

Surveying the effect of type of industry and size of company on financial structures of admitted companies on Tehran stock exchange

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ABSTRACT

The subject of research relates to size of company and type of industry and it pays for surveying the effect of these two factors on financial structure of companies. The main goal of this research is studying different effects of size of company and type of industry on financial structure of admitted companies on Tehran stock exchange. The current research is descriptive, due to collecting information. The required data for testing hypotheses are financial information of admitted companies in market of Tehran stock exchange which is extracted from audited financial statements of these companies. The time limitation of this research is five sequential year from 2011-2015 in which the surveying of research hypotheses is taken out by using real data of these years. According to subject of research, the information in regard to above mentioned period was collected and analyzed based on hypotheses test pattern. In the current research, the classified and audited financial data of active, admitted companies in Tehran stock exchange are used. The statistical society of this research is involved 7 industrial group of admitted companies on Tehran stock exchange that are consisting the group of main metal companies, automotive and spare-parts manufacturing companies ,material and pharmaceutical products group companies, cement, lime and chalk companies group, chemical production group companies machinery and equipment group companies, food production group companies . The analysis of this research is done by SPSS software in confidence level of 95 percent. In this line, the analysis is taken out by comparing average amounts and the second hypothesis is analyzed by test of liner regression. Finally, it has been concluded that the kind of industry affects financial structure of sample statistic. And the size of company affects financial structure of sample statistic companies.

1-Introduction

The Financial structure is addressed as one of important, effective parameters of companies. It is formed from combination of debts, equity rights for supplying required financial requirements of companies. Decision-making about financial structure of company is one of challenging and difficult issues of companies, yet it is more critical decision about existence of company. These decisions which are main fields of decision making of financial managers of corporations should be adopted at the line of maximizing values of company. Hence, the questions such as; which factors are effective in determining financial structure of companies? Whether there is optimal financial structure which maximizes the value of company?

The financial matters have engaged the minds of researchers for many years and some theories have offered for answering these questions, but yet no single theory was able to answer this matter in regard to financial structure.

2-Statement of the problem:

The theories in relation to financial structures have emphasized that due to differentiation of inside parameters of companies, the ways of supplying financial matters and risks of these companies are different and the selection depends on features and inside parameters of companies. The results of empirical researches have emphasized on factors such as; the size of company, growth and investment opportunities, the amount of evident fixed assets, profitability, profit volatility, and qualitative variations on company performance such as the type of industry in determining financial structure of company ,but as the features and

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factors related to company are invisible and abstract, in empirical researches generally one or more than one visible variable is used for formation of one index or indicator for these invisible variables. These indexes or indicators may be completely present the measurable features and could be used with error measure as hidden variables criteria. This could lead the empirical researches with difficulties in this field. The size of company and structure of asset is known as financial leverage. The size of company has known as important factor on financial leverage and it is believed that the large companies due to ability in using different financial resources are less vulnerable to bankruptcy. And during bankruptcy, the rates of expenses are less in comparing to the total value of company for large companies and they are more capable for borrowing loans. By increasing the size of company, the financial leverage increases too. Also, the newly established companies, foreign – owned companies and the companies with proper cash status have higher financial leverage. The effect of size of company on financial leverage is more complex. The large companies tend to be more versatile. So, the size of company is a criteria for possible bankruptcy based on this, large companies may publish more securities with less expenses in comparison to small companies and perhaps they are more credible. Thus they prefer financial supply by non-banking debts (publishing securities), this is usually unavailable for small companies. (Arab Salehi and Tahmasebi, 2010, pages 89).

There are very few asymmetric information in regard to large companies, while these companies would like to offer more information to stakeholders and foreign investors and this increases their priority to shareholders rights (capital) in relation to debts. In other words, they would like to use capital instead of debts in their capital structure (Arab Salehi and Tahmasebi, 2010, pages 89).

In addition, according to the bankruptcy theory, the size of company has main role in decision-making in the field of capital structure because large companies tend to diversify structure of capital, so they have more risky power and are less exposed on bankruptcy danger. As a result, it is expected the large companies expand their scope of activities and have more capability for borrowing loans. Thus, it is anticipated that the capital structure of large companies exceeds from the amount of debts (Arab Salehi and Tahmasebi, 2010, pages 89).

In general, the meaning of size of company is the amount and volume of activity of a company. So that the important point in measuring the size of company is that: what element should be used as criteria in order to separate the companies from point of size and volume of companies in correct and exact form? Therefore, the important point in explaining size of company is measurement scale. The researchers in their study applied various indexes for measuring size of company. The value of assets, the amount of sale, the sum of sale and assets can be pointed out among these indexes. Each one of these indexes couldn't show the size of company. It seems all of these different scales are suitable for measuring the volume and extent of activity of companies. For example, the total amount of sale of company, the total amount of assets to the market value could be used as determining index for size of company.

3-The importance of subject:

The structure of capital is the combination of the financial resources achieved from rights of share-holders and sum of debts of companies which are used in the event of supplying required cash-payments (Kooher and Raool, 2007). By considering the needs of companies in supplying required assets for doing commercial plans and investments, cash payments, providing these resources and achieving the payments which have the least financial expenses and the most flexibility for company are more important. So the combination of these cash payments which is called the structure of capital is among factors that could be effective on continuing company's activity and value of company. Therefore, the major part of financial managers decisions are about this subject (Dimitiries and Maria, 2011). On the other hand, by ever-increasing economic and commercial activities and becoming commercial & sharing companies and separation of management from ownership, the commercial units incur expenses which are the results of conflict between goals and benefits of owners and inequalities of information existed among mentioned people. Then, by considering above-mentioned, surveying the structure of capital and its relation with changes in some of main accounting variables became necessary.

4-The theories of capital instruction:

As further stated; the purpose of financial structure is a quality with which can supply the financial requirements for preparing assets, in other words, the financial structure of a company is referred to the sum of items on left side of balance-sheet which includes total debts and net value. While the purpose of capital instruction quality of financial supply of company is constant which generally is shown by long-time debts, preferred stock and regularly stock and do not include short time loans. As by noting to the special situation and conditions of Iranian companies which the current debts forms the most volume of their debts, thus there is not a lot differences between capital and financial structure, in fact in Iran the structure of capital of companies is the same of their financial structure (Shirzadeh, 2012).

4-1-Traditional theory

The basis of above theory is on favorable structure of capital and could raise the capital of company by using this leverage value. In fact, this theory suggests that the company could decrease the expenses of its capital by increasing the amount of debts. Although by raising the leverage value, the rate of rights of share-holder's increases, but this increase is not in such an amount that competently neutralizes the usage of debt, though by unusual increase of rate of debt, the share-holders increase

return rate more than usual which eliminates the advantage of debt. The advocates of traditional theory offer two rationales for defending their theory:

First, the investors like the created financial risk by financial lever at the average limit. However, when the debts became more, they notice the risk ,if so, the investors with average debts must accept the lower return rate .Of course this rationale is very simplilistic,because in capital market the information about companies are easily available , and the investors are logical people and do not risk and anticipate higher return rate for high risks.

The second reasoning is that, we accept this rationale in complete capital market, while the real market is imperfect. This deficiency causes the leverage stock deal in market to high prices in comparison to its price of incomplete capital.

Supposing that the companies could borrow cheaper than persons, in this case persons could proceed for buying stocks of company instead of borrowing and in this way, they could borrow in low prices.as a result, they will accept that the return rate is lower than the amount that can compensate its commercial and financial risks, then by increasing debts, the expense of company capital will come down. But as companies borrow loans cheaper than peoples, it is difficult we argue, because the interest rates for mortgage of house are not very difference with rates of securities of first – class companies.

Also, these people argue that there is saving on scale .if every single person borrows itself; they will have many side expenses. However if they borrow by company in mass amount, the expenses would be less. So they are satisfied to achieve less return. But this may cause satisfaction and will bring the people toward industry and act as a company because at present time there is no unsatisfied customer for different kinds of financial leverage and nobody is ready to neglect its own return. (Shirzade, 2012).

4-2- Theory of Modigliani and Miller

The theory of new structure of capital is offered by Modigliani and Miller in 1958.¹They used "Arbitrage concept" for offering the theory of capital structure and approved that the value of company is not affected by capital structure with the existence of limited assumptions.

Therefore, the result of research of these two researchers represents that the way of financial supply of company activities has no importance, because by considering these assumptions ,the financial structure is imperfect, in other words, if the tax reaches to zero, the increase of share-holders return resulting from applying leverage becomes neutral. So, in any level of loan, the share-holders return is just at a level that neutrals the related risk, and then using financial leverage has no benefit.

Some of initial assumptions of these two researchers which has been adjusted over the time are as followings:

1- There is no personal or company taxes.

2- Current and future investors make similar estimates in relation to profit before interest and future taxes of company, that is ,the investors have homogeneous expectations about expected future profits and risk of these profits.²

3- The stocks and securities are traded in complete capital market.

This assumption is based on these premises that: firstly, there are no broker expenses and in second place, the investors (persons and organizations) could borrow loans like companies and with the same rate.

4- The debts of companies and persons are without risks. Therefore, the interest rate of all debts from any kind is without risk. Besides, this assumption is based on this premises that the amount of loan borrowed by persons or organization has no importance.

5- All cash payments are always constant. So, the companies expect to have growth with zero rates, consequently profit before interest and tax is exceptionally fixed and securities never reach to their final due- times (Shirzadeh, 2012).

5- Review of past researches

Hassan And Boot (2011) reviewed the effect of property structure and management system of company on capital structure.in this research the three variables; the size of board director, the combination of board director and membership of managing director on board director are used as measuring indexes of management systems of company and the percentage of stocks and shares belonging to managers and institution share-holders are used as measuring criteria of property structure. the results showed that the size of board director and manger share holder have negative and meaningful relationship with financial leverage ratio, while the membership of managing director in board director and combination of board director has no meaningful relation on capital structure. Also the findings of this research represent positive but without meaningful relations between institution property and capital structure. Sergorobe (2010) surveyed how the characteristics of small companies effect on their capital structure in Spain .this researcher take out his research by using data of 6482 companies in 8 different industry during 1994- 1998. The results showed that the tax shields and profitability of these companies has negative relation with capital structure while the size of company, growth opportunities and assets structures have effective, positive relationship with capital structure. Pao (2011) surveyed the effective factors on capital structure of Taiwanese companies by using multi-liner regression and neural network models. The findings for years 2000 – 2009, represented that the effective factors on capital structure in two kinds of industry with high and traditional technology were different. In addition, the neural networks models in relation to liner regression models had better capability for predicting and fitness and it seemed the relation between debts and independent variables (determining factors) was not liner. Ebrahim (2014) surveyed the capital structure and performance

¹ Franco Modigliani and Merton Miller (MM)

² Homogeneous Expectations

of admitted companies in Egypt stock exchange on periods 1997-2009. The results of his research showed that in normal situations, there are poor meaningful relations between capital structure and performance of company while in financial crisis and inflation courses, the mutual relations between these two variables intensify.

Khajavi and Houssaini (2010) surveyed the relations between the kind of companies property (political support of government) and capital structure of admitted companies in Tehran stock exchange. In this research which have done for a period of 10 years, the other independent variables such as; size of company, investment and growth opportunities, the rate of fixed visible assets to sum of assets and return assets are also used, among them, the size of company was as a control variable. The results of research represents that there is positive and meaning relations between capital structure and political support. This finding shows that the capital structure of governmental companies in Iran has no necessary proficiency and it is needed to have more control for achieving improved capital structure. This is not possible except by implementing correct privatization. Yahyazade and et al (2011) in a study, surveyed the relations of features of company with capital structure in admitted companies in Iran market. They considered specifications like the size of company, assets structure, profitability, and expected growth, the coverage rate of interest expense, temporary rate, and asset efficiency. The number of sample research was 103 companies and the period was from 2002 – 2008. The results showed that there is a negative and meaningful relation between debts of company with asset structure, profitability, the rate of value to office value, temporary rate and proficiency of assets. Also, the relationship between the size of company and coverage rate of expenses with company structure is positive. Poorheidari and Yosefzadeh (2012) in a study surveyed the effective factors on financial structure of admitted companies in Tehran stock exchange with attitude of modeling structural equations. This study attempts to determine the relative importance of each one of effective factors on financial structure. The time period of study was from 2000 – 2007. In this research, the multi-indexes of multi – causes models "in fact it is a special modeling of structural equations" were used for surveying effective factors on financial structures, and the effect of company factors including growth, the security value of assets, profitability, volatility of profits, the size of company, the kind of industry on hidden instruction of company was used. The financial structure were measured simultaneously with two rates of long-time and short – time debts with market value of share-holders rights. The achieved results showed that the securities value of assets were important factor in financial structure. The other determining factors of financial structures based on their importance are as the size of company, profitability, growth, vitality of profit and kind of industry respectively. Also, the results stating that the rate of short – term debts to the value of stock-holders rights is the most important index showing financial structure of company.

6- The method of research

The method of this research is descriptive and correlation. It is descriptive because its aim is to describe terms or surveying phenomena and it is for more familiarity of existing conditions. It is correlation because the relations between variables are desirable. The current research surveyed the relations between variables and is approving the existence of this relation in current conditions based on historical data. The desired approach for descriptive analysis in comparison of averages and surveying correlations between variables is liner regression. In this kind of research, the relationship between variables is analyzed based on the aim of research. These researches have one dependent variable and one or more independent variables in which the amount of effects of independent variables on defendant variables are considered by proper statistics tests. This research is applicable one from its aim point of view because its results in determining financial management approaches in profit units are usable. The current research in gathering data is descriptive and required data are for testing assumptions, financial information of admitted companies in Tehran stock exchange which are extracted from audited financial statements of these companies.

7- Time period of research

Time period of this research consists five consecutive periods from 2011- 2015 in which surveying assumptions of research is taken out by using real data. According to the aim of research the related information of previous research collected and analyzed based on research assumption.

8- Statistic society of related study

In current research the financial, classified and audited data is used for testing assumption of research in active admitted companies on Tehran stock exchange. In determining desirable statistic society, financial companies, investors and the companies that their fiscal year was not end of solar year (12/29) were omitted. Of course it is mentioning that in similar research, these kinds of companies with similar rationale have been omitted (Nicolas, 2009). Also, it is mentioning that the kind of industry by considering major activity of companies and homogenizing them like similar researches (Kookeh, 2005) are considered in 7 main categories. Therefore, the statistic society of this research is 7 industrial group among admitted companies on Tehran stock exchange as followings:

- 1) Main metal companies group
- 2) Automobile and spare parts group companies
- 3) Material and drug products group companies
- 4) Cement, lime, chalk group companies
- 5) Chemical products group companies

9- the method of sampling

In this method, at first place a method is defined for selecting a sample and graphs with no eligible conditions are omitted from sample. These conditions are defined based on assumption testing and variables of research. The reason for using this method and defining such conditions is homogenizing statistical sample of study with whole society and possibility for generalization of results of testes to statically society. Based on research variables, could omit the following criteria for applying in sampling:

- 1) They attend in stock exchange market during 2011-2015.
- 2) The end of fiscal year of company leads to 20 March.
- 3) The company couldn't have any change in its fiscal year during study.
- 4) Trading symbol of company could be active and do not stop more than 4 months per year.
- 5) The financial data of company would be available during study.

10- The volume of sample statistic

Table 1-3 shows the way of selecting and extracting proper sample statistic of research based on method of sampling, mentioned conditions and remarks and existing data on stock exchange.

Table 1: the method of selecting sample by separate industry under study

Industry	Condition 1	Condition 2	Condition 3	Condition 4	Condition 5	Final sample
Automobile	35	31	29	28	28	28
Drug	34	26	24	23	22	22
Cement	21	19	17	16	15	15
Chemistry	25	21	18	17	17	17
Main metals	19	16	15	14	14	14
Machinery	22	19	16	14	14	14
Food	20	15	14	14	14	14
Total						124

The above table shows that after considering limitations and related conditions, 124 company were selected as sample statistic among accepted companies on Tehran stock exchange. Finally, by calculating 5 years period of research, the numbers of consolidated data used in assumption tests were for 620 years of company.

11- The method of collecting data

According to the nature of this research, for gathering related information, the library method is used for gathering data. In this method, firstly by using library resources which includes books, magazines, tests, essays and internet, the primary studies and composition of literature season and theoretical framework of research is taken out. Following it, by using banking information of Tehran stock exchange, the web site of this organization and stock software like new Rah-Avard software, needed data for testing assumptions are collected.

12- The method of hypothesis test

In research hypotheses, the effect of size of company on financial structures has been considered. For testing this hypotheses, the multi-variation regression model is used in which the financial leverage of companies (financial structure index) has been used as dependent variable and subject of company size and control variables. The related measures for size of company (independent variable) are logarithm of assets and logarithm of income sale. Also, profitability variables and growth opportunities of company are considered as control variable. In this relation, Chen and Strang (2005) showed that the companies with higher profitability have high financial leverage. Because these companies spend internal resources for investments in high value positive projects and are increasingly depend on resources out of company. Also, Nicolas and et al (2007) suggest that the companies with higher rate of market value in comparison to office value (growth opportunities are less willingness for financial supplying as debts. As these companies provide their required financial resources very quickly and with low expenses by capital market. Thus, it seems that profitability variables and the rate of market value to office value are determining factors in financial structure of companies. So, the regression model of second hypothesis test is addressed as following:

$$Lev_{i,t} = \beta_0 + \beta_1 LnAssets_{i,t} + \beta_2 LnSales_{i,t} + \beta_3 ROA_{i,t} + \beta_4 MTB_{i,t} + \epsilon_{i,t}$$

In which the "Lev" is financial leverage as financial structure of companies (the ratio of total debts to total assets)

"LnAssets" is regular logarithm of assets of company as index of size of company

"LnSales" is the regular logarithm of sale of companies as index of size of company

"ROA" is the return assets as profitability index (the ratio of net profit of company to office value of total assets)

"MTB" is the value of company market to office value of stock holders rights as growth opportunities of company (the value of company market consists number of published stock multiplied each share in stock exchange).
 The coefficients of β_1 and β_2 are reflecting the effect of size of company on financial structure. Also, the coefficients β_3 and β_4 are representing the effect of control variables on financial structure of companies.

13- The results of fitness of regression models

Table 2: the results of statistical analysis for testing the second hypotheses

Meaningful level of F	Statistic of F	Watson statistics	Camera	Adjusted R ²
0.000	5.389	1.775		0.328
Linear tests	Meaningful level	Statistic t		Size of β coefficient / variable
Variance inflation factor	Tolerances	P- value		Standardized
1.242	0.765	0.74	-0.468	-0.046 / LnAssets
1.238	0.766	0.545	0.765	0.075 / LnSales
1.566	0.639	0.023	-2.863	-0.092 / ROA
1.558	0.642	0.000	-4674	-0.221 /MTB

The results show that the coefficient for determining regression model is 0.328 and this model could explain 32/8 percent of changes of dependent variable by independent variables. Watson camera statistic is between 1/5 – 2/5. Therefore, there is no correlation between errors of regression models.

The results of variance regression which is decided based on statistic F in relation to it, is mentioned for fitness model in testing first hypotheses at the last two column of table 2. The statistic hypotheses related to analyze of statistic F is as following:

The regression model is not meaningful, $H_0: \beta_i = 0$

The regression model is meaningful, $H_1: \beta_i \neq 0$

The meaningful level of statistic F is less than error test level ($\alpha = 0.05$) and as a result the hypotheses H_0 is rejected and evaluated models are meaningful and relations between research variables are linear. The second part of table 2 show the statistical analyzes for coefficient variables of independent regression model. These results represent the type, severity, validity and meaningfulness relation of each independent variable on dependent variables of regression model. The achieved results of linear tests at the last two columns of above table show that the statistics of this test for all variables is approximately 1, therefore there is sever linear relation between independent remained variables in the model.

According to the achieved results, the meaningful level of evaluated coefficient for indexes of size of company (LnAssets and LnSales) both of them are upper than 0.05. This finding represent that the size of company has meaningful effect on financial structure of company. The achieved results are not consistent with the claim in second hypotheses and theoretical bases because it is expected that the size of company will be the main factor for determining financial structure of sample statistic companies. The results of control variable shows that the coefficient variable ROA is -0.092 and its meaningful level are 0.023. This finding shows that there is reverse and meaningful relation between profitability of company with its financial leverage. Also, the evaluated coefficient for variable MTB is negative and meaningful. This finding represent that growth opportunity has negative effect on level of debts of companies. Recent findings are consistent with theoretical bases of research and show that the profitability and growth opportunities are determining factors for financial structures of statistic sample companies.

In general, by considering above mentioned findings, the convincing evidences in regard to size of company on financial structure of companies are not observed. So that, the second hypotheses of research and addressed claim is rejected at confidence level of 95 percent.

14- The summary of results of hypotheses of tests

In this section, the hypotheses of research and gained results offered. In hypotheses it has been predicted that the type of industry and size of company is affecting on financial structure. The summary of results of hypotheses tests are offered in table 3.

Table 3: The summary of results of hypotheses tests

Hypotheses	The kind of test	Related index	Meaningful level of test	Result
The type of industry affects the financial structure of admitted companies on Tehran stock exchange	ANOVA	Separating statistical sample on different industries	0.000	Accepting the hypotheses
The size of company affects the financial structure of admitted companies on Tehran stock exchange.	Regression	LnAssets	0.74	Rejecting hypotheses
		LnSales	0.545	

15- Conclusion

The relationships between companies of each industry and financial structure have been surveyed significantly. The effect of type of industry on structure of capital is very important. In addition, the features such as tax coverage of debts, the expenses of research and development, the amount of fixed assets, the kind of industries and their exclusiveness are the items that effect on structure of capital. Controlling the companies inside each industry, indicating the combination of each industry, filtering companies for special surveys, determining the kind of combination as classified goals of companies are mentioned based on industry. In regard to the size of company, it can be understand that large companies have less risk in relation to small ones. Also the expenses of debts of large companies are less in relation to small companies.

The type of industry is demining the nature and volume of activities of profit- making units. Hence, it is expected that this variable is determinant for more features and performance criteria of companies. In some of industries, creating new investments needs more financial resources in comparison to other industries. While some other producing activities are not depend on capital but most of them depend on man-power. These differences cause companies to have different approaches for supplying resources and financial structure.

The findings of research can be interpreted based on capabilities which profit units have on financial supplying by different financial resources. In general, the popularity of some of industries in stock exchange market is more than other industries. In fact, some of companies are more attentive by investors due to their long time activity in production or popularity which they have in profitability and when they proceed to increase capital by publishing new stock, the face more attention. Such an approach causes these companies to provide their financial resources by capital market and borrow less amount of loans. Also some of industries for different reasons such as nature of products, governmental support or penetrating among creditors have more opportunities for receiving facilities and prefer to provide financial requirements by debts.

References

1. Pinnowo, Raymond, Financial Management, (translators) Ali Jahankhani and Ali Parsaeen, Sadegh Publications (2005), Eighth Edition, Volume I and II.
2. Frobery Step, Ojin and others, Financial Management (Middle), (Translator) Ali Parsayian, Terme Publishing (2003), First Edition.
3. Shaheenak, Reza, Financial Management, Publication of the Specialized Accounting and Audit Research Center of the Audit Organization (2008), Third Edition, Vol. I and II.
4. Anvari Rostami, Ali Asghar, Financial and Investment Management and Portfolio Analysis, Publishers Designers (2009), First Edition.
5. Audit Organization, Accounting Standards Committee, Accounting Standards: Standards No. 1 to 26, (1384).
6. Excellent, dear, Basic financial statements, Specialized Audit and Accounting Research Center of the Audit Organization (1998), Sixth Edition.
7. Gorki Ki Butacharia and Richard E. Johnson, (Translators) Morteza Ibn Shahr Ashub and Fattah Mikaeli, Center for Academic Publishing, (2006), Twelfth Edition, Volume I and II.
8. Azar, Adel and Mansour Momeni, Statistics and Application in Management, Publication of the Party (2002), Sixth Edition, Vol. I and II.
9. Khaki, Gholam Reza, Research Methodology with Thesis Approach, Reflection Publication (2003).
10. Hafez Nia, Mohammad Reza, An Introduction to Research Method in Humanities, Sovet Publishing (2002).
11. Kharazmi, Shahindokht, pamphlet method of research, Industrial Management Organization (2004).
12. Qalibaf Alis, Hasan (1373). The Effect of Financial Structure on Systematic Risk of Companies Accepted in Tehran Stock Exchange, Master's thesis, Faculty of Management, University of Tehran.
13. Pourheidari, Omid (1374). Investigating the Factors Determining the Financial Structure of Companies Accepted in Tehran Stock Exchange, Master's thesis, Tehran University.
14. Pour Heidari, Omid, Yousefzadeh, Nasrin, Investigating the Factors Affecting the Financial Structure of Companies Listed in Tehran Stock Exchange with the Structural Equation Modeling Approach, The Journal of Economic Research (Islamic-Iranian Approach), Year 12, Number 45, Summer 2012
15. Rahmani, Mahmoud (1374). Impact of Financing Methods (Long Term and Normal Sampling) on stock prices of companies accepted in the Tehran Stock Exchange, Master's thesis, Tehran University.
16. Mohseni Demnah, Qasim (1377). Investigating the Impact of Capital Structure on Capital Cost and Stock Returns in Iran's Capital Market, Master's Thesis, Faculty of Islamic Sciences, and Imam Sadiq University.
17. Afshar Mehr, Gholam Reza (1378). Investigating the Relationship between Financial Structure and Stock Returns of Companies Accepted in Tehran Stock Exchange, Master's Degree in Business Management, Shahid Beheshti University.
18. Sherzadeh, Jalal (2010). Investigating the effect of capital structure on profitability of companies accepted in Tehran Stock Exchange (with emphasis on industry type), Master's dissertation, Shiraz University.
19. Yazdani, Nasser and Dr. Ali Shakhani (1374). Investigating the effect of type of industry, size, business risk and operating leverage of companies on the amount of leverage employed in companies admitted to Tehran Stock Exchange, Management and Management Studies, 18 and 17, pp. 186-169.
20. Jahan Khani, Ali (1373). Long-term financing strategy of companies, Journal of Financial Research, 2, pp. 36-5.

21. Salimi Alireza, The Need for Developing Islamic Securities, Strategy Journal, Winter 2012, Volume 21, Number 65; From page 291 to page 318.
22. th Myers, Stewart, The Structure of Capital, (Translator) Farhad Abdolhazadeh (1373), Journal of Financial Research, 2, pp. 90-71.
23. th Myers, Stewart, Optimal Capital Structure, (Translator) Ali Parsayian (1373). Quarterly Journal of Financial Research 2, pp. 110-91.
24. h Miller and Franco Mudiliani, Profit Dividend Policy, Growth and Determination of Stock Value, (Translator) Dr. Ali Parsayian (1994). Quarterly Journal of Financial Research 3, pp. 43-6.
25. Gosim, Amir and Aman Sidhoud, Application of Representation in Financial Management, (Translator) Ahmad Modares Sabzevari, Journal of Financial Research, 3, pp. 58- 44.
26. Parker George, Risk Management, Dimensions of Risk Management, Definition and Application in Financial Organizations, (Translator), Dr. Ali Parsayian, (1999). Quarterly Journal of Financial Research 13 & 14, pp. 144-125.
27. Sinai, Hassan Ali and Ismail Khorram, (2009). Investigating the relationship between financial leverage and systematic risk of ordinary shares (beta) of public corporations in Iran, Financial Research Quarterly, No. 18, pp. 121-110.
28. Institute for Development of the Iranian Investment Industry, Transformation in the Financial Structure of Fixed Capital Companies, Investment Message, (Spring 2004).
29. Arrest, Mohsen and Gholamreza Soleimani (2007). Balance sheet financing: Comparative Approach, Accountant Monthly, No. 182, pp. 21 - 15.
- 30-Richard A. Brealey, C. Myers. Principals of Corporate Finance, Mcgraw Hill, Seventh Edition, 2003.
- 31-Van Horne, T.C. Fundamental of Financial Management, Prentice Hall Inc. Sixth edition, 1986.
- 32-Fischer E, R. Heinkel, J. Zechner, (1989). Dynamic Capital Structure Choice: Theory and Test, Journal of Finance 1.
- 33-Harris M., Raviv A., (1991). "The Theory of Capital Structure", Journal of Finance, 1.
- 34-Lakshmi Shyam - Sunder, Stewart C. Myers, (1999). "Testing Static Trade Off the Pecking Order of Models of Capital Structure", Journal of Financial Economics 51.
- 35-Robert A. Korajczyk, Amnon Levy, (2000). Capital structure Choice: Macroeconomic Condition and Capital Restrictions, [http: //faculty.fu](http://faculty.fu)