



Studying the Role of Marketing Intensity on the Relation of Financial Leverage and Firm Function

Khosro Dalvand^a, Mahtab Tabatabaie^{b}*

^aDepartment of Management, Malayer Branch, Islamic Azad University, Malayer, Iran
^bYoung Researchers and Elite Club, Boroujerd Branch, Islamic Azad University, Boroujerd

ARTICLE INFO

Article history:

Received 12 March 2018

Accepted 24 July 2018

Keywords:

Marketing Intensity,
Financial Leverage,
Firm Function,
Stock.

ABSTRACT

Choosing the financial supply is one of the most important decisions for providing optimal structure that can be effective for firm value and stocks market of companies. Therefore, marketing as one of the abilities of the firm can be effective on firm function. The purpose of this research is studying the role of marketing intensity on the relation of financial leverage and firm function in Companies listed on the Tehran Stock Exchange. This study is performed between 2012 and 2016 and 103 firms are studied in this research. The independent variables in this research are financial leverage and marketing intensity. The dependent variable is firm evaluation that Tobin's Q is used for evaluating this variable. For evaluating the research variables, Eviews 9 software is applied. The research findings illustrate there is not a U relation between financial leverage and firm function and marketing intensity is not a moderator between these two variables.

1 Introduction

The importance of financial decisions can be led to break in business. Through proper financial strategies, organizational purposes can be achieved. Financing of the firms is the main factor of financial crisis. The financial decisions are reflected in the structure of firms' capital and wrong decisions can make some incompetency in the organizations (Wamugo et al., [33]).

The models of traditional economy have shown that there is not any relation between financial structure and financial making decision of the firm. Therefore, changes in profit rate or money supply do not make any change in the capital structure and expense in the firms. Miller and Modigliani 1958 have developed this point of view about the capital structure. They have stated there is little tax and small transaction expenses between lenders and borrowers in complete financial markets without information asymmetry. The firm value is determined based on future cash flow, firm function activities without considering the methods of financing. Actually, this hypothesis is not visible and this is because of information asymmetry and the existence of tax and transactions expenses in the market (Assoc et al., [3]). Since Miller and Modigliani 1958 have studied the debts and financing, they have shown that the rate of debts has affected the structure of the firms. Actually, they have stated the structure of capital does not affect the market value of the firm. Therefore, the financial effect of the debts, its advantages and monetary expenses are studied extensively. For instance, Kraus and Litzen-

* Corresponding author Tel.: +989184342400
E-mail address: mahtab_tabatabaie@yahoo.com

berger [14] have presented that debts are effective for firms as a financial defines and they reduce the bankrupts of the firms. It fact, it will be led to increasing of debts level, decreasing of profit margin and increasing expenses. In this way, increasing debts level can increase the expense level and decrease the optimal value of firms. Therefore, there is a U form relation between debts and function curve. Based on business theory, the theoretical bases will help to our understanding about the capital structure. The experimental connections always study the relations among debts levels and they can be effective on different dimensions of the firm that have not been studied exactly. The experimental findings have shown that some of researchers have shown some positive relations between debts and function of the firm while the others have shown the negative one (Stulz based on Jensen's results, [30]). Myers and Stewart [21] has shown that there is a relation between financial crisis and firm function based on agency costs (Bae et al, [4]).

Miller and Modigliani' output is a theorem that have answered some questions about experimental studies related to capital structure of the firms and their real activities through leverage. For example, the evaluation of financing has effect on the pattern of investing and profit growth. The results of international researches have shown that export activities of the firms are dependent on different financial factors and different researches have shown the exporters who have lesser financial leverage, they have more liquidity than the others. The probable relation between financial leverage and outputs qualities in investing ways can be seen on the short-time projects. Then, using the possible financing can affect the optimal profit and applying financial leverage by strategy will be led to achieve the competitive advantage than the other competitors. In this case, it is expected that the firms, which have enough internal liquidity, have positive effect of profitability and marketing position of the firm because of negative effect of the financial leverage. Margaritis and Psillaki [16] have presented that there is a positive relation between leverage and function of the firms. In addition, it has been studied the capital structure and function of the firms and has presented a positive relation between financial leverage and function through method of regression GMM (Bokhtiar et al, [18]).

In this study, it is attempted to fill the experimental gaps about the role of financial leverage on firm function. Especially, the debt can be as a replacement for inside and outside financing, play a dual role in the structure of the capital and generate different signals in the field of financing. They can be called as debt signals that can show the differential effects on function of firm. Based on this subject, the debt signal can be studied through marketing intensity by companies. Concentrating on debt signals of marketing expenses can be effective on increasing the firm value and its financing function. It is evaluated that the marketing intensity can be effective positively and a non-linear relation is effective on relation between financial leverage and firm function. The intensity of marketing includes activities for facilitating relations with shareholders (such as investors and customers) and framework about general issues related to firm. Such marketing activities for firms are very expensive and these marketing expenses for firms are optional completely. Because investors cannot distinguish the firms with good and bad qualities and they consider signals from expensive activities of the firms as signals with good quality. Therefore, the firms which expend more for marketing activities are good signals for shareholders based on investors' view. In addition, active marketing can increase financial function as a factor. Marketing can be as a signal of strengthen firm growth, its decrease as a negative signal for investors' hatred and bankruptcy danger. Therefore, marketing activities can have different meanings of debt signals as a strategic instrument. Therefore, the marketing intensity can be as national criteria for investors and it can be effective on the relation between debts in evaluating of the firm. In continue, theoretical and editing hypnoses are studied, model and functional explanations of the variables in third section, analysis of data in fourth section and finally discussion and conclusion are pre-

sented.

2 Literature Review

Choosing financing is one of the most important decisions for determining the optimal structure of the capital that can be effective on the firm value and its market stock. The previous studies have presented that fix assets, liquidity, tax, business risk and rate of yearly inflation are the effective decisions on its financial decisions.

The axial role of capital in today business world is obvious for everyone and it is necessary as one of the most important necessities in every economic activity for providing financial sources. Certainly, recognizing different ways for financing and exploiting proper financial tools can help the management in achieving correct decisions and more sources (Abjam, [1]). Financing resources are divided to two parts, internal and external resources. In the internal resources section, the firm applies for financing through achieving profits. It means, instead of dividing profits among shareholders, the profit is used in general functional activities of the firm for more output. In the part of external resources, it applies for financing through debts and dispersion of stocks (Safari Gereili, [28]). One of Managers' purposes is decreasing the capital expense and then maximizing investors' assets. The capital structure is one of the most effective managers' tools for managing capital expenses. The structure of optimal capital is created when managers can minimize the capital expense of the firm. First time, Miller and Modigliani [19] have presented a research related to the structure of the capital in 1958. They have proved in their research that the firm value is not affected by related decisions to the capital structure through appointed hypotheses. Based on unreal hypotheses of Miller and Modigliani's theory, researches study the other theories in relation to the structure of the capital. After Miller and Modigliani's studies, different theories and patterns have been developed in related to the structure of the capital. The most important theories in relation to capital structure are static tolerance theory and hierarchy process theory that in the first, it is stated that there are two opposite powers in leveraged companies. The positive energy is created because of financial deposit of profit expense. However, negative energy, which threats firms, is default risk and bankruptcy expense. For first time, Myers and Stewart [20] has presented the hierarchy process theory. Based on this theory, the structure of capital of these firms has been provided by internal resources. If providing by external resources is necessary, the financing through debt is preferred than stock diffusion. Many searches have been performed since Muller and Modigliani's such as Long and Malitz [15], Abor [2] have shown the capital structure of companies are affected by financial and non-financial qualities (Assoc et al, [3]).

The commercial theory of debt has shown that the debt has two opposite effects and U relation with firm function, although, relation of making business is extremely dependent on financial explanations and bankruptcy expenses. Graham [7] has stated that the financial effect is dependent to its especial features and complexity of financial systems. In this relation, Haugen and Lemma [9] have stated the bankruptcy expenses are extra ones. These bankruptcy expenses are not derived directly from financing but from lack-balance between sources and financial expenses. Also, bankruptcy expenses are an infrequent event and improbably the estimating of bankruptcy expenses is performed correctly. Totally, there are some differences between the real concepts of function and theory of business, and the commercial theory shows a U relation between debt and firm function. For explaining this difference, two reasons are presented: measurement based on accounting and information asymmetry. First, Barter theory based on profits and monetary expenses are calculated. The monetary accounts should be

without results, depend on profits and debt expenses and evaluated according to the financial statements. Therefore, it is expected the effect of debts on firm value has an opposite effect depend on performed measures. The second reason, not all information is shared equally between firm and the inventors and this theory assumes that there is some common information between decision makers of the firm and investors. Thus, in a firm, there is internal information that is led to different interpretations by investors. This information asymmetry will be strong when a part of information has many meanings. Because there are different meanings about debt and using them are not transferred to investors well, so there is different meaning about debt in the firm.

While two signals from debt of the firms are issued, these evaluations affect the rate of evaluating firms. So, Myers et al. [21] have considered internal resources and then external financing among financing resources such as internal funds, debt and firms' stocks, firms' priorities, internal resources and then external financing. If the external financing is used, the firms will prefer the debts than stocks owners and finally they can use the increasing of external ownership as the lowest priority for financing. Therefore, the main properties of the firms for financing are internal budget, debt and stockowners' income. They have a lower level of debt through enough internal financing and have enough budgets for doing projects. Based on hierarchy process of financing, they are attempting for financing through internal resources. Issuing debt as a signal of financial turmoil that shows the lack of enough internal resources for performing projects and this fact can affect the firm value.

Therefore, the approach of issuing debt is based on the maximum capacity of the firms. The stockowner' rights as a resource is the next replacement for financing is considered. However, firms, which prefer to use external financing, they try to explain the proper situations for growing itself that it will be led to using external financing instead of internal and it will be resulted to positive understanding of firm value. In external financing, the firm, which uses debt more than stock issuance, it shows this fact that it has more freedom for increasing its value. Therefore, the higher level of the debt can be interpreted as growth incentives and then caused the increase of firm value. For that reason, according to the mentioned points about external and internal resources, it can be said that there is a U relation between financial leverage and firm evaluation: first hypothesis: the debt has a U relation with firm value.

When an organization puts itself in a market and adjusts a proper approach, the first duty is planning a collection of plans or activities for performing. These plans are presented in the mixed frame of marketing that the best explanation for it is the complex of tools for marketing manager for achieving a position or an especial strategic. Along past years, the importance of marketing has been increased and in almost fields of business as a principal factor for achieving stable competitive advantage. Based on increasing marketing importance, it is necessary to study the concept of marketing extensively. Besides, the modern policies should be used for promote of sale and develop of market stock that in a general view, the usages of marketing channel should be considered.

The marketing activities have two strategic roles in increasing firm value: 1. a good signal with quality of investing to investors 2. Improving the function of organization because of active marketing in an improper environment. The real position of the firm against financial crisis and point of views are not obvious very well. Therefore, for informing and persuading market about its point of view, firms can send signals to market. Because the expense of marketing is an optional expense, investors cannot determine the real position of the firm; therefore, marketing expense can be as a criterion of financial position. It can transfer a signal of future profitability of the firms in stock market to investors and shareholders. Performing marketing activities can increase the price of stock or decreasing the liquidity requirement of the firm. Through using marketing data, investors can predict the future

liquidity process of the firms with more attention. Erickson and Jacobson [5] have understood there is a positive relation between advertisement expenses and stocks profit, because investors consider the increase of marketing expenses as a positive signal of future profitability for firms. Also, it has been shown the marketing expenses help the creating of especial value of brand and as a channel of data with qualities that will be led to increasing liquidity and improving investors' possession. In addition, marketing can help to increase of financial firm value in an improper environment. Besides, them it has been presented this fact that the active marketing is a strategic answer of a firm to economic downturn or an improper environment.

Along economic crisis, a marketing mix is used by firms is very important. As well, Koksai and Ozgul [12] have expressed that introducing new products have affected the firm's functions during downturn considerably. Kim [11], Werner [34] and Quelch [25] have studied the effect of advertisement strategies according to economic crisis condition and the results show they can increase their sale income and stock market during and after economic downturn (Nott and Vlachvei, [24]).

Researchers have presented this fact in their studying that decisions in marketing expenses can be seen in the frequency of market stock. In a big part of marketing literature, the decision-making incentive of marketing expenses is studied. The studies have shown this fact that based on non-marketing point of view and financial incentives, marketing expenses are studied such as absorbing free liquidity process, the agency cost on advertisement cost and how the stock profit are affected by marketing expenses. Therefore, the theoretical and experimental share of this subject is limited (Imran et al, [10]).

Shakawan [29] has studied the marketing in record. This research studies the rate of selling home appliance during economic downturn in Sweden companies. The achieved results through interviews have proved that these firms have changed their marketing strategies during this time and follow new methods. Rollins et al. [27] have shown in the effect of economic record on marketing that the firms which have concentrated on their clients and increased their marketing activities and changed their marketing strategies. Finally, they have increased the firm value and its functions growth. Roger et al [26] have studies the marketing strategies related to New Zealand producers. In showing a proper strategy for facilitating the success in the competitive marketing, the purpose of locating clients based on value, has an important role in success and market firm value. It can be said that firms with high leverage are under environmental pressure. Because they have limited abilities for achieving financial resources and limited strategic options are existed for these firms. Therefore, firms with high financial leverage can transfer signals about strategic qualities and actions related to improper situation with high marketing expenses for increasing financial functions of the firm. The financial result is related to marketing activities positively that can transfer signals related to bankruptcy danger of the firm to investors. Therefore, Fornell et al. [6] has stated the high satisfaction by clients is derived from marketing activities and these companies are encountered with less risk. Consequently, marketing activities can reduce the bankruptcy danger for firms.

Since the debts of firms can transfer signals to market, the marketing activities can also transfer the effect of environmental factors on firm function to market and the increase of marketing activities can be led to reducing bankruptcy danger and empowering the signals from debt of them. In addition, shareholders will able to evaluate the firm positively and then the followed hypothesis will be codified:

Second Hypothesis: the intensity of marketing positively reduces the relation between financial leverage and the firm evaluation

4 Data and Variables

The independent variables in this research are financial leverage and marketing intensity. The financial leverage of the company is achieved through the proportion of all debts of the firms to their all assets. The marketing extreme: generally, marketing managers consider sales amounts as a making-decision criterion for advertisement and budget marketing. Researchers have shown the proportion of sale to assets (SG & A) is considered as a criterion for marketing expenses. Therefore, researchers know the marketing intensity as a difference between research, development and sale expenses. In this research, through changing sale is considered as an income criterion for marketing expenses. In addition, the proportion of assets and sale changes to total sale are used as the marketing intensity. The dependent variable is firm evaluation that Tobin's Q is used for evaluating this variable. The control variables are firm size, marketing to book ratio, sales, average changes in assets and adjust marketing share, age of firm, capital expenses firm type. All firms are based on industrial clusters in Table 1:

Table 1: Industrial Cods

Industrial Code ISIC	Industry Name	Industrial Code ISIC	Industrial Name
17	Textile	27	Metals
19	Tanning, Leather and Footwear	28	Metal Products
20	Wooden Products	29	Machinery and Equipments
21	Papery Product	30	Electronic Machines
23	Oily, Coke and Nuclear	33	Measurement, Medical
24	Chemical	34	Automobiles and Parts
25	Rubber and Plastic		

In this section for testing first hypothesis, the regression panel data model is used to study U relation. For testing second hypothesis, the followed regression model is used for studying the adjustment role of marketing with relation between financial leverage and firm evaluation. In this study, it is attempted to solve the problems of previous researches through using the last methods of evaluating panel data as possible and present trustable and adjusted results. Interval of the research in stock exchange market is between 2012 and 2016 that 103 firms are selected as systematic deleting from stock exchange market. The first step in statistical analysis is determining the summarized characteristics of data and calculating descriptive criteria. The purpose of this analysis is knowing the internal relation of variables and showing the testing behaviour to provide the introduction of statistical analysis and appear the descriptive characteristics for more analysis. In this section, analysis of data is performed according to the calculating of central criteria such as average, median and scattered criteria such as standard deviation, maximum and minimum of variables.

Table 2: The Descriptive Statistics of Variables

LEV_2_MARKETING	LEV_2	LEV	IND_MRKTS_HARE	FIRM_EVALUATION	DATE_ID	CAP_EX	AV_ASSET	AGE	
0.132045	0.3643	5.76E-01	6.85E-05	1.254787	-	-0.09	0.19518	1.2421	Average
0.116343	0.3295	5.74E-01	6.81E-05	1.14648	-	0.047	0.17730	1.2787	Median
0.739583	1.5117	1.2295	0.000102	5.720201	-	0.123	1.36986	1.6720	Maximum

Table 2: Continue

	AGE	AV_ASS ET	CAPEX	DATEI D	FIRM_V ALUATI ON	IND_MR KTSHAR E	LEV	LEV_2	LEV_2_ MARKE TING
Minimum	0	0.000487	-0.8475	-0.9999	0.078661	3.79E-05	9.50E-04	9.03E-07	3.28E-07
Standard Deviation	0.240 326	0.126288	0.11728	1.64E-1	0.591789	1.29E-05	1.80E-01	0.212018	0.0848
Skewness	- 1.403	4.0074	-2.775	0	1.416752	0.057462	-0.049	1.09854	1.706101
Kurtosis	8.629 118	33.4716	13.4945	1.7	9.182013	2.762712	3.518261	5.367599	9.423084
Companies Number	103	103	103	103	103	103	103	103	103
Observation Numbers	515	515	515	515	515	515	515	515	515

5 Results and Analysis

5.1 Testing the Normality of Variables

For performing this research, the method of ordinary least square is used for evaluating model parameters. This method is based on this hypothesis that variable has normal distribution and its un-normal distribution will lead to contravention of hypotheses of this method for estimating parameters. As a result, it is necessary to test the normality of variables. In present study, the normality test is performed through Bera-Jarque statistics if the level of significance is more than 0.05, the hypothesis 0 is accepted based on normality of variables distribution.

Table 2: Continue of Table 2

	AGE	AV_AS SET	CAPEX	DATEID	FIRM_V ALUATI ON	IND_MR KTSHAR E	LEV	LEV_2	LEV_2_ MARKE TING
Average	1.24211	0.19518	-0.09137	-0.99998	1.254787	6.85E-05	5.76E-01	0.364261	0.132045
Median	1.27875	0.17730	-0.04627	-0.99998	1.14648	6.81E-05	5.74E-01	0.329522	0.116343
Maximum	1.67209	1.36986	0.122558	-0.99998	5.720201	0.000102	1.2295	1.51167	0.739583
Minimum	0	0.00048	-0.84755	-0.99998	0.078661	3.79E-05	9.50E-04	9.03E-07	3.28E-07
Standard Deviation	0.24032	0.12628	0.117297	1.64E-08	0.591789	1.29E-05	1.80E-01	0.212018	0.0848
Skewness	- 1.40342	4.00739	-2.77544	0	1.416752	0.057462	-0.04873	1.098547	1.706101
Kurtosis	8.62911	33.4716	13.49458	1.7	9.182013	2.762712	3.518261	5.367599	9.423084
Compa- nies Number	103	103	103	103	103	103	103	103	103
Observa- tion Num- bers	515	515	515	515	515	515	515	515	515

The results of Bera-Jarque test for variables are presented in Table 3.

Table 3: Bera-Jarque Statistics of Dependent Variables of the Research

Normality Test	FIRM_VALUATIONT_1
Jarck-Bra	992.3627
Significance	0.000000

In Table 2, based on the less amount of significance of Bera-Jarque statistics that significance level is 0.05, the variables cannot be normal and are not proper for next analysis. Therefore, data should be changes through statistics methods. Different kind of statistics methods of changing data are as followed.

1. Data Inversion
2. Logarithm
3. Square root
4. Johnson Transformation
5. Box-Cox Transformation

In this research, the change of Box-Cox in software Minitab 17 is used, Bera-Jarque test is perform another time on transformed data and followed results are achieved.

Table 4. Bera-Jarque Statistics of Dependent Variables of Research after Normality

Normality Test	FIRM_VALUATIONT_1
Jarck-Bra	1.549
Significance	0.461

As it is presented in Table 4, the amount of significance of Bera-Jarque statistics is more than significance level 0.05 and shows the normality of the variable.

5.2 Stability Test of Variables (Unit Root)

For studying the stability of variables of the research, the Philip Peron-unit root test is used for variables of the research. If the time series is not stable in regression, we may involve in false regression. The result of Philip-Peron unit root test for variables of studied model is followed.

Table 5: Studying Stability of Variables

Variable	Philip-Peron Test		Test Results
	Statistic	Significance	
LEV	468.407	0.0000	Stable
MARKETING	358.024	0.0000	Stable
SIZE	383.315	0.0000	Stable
CAPEX	349.243	0.0000	Stable
SALES	413.392	0.0000	Stable
MTB	395.115	0.0000	Stable
IND-MRKTSHARE	416.514	0.0000	Stable
Av-ASSET	305.162	0.0000	Stable
AGE	257.484	0.0000	Stable
FIRM-VALUATION-1	359.166	0.0000	Stable

The result of Table 5 shows that all variables and the probable statistics of all tests are lesser than 0.05

and it presents the fact that all variables of research are in stable level.

5.3 Co-linearity of Variables

Temporal co-linearity is happened in econometrics that two or more than two variables (independent) in one multi-variables regression than each other have high correlation. The correlation means a linear relation between independent variables here. According to the intensity of correlation between independent variables, the amount and kind of co-linearity will be different. The co-linearity is existed in all models of regressions approximately. What is important here is the intensity of co-linearity between independent variables. The existence of "complete co-linearity" causes the breach of classic hypotheses of regression model. In this study, correlation coefficient is used for studying the co-linearity between explanatory variables. The results are presented in Table 6.

As it is obvious, the most absolute value of correlation coefficient among variables is equal to 0.218. In addition, other amounts are less and it shows this fact that there is not a high co-linearity among explanatory variables.

5.4 Estimating Models

The test of auto-correlation is one of the regression class hypotheses. Durbin-Watson statistic is one of statistics of the test, which is used for studying the correlation itself among the reminders in analysing the regression (the relation between the amounts that divided from each other with determined lag). The amount of this statistic always is located between 0 and 4 that the accepted degree is as followed: the amount 2 for this statistic shows the lack of correlation that the desirable statue in the main hypotheses is related to remainders in regression analysis.

Table 6: Correlation Coefficient Amount

Correlation	LEV	MARKETING	SIZE	CAPEX	SALES	MTB	AGE	IND_MRKTSHARE	AV_ASSET	M_FIRM_VALUATIONT_1
LEV	1.000									
MARKETING	-0.007	1.000								
SIZE	0.031	-0.018	1.000							
CAPEX	0.070	0.045	0.036	1.000						
SALES	0.077	0.109	-0.015	0.097	1.000					
LMTB	-0.048	-0.038	0.081	-0.017	-0.006	1.000				
AGE	-0.038	-0.071	0.031	-0.071	-0.038	0.036	1.000			
IND_MRKTSHARE	-0.032	0.180	-0.039	-0.023	0.048	0.038	-0.035	1.000		
AV_ASSET	0.072	0.043	0.045	0.010	-0.020	-0.043	-0.021	-0.053	1.000	
M_FIRM_VALUATIONT_1	0.031	-0.049	-0.043	-0.218	-0.009	-0.026	0.054	0.041	-0.042	1.0

Table 7: Estimating Research Model

Variables	First Model		Second Model	
	Coefficient	significance	Coefficient	significance
AGE	0.056598	0.0120	0.014356	0.0253
LEV	-0.014276	0.8882	-0.628151	0.2666
LEV 2	0.003637	0.9661	0.168081	0.7212
SIZE	-0.005132	0.4248	-0.005215	0.4133
FIRM VALUATION	0.408571	0.0000	0.411426	0.0000
CAPEX	-0.063001	0.1304	-0.069129	0.0954
SALES	0.014167	0.5343	0.004914	0.8309
LMTB	-0.007446	0.5947	-0.006864	0.6200
AV ASSET	0.045871	0.1896	0.039942	0.2501
IND MRKTSHARE	318.8203	0.3599	286.9430	0.4073
LFIRM	-0.048550	0.7214	-0.096120	0.4796
LYEAR	-2.744912	0.7511	-2.155692	0.8020
MARKETING			-0.742206	0.0934
LEV MARKETING			1.765195	0.2300
LEV 2 MARKETING			-0.517285	0.6684
C	9.270079	0.7334	7.706469	0.7756
General Fitting of Model	F= 36.88512	F= 36.88512	F= 36.85998	F= 36.85998
	prob(F)= 0.000	prob(F)= 0.000	prob(F)= 0.000	prob(F)= 0.000
	D.W=2.149645	D.W=2.149645	D.W=2.128343	D.W=2.128343
	R ² =0.912235	R ² =0.912235	R ² =0.914844	R ² =0.914844

Generally, the amount lesser than 2 positive continuous correlations (it is a kind of continuous correlation that the positive reminder for an observation increases the chance of being positive of reminder of other observation and reverse). Moreover, the amount more than 2 of this statistic shows the negative continuous correlation. It is necessary to mention that if the amount of statistic of the test is lesser than 1 or more than 3 it will be a danger alarm for the positive or negative correlation itself among reminders. As it is obvious, the amount of this statistic in this study is near to 2 that this amount shows the lack of correlation itself that the desirable situation in main hypotheses is related to reminders.

The achieved results of evaluation regression model are reported in Table 7. The results of evaluating model and significance level related to F s are all lesser than 0.05 that present the significance of input variables such as control and independent variables at confidence level 95 and it shows proper fitting of model.

First hypothesis: the debt has a U relation with the firm value

Based on achieved results of evaluating first model, it can be observed that the relation between debt and firm value is not significant and the significance level is higher than 0.05. Therefore, the first hypothesis is rejected.

Second hypothesis: the intensity of marketing is positively reducing the relation between financial leverage and firm evaluation.

Based on achieved results of evaluating second model, it can be observed that the relation between studied variables is not significant and the significance level is higher than 0.05. Therefore, the first hypothesis is rejected.

6 Conclusion

Market uses data of financial statement for evaluating firm. The relation of accounting data for determining the firm value can be affected with different factors such as policy of sharing profit. The policy of sharing profit is always in interaction with other financial decisions of firm and this interaction relation is affected by different conditions. In this research, the role of marketing intensity in relation to financial leverage and firm function is studied. The results show there is not significant relation between studied variables. The financial function for an organization is necessary and actually, when an organization does not have a proper financial function, it will be removed from competition field. The customers of financial statements for their reasonable decision-making need an evaluation of firms' function and one way for doing this is evaluating analysis of financial statement. When firms use debt for providing their capital, the financial leverage in analysis of financial statements has more significant meaning. In addition, different factors help the firms function, the factors for determining leverage plays an important role. The level of firm leverage is determined by different factors. The suitable leverage will be led to this fact that the firm will achieve a better function and the stability is guaranteed in action. Every business has especial abilities and considering them can have a significant promotion for the firm. One of the inside capabilities is marketing one that can be effective on firms' function.

References

- [1] Abjam, H. *Studying the Effective Factors on the Capital Structure of Accepted Small and Medium Firms in Tehran Stock Exchange*. MA Accounting Thesis. Shahid Beheshti University. Tehran. 2009.
- [2] Abor, J. *The Effect of Capital Structure on Profitability: An empirical analysis of listed firms in Ghana*. Journal of Risk Finance. 2005, **6(5)**, 438–447(10.1108/15265940510633505)
- [3] Assoc, P. Nguyen, T.H.L. *Monetary Policy and the Financial Decisions of Firms – Empirical Study in Vietnam*, Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy, 2016, **45**, P.456-478.
- [4] Bae, J. Sang-Joon Kimb, H.O. *Taming Polysemous Signals: The Role of Marketing Intensity on the Relationship between Financial Leverage and Firm Performance*, Review of Financial Economics, 2017, **33**, P. 29–40
- [5] Erickson, G. Jacobson, R. *Gaining Comparative Advantage through Discretionary Expenditures: The returns to R&D and advertising*. *Management Science*. 1992, **38(9)**, P.1264-1279.
- [6] Fornell, C. Sunil, M. Forrest, V. Morgeson. Mayuram, S. Krishnan. *Customer Satisfaction and Stock Prices: High returns, low risk*. Journal of Marketing, 2006, **70(1)**, P.3-14.
- [7] Graham, J. R, *Taxes and Corporate Finance: A Review of Financial Studies*, 2003, **16(4)**, P.1075-1129.
- [8] Guney, Y. Aydin, O. and Neslihan, O. *International Evidence on the Nonlinear Impact of Leverage on Corporate Cash Holdings*. Journal of Multinational Financial Management, 2007, **17(1)**, P.45-60.
- [9] Haugen, R. A. Lemma, W. S. *The Insignificance of Bankruptcy Costs to the Theory of Optimal Capital Structure*, Journal of Finance, 1978, **33(2)**, P.383-93.
- [10] Imran S. Currim, Jooseop Lim, Yu Zhang, *Commitment to Marketing Spending through Recessions: Better*

or worse stock market returns, *European Journal of Marketing*, 2016, **50(12)**, P.2134–2161

[11] Kim, P. *Does Advertising Work: A Review of the Evidence*. *Journal of Consumer Marketing*. 1992, **9**, P.5-21.

[12] Koksall, M. H. and Ozgul, E., *The Relationship between Marketing Strategies and Performance in an Economic Crisis*. *Marketing Intelligence & Planning Journal*, 2007, **25(4)**, P.326-342

[13] Kontis A.P. Dimitrios, L. *Factor Framework for the Evaluation of Multichannel Marketing Mixes in 5* City Hotels*, *Procedia - Social and Behavioral Sciences*, 2015, **175**, P.408-414

[14] Kraus, A. Litzengerger, R.H. *A State-preference Model of Optimal Financial Leverage*. *Journal of Finance* 1973, **28 (4)**, P.911-22

[15] Long, M. Malitz. *Leverage, Investment, and Firm growth*. *Journal of financial Economics*.1996, **40(1)**, 3-29

[16] Margaritis, D. Psillaki, M. *Capital Structure, Equity Ownership and Firm Performance*. *Journal of Banking & Finance*, 2010, **34(3)**, P.621–632(Doi:10.1016/j.jbankfin.2009.08.023)

[17] McAlister, L. Raji, S. MinChung, K. *Advertising, Research and Development, and Systematic Risk of the Firm*. *Journal of Marketing*, 2007, **71(1)**, P.35-48.

[18] Md. Bokhtiar, H. A. F. M. Mainul Ahsan, Md. Afzalur Rahaman & Md. Nurul Alam., *Influence of Capital Structure on Firm Performance: Evidence from Bangladesh*. *International Journal of Business and Management*. 2014, **9(5)**, P.34-56.

[19] Modigliani, F. Miller, M. *The Cost of Capital, Corporation Finance and the Theory of Investment*. *American Economic Review*, 1958, **48(3)**, P.261–297

[20] Myers, Stewart C. *The Capital Structure Puzzle*. *Journal of Finance*, 1984, **39(3)**, P.575-92.

[21] Myers, Stewart C. and Majluf, Nicholas S. *Corporate financing and investment decisions when firms have information that investors do not have*. *Journal of Financial Economics*, 1984, **13(2)**, P.187–221 (doi:10.1016/0304-405X(84)90023-0)

[22] Myers, Stewart C., and Nicholas S. Majluf. *Corporate Financing and Investment Decisions When Firms Have Information that Investors Do Not Have*. *Journal of Financial Economics*, 1984, **3(2)**, P.187-221

[23] Noori Nasab, M. Oliyan, H. *Marketing Strategies in Economic Downturn*. The Second International Conference of Management, Entrepreneurship and Economic Development. Payame Noor University, Qom,2012.

[24] Nott, O. Vlachvei, A. *Changes in Marketing Strategies during Recession*, *Procedia Economics and Finance*, 2015, **24**, P.485-490.

[25] Quelch, J. *Marketing Your Way Through a Recession*. *Harvard Business School*. Working Knowledge, Research & Ideas, 2008, **43**, P.1-2.

[26] Roger, B. et al. *Strategic Marketing in Times of Recession Versus Growth: New Zealand Manufacturers*. *Asia Pacific Journal of Marketing and Logistics*, 2015, **27(4)**, P.600 – 627

[27] Rollins, M. David, N. Justin, E. *The Impact of Economic Downturns on Marketing*. *Journal of Business*

Research, 2014, **67**, P.2727-2731

[28] Safari Gereili, M. *Studying the Effect of Capital Structure on Profitability of Accepted Firms in Tehran Stock Exchange*. MA Accounting Thesis. Shahid Beheshti University, Tehran, 2008.

[29] Shakawan, R. *Marketing in Recession- How have Swedish firms in the consumer discretionary sector reacted to the current recession*. University of Halmstad SET European Business Program, 2012.

[30] Stulz, Rene M. *Managerial discretion and optimal financing policies*. Journal of Financial Economics.1990, **26(1)**, P.3-27

[31] Suleiman A. *Capital structure effect on firms' performance: Evidence from Saudi listed companies*. Saint Mary's University, Master's thesis. Retrieved from, 2013.

[32] Vătavua, S. *The Impact of Capital Structure on Financial Performance in Romanian listed Companies*. Procedia Economics and Finance, 2015, **32**, P.1314 – 1322

[33] Wamugo, L M. Muathe Stephen, M. George, K . *Relationship between Capital Structure and Performance of Non-Financial Companies Listed in the Nairobi Securities Exchange, Kenya, Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics (GJCRA) An Online International Research Journal*, 2014, **1(2)**, P.56-78.

[34] Werner, L.R., *Marketing Strategies for the Recession*. Management Review, 1991, **80(8)**, P.29-30.