have been categorized in two groups of long-term and short-term. The statistical population includes all industrial firms enlisted in Tehran Stock Exchange during the time period between 2008 and 2013 through which 206 firms have had the required qualifications to be included in our sample. Since the documents and evidences required were approved by firm auditors and auditing organization, they have both validity and reliability. The present study is descriptive correlation type regarding the nature of the study and it is applied considering the goals. In this research first we have used the descriptive statistics to analyze the data and then we have used regression analysis and correlation to test the hypotheses.*

*Results showed that there has been a meaningful relationship between financing methods (long-term and short-term) and firms' profitability. The relationship between long-term financing and firms' profitability has been negative and meaningful. For each unit of increase in long-term financing, profitability score would decrease -0.049 units. Regarding the other minor hypothesis, it can be stated that the relationship between short-term financing and firms' profitability has been positive and meaningful and for each unit of increase in short-term financing, profitability score could increase 0.058 units.*

**Keywords:** *Financing, long-term financing, short-term financing, profitability.*

### INTRODUCTION

Firms and entities need financing to supply the required capital. An important issue for financial managers in firms is to consider financing methods and their effects on firm's profitability. The selection of financing method is one of the major decision making domains of firms' managers in order to increase the stockholders'

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<sup>1</sup>. MA student of Public Financial Management in Management Department of Islamic Azad University, Rafsanjan Branch, Iran

<sup>2</sup>. Assistant Professor in the Department of Management and Economics, Economics group in Bahonar University of Kerman, Iran

<sup>3</sup>. Assistant Professor of Economics Group in Bahonar University of Kerman, Iran

wealth. The growth and continuation of activities of firms demand financial resources and the supply of these resources is usually along with constrains. Thus, to continue resources absorption process, its use should be in a way that it supplies an appropriate amount of value for the firm and cash suppliers (Asadi & Pourbagerian, 2011: 139). Managers' performance in choosing different financing approaches can prepare and set the appropriate ground to achieve the goal of increasing stockholders' wealth (Modigliani & Miller, 1958). This means that by considering the cost of each of different financing resources and its effects on return and risk, the firm should select those resources that lead to minimize financing costs (Mollanazari & et al, 2010: 66).

Economic entities and institutions and especially active ones in industrial section, need great deal of capitals to survive and continue their manufacturing activities and also to develop their activities. Also these economic entities and institutions are severely dependant on financial markets to supply their capital. The role of these markets is to confer the required capital for these entities and firms. One of the principal points considered by financial managers in economic entities is the methods and amounts of financing (Abzari & et al, 2007: 74).

Financing decisions and firms' investments are decisions made regarding future. In financial decisions, the firm uses cash currently to be able to do the commitments against the suppliers of financial resources in the future (Titman & Grinblatt, 1998). Profitability is noticed a lot in financial issues and accounting literature. Profitability is considered as one of the most important goals of financial management (Sivathaasan et al, 2013: 99).

Therefore profit is one of the most important data in economic decisions. The studies and researches carried out about profit have been one of the bulky and challenging research efforts throughout accounting history. Profit has always been used by investors, managers, and financial analysts as a guide for dividends, a measurement tool to assess management's efficiency, and a tool to predict and assess decision makings. Accordingly, many researchers have tried to recognize factors affecting firms' profitability (Sajjadi & et al, 2009: 50).

Regarding what was pointed out above, understanding the different financing methods in firms and financial management is such important that financial programs and policies would not be effective without having the required knowledge about appropriate financing methods. Thus, the problem in the present research is whether financing methods that have been categorized into two groups of long-term and short-term in this study have affected profitability of industrial firms enlisted in Stock Exchange or not. In this study we would try to investigate about this issue using a scientific approach.

## **RESEARCH LITERATURE**

Currently a growing and competitive environment is dominating the firms and firms need to develop their activities through new investments to make progress. The administration of industrial projects requires the supply of financial resources and cash and therefore firms are forced to use financing mechanisms (Rahnomay-e-Roudposhti & et al, 2009: 66). Managers should decide how to supply cash they need and how to consume it (Frank & Goyal, 2003: 221-222).

Up to now no one has dared to propose an optimal capital structure (Parsaeian, 1994: 91). Financing methods are affected by internal and external factors such as firm's growth opportunities, accumulated earning, firm size, liability ratio, and intangible assets (Mashayekh & Shahrokhi, 1996).

Several theories have been posed by researchers regarding how to choose financing resources (choosing from among debts or stock issuance) and all of these theories have focused on the effect of financing resource type on firm's value. These theories are as follows:

### **TRADITIONAL THEORY**

The basis of this method is that there is a desirable capital structure and we can increase firm's value by using leverage. In fact, this method suggests that as a result of more use of liabilities, capital cost first decreases and then it increases due to the increase in owners' equity cost (Mollanazari & et al, 2010: 68).

### **MODIGLIANI & MILLER'S THEORY**

Miller & Modigliani (1958) were the two scholars who posed modern theory of capital structure (MM theory). They rejected traditional theory and stated that firm's capital cost does not change by changing firm's capital structure in certain conditions (lack of paying tax for income, lack of the existence of tax costs). Also the desirable effect of the alteration of debts with lower level financing rate in firm's financial structure will be compensated by changing the price of common stocks of the firm precisely. In other words, due to increases in the percentage of financing through liabilities, the stockholders incur higher financial risk levels and by increasing the financial risk amount, the expected rate of return by the stockholders will increase either. Therefore, capital cost is independent from firm's financial structure and as Miller & Modigliani have stressed financing decision making is less important regarding this issue (Mollanazari & et al, 2010: 69).

## **PECKING ORDER THEORY OF FINANCING**

Myers (1984) posed pecking order theory of financing as follows:

1. Firms prefer internal financing resources.
2. A target dividend ratio is avoided due to the selected investing positions and sudden changes in dividends.
3. The application of fixed dividend policy along with unprecedented changes in profitability and investment situations in a way that sometimes the internally created cash flows are more and sometimes they are less than capital costs. If cash flows are higher than capital costs, the firm repays its liabilities. If cash flows are less than capital costs, the firm uses its residual accounts or tries to sell bonds (short-term).
4. If there is a need for external financing, the firms first issue the most secure bonds. Accordingly, first firms use liabilities, and then if possible they use transferable bonds or common stocks for financing (Abzari & et al, 2007: 75).

## **STATIC TRADE OFF THEORY**

Based on this theory as the firm regulates the dividend payable towards a desirable ratio of payment in the future and works to achieve this goal, it identifies a desirable debt ratio and this optimal debt ratio is determined based on balance of costs and debt benefits. In this theory the desirable capital structure can be considered as the balance between tax advantages of debt and financial crisis costs and probable bankruptcy (resulting from debts) and agency. Based on this theory a firm should exchange and alter debt with stock and stock with debt to the extent that the value becomes the highest. The important issue posed in this situation is the existence of the regulation cost of debt ratio and the regulation of debt ratio to reach the optimal amount is done slowly. Based on this theory, there is a desirable level of debt ratio for the firm through which any deviation from this level results in reducing stock price and thus return on stock reduces (Zhe & Jie, 2006).

## **THE MARKET TIMING THEORY**

The basis for this theory is market condition. This means that managers measure market conditions for both financial resources (borrowings and stock issuing). If they need financing, they use a resource compatible with market conditions. If market conditions of both financing resources are not appropriate they delay this task but if market conditions are appropriate they will do financing even if they do not need financial resources.

## **DYNAMIC FINANCING MODEL**

In static capital structure it is presupposed that there is a known level of leverage and the firm tries to approach the optimal leverage level regarding the factors and variables affecting it. This method (static) has two main outcomes: first this known leverage does not need the optimal leverage necessarily (because known leverage equals the optimal leverage). Second, such experimental analysis is non-dynamic and is unable to show the dynamic and adjusting nature of the firms regarding capital structure. The superiority of studying capital structure in dynamic format compared to its traditional form is due to the fact that first none of the probable conditions in none of the time spots of the realization of the optimal structure of firms is possible. Second, firms move towards target capital structure and have adjusting speed and this adjustment speed and its constituents differ considering different firms. In dynamic model that has appropriated many researches to itself during recent decade a firm tries to adjust its debt level or leverage in different times. Of course, this is along with adjustment costs and the recognition of factors affecting adjustment speed is highly important (Mollanazari & et al, 2010: 70-71).

Different financing resources in the country are divided into costly financial resources and financial resources without costs. Financial resources without costs include invoices gained from customers, business creditors, stock earnings payable and costs payable. Costly financial resources are divided into two groups of internal resources (accumulated earnings) and external resources (short-term and long-term facilities and issuing new stocks) (Abzari & et al, 2007: 74).

Shabahang stated the 4 main financing resources as borrowing, issuing common stocks, issuing outstanding stocks, and using accumulated earnings and divided them into two parts of internal and external (Mirzaeer, 2011: 42).

In an overall categorization, firms' financing methods are divided into two groups:

- (A) Short-term financing
- (B) Long-term financing

Long-term and short-term financing resources are called external organizational financing because they are supplied by resources out of the organization. In this research we mean external organizational by financing (Mojtahedzadeh & et al, 2009: 30).

### **Short-term Financing**

It is a type of financing that is repaid during one year (Mojtahedzadeh & et al, 2009: 3). Short-term financing is used to support temporary investment of current

assets. Usually financial manager should think about his program financing after programming the investment in current assets and prediction of resources needed for the economic unit in next year and decide on how to finance (Rahimian, 2001: 29).

Roudposhti & et al (2006) have categorized short term financing resources as follows:

- Business and bank credits
  - (a) Document credits
  - (b) Credit limits
- Business bonds
- Guaranteed loans
  - (a) The deposits of accounts receivable
  - (b) The guarantees of inventories
- Invoices
- Deferred costs
- Sales of claims and inventories
  - (a) Sales of accounts receivable
  - (b) Sales of bonds guaranteed

### **Long-term Financing**

It is financing achieved through long-term resources. In other words, its repayment is done within a time period more than one year (Mojtahedzadeh & et al, 2009: 3). Long-term financing resources of firms are: bonds (debt tool), outstanding stocks and common stocks (capital tools), bonds and outstanding stocks (when it has a guaranteed fixed earning rate) are known as bonds with fixed earnings and common stocks are known as bonds with variable earnings.

Thus, different bonds with maturity dates of more than one year are exchanged in capital market in a way that financing tools should be searched in capital market.

Long-term financing market is called capital market and includes different types of bonds that have maturity dates of more than one year. Different types of bonds noticed in financial markets are: bonds, common stocks, outstanding stocks, and different types of transferable bonds.

Roudposhti & et al (2006) has categorized financing resources as follows:

- Debts

- Transferable bonds
- Capital

### **Earning and Profitability**

Earning is one of the most variable concepts in the complex world of business and probably one day it would be possible to present a definition of earning in future that would deserve consensus. Among the different definitions posed for earning, the following is considered one of the concise ones:

“earning results from changes in owners’ equity or changes in net assets of a business unit during a fiscal period, in a concise statement earning is the resultant of all changes in owners’ equity during a financial period except for the changes resulting from investment by the owners and the distribution of resources among them” (Rostami, 2011: 46).

Earning is considered as one of the superior measurement indexes of performance and assessment and it is the incentive to carry out the highest amount of research efforts of accounting. The concept of earning can be interpreted differently regarding different viewpoints. Also earning measurement is related to the concept of capital retaining and earning measurement and capital retaining are defined based on asset’s assessment. Today the analysts and investors use earning as a criterion for assessment, stock prediction, bankruptcy, stock price reaction, ... . In production markets, works and political policies such as pricing, taxation, and stock earning payment are used as decision makers’ guide and as an element for prediction. Earning is the difference between current prices of cost items minus income resulting from current sales. Profitability refers to firms’ capability in achieving income and earning. Income or net earning is the only criterion to measure profitability. The investors and creditors are greatly interested in assessing current and future profitability of the firm and firms are forced to achieve enough earnings to supply appropriate return for the investors and creditors to absorb the required capital (Mirzaee, 2011: 74).

Profit economic units are established with the aim of gaining profits and accept responsibilities and continue their activities. The stockholders and investors purchase stocks of a profit unit to gain profit and cause it to continue activities. Thus, there is a direct correlation and relationship between profit earning and activity continuation of a profit unit. Earning can be defined regarding different perspectives and certain concepts are formed accordingly. This leads accounting issues to use different approaches to recognize earning (Nikomaram & et al, 1999: 140).

Accumulated earning has always been one of important long-term financing resources for firms. During some recent years, big industrial firms have often

used accumulated earning instead of issuing new stocks to supply their financial needs. If internal resources of firms are not enough to satisfy their needs, they try to issue new bonds or get loans from financial institutions for financing. Usually corporate firms appropriate %35 of their net earning (earning after subtracting tax) for accumulated earning and it results in the ratio of dividend to reach % 65 (Novo, 2011: 416).

## RESEARCH LITERATURE

Kordestani & Najafi (2010) studied about different financing methods and how to consume earnings resulting from these methods and its effect on stock's future return in a research project entitled: "studying the effect of financing methods on stock return". The data of this research were extracted from 65 firms enlisted in Tehran Stock Exchange during the time period between 2006 and 2008 and findings showed that there has been a meaningful relationship between net changes in total financing, net changes in external financing, and net changes in net operational assets financed through internal financial resources and abnormal return of stock accumulation but it was positive on the contrary to the predictions.

Behnam Samadi (2011) has investigated about the effect of financing tools on growth and development in machinery industry of firms enlisted in Tehran Stock Exchange in his MA dissertation. In this research growth and development assessment has been carried out regarding three criteria of stock earning, stock price, and dividend. He concluded that there has been a meaningful relationship between financing tools and their stock earning, but there has not been a meaningful relationship between financing tools and stock price and dividend criteria. This research approved the relationship between financing tools and growth and development of the firms mentioned.

Cohen & Thomas (2006) investigated about the relationship between financing activities and accruals and stock return and their research results showed that there exists a negative relationship between financing activities and stock return.

Mayer (1989) studied about financial structures of firms in 8 industrial countries and concluded that:

- The most important financing resource in all countries especially in England, Canada, and the United States is accumulated earning.
- There is a reverse relationship between using accumulated earning and bank facilities.
- Small and medium firms use more external resources compared with big firms.



Bradshaw & Sloan (2006) carried out a research about the relationship between financing activities, analysts' prediction, and stock return in a 10 years time period and concluded that there has been a reverse relationship between net cash related to each of the classes in financing activities (stock issuance and borrowings) and stock return and firm's profitability.

## **RESEARCH HYPOTHESES**

### **Major Hypothesis**

Financing methods affect profitability of industrial firms enlisted in Tehran Stock Exchange.

### **Minor Hypotheses**

Long-term financing affects profitability of industrial firms enlisted in Tehran Stock Exchange.

Short-term financing affects profitability of industrial firms enlisted in Tehran Stock Exchange.

## **RESEARCH VARIABLES**

### **Dependent Variable**

In this research profitability is the dependent variable and the ratio of net earning to total assets is used to measure it.

### **Independent Variable**

In this research short-term and long-term financing were considered as independent variables and the ratio of current debt and long-term debt to total assets have been used to measure it.

### **Control Variables**

The present research has used firm size and financial leverage as control variables. To measure financial leverage we have used the ratio of total debts to total assets and to calculate firm size we have used assets' logarithms.

### **The Descriptive Statistics of Data**

In descriptive methods it is tried to present tables and use descriptive statistics tools such as central tendency and dispersion to describe the research data to help the transparency of the discussion. The descriptive statistics of research variables have been presented in table (1-1).

**Table 1**  
**The descriptive statistics of research variables in sample firms**

<i>Variable</i>	<i>Symptom</i>	<i>Observations</i>	<i>Mean</i>	<i>Median</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Std. Dev.</i>	<i>Skewness</i>	<i>Kurtosis</i>
Profitability	PROFIT	1236	0.099	0.087	0.620	-0.485	0.142	0.149	2.427
Short-term financing	CL	1236	0.852	0.907	1.350	0.087	0.156	-1.975	5.560
Long-term financing	LL	1236	0.146	0.092	0.912	0.000	0.154	2.009	5.557
Size	SIZE	1236	13.570	13.436	18.817	10.031	1.490	0.712	3.825
Leverage	LEV	1236	0.665	0.648	3.760	0.089	0.298	2.909	7.091

The number of year-firm observations based on balanced mixed data has been 1236. Regarding the descriptive statistics we can divide the indexes above into central tendency and dispersion indexes and others. The central tendency indexes include mean and median. Dispersion indexes are standard deviation and other indexes are minimum, maximum, skewedness, and pulling. Mean index has been explain in brief below. For example, short-term and long-term financing show that firms use short-term financing more than long-term financing for their financing resources.

### Data Normality Test

To test the normality of the data we have use Kolomogorov-Smirnov test and the results are shown in table (2).

**Table 2**  
**Results of Kolomogorov-Smirnov test**

<i>Variable</i>	<i>Variable</i>	<i>K</i>	<i>Asymp (sig)</i>
Profitability	PROFIT	<b>1.112</b>	<b>0.106</b>
Short-term financing	CL	<b>6.112</b>	<b>0.000</b>
Long-term financing	LL	<b>6.113</b>	<b>0.000</b>
Size	SIZE	<b>1.513</b>	<b>0.069</b>
Leverage	LEV	<b>3.395</b>	<b>0.000</b>

Results of Kolomogorov-Smirnov test showed that the distribution of profitability and firm size has been normal because their meaningfulness level has been higher than %5. Thus, regarding the fact that the dependent research variable has had a normal distribution we should have used parametric statistic methods.

### Correlation Between the Variables

To study about the correlation between quantitative variables we have used Pearson's correlation coefficient and the results of this test have been represented in table (3).

**Table 3**  
**Pearson's correlation matrix for quantitative variables of the research**

	<i>PROFIT</i>	<i>CL</i>	<i>LL</i>	<i>SIZE</i>	<i>LEV</i>
PROFIT	1.000000				
	-				
CL	0.168638	1.000000			
	0.0000	-			
LL	-0.161810	-0.991227	1.000000		
	0.0000	0.0000	-		
SIZE	0.191701	0.015589	-0.010884	1.000000	
	0.0000	0.5840	0.7023	-	
LEV	-0.684757	-0.143426	0.148412	-0.104341	1.000000
	0.0000	0.0000	0.0000	0.0002	-

Based on table (3) and the hypotheses devised in an assurance level of % 95, there has been a positive and meaningful relationship between short-term financing and profitability. This relationship has been calculated to be (0.168) through Pearson's correlation test and it shows that the positive relationship between short-term financing and profitability has been %16.8. In an assurance level of % 95, there has been a negative and meaningful relationship between long-term financing and profitability. This relationship has been calculated to be (0.161) through Pearson's correlation test and it shows that the negative relationship between long-term financing and profitability has been % 16.1.

### Unitary Square Root (stability) Test of Research Variables

In researches it has always been presupposed that time series is stable and if this is not the case, statistic tests based on t, F, Chi2, ... devised, have been doubted. If all moments are fixed throughout the time, the series is strongly stable; but if first and second order moments are fixed, the series is weakly stable. In this research we have used Adjusted Dikki-Fuller (ADF) test. Results of this test have been represented in table 4.

**Table 4**  
**Unitary square root test by using adjusted Dikki-Fuller tests**

<i>Variable</i>	<i>Symptom</i>	<i>The number of interruptions</i>	<i>t</i>	<i>sig</i>
Profitability	PROFIT	0	-15.560	0.000
Short-term financing	CL	0	-10.450	0.000
Long-term financing	LL	0	-10.349	0.000
Size	SIZE	0	-20.628	0.000
Leverage	LEV	0	-32.817	0.000

Regarding the results presented in table 4, all research variables have had stability in an assurance level of %95.

### Results of Testing the Hypotheses

Regarding the fact that in this research we have tried to study about the effect of financing methods on industrial firms' profitability, in order to test these hypotheses and due to the co-linearity problem, it would be impossible to adjust a model with both financing method styles (long-term and short-term financing). Thus, for each financing index we have used a regression model as follows:

### Results of testing first minor hypothesis

**The first research hypothesis states that:** Long-term financing affects profitability of industrial firms enlisted in Tehran Stock Exchange.

$$\text{PROFIT}_{it} = \beta_0 + \beta_1 \text{LL}_{it} + \beta_2 \text{SIZE} + \beta_3 \text{LEV} + \varepsilon_{it}$$

**Table 5**  
**Results of first minor hypothesis test**

<i>Variable</i>	<i>Symptom</i>	<i>Coefficient</i>	<i>t-Statistic</i>	<i>Prob</i>
c	C	0.163	6.017	0.000
Long-term financing	LL	-0.049	-2.692	0.007
Size	SIZE	0.011	5.986	0.000
Leverage	LEV	-0.322	-32.682	0.000

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R Squar		0.493
Adjusted R Square		0.492
Durbin-Watson		1.724
F	399.802	<b>Prob.</b> 0.000
Godfrey	1.910	<b>Prob.</b> 0.114
ARCH	0.006	<b>Prob.</b> 0.934
H-hausman	11.335	<b>Prob.</b> 0.010
F-limer	3.648	<b>Prob.</b> 0.002

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Regarding the results of testing the first minor hypothesis represented in table (5), the meaningfulness level of F-Limer statistic (0.002) has been less than acceptable error level (%5), and therefore panel data method was preferred to pooled data method and to adjust the regression model we used panel data method. Also since the meaningfulness level of H-hausman statistic (0.010) was less than acceptable error level (%5), the regression method with fixed effects was preferred to regression method with random effects. Also due to the fact that the meaningfulness level of ARCH statistic was equal to 0.934, it can be inferred that the regression did not have variance incongruence. Finally, regarding the meaningfulness level of Godfrey statistic (0.114), the regression did not have serial self-correlation problem. In the next stage and due to F statistic (0.000) having a meaningfulness level of below %5, it can be stated that the regression has had identification power. Since the meaningfulness level of long-term financing (independent variable) has been less than %5, it can be claimed that long-term financing affects profitability negatively and meaningfully. For each unit of increase in long-term financing, profitability scale has reduced -0.049 units. Also control variables such as firm size and leverage have had positive and negative meaningful effects on profitability. Durbin-Watson statistic was between 1.5 and 2.5. Therefore, it can be concluded that there has not been self-correlation between variables. Finally, the amount of identification coefficient showed that changes in independent and control variables could represent %49.3 of change in the dependent variable.

### **Results of Testing Second Minor Hypothesis**

**The second research hypothesis states that:** Short-term financing affects profitability of industrial firms enlisted in Tehran Stock Exchange.

$$\text{PROFIT}_{it} = \beta_0 + \beta_1 \text{CL}_{it} + \beta_2 \text{SIZE} + \beta_3 \text{LEV} + \varepsilon_{it}$$

**Table 6**  
**Results of second minor hypothesis test**

<i>Variable</i>	<i>Symptom</i>	<i>Coefficient</i>	<i>t-Statistic</i>	<i>Prob</i>
c	C	0.106	3.334	0.000
Short-term financing	CL	0.058	3.213	0.001
Size	SIZE	0.011	5.989	0.000
Leverage	LEV	-0.322	-32.693	0.000
R Squar			0.493	
Adjusted R Square			0.492	
Durbin-Watson			1.724	
F		401.718		Prob. 0.000
Godfrey		2.062		Prob. 0.101
ARCH		0.008		Prob. 0.925
H-hausman		12.277		Prob. 0.006
F-limer		3.649		Prob. 0.002

Regarding the results of testing the second minor hypothesis represented in table (6), the meaningfulness level of F-Limer statistic (0.002) has been less than acceptable error level (%5), and therefore panel data method was preferred to pooled data method and to adjust the regression model we used panel data method. Also since the meaningfulness level of H-hausman statistic (0.006) was less than acceptable error level (%5), the regression method with fixed effects was preferred to regression method with random effects. Also due to the fact that the meaningfulness level of ARCH statistic was equal to 0.925, it can be inferred that the regression did not have variance incongruence. Finally, regarding the meaningfulness level of Godfrey statistic (0.101), the regression did not have serial self-correlation problem. In the next stage and due to F statistic (0.000) having a meaningfulness level of below %5, it can be stated that the regression has had identification power. Since the meaningfulness level of short-term financing (independent variable) has been less than %5, it can be claimed that short-term financing affects profitability positively and meaningfully. For each unit of increase in short-term financing, profitability scale has increased 0.058 units. Also control variables such as firm size and leverage have had positive and negative meaningful effects on profitability. Durbin-Watson statistic was between 1.5 and 2.5. Therefore, it can be concluded that there has not been self-correlation between variables. Finally, the amount of identification coefficient showed that changes

in independent and control variables could represent %49.4 of change in the dependent variable.

## CONCLUSION

The overall results of the research were shown in the table below.

**Table 7**  
**Overall research results**

<i>Hypothesis No.</i>	<i>Subject</i>	<i>Approval or rejection</i>
1	Financing methods affect profitability of industrial firms enlisted in Tehran Stock Exchange.	Due to the existence of co-linearity problem, it would be impossible to adjust the model using both indexes (long-term and short-term financing) of financing methods.
1-1	Long-term financing affects profitability of industrial firms enlisted in Tehran Stock Exchange	Hypothesis was approved.
1-2	Short-term financing affects profitability of industrial firms enlisted in Tehran Stock Exchange	Hypothesis was approved.

Regarding the results gained from analyzing minor research hypotheses, it can be stated that the relationship between long-term financing and firms' profit has been negative and meaningful and for each unit of increase in long-term financing, profitability index was reduced -0.049 units. Also regarding the other minor hypothesis, it can be said that there has been a positive and meaningful relationship between short-term financing and firms' profits. For each unit of increase in short-term financing, profitability index was increased 0.058 units.

## Research Suggestions

- The research results showed that there has been a meaningful relationship between financing methods and industrial firms' profitability. Due to this fact, managers should be able to choose the best and most appropriate financing methods to increase firm's profitability.
- Results showed that financing through using long-term financing methods such as debts, exchangeable bonds, and capital affect industrial firms'

profitability negatively. Thus, it can be suggested to managers to avoid using long-term financing methods such as debts, exchangeable bonds, and capital for financing.

- It is suggested to firms to use short-term financing methods such as business and bank credits, business bonds, guaranteed loans, ... because short-term financing affects industrial firms' profitability positively.

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