



Surveying The Relationship Between Financial Performance, Free Cash Flow, Capital Structure As Well As Related or Unrelated Diversification in Tehran Stock Exchange

Ali Akbar NONAHAL NAHR¹, Zahra NEMATİ^{2,*}

¹ Assistant of Accounting, Department of Accounting, Islamic Azad University, Science and Research Branch of Tehran

² MA of Accounting, Islamic Azad University, Science and Research Branch of East Azarbaijan

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Abstract. This study, investigate the relationship between financial performances, free cash flow, capital structure and related and unrelated diversification. Test research hypotheses on 90 companies listed in Tehran Stock Exchange during the period 1386 to 1391 using the panel data show that diversification on firm performance by the index Q Tobin measure is effective and positive relationship between these two variables is significant and there are so related and unrelated diversification has improved performance. Also other research hypothesis was rejected; indicating between free cash flow and capital structure with financial performance, capital structure and free cash flow, free cash flow, capital structure and diversification, there is no significant relationship.

Keywords: financial performance, Free Cash Flow, Capital Structure, related and unrelated diversification

1. INTRODUCTION

Accounting has been occurred for meeting the needs of human. Socioeconomic and political conditions of the accounting environment have been varied depends on the time; therefore, the goals of accounting and its methods have been changed according to the environmental conditions. Over time and in parallel with the development of economic activities and increasing its complexity, purpose and procedures of accounting information has been developed to respond the information needs. Various aspects and features of the companies such as investment, credit-providing, etc., have been studied and analyzed in different methods. With development of capital markets and making the companies larger, both in local and international dimensions, cause to create this kind of research (capital market) more than past. For example, at the beginning of the privatization process in Iran in accordance with Article 44 of the constitution, we observe the growth and development of the capital market and entering the investors to this market. Clearly, if the mechanism of this important affair does not play its role properly, this promising policy will face with some problems that will hurt the economy. Therefore, providing practical approaches for the analysis of corporate for the investments, creditors and analysts can lead them to better decision making. We examine the four aspects of each company as the most important aspects of it in this research.

2. EXPRESSION OF THE PROBLEM

One of the functions of the Stock Exchange is mobilizing the private savings and assigning it to the industrial and production investment. Tehran Stock Exchange at the time of its activity has faced with many ups and downs, and despite the relative prosperity, has also experienced a

* Corresponding author. Email Address: z.nemati@bankmellat.ir

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period of stagnation. Undoubtedly, boom and extension of financial performance depends on the boom and performance of the accepted companies on it. Whatever a corporate is successful in its finance function, it can receive the confidence and satisfaction from its investors, including major and minor investors and society's confidence to the capital market will increase. As a result, financial performance in terms of economic and financial issues is considered an important affair in managing the financial decision-making process of the enterprises (Malekpour, 1389).

The value of each company significantly depends on its ability in creation the free cash flow and their practicing methods. This important criterion according to numerous applications that some of them are re-investment, increase the divided profit, redemption of shares and debt repayment at due date is very remarkable and has extraordinary importance for the investors and creditors (Ojin F., et al.).

Free cash flow, is important in the sense that it allows administrators to search for opportunities to increase shareholder value. Without having the cash is not possible to develop new products, doing business attainment, payment of cash benefits to shareholders and reducing the debts. In addition, funds must be maintained at a level that there is a balance between the cost of maintaining the cash and the cost of insufficient cash. Positive free cash flow for the company shows that the company, after payment of expenses and doing the investments, has free cash flow; however, the negative value of it indicates that the company has not created sufficient income to cover costs and its investment activities.

Decisions for financing and investment in the companies are decisions that will be taken both with futurism. In the decisions of financing, the company considers its current funds to be able to meet its obligations to act against sponsors of financing in the future and which plays a key role in investment decisions is the company's cost of capital. However, the company's cost of capital is a function of its capital structure. Capital structure has been introduced as the most important parameter affecting the valuation of companies and their orientation to the capital markets. Changing environment and the current variable depend the grading of the companies via credit somehow to the capital's structure. This trend makes their strategic planning closer into the selecting of the sources that are effective on the goal of maximize the shareholders' wealth (Dogloss, 2001). Decisions about capital's structure is one of the most difficult and the most challenging issues facing the company, but at the same time it is the most important decisions in relation to their survival (Sajjadi and et al., 1390).

Many of the current organizations in the world progress to larger sizes and increase of their business environment. Perhaps one reason for this, is responding to customer needs. Managers try to meet the multiple needs of customers to make them more loyal to their organization. For this reason and other technical reasons, building the raw material and final product distribution system within the system, many organizations accept the diversification. So large holding companies have been created in the world which each may have economic activity in quite different several industries (Tehrani and et al., 1387).

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3. THEORETICAL FOUNDATIONS

Company during its life cycle deals with several issues and needs to resolve these issues for continuing. Obtaining decisions such as financing, evaluating the performance, or making the products variant are some of these decisions. Competition in the markets for both goods and capital markets have created conditions that companies' managers should not be indifferent with it; meanwhile, they should consider the maximization of the shareholders and their profit too important. Select the appropriate capital structure for the business unit is one of the things that can be effective in improving the performance of business units. It should be considered that the theory of capital structure in financial management theories has a special place as a criterion for selecting the type of financing source (Mohammedan, 1389).

According to Jensen and Meckling (1976) as well as Jensen (1986), there is a conflict of interest between managers and owners. From this perspective, managers tend to take advantage of free cash. Devolving more powers to the Director, increase his use of the company's profits will increase and could cause a problem representation. This can be resolved through decisions of optimal capital structure, such as increased leverage. This model assumes positive relationship between leverage and performance of economic unit.

Previous studies show the relationship between capital structure and economic performance. Harvey et al (2004) consider the relationship between the two variables Tobin's q and capital restructuring as a reciprocal cause and effect relationship. As a result, capital structure decisions are effective on economic unit performance and economic unit performance is effective on the capital structure. Lang and colleagues (1996) found a negative relationship between leverage to Tobin's q and property. Clearly, increasing the value of the company and optimizing the performance can optimized the financing structure and conversely, the optimal capital structure decrease the company costs and increase profitability. Therefore, we can consider a reciprocal relationship between capital structure and economic unit performance, taking into account the leverage as the capital structure and variable Tobin's Q as a function. In addition to the relationship between capital structure and corporate performance, free cash flow can be investigated placed along these two variables.

Due to this reason that nowadays the companies interested in the issue of performance evaluation, the free cash flow is considered by many groups. Investors, shareholders and other users consider special value for free cash flow in comparison to various financial variables (Purnahavandy, 1388).

The ability of the manager because of being the agent from the side of shareholders causes that the generated cash generated inside the company have been invested in a profitable projects in their views or maybe detrimental in the views of stakeholders; although in some cases it is preferable that the company's cash has been returned to shareholders till will be used in the useless (Richardson, 2006).

Jensen (1986) defines free cash flow as cash flows in excess of the invested cash in projects that have their net present value is positive and states that the free cash flow of the projects that their present net value is negative, are investing.

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Free cash flow can be introduced as a measure of performance measurement and reporting the economic value of the business unit. The basic assumption is that the value of the business unit is because of the company's ability to generate cash flows. Thus, the value of a company depends on the future cash flows, timing and risk of these flows. This evaluation method considers all of the factors influencing the value of a company. Therefore, the remuneration committee and general meetings of companies use this scale to escape from the trap of accounting profit and other measures of the performance evaluation based on accounting numbers. EVA and free cash flow scales are the main scales of measuring the value that has not the failures of other accounting scales and try to coordinate the profits of shareholders' interests and the managers (Izadi Nia, 1384).

Considering the mentioned matters about the free cash flow, we can establish an interacting between free cash flow, capital structure and Tobin's Q index. Park and Jang (2013) believe that the leverage significantly affect free cash flow. Appropriate leverage means of financing with low rates and more favorable operating profit cause more free cash flow and free cash flow that is used in valuation models of the company's value shares also affect the Tobin Q indicator and according to the front picture, the suitable amount of this indicator has the opportunity of the growth and future profitability. Thus, interactions between the mentioned variables can also be examined.

In addition to the above issues, diversification of products and production is one of the company's strategies and many managers use them to improve the economic performance of their firms. Companies differ in the activity composition. Some companies have not any variety and others have diverse products. Diversification is for increasing the company profitability through higher sales volume that can be achieved through new products and new markets. It should be noted that the decision-making on the diversification of the company's performance is in the priority (Dadbeh and Bagher Abadi, 1391). However, the variety of types should also be considered. Ramlet (1982) states that related diversification creates better performance in comparison with unrelated variety. Long and Scholes (1994) and Berger and Ofeq (1995) find evidence of "reduce diversification" with comparing the the various business sectors in different firms with specialized companies. Their findings suggest that diversity reduction occurs after reducing the diversity of economic performance and vice versa.

Park and Jang (2013) states that managers are looking for diversification as a way to increase compensation as well as retaining their positions even when the variation damages the value of economic unit. Diversification is influenced by several variables such as the company's capital structure and free cash flow and influences these variables like the front picture and acts as a cycle.

Ducasse and Kahn (2004) show a direct link between diversification and free cash flow in both related and unrelated diversification. By adopting the concept of finance and its strategies, Vilulanga (2004) believes that diversification is as the result of investment methods that are supported via free cash flow hypothesis. Simply, for the evaluation of projects that can lead to a variety of the company's portfolio evaluating the financial structure and cash flows should be assessed. Lee and Lee (1996) is expressed in terms of representation theory, an increase in the debt ratio reduces the irrelevant diversification. Amit and Lyonat (1988) survey the relationship between diversification, capital structure and risk systematic and show that the risk of the

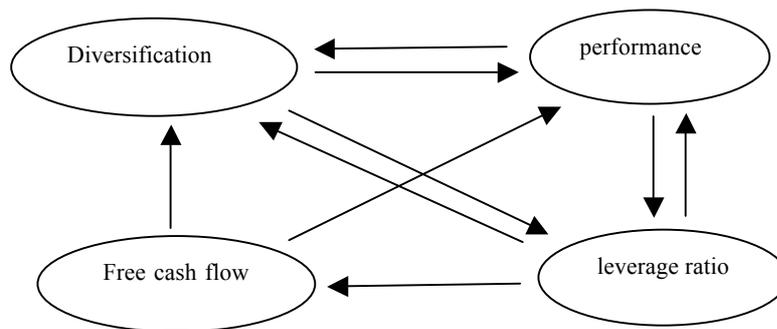
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economic unit is reduced through diversification, but it increases by the proportion of debt increases.

The important matter for the above variables is that the mentioned variables must be investigated in combination with each other with considering the effect of each one on the other. Therefore, a separated and partial assessment of the relationship between the ratio of debt, free cash flow, diversification and economic performance can lead to inaccurate results that the current study will survey the with relationships between these variables regard to this matter.

4. CONCEPTUAL MODEL OF THE RESEARCH

The conceptual framework of this study in the picture suggests that the financial performance, capital structure and diversification of the economic unit are a reciprocal relationship. And also because the relationship between financial performance and diversification is reciprocal with the capital structure; therefore, the free cash flow indirectly associated with capital structure. The recent study is tested the conceptual comprehensive model presented in this picture.



5. BACKGROUND OF THE RESEARCH

Foreign studies: Park and Jang (2013) both survey in a research about the relation between capital structure, free cash flow, diversification and economic unit performance. The result of the study shows that the free cash flow increases the entropy of the related and unrelated diversification and therefore, the hypothesis that consider the reduction of variability because of the investment of excess cash flow have been rejected. Yilmaz Jeyune and Ling Li (2011) completed a study entitled the relationship between product market competition and capital structure of listed companies in China's stock market. In this study, criteria for measuring product market competition are Tobin's Q ratio as the independent variable of the research and capital structure is as dependent variable of the research. The results of the research show that there is a linear relationship between financial leverage of the company and product market competition and depend on factors as the type and size and growth opportunities of the company. Ibrahim (2009) survey the relationship between the ratio of short-term debt to total assets, long-term debt and total debt to total assets as criteria for the capital structure with economic performance (return on assets, return on equity and gross margin) in his study. His results showed that in normal conditions there is a significant but weak relationship between capital structure and corporate performance.

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Foukoy and Yushijima (2007) was performed a research entitled "The diversification of the company, the performance and reconstruction at the largest Japanese manufacturers" which includes 142 companies during the period of 1973 to 1998. In order to assess the diversification and function, the Herfindahl indices and Tobin's Q was used, respectively. They used moderating variables such as the size of the company and growth of the company's revenue. The results indicate that the average relationship between diversification and performance is negative.

Internal studies: Vafaju (1391) examined the effects of Tobin's Q ratio on the capital structure of listed companies in Tehran Stock Exchange during the 5 year period from 1385 to 1389. Results show that when the ratio of long-term debt to total assets was used as a measure of capital structure, Tobin's Q ratio and capital structure has a significant but weak. When Debt-to-equity ratio is considered as a measure of capital structure, there is a direct and significant relation between Tobin's Q ratio and capital structure that is strong. When total liabilities to total assets is considered as a measure of capital structure, the ratio of Tobin's Q and capital structure has a direct and significant correlation that is extremely strong. Thus, after controlling the effects of size's variable, ROA and growth of the company shows the effect of Tobin's Q ratio on the capital structure that is extremely strong and direct.

Dadbeh (1390) surveys the impact of diversification of the company on information asymmetry and the enterprise value about the companies listed in Tehran Stock Exchange during the period of 1383 to 1388. He tests the corporate diversification in terms of trading diversification and the geographical diversification by Herfindahl index. The used control variables are parameters such as the size and the debt ratio.

The results indicate that the trading diversification including commercial and geographical diversification impact the information asymmetry. It was also noted that the information asymmetry affects firm value.

Setayesh and Jahromy (1390) examined the impact of competition at the product market on the capital structure. Therefore, the effect of Tobin's Q and focus indicators (Herfindal- Hirschman and 4-firm concentration ratio) on a debt ratio of 86 companies listed in Tehran Stock Exchange during 1381 to 1388 was surveyed. The statistical method used to test the proposed hypotheses was the panel data model. The results showed that competition at the product market and industry structure is different. Moreover, in the case of using Tobin's Q index and and Herfindal- Hirschman, there is a positive and significant relationship between corporate competition and companies 'capital structure. But at the case of using the 4-firm concentration ratio index, there is evidence for a significant relationship between competition at product market and capital structure.

Asgari (1390) accesses in a study the effectiveness of the agency problems of free cash flow on the associated earnings per share and book value per share with stock price that has been paid in the petrochemical and pharmaceutical companies listed in Tehran Stock Exchange during 1381 to 1388.

The findings reveal that earnings per share and book value per share of the stock price has a significant positive correlation and the problems of free cash flow cause the reduction of the associated earnings per share and book value per share with the stock price.

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6. HYPOTHESIS OF THE RESEARCH

Based on the theoretical study, this research has 6 hypotheses as follows:

1. There is a relationship between free cash flow and financial performance of the company.
2. There is a relationship between capital structure and financial performance.
3. There is a relationship between diversification and the company's financial performance.
4. There is a relationship between free cash flows and the company's free cash flow.
5. There is a relationship between diversification and capital structure of the company.
6. There is a relationship between free cash flow and diversification of the company.

7. RESEARCH METHODOLOGY

This research is applied research from the view of goal and descriptive cross – correlation from the view of research methodology. On the basis of survey data, the research is ex-post facto (using past data), because it is done by using actual data of the past years from the Tehran Stock.

8. POPULATION AND STATISTICAL SAMPLE OF THE RESEARCH

The statistical population of the research consisted of all the companies listed in Tehran Stock Exchange. To determine the sample used in this study, according to the number of stock firms, their activities, their different sizes and etc. systematic sampling method is used. This means there are conditions for making the samples homogeneous. Of all the companies listed in Tehran Stock Exchange, companies that have all the following conditions have been considered as a sample:

1. Among the companies that are listed on the Stock Exchange by the end of 1386 and the name of the company during the review of the list of companies accepted in Tehran Stock Exchange are not removed.
2. Their financial year ending in March and the company have not changed their fiscal year during the study period.
3. Its shares are not interrupted more than 3 consecutive months.
4. It is not including the companies in the financial intermediation (investment, holding, banking and insurance).
5. The required information will be available for the period of study.

9. DATA COLLECTION TOOL

The data of this study may be divided into two parts. The first part is related to the literature that collects the information using of the library method. The second part, which includes accounting data and companies reports to the Stocks and Exchange statistical Archive, has been extracted from a software package of new outcomes and site.

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Statistical method is used for data analysis from statistical method and multivariate regression is used for hypothesis test with 16SPSS and 6Eviews software.

10. MODELS USED TO TEST HYPOTHESES

As mentioned earlier, the regression models were used to test the research hypotheses. Each of the main variables means Tobin's Q, free cash flow, capital structure and diversification are considered in the following models as dependent variables and after as the independent variables. To investigate the relationship between financial performance, free cash flow, capital structure and related or unrelated diversification, following Park and Jang (2013) to test the first, second and third hypothesis, model 1 is used; and to test the fourth hypothesis, model 2 is used; and to test the hypothesis fifth, model 3 is used' and to test the sixth hypothesis, model 4 is used is as follows:

Model

1:

$$\ln(Tobins_q)_{i,t} = \alpha + \beta_1 FCF_{i,t} + \beta_2 \ln(TDL)_{i,t} + \beta_3 Diver_{i,t} + \beta_4 CashFlow_{i,t} + \beta_5 Sales GR_{i,t} + \beta_6 \ln(Sales)_{i,t} + \beta_7 DY_{i,t} + \varepsilon_{i,t}$$

Model

$$2: FCF_{i,t} = \alpha + \beta_1 \ln(TDL)_{i,t} + \beta_2 dummy Dividend_{i,t} + \beta_3 \ln(Sales)_{i,t} + \beta_4 DY_{i,t} + \varepsilon_{i,t}$$

Model3:

$$\ln(TDL)_{i,t} = \alpha + \beta_1 \ln(Tobins_q)_{i,t} + \beta_2 Diver_{i,t} + \beta_3 QR_{i,t} + \beta_4 Wcap_{i,t} + \beta_5 \ln(Capx)_{i,t} + \beta_6 \ln(Sales)_{i,t} + \beta_7 DY_{i,t} + \varepsilon_{i,t}$$

Model 4:

$$Diver_{i,t} = \alpha + \beta_1 \ln(Tobins_q)_{i,t} + \beta_2 FCF_{i,t} + \beta_3 \ln(TDL)_{i,t} + \beta_4 RER_{i,t} + \beta_5 PPNE_{i,t} + \beta_6 \ln(Sales)_{i,t} + \beta_7 DY_{i,t} + \varepsilon_{i,t}$$

11. OPERATIONAL DEFINITION OF VARIABLES

Kind of variable	Name of variable	Calculation method	Symbol
In the first model, the dependent variable is independent of the other models	Tobin Q	Market value at the end of year for common stock + Market value at the end of year for preferred stock + book value at the end of year for long-term debt + book value at the end of year for debts with a maturity of less than one year divided by the book value at the end of year of total assets	$Tobinsq_{i,t}$
In the second model, the dependent variable is independent of the other models	Free cash flow	Operating profit before depreciation + total tax payments + paid interest expenses + Preferred shareholders benefit + Benefit of ordinary shareholders divided by the book value of total assets at the end of the year	$FCF_{i,t}$

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In the third model, the dependent variable is independent of the other models	Capital structure	Ratio of total liabilities to total assets	$TDL_{i,t}$
In the fourth model, the dependent variable is independent of the other models	Related and unrelated diversification	If the diversification of the company is unrelated, it will be 1 and otherwise it will be zero	$Diver_{i,t}$
Control variable	Cash flow	Ratio of operating cash flow to total assets	$CashFlow_{i,t}$
Control variable	Sales growth	Differences in sales in year t and t-1 divided by sales t-1	$Sales GR_{i,t}$
Control variable	Natural sales logarithm		$\ln(Sales)_{i,t}$
Control variable	Dummy variable of interest payments	If the interest is paid, shares will be 1 and otherwise will be zero	$dummy Dividend_{i,t}$
Control variable	The ratio of retained earnings	The ratio of retained earnings divided by total assets	$RER_{i,t}$
Control variable	Variables related to fixed assets	Fixed assets ratio divided by total assets	$PPNE_{i,t}$
Control variable	Rapid or immediate ratio	Cash and short-term investments + total accounts receivable divided by total current liabilities	$QR_{i,t}$
Control variable	Working capital	Ratio of current assets divided by current liabilities	$Wcap_{i,t}$
Control variable	Capital expenditures	The difference between the total tangible assets of period t and t-1 divided by the sum of tangible fixed assets of the period t-1	$Capx_{i,t}$
Control variable	Depreciation ratio to total assets		$DY_{i,t}$

12. FINDINGS OF THE RESEARCH

Regarding the results of the test for basic assumptions of regression for models 1, 2, 3, results of the test for these models indicate that:

1. In all 3 models, errors have normally distributed since the mean distribution of errors are close to zero and their standard deviation are one.
2. Fisher F statistic was significant in all 3 models indicate that there is a significant linear correlation at the total regression.
3. Value of the tolerance statistic for each 3 independent variables is close to one and as a result, there is no linear relation between independent variables.
4. Camera-Watson statistic is for all 3 models is between 1.5 to 2.5 and show that there is no correlation between the components of the error.

Because of using logistic regression, model 4 does not need to high tests.

13. TEST RESULTS OF THE FIRST, SECOND AND THIRD HYPOTHESIS (VARIABLES AFFECTING PERFORMANCE)

According to the first hypothesis: There is a relationship between free cash flow and company's financial performance. The second hypothesis states that there is a relationship between capital structure and financial performance of the company. Finally, the third hypothesis states that there is a relationship between diversification with the company's financial performance. As it was, model 1 is used for the test of three hypotheses.

Results of testing data using consolidated data are as the following table.

Test results of the first, second and third hypothesis (factors affecting performance)			
Descriptive variable	Test results		
	Coefficient	t statistic	P-value
Constant amount	0.72	1.19	0.23
Free cash flow	-0.06	-0.12	0.9
Ratio of total liabilities to total assets	-0.55	-1.19	0.23
Virtual variables of related and unrelated diversification	0.27	2.44	0.01
The ratio of cash flow to total assets	-0.06	-0.14	0.88
Sales growth of the company	-0.18	-0.94	0.34
Natural logarithm of sales	0.13	3.29	0.001
Depreciation ratio to total assets	4.32	1.84	0.06
F statistic	1.5		
P-value	0.004		
R2	0.29		
R2. Adj	0.09		
D-W statistic	2.4		

As the table shows, the F statistic and its P-value indicates the significance of the total model 1. Dorbin - Watson (2.4) statistic amount also implies the absence of autocorrelation of errors. Within the independent variables, diversifying natural logarithm of sales has a positive and significant correlation with the performance variable; and free cash flow and capital structure variables had no significant correlation with performance; and therefore, it can be stated that the diversification is impressive on the company's financial performance.

14. TEST RESULTS OF THE FORTH HYPOTHESIS (FREE CASH FLOW- CAPITAL STRUCTURE)

According to the forth hypothesis: There is a relationship between free cash flow and capital structure. Model 2 tests the relationship between capital structure and capital structure. Results of testing model 2 (test model of the forth hypothesis) like the past hypothesis is separated to two parts of test results of the main hypothesis and test results of the relationship between the variables.

Results of testing the data using panel data is as the following table.

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Test results of the forth hypothesis (free cash flow- capital structure)			
Descriptive variable	Test results		
	Coefficient	t statistic	P-value
Constant amount	-0.21	-3.45	0.00
Ratio of total liabilities to total assets	-0.03	-0.77	0.43
Dummy variable of the payment's dividends	-0.01	-0.84	0.4
Natural logarithm of sales	0.02	5.16	0.00
Depreciation ratio to total assets	0.99	4.48	0.00
F statistic	2.4		
P-value	0.000		
R2	0.38		
R2. Adj	0.22		
D-W statistic	2.1		

As the table shows, the F statistic and its P-value indicates the significance of the total model 2. Dorbin - Watson (2.1) statistic amount also implies the absence of autocorrelation of errors. Within the independent variables, diversification natural logarithm of sales and depreciation ratio to total assets has a positive and significant correlation with the free cash flow variable and their significance level is less than 5%. Other variables had no significant correlation with free cash flow variable. Capital structure variable has no significant relationship with free cash flow, too and therefore the forth hypothesis is rejected.

15. TEST RESULTS OF THE FIFTH HYPOTHESIS (DIVERSIFICATION - CAPITAL STRUCTURE)

According to the fifth hypothesis: There is a relationship between diversification and capital structure. Model 3 tests the fifth hypothesis.

Results of testing data using consolidated data are as the following table.

Test results of the fifth hypothesis (diversification - capital structure)			
Descriptive variable	Test results		
	Coefficient	t statistic	P-value
Constant amount	0.82	13.58	0.00
Tobin Q ratio	-0.003	-0.63	0.52
Virtual variables of related and unrelated diversification	0.02	1.84	0.06
Quick or instant ratio of the company	-0.004	-0.16	0.86
Working capital ratio	-0.05	-3.34	0.00
Capital expenditure	0.39	1.56	0.11
Natural logarithm of the company's sales	-0.01	-2.6	0.009
Depreciation ratio to total assets	0.43	1.57	0.11
F statistic	1.07		
P-value	0.032		
R2	0.22		
R2. Adj	0.01		

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D-W statistic	2.19
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As the table shows, the F statistic and its P-value indicates the significance of the total model 3. Durbin - Watson (2.19) statistic amount also implies the absence of autocorrelation of errors. Within the independent variables, working capital and capital expenditure variables have a negative and significant correlation with the capital structure variable and their significance level is less than 5%. Other variables specially related and unrelated diversification had no significant correlation with capital structure and therefore the fifth hypothesis is rejected.

16. TEST RESULTS OF THE SIXTH HYPOTHESIS (DIVERSIFICATION - FREE CASH FLOW)

According to the sixth hypothesis, there is a relationship between diversification and free cash flow. Testing this hypothesis, model 4 and logistic regression are used without any needs for the main hypothesis of the test for regression.

The following table shows the test results of the sixth hypothesis.

Test results of the sixth hypothesis (diversification - free cash flow)			
Descriptive variable	Test results		
	Coefficient	t statistic	P-value
Tobin Q ratio	.29	9.3	.002
Free cash flow	1.11	1.57	.21
Ratio of total liabilities to total assets	1.45	3.34	.06
The ratio of retained earnings divided by total assets	2.21	8.1	.004
The natural logarithm of the ratio of fixed assets divided by total assets	-.229	12	.001
Natural logarithm of sales	.08	1.52	.21
Depreciation ratio to total assets	-5.6	1.81	.17
Constant amount	-3.73	12.38	.00

As the table shows, within the variables in model 4, Wald statistic for variables of Tobin's Q, the ratio of retained earnings divided by total assets, depreciation ratio to total assets and the natural logarithm ratio of the total assets divided by the assets is significant and positive but it is not significant for the variable of free cash flow and the sixth hypothesis is rejected too.

17. CONCLUSION

The results show that diversification impacts on the firm performance. Therefore, it is recommended to companies to diversify their product portfolio to reduce the risk of sales risk for their products. In addition, research findings suggest that the variables of working capital ratio, capital expenditures and the amount of company's sales have been on capital structure. In other words, companies and their managers can consider the mentioned variables for identifying the effective factors on capital structure and determining its optimal level. Regarding the factors affecting the free cash flow, the company's sales have positive and significant relationship with the free cash flow. In other words, the increase in sales can increase free cash flow that is the favorite of shareholders and investors.

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18. RESEARCH PROPOSALS

1. Diversifying the company's product affects the risk and related problems to the sales' reduction; and reducing this risk cause more profitability for the company and reduction their expectations of the company and shares and this matter finally affects the company's capital cost. Therefore, the relationship between the diversification and the company's capital cost can be surveyed. Computing the capital cost, we can use the suitable models according to Iran environment including pricing the capital assets or Fama-French Model.

2. Meanwhile, diversification of the company's products portfolio, especially in the economic depression reduces the effect of depression situation. Moreover, diversification of the products can accompany with useless capacities and improves the sales and continuing the company's activity and as a result, makes the company far from the depression. Therefore, it is proposed that the relationship between the diversification and depression probability will be surveyed. Depression can be tested with different depression models including Falmer model or Altman model.

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