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Survey of the Relationship between Capital Structure and Free Cash Flow with Financial Performance of Companies Listed in Tehran Stock Exchange

Maryam Nakhaei[1*] and Seyedeh Mahbobeh Jafari[2]

[1]Department of Accounting, College of Humanities, Zahedan Branch, Islamic Azad University, Zahedan, Iran
[2]Department of Accounting, College of Management and Accounting, South Tehran Branch, Islamic Azad University, South Tehran, Iran

Abstract

Capital structure is one of the important issues in modern financial theory as not only raised in recent years but also it has received much attention from researchers in recent decade. The goal of cash flow management is restricting the levels of cash flow and maximizing wealth of shareholders. The main goal of this study is evaluation of the relationship between capital structure and free cash flows and financial performance in companies listed on TSE during 2009 to 2013. The capital structure and free cash flow are independent variables and return on asset, annual stock return and economic value added are dependent variables. Firm size is control variable. Generally, data collection method in theoretical basics of study is library method and in hypotheses test, document study of financial statement of companies in stock market site of Tehran can be applied. The statistical method in this study is Pearson correlation method and multiple regression. The results of study show that capital structure has inverse and significant association with evaluation criteria of financial performance (return on asset, annual stock return and economic value added) and firm size. Also, there is a direct and significant correlation between free cash flow and evaluation criteria of financial performance (return on asset, annual stock return and economic value added) and firm size.

Keywords: Capital Structure, Financial Performance, Free Cash Flow, Financial Leverage

1. Introduction

Capital structure is one of the important issues in modern financial theory as not only raised in recent years but also is the important point in recent decades. The need to funding is based on the fact that first, the value of companies causes that to purchase new assets, increase of factory capacity, employment of new force and purchase of raw materials, the cash is required and this financial cash is raised in the form of financial resources (Abzari et al., 2007). Financial resources can have short-term and long-term effect on financial performance. Long-term effect is dedicated to future effects and based on dedicating the cash in projects with "net present value" is positive on price, return and benefits of shareholders. If a company absorbs suitable resources with optimal consumption, net profit of company is increased and value of company is also increased. The second effect is short-term regarding the disclosure of internal information of company to capital market as any information as financial and manufacturing as effective from the view of shareholders and experts of market motivates the reaction of capital market[3]. Capital debts create financial commitment for company and much emphasis on it leads to the increase of financial leverage and bankruptcy and lack of payment of principal and interest. Namely, this is regarding the companies not in good condition, using any other capital debt increases their commitment and shareholders can be

*Author for correspondence

anxious. Thus, the demand for the share of such company as trading in supply and demand market (stock market) is reduced. The shortage of demand for stock and high investment risk in such company can lead to reduced stock price and return reduction (Banarji et al., 2000, 333). Free cash flow is a criterion to measure performance showing net cash flow price as created for company and it includes costs, tax, changes in net working capital and investment. Free cash flow is a criterion measuring profitability of company after all costs and investment.

The main goal of this study is evaluation of the relationship between capital structure and free cash flow and the performance of companies listed on TSE.

The decisions of funding and determination of optimal composition of capital structure on one hand and considering company risk, namely risk of debts solvency on the other hand are the issues as of great importance in decision making of management[6]. One of the most important components of each economic activity is providing required financial resources and these resources are provided from the equity or debt. The financial managers in companies guarantee the best composition of funding resources or capital structure and decisions in this regard increase value of company. Capital structure is one of the issues that many tests are performed on it. Now, many theoretical and empirical studies are performed on it[20]. Investment is a vital issue in economic development of each country. To provide required money for investment, there should be some resources for funding. Thus, for funding, financial managers should consider various resources and also consider risk and return of company and its effect on risk and common stock return of company in stock market. There are various factors determining the risk of a company. One of the factors is company capital structure. The revenue of shareholders and debts of company in capital structure are important issues. Using debt leads to fixed commitments (financial costs) for company. These fixed commitments increase the company risk as if the company couldn't pay the principal and interest of loan, financial distress is made[6]. One of the important issues on common stock return and risk is decisions of capital structure. Using cheap debt leads to reduced capital cost, also it increases financial risk and bankruptcy costs (Stiglitz, 2012). The foundation of the need to evaluation of companies' performance is the importance of capital market. Capital market is of great importance in economy of countries. Not only the liquid capitals are activated via companies by these markets, also it acts as economic prosperity of countries. Thus, considering this market and basic decision making issues can be necessary. The goal of investors of investment in each company is achieving return based on their investment. If the company is successful in value creation, not only the internal people and investors, but also the society can use the value creation. Performance evaluation in decision making process based on the importance of the role of capital market is one of the important issues in financial economy. Thus, function of financial and economic criteria is necessary to evaluate the performance of companies[18].

Based on the importance of capital structure, cash flow and financial performance of companies, the main problem of study is the relationship between capital structure and free cash flow and performance of the companies listed on Tehran Stock Exchange?

2. Study hypotheses

1. There is a significant relationship between capital structure and performance of companies listed on Tehran Stock Exchange.
   - There is a significant association between capital structure and return on assets.
   - There is a significant association between capital structure and annual return on stock.
   - There is a significant association between capital structure and economic value added.
2. There is a significant association between free cash flow and performance of companies listed on Tehran Stock Exchange.
   - There is a significant association between free cash flow and return on assets of companies.
   - There is a significant association between free cash flow and annual stock return of companies
   - There is a significant association between free cash flow and economic value added of companies
3. Study Purpose
   - The evaluation of the theoretical basics of capital structure and performance evaluation criteria and cash flows
   - Presenting applied recommendations to managers of stock companies
   - Identification of the relationship between capital structure and performance of companies listed on Tehran Stock Exchange
   - Identification of the relationship between free cash flow and performance of companies
4. Theoretical Basics of Study

Utami and et al., (2013) in a study "capital structure and organizational life cycle among manufacturing companies of Indonesia. The question was responded as among manufacturing companies in Indonesia, which companies follow hierarchy theory, why? In this study, companies were classified into developing and mature companies. The results of study showed that hierarchy theory explained financial models of developing companies better than mature companies. The results showed that mature companies were inclined to solve the problems of funding via equity (public offering), but growing companies can resolve this problem with debt (bank loans).

Joggy and goul (2011) in the study found the direct relationship between earnings management and high free cash flows in companies with low growth. They believed that according to Jensen theory, in such companies, instead of distributing free cash flows among shareholders by managers, they invest the mentioned money in the projects with negative net present value and this reduced market value of company. The managers of such companies attempt to adjust the existing condition by discretionary accruals increasing profit and achieve some personal benefits.

Sajadi and Jafari (2012) in a study evaluated the capital structure and effective factors via the evaluation of 70 companies in the period leading to the end of 2011. By library studies of theoretical basics of study and by evaluation of accounting documents of companies and data checklists, the required data were collected for analysis and decision making about study hypotheses. By parametric and non-parametric statistical techniques, data analysis was performed. The results of study showed that there was a significant association between firm size, age of managers, education, financial performance of company and capital structure of companies. But there was no significant association between age of company and familiarity of managers and financial concepts with capital structure of companies.

Haeri et al., (2012) in a study with theoretical basics of firm performance, capital cost, capital structure evaluated the performance evaluation criteria, capital cost and relevant theories. Also, the importance of the relationship between capital cost, capital structure and performance of company is defined from the view of management. By capital structure, we can affect total value of company and by considering specific assumptions and inference of investors and their reaction to financial risk changes, we can determine good structure of company capital. Generally, we cannot resolve the benefits of bond holders and common stock of company completely.

Khalife soltani et al.[9] evaluated the effect of capital structure of company and free cash flow on financial performance. The study period was 2010-2002. The results of study showed that there was an inverse and significant association between capital structure and financial performance, and there was no significant relationship between free cash flow and performance of company.

3. Study Method

This study is applied in terms of purpose as it evaluates the relationship between variables in TSE. It also determines the relations and recommendations to improve market efficiency. This study is descriptive-correlation design. Among different types of correlation studies, it is regression analysis in terms of purpose. The study population is the companies listed on TSE. Due to some inconsistencies among the study population, the following conditions are considered:

- Fiscal year of company leads to the end of Esf and of each year.
- The company has no fiscal year change during 2009–2013.
- The company is listed in TSE to the end of fiscal year 2013.
- Company share trade is performed continuously in TSE and trade stopping more than one month is not occurred. Thus, 91 companies are selected by the following conditions.

A part of information as the basis of design is collected by library method. Also, a part of data of hypotheses test is extracted from financial statement of companies and TSE site.

3.1 Data Analysis Method

For data analysis, at first descriptive statistics including mean, standard deviation, skewness, etc. is used and then inferential statistics is applied. Inferential statistics is normality test, correlation test and then multiple regression test.

4. Findings

4.1 Descriptive Statistics

Descriptive statistics of study variables capital structure (CS), free cash flow (FCF), return on assets (ROA), Economic value added (EVA), annual stock return (SRE) and firm size (SIZE) are presented in Table 1.

Table 1. Descriptive analysis of study variables

Kurtosis	Skewness	Variance	SD	Mean	Max	Min	N	Variable
–.121	.312	.220	.312	1.001	3.026	.503	455	CS
.241	.246	2.123	2.178	1729232	12397700	74706	455	FCF
.521	.163	.063	.117	0.712	1.855	–0.95	455	ROA
.389	.943	.015	.159	.776	2.026	1.004	455	EVA
.213	-.299	.025	.142	2.365	3.84	-1.132	455	SRE
.209	.306	1.327	1.156	6.021	16.993	3.137	455	SIZE

This chapter at first evaluates descriptive statistics. The number of observations in descriptive statistics of companies is 455 (91 companies in 5 years). Based on descriptive statistics, dispersion index of these variables in various companies is low. The highest deviation is dedicated to free cash flow and lowest deviation is dedicated to return on assets variable. The skewness and kurtosis of each of variables and its comparison with normal distribution shows that all study variables are distributed as normal as when absolute value of skewness and kurtosis is high, we can say there is a high difference with normal distribution. High skewness shows skewness to negative or positive and kurtosis is regarding the short and long chart of distribution of variables.

4.2 Normality Test of Variables

The results of normality test of variables are shown in the Table 2.

As shown, as significance level in all variables is higher than 0.05, the study variables has normal distribution.

4.3 Correlation Test

As the data distribution is normal, to evaluate correlation between variables, Pearson correlation coefficient is applied.

As shown in Table 3, capital structure has inverse and significant association with criteria of evaluation of financial performance (return on assets, annual stock return and economic value added) and firm size. There is a direct and significant correlation between free cash flow and evaluation criteria of financial performance (return on assets, annual stock return and economic value added) and firm size.

5. Study Hypotheses

5.1 First Hypothesis Test

In this study, first hypothesis evaluates the relationship between capital structure of company and financial performance. This hypothesis has three sub-hypotheses.

Table 2. Normality test of variables

Significance level	Z Kolmogrov-Smirnov	Variables
.238	2.031	CS
.691	1.712	FCF
.299	1.450	ROA
.642	1.741	EVA
.582	1.777	SRE
.447	1.247	SIZE

Table 3. Pearson correlation test of study variables

SIZE	SRE	EVA	ROA	FCF	CS	Variable
–.452*	–.520**	–.432*	.294**	–.853*	1	CS
.308*	.196**	.407**	.385**	1	–.853*	FCF
.157**	.083	.180	1	.385**	–.294**	ROA
.371**	.068	1	.180	.407**	–.432**	EVA
.311*	1	.068	.083	.196**	–.520**	SRE
1	.311*	.371**	.157**	.308*	–.452*	SIZE

**Significant at error level 1%

*Significant at error level 5%

5.1.1 First Sub-Hypothesis

In this study, first sub-hypothesis evaluates the relationship between capital structure of company and return on assets. The result of regression is shown in Table 4.

As shown in Table 4, capital structure and firm size (p-value<5%) have significant relationship with return on assets rate. Coefficient of variables shows that the relationship between firm size and return on assets rate is higher than to the capital structure. The variable of capital structure has significant and inverse relation with return on assets and firm size and return on assets has direct and significant relationship. As shown in F statistics, fitted regression model is significant. Based on coefficient of determination, these variables explain 19.7% of changes

of return on assets. As Durbin-Watson statistics is ranging 1.5–2.5, we can say there is no auto-correlation problem between variables.

5.1.2 Second Sub-hypothesis Test

In this study, second sub-hypothesis evaluates the relationship between capital structure and annual return rate of stock. The result of its regression is shown in Table 5.

Table 4. Results of multi-variate regression of capital structure of company and return on assets rate

Significance level	T statistics	Coefficient	Variable name	Symbol	Type of variable
_	_	_	Return on assets	Y	Dependent variable
0.025	1.648-	1.744-	Alpha	α	Constant
0.001	1.995-	*0.240-	Capital structure	X1	Independent variable
0.020	1.802	*0.62	Firm size		Control variable
_	_	1.856	Durbin-Watson		
0.003	_	3.742	F statistics		
_	_	0.443	Correlation coefficient	R	
_	_	0.197	Coefficient of determination	R Square	
_	_	0.196	Adjusted coefficient of determination	Adjusted R Square	

*Significance level is 0.05

As shown in Table 5, capital structure and firm size (p-value<5%) have significant relationship with annual stock return rate. Coefficient of variables shows that the relationship between firm size and annual stock return is higher to the capital structure. The variable of capital structure has significant and inverse relation with annual stock return and firm size and annual stock return has direct and significant relationship. As Durbin-Watson statistics is ranging 1.5–2.5, we can say there is no auto-correlation problem between variables.

As shown in F statistics, fitted regression model is significant. Based on coefficient of determination, these variables explain 44.6% of changes of annual stock return.

5.1.3 Third Sub-hypothesis

In this study, third sub-hypothesis evaluates the relationship between capital structure and economic value-added. The result of regression is shown in Table 6.

As shown in Table 6, capital structure and firm size (p-value<5%) have significant relationship with economic value added. Coefficient of variables shows that the relationship between firm size and economic value added is higher to the capital structure. The variable of capital structure has significant and inverse relation with economic value added and firm size has direct and significant relationship with economic value added. As shown in F statistics, fitted regression model is significant. Based on coefficient of determination, these variables explain 44.6% of changes of economic value added.

As Durbin-Watson statistics is ranging 1.5–2.5, we can say there is no auto-correlation problem between variables.

Table 5. The results of multi-variate regression of capital structure of company and annual stock return rate

Significance level	T statistics	Coefficient	Variable name	Symbol	Type of variable
_	_	_	Annual return rate of stock	Y	Dependent variable
0.002	1.544	1.765	Alpha	α	Constant
0.040	1.531-	*0.357-	Capital structure	X1	Independent variable
0.001	1.985	*0.645	Firm size	Control variable	
_	_	1.775	Durbin-Watson		
0.003	_	14.002	F statistics		
_	_	0.668	Correlation coefficient	R	
_	_	0.446	Coefficient of determination	R Square	
_	_	0.445	Adjusted coefficient of determination	Adjusted R Square	

*Significance level is 0.05

5.2 Second Hypothesis Test

In this study, second hypothesis evaluates the relationship between free cash flow and performance of companies. This hypothesis has three sub-hypotheses.

5.2.1 First Sub-hypothesis Test

In this study, first sub-hypothesis evaluates the relationship between free cash flow of company and return on assets. The result of regression is shown in Table 7.

As shown in Table 7, free cash flow and firm size (p-value<5%) have significant relationship with return on assets. Coefficient of variables shows that the relationship between firm size and return on assets is higher to the free cash flow. The variable of free cash flow and firm size has significant and direct relation with return on assets. As shown in F statistics, fitted regression model is significant. Based on coefficient of determination, these variables explain 41.6% of changes of return on assets. As Durbin-Watson statistics is ranging 1.5–2.5, we can say there is no auto-correlation problem between variables.

5.2.2 Second Sub-hypothesis Test

In this study, second sub-hypothesis evaluates the relationship between free cash flow and annual stock return ate. The result of regression is shown in Table 8.

As shown in Table 8, free cash flow and firm size (p-value<5%) have significant relationship with annual stock return rate. Coefficient of variables shows that the relationship between firm size and annual stock return

Table 6. The results of multi-variate regression of capital structure of company and economic value-added

Significance level	T statistics	Coefficient	Variable name	Symbol	Type of variable
_	_	_	Economic value added	Y	Dependent variable
0.000	1.965	1.445	Alpha	α	Constant
0.000	1.718-	*0.229-	Capital structure	X1	Independent variable
0.000	1.754	*0.387	Firm size	Control variable	
_	_	1.894	Durbin-Watson		
0.001	_	6.987	F statistics		
_	_	0.702	Correlation coefficient	R	
_	_	0.492	Coefficient of determination	R Square	
_	_	0.491	Adjusted coefficient of determination	Adjusted R Square	

*: Significance level is 0.05.

Table 7. The results of multi-variate regression of free cash flow of company and return on assets rate

Significance level	T statistics	Coefficient	Variable name	Symbol	Type of variable
_	_	_	Return on assets rate	Y	Dependent variable
0.050	1.705	1.545	Alpha	α	Constant
0.003	1.950	*0.447	Free cash flow of company	X1	Independent variable
0.003	1.840	*0.745	Firm size	Control variable	
_	_	1.921	Durbin-Watson		
0.001	_	6.950	F statistics		
_	_	0.645	Correlation coefficient	R	
_	_	0.416	Coefficient of determination	R Square	
_	_	0.415	Adjusted coefficient of determination	Adjusted R Square	

*: Significance level is 0.05.

rate is higher than to the free cash flow. The variables of free cash flow and firm size have significant and direct relation with annual stock return rate. As shown in F statistics, fitted regression model is significant. Based on coefficient of determination, these variables explain 36% of changes of annual stock return rate.

As Durbin-Watson statistics is ranging 1.5–2.5, we can say there is no auto-correlation problem between variables.

5.2.3 *Third Sub-hypothesis Test*

In this study, third sub-hypothesis evaluates the relationship between free cash flow and economic value added. The result of regression is shown in Table 9.

As shown in Table 9, free cash flow and firm size (p-value<5%) have significant relationship with economic value added. Coefficient of variables shows that the relationship between firm size and economic value added is higher than to the free cash flow. The variable of free cash flow and firm size has significant and direct relation with economic value added. As shown in F statistics, fitted regression model is significant. Based on coefficient of determination, these variables explain 33.7% of changes of economic value added.

As Durbin-Watson statistics is ranging 1.5–2.5, we can say there is no auto-correlation problem between variables.

Table 8. The results of multi-variate regression of free cash flow of company and annual stock return rate

Significance level	T statistics	Coefficient	Variable name	Symbol	Type of variable
_	_	_	**Annual stock return rate**	**Y**	**Dependent variable**
0.001	1.911	2.106	Alpha	α	Constant
0.000	1.772	*0.441	Free cash flow of company	X1	Independent variable
0.001	1.635		Firm size	Control variable	
_	_	1.668	Durbin-Watson		
0.000	_	8.840	F statistics		
_	_	0.600	Correlation coefficient	R	
_	_	0.36	Coefficient of determination	R Square	
_	_	0.35	Adjusted coefficient of determination	Adjusted R Square	

*: Significance level is 0.05

Table 9. The results of multi-variate regression of free cash flow of company and economic value added

Significance level	T statistics	Coefficient	Variable name	Symbol	Type of variable
_	_	_	Economic value added	Y	Dependent variable
0.000	1.713	1.589	Alpha	α	Constant
0.002	1.947	*0.331	Free cash flow	X1	Independent variable
0.000	1.829	*0.398	Firm size	Control variable	
_	_	1.796	Durbin-Watson		
0.000	_	4.546	F statistics		
_	_	0.581	Correlation coefficient	R	
_	_	0.337	Coefficient of determination	R Square	
_	_	0.337	Adjusted coefficient of determination	Adjusted R Square	

*: significance level is 0.05

6. Conclusion and Discussion

The important findings of the study are including:

- There is an inverse and significant association between capital structure and return on assets of companies listed on TSE during 2009-2013. We can say the companies with high financial leverage have low return on assets.
- There is an inverse and significant association between capital structure and annual stock return rate of companies listed on TSE during 2009-2013. We can say the companies with high financial leverage have low annual stock return rate.
- There is an inverse and significant association between capital structure and economic value added of companies listed on TSE during 2009-2013. We can say the companies with high financial leverage have low economic value added.
- There is direct and significant association between free cash flow and return on assets of companies listed on TSE during 2009-2013. We can say the companies with high free cash flow have high return on assets.
- There is a direct and significant association between free cash flow and annual stock return of companies listed on TSE during 2009-2013. We can say the companies with high free cash flow have high annual stock return.
- There is a direct and significant association between free cash flow and economic value added of companies listed on TSE during 2009-2013. We can say the companies with high free cash flow have high economic value added.
- There is a direct and significant association between firm size and financial performance of companies listed on TSE during 2009-2013. We can say the companies with high size have high financial performance.

The companies with big size, with high assets, invest mostly in profitable projects as these companies by adequate financial resources and expert managers in financial affairs can make correct decisions in financial affairs and one of the correct decisions is using growth and investment opportunities.

Based on first hypothesis test, there is an inverse and significant association between capital structure (financial leverage) and criteria of evaluation of financial performance of companies listed on TSE. This result shows that financial leverage indicates the use of debts in capital structure and financial leverage indicates bankruptcy risk of company. If the financial leverage is high, the managers are obliged to ignore dividend policy to save the companies from bankruptcy risk and they can use investment opportunities less. If the financial leverage and debts of company are increased, the managers of company are obliged to direct financial resources and cash flow to the reduction of debts and reduce the cash flow of company. High financial leverage increases the bankruptcy risk of company and this obliges the managers to be cautious and less investment on stock. If the bankruptcy risk is increased, the company is obliged to use the high debt in capital structure and the managers cannot use the growth opportunities of company and the investment leading to increase of value of company and its financial performance can be reduced. Profitability of companies requires high financial resources and evaluated investment and listing of company in new target markets. High financial leverage prevents the above items. Thus, profitability of company is reduced.

The results of hypothesis are consistent with the studies of Daskalakis, N., & Psillaki[34], Sogorb[54], Sajadi and Jafari (2012) and Khalife soltani et al[9].

Based on second main hypothesis, the relationship between free cash flow and evaluation criteria of financial performance of companies listed on TSE is direct and significant. It means that free cash flow is a criterion to measure performance of companies. Also, it indicates the cash flow of company after required expenditures to keep or develop assets. Free cash flow is of great importance as it allows the managers to search the opportunities as increasing stock value of company. Without cash flow, development of new products, commercial acquisition, payment of cash profit to shareholders and reduction of debts are not possible. Also, cash flow is kept as there is a balance between holding cost of cash flow and inadequate cash flow cost.

The results are consistent with the study of Bolan and Yan (2012), Khalife Soltani et al.[9], and Moradzadefard et al., (2010).

Based on the evidences of study and results of hypotheses test, some recommendations are presented for TSE, management of companies, shareholders, banks and credit institutes, students and researchers:

1. Based on the result of first main hypothesis test regarding the inverse and significant association between

capital structure and financial performance, it is recommended as:

- The financial leverage and debts of company are decreased that the company by adequate cash flow and financial resources can use investment opportunities and stock purchase of the profitable companies.
- It is recommended to investors to invest on the companies with low financial leverage and bankruptcy risk.
- Managers shouldn't use debt and borrowing for funding and they can use internal resources as based on the results of this study, high financial leverage reduces profitability and performance of company.

2. Based on the result of second main hypothesis test regarding the direct and significant association between free cash flow and financial performance, we can recommend:
   - It is recommended to managers to identify the factors increasing free cash flow and improve liquidity of stock.
   - It is recommended to people, institutes and organizations to consider liquidity rank of companies in investment in stock market as stock market introduces liquidity rank of companies as a symbol of stock liquidity of companies. The companies with high liquidity, have high free cash flow and high financial performance.
3. Based on the direct association between firm size and stock performance, it is recommended to investors that big companies have adequate financial resources and decisions are made by expert managers to financial issues. Thus, investment on big companies can lead to high profitability.

7. Recommendations for Further Studies

- Evaluation of the effect of macro-economic variables, inflation, oil and exchange rate on the relationship between capital structure, free cash flow and financial performance of companies.
- The study of the effect of type of industry on the relationship between capital structure, free cash flow and financial performance of companies.
- Evaluation of the relationship between capital structure, free cash flow and financial performance of companies during life cycle of companies and division to high and low growth opportunities.
- Investigation of the relationship between capital structure and free cash flow with other criteria of financial performance as value added of market, ratio of market value to book value, Q-Tobin ratio, etc.

8. References

1. Ahmadpour A, Salimi A. The effect of industry and size on capital structure of the companies listed on TSE. Journal of social sciences and human sciences. Shiraz University. 2010; 55.
2. Etemadi H, Javad M. The evaluation of the effective factors on capital structure of the companies listed on TSE with emphasis on competition of production market. Journal of Accounting and Audit. 2013; 73:1–26.
3. Izadinia N, Dastjerdi M. Capital structure on stock return. Accounting research. First year. 2007; 3.
4. Tehrani, R. Financial management. Negah Danesh publications; 2008.
5. Saghafi A, Qasem B, Mohammad M. Quality of accounting information. Over-investment and free cash flow. Journal of Accounting Progress. NO. 61. Fall and winter. 2011. p. 37.
6. Jola G. Eslami BJ. The evaluation of the relationship between capital structure and systematic risk of companies listed on TSE. Journal of TSE. 2010; 8:91–113.
7. Hejazi R, Saber K. The effect of economic factors and corporate properties on capital structure of companies listed on TSE. Journal of Financial Accounting Research. 2013; 16:1–16.
8. Haghighat H, Ali A. Utility of accounting estimation in earnings forecast and future cash flow. Empirical research of financial accounting. 2011; 2:29.
9. Khalife S, Seyed AS, Rahman AH. The evaluation of the effect of specific features of company and leadership tools of company on capital structure by Tobit model. Journal of financial accounting research of Isfahan University. 2012; 4:112–35.
10. Khalili A, Beitollah AM, Masume A. The effect of environment risks, company strategy and capital structure on performance of companies in Petrochemical industry. Journal of Development and Change Management. 2009; 41–7.
11. Dadashi I, Asghari M, Zarei S, Jafaribani M. The evaluation of the effect of capital structure and funding method on efficiency of pharmacological companies of listed on TSE. Journal of Accounting of Health. 2013; 3:1–19.
12. Rai R. Financial management. Second Vol. Agah publication; 2010.
13. Raymond P. Nov. Financial management. In: Jahankhani A, Parsayina A. Tehran. SAMT. 2001.

14. Salimi S. The effect of industry and size on capital structure of companies in Iran. [MA thesis]. Human sciences and social sciences University of Mazandaran; 2004.
15. Sinayi H, Selgi M, Mohammadi K. The effect of growth opportunities on the relationship between capital structure, dividend and ownership structure and value of company. Journal of Financial Accounting Research. 2012; 10:87–102.
16. Ali M, Marufani A, Jalal. The evaluation of the relationship between capital structure and profitability of companies listed on TSE. Journal of Accounting and Audit. Tehran University. 2008; 42.
17. Arabsalehi M, Rozita M, Sajad K. The effect of risk of environment and strategy of company and capital structure on performance of companies listed on TSE. Journal of Financial Accounting Research. 2012; 13:47–70.
18. Azizi MA, Alame HF. The theoretical basics of funding methods, capital cost and capital structure. Economy of Accounting and Financial Management. 2012; 107–29.
19. Qalibafasl H, Izadi S. The empirical study of static balance theory in TSE. Knowledge and Development. 2009; 26.
20. Keshavarz S, Mosavi H. The evaluation of the relationship between capital structure and systematic risk levels in companies listed on TSE. Journal of Management. 2012; 19–36.
21. Mayers S. The capital structure puzzle. Translated by Farhad Abdollahzade. Tehran. Journal of Financial Research; 1994; 2:73–91.
22. Mostavafi MS. Explaining the capital structure model of companies listed on TSE. Journal of Financial Researches. Tehran University. 2007; 16.
23. Nikbakht MR, Moghimi AA. The evaluation of the relationship between economic value added and capital structure. Journal of Auditor. 2012; 56.
24. Nikomaram H, Fereidon RR, Farshad H. The basics of financial management. Second Vol. Terme publications; 2009.
25. Nikbakht MR, Peikani M. The evaluation of the relationship between capital structure and performance evaluation market criteria in companies listed on TSE. Journal of Public Management Researches. 2010; 9:57–76.
26. Vakilifard H. The decision making in financial issues. Second Volume. Foj scientific publications; 2012.
27. Antoniou A, Guney Y, Paudyal K. The determinants of capital structure: capital market oriented versus bank-oriented institutions. Journal of Financial and Quantitative Analysis. 2008; 43(1):59–92.
28. Aharony J, Falk H, Yehuda N. Corporate Life Cycle and the Value Relevance of Cash Flow versus Accrual Financial Information. School of Economics and Management Bolzano, Italy. Working Paper. 2006. p. 34.
29. Balla A, Mateus C. An Empirical Research on capital structure Choices. University of Pecs / Faculty Business and of economics Working Paper, Hungary. 2002.
30. Beasli RM, Bringham CC. Evidence on the existence and determinants of inter-industry differences in leverage. Financial Management. 1999; 11:10–2.
31. Bradley M, Jarrell G, Kim EH. On the existence of an optimal capital structure: Theory and evidence. Journal of Finance. 2006; 39:857–78.
32. CaiJie ZZ. Leverage change, debt overhang, and stock prices. Finance. 2011; 391–402.
33. Chen S. How do leverage ratios affect bank share performance during financial crises: The Japanese experience of the late 1990s. Journal of the Japanese and International Economies. 2013 Dec; 30:1–18.
34. Daskalakis N, Psillaki M. The Determinants of Capital Structure of the SMEs: Evidence from the Greek and the French firms. 2005.
35. De Angelo H, De Angelo L. Capital Structure, Payout Policy, and Financial Flexibility. Working Paper No.FBE 02-06, Marshall School of Business, University of Southern California. 2006. Available at SSRN: http://ssrn.com/abstract=916093;
36. Duru A, Raghavan JI, Ernest MZ. Performance choice, executive bonuses and corporate leverage. Journal of Corporate Finance. 2012; 18(5):1286–305.
37. Frank MZ, Goyal VK. Trade-Off and Pecking Order Theories of Debt. Working Paper, Carlson School of Management, University of Minnesota. 2006. Available at SSRN: http://ssrn.com/abstract=670543;
38. González VM. Leverage and corporate performance: International evidence. International Review of Economics and Finance. 2013 Jan; 25:169–84.
39. Jaine MA, Khaine A. Finance in family business. Family Business Review. 2007; 9(4):387–401.
40. Jon JB. Financial information for decision making: An alternative small firm perspective. The Journal of Small Business Finance. 1992; 1:221–32.
41. Kroes JR, Andrew SM. Cash flow management and manufacturing firm financial performance: A longitudinal perspective. International Journal of Production Economics. 2014 Feb; 148:37–50.
42. Laarni BZY. The Pecking Order Theory and the Firm's Life Cycle. Forthcoming, Banking and Finance Letters, 1- 2009; 16–1.
43. Marques MO, Santos MC. Capital Structure Policy and Determinants: Theory and Managerial Evidence. Working Paper, Department of Economy, University of Porto, Portugal. 2004. Available at SSRN: http://ssrn.com/abstract=494143
44. Maryai R, Holmes S, Hutchinson P, Forsaith D. Small enterprise financial management: Theory and practice. Sydney, New South Wales: Harcourt Brace; 2007.
45. Michaelas N, Chittenden F, Poutziouris P. Financial Policy and Capital Structure Choice in U.K. SMEs: Empirical

Evidence from Company Panel Data. Small Business Economics. 1999; 12:113–30.
46. Mishckin MZ. Trade-Off and Pecking Order Theories of Debt.Handbook of Corporate Finance. 2011.
47. Modigliani F, Miller MH. The Cost of Capital Corporation Finance and the Theory of Investment. American Economic Review. 1958; 48(3).
48. Mulaies S. Determinants of corporate borrowing. Journal of Financial Economics. 2007; 5(2):147–75.
49. Myers SC. Capital Structure. Journal of Economic Perspectives. 2001; 15(2).
50. Myers SC, Majluf NS. Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics. 1984; 13(2):187–221.
51. Park K, Soo CJ. Capital structure, free cash flow, diversification and firm performance: A holistic analysis. International Journal of Hospitality Management. 2013; 33:51–63.
52. Rilie AG, Brown R. The Canadian small business-bank interface: A recursive model. Entrepreneurship: Theory and Practice. 2003; 18(4):5–24.
53. Siti RU. The Relationship between Capital Structure and the Life Cycle of Firms in the Manufacturing Sector of Indonesia.International Research Journal of Finance and Economics. 2013.
54. Sogorb F. How SME uniqueness affects capital structure: evidence a 1994-1998 Spanish data panel. Small business economics. 2005 Dec; 25(5):447–57.
55. Tong Z. Firm diversification and the value of corporate cash holdings. Journal of Corporate Finance. 2011 Jun; 17(3):741–58.
56. Weston JF. Toward Theories of Financial Policy. Journal of Finance. 1955; 10(2).
57. Weston JH, White JF. A small business is not a little big business. Harvard Business Review. 2007 Jul–Aug; 18–32.