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COMPARATIVE INVESTIGATION OF THE RELATION BETWEEN THE WAYS OF FINANCING AND STOCK RETURNS IN THE COMPANIES ACCEPTED IN TEHRAN STOCK MARKET

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ABSTRACT

In this research, the relation between the ways of financing and stock returns in the companies accepted in Tehran stock market is investigated. Place and Duration of Study: The statistical community of research includes the companies accepted in Tehran stock market that their financial data are gathered for the years 2007 to 2011. Among the statistical community, 46 companies were selected by considering the criteria determined in this study. The research hypotheses were tested by use of correlation method between variables and the regression equations via panel data method. For the financing, two variables of debt and equity are considered that the result of research indicates lack of relation between equity and stock returns. On the other hand, the investigations conducted in this research indicate that there is an inverse relation between financing via debt and the stock returns.

Keywords: External Financing, Debt, Equity, Future Stock Returns

INTODUCTION

The financing methods are one of the main fields of decision making for the company managers along increasing the wealth of shareholders. Growth and continuance of companies' activates requires financial resources and provision of them is usually limited. In an efficient market, company's growth and profitability and at the end

increase in the wealth of shareholders is fulfilled when the returns resulting from application of financial resources of equity are more than the opportunity cost resulting from capital projects. Since the financing methods, investment decisions and the policy of dividing interest on value is effective on the wealth of shareholders, detection of patterns and modes that the decision taking of companies and managers follow are great importance.

In other words, the capital market acts as a path for transmission of resources from depositors to consumers of financial resources ad by providing the capital required by the economic businesses and optimized dedication of resources, it plays critical role in the economy of countries; in this way, by help of the gained resources take efforts for survival and growth of their organization; that is while severe competitive condition, financial, economic and political crisis and ownership and legal requirements have made the companies to ask for more resources and sometimes the resources gained from the operation results, they will reinvest the economic unit that belongs to the possessors in the economic unit. For this the managers shall decide how to provide their required amounts, because the method of financing affects the companies' stock returns. The company's financing decisions would change its financial structure and this will affect the risk returns of company's stock in the market and the investor will consider this point at the time of evaluating this company, as a result the resources of company shareholders will be influenced; for this the management of decision taking on increase of capital via stock profit or equity and short-term financing and long-term debt shall be investigated precisely. Then, the financial tools shall be recognized so that appropriate tools in financial markets can be utilized and the most economic financing method with appropriate risk and returns can be chosen (Moradzadeh Fard, Pourmonfared, 2009). By taking into account the special importance of financing methods in formation of the companies' future stock returns, it seems that investigation of the relations of these variables by the performance at the new-established capital market of Iran is essential to be able to provide the investors with appropriate propositions along using the information related to these items by reliance on the gained results.

MATERIAL AND METHODS

Selected methods of financing in the corporate are an important factor in determining a company's value and shareholder wealth. Sources of Financing are

divided into two categories: Internal sources (retained earnings) and external sources (new equity and short-term and long-term loans). One goal of financial management is to maximize shareholder wealth. To this end, the purpose financial managers find ways of financing to achieve this goal.

Due to following reasons the companies prefer internal financing to external financing: First, when using internal resources, the managers are more flexible. For instance, managers can provide required resources for investment projects and execute these plans and in this way they prevent both the costs of delay in execution of investment projects and they also save the advantage of increase in amounts via external financial resources for future periods.

Second, when using external resources the companies are forced to assume accounting costs, endorsement costs and so on and most of the time such costs does not exist when using internal financing.

Third, due to lack of information symmetry between the management and out-organization investors regarding company's investment opportunities, the market might evaluate the companies' new equity certificates less than their real price and this will cause wealth transmission from existing shareholders to the new shareholders (Chul Park and Pincus, 2001).

Therefore, the cost of internal financing is less than external financing. For this, it is expected to be a positive relation between the proportion of internal financing to external financing and the profit respond coefficient.

Till a certain time, companies shall avoid disclosure of the information related to investment opportunities and the future growth so that in this way they prevent misuse of their competitors from such information and as a result reduction in the company's value. Therefore, the companies with more growth compared to other companies have less interest in disclosing the information related to growth; in addition investment opportunities and the lack of information symmetry between the management and investors of growing companies is more. For this, investors seek higher returns and as a result the capital cost for external financing is more in such companies rather than the companies with less growth. As a result, it is expected that the positive relation between the proportion of internal financing to external financing and the profit respond coefficient to be stronger in companies with high growth (Ibid).

Various studies are conducted regarding the effect of financing on the future stock returns.

Meyers and Majluf (1984) in a research by the title "corporated financing and investment decisions (when the firms have information that the investors don't have)" they investigated the effect of equity with the future stock returns and they expressed that the announcement of external financing contains inappropriate information for the capital market and has negative effect on the price of stock market.

Loughran and Ritter (2000) in a research by the title "uniformly the least powerful tests of market's efficiency" by help of the hypothesis of mispricing concluded that the active economic units take actions for equity when their stock is priced more than its value. It means that the hypothesis of mispricing following debt of economic unit is expecting reduction in the stock's future returns.

Bradshaw, Richardson and Sloan (2006) in their research by the title "the relation between corporate financing activities, analysts' forecasts and stock returns" in a 30-year period concluded that there is a negative relation between net cash amounts related to each section of financing's activities (equity and debt) with the stock returns and also the company's profitability.

Cai and Zhang (2005) in their research by the title "capital structure dynamic and stock returns" by help of a sample of U.S. capital firms during 1975 to 2002 such as FAMA and French considered lever as an objective for company and then they computed deviation from this objective. The results gained are not compatible with the prediction of sustainable balance model; because deviation from the objective shall be interpreted as bad news, while when the stocks were divided to different groups based on deviation from objective, no special model of returns was observed in them. They concluded that majorly there is a negative relation between changes of financial lever and stock returns. In other words, companies with more changes in the lever proportions have less stock returns. This negative relation is more intense for companies having higher lever levels and the role of long-term debts is more than short-term debts. In this study, sectional analysis is applied.

Miller and Modigliani's model (1958) finds that financing activities have no impact on firm value. However, When Miller and Modigliani's assumptions are relaxed, firms external financing activities provided information on operating cash flows and on investment opportunities of the firms. On the former case, (provision of information on operational cash flows), unexpected external financing is likely to be interpreted that current and future cash flows are not

sufficient to allow the firm to invest. Hence, it will be interpreted by investors as bad news. On the other hand, external financing can also be indicative of increased inversing activities. Since on average managers accept positive net present value projects, increases in the financing can be interpreted as a positive signal (Cohen and Thomas, 2006).

Baker and Wurgler (2000) mention two major reasons for negative effect for issue of new stock on the stock's future returns: first, the more the stock issued by a firm, the less leverage as a result the financial risk of that company is. For this, the investors ask for less returns.

Second, by assuming that companies follow the hierarchical model for providing financial resources, the investors consider issue of new stock as a bad news and they evaluate the issued stock less than the real rice and as a result, this news causes reduction in the stock's future returns (Baker and Wurgler, 2000).

Brick and Ravid (1991), claimed that debt and divided profit bring equal information from the financial situation and future profits of a company, in a way that the more the divided profit or debt is, the better the financial situation and the results of current and expected operations of that company is (Maria and Garcia, 2006).

On the other hand, some researchers believe that by increase of the finical lever, the costs for debt delegation including bankruptcy costs will increase. Besides, the effects of debt control in companies with high growth having profitable investment projects lacking free cash amounts are not important; because these companies majorly rely on capital markets depending on financing for their investment projects and in this condition, the market will find sufficient time for evaluating the company's performance, its management and investment projects and it will reduce the delegation problem to some extents (Jensen, 1986).

In a research by the title "evaluation of extra-balance sheet (operational rent) financing method on the stock price and profit of companies accepted in Tehran stock market", this state is studied that whether extra-balance sheet (operational rent) financing method in companies accepted in Tehran stock market can cause increase in profit and price of their stock or not. In order to test the hypotheses of research, the information packs of equity and the software Rahavarde Novin for financial sheets audited in 2003-2008 for companies accepted in Tehran stock Market were applied and the gained results are indicating that using extra-balance sheet (operational rent) financing methods compared to other

financing methods mentioned in debts neither cause increase in profit nor increase in the stock price of companies accepted in Tehran stock market (Taghavi et al., 2010).

In a research by title "investigation of the relation between financing methods (external resources) and the stock price returns of companies accepted in Tehran stock market" the effect of external financing resources (distribution of equity and long-term debt) on the price and stock returns of companies accepted in the Stock Market during 1996-2000 were studied. The results were indicative of the fact that the influence of distribution of equity proportioned to long-term debt on the equity price is more. Also, the returns of companies which have provided financial support by distribution of equity compared to the returns of companies which have used long-term debt is more (Jafari Samimi et al., 2004).

2.1 Statistical Community, Sample and Sampling Method

The companies accepted in Tehran stock market are selected as the statistical community. The reason for this selection is full consideration of investors and financial analysts to the stock, availability of information and also transparency of accounting information of these companies.

In this research, the statistical sample is including companies with following specifications:

Being accepted in Tehran stock market from 2007 to 2011;

The end of their fiscal year shall be the February of each year;

They shall not have change in their fiscal year;

They shall not have transactional stop exceeding 3 months;

During the investigation period they shall at least for once have issued equity or taken debt;

They shall not be financial intermediates;

Their respective data shall be accessible.

After performing the sampling, 46 companies accepted in Tehran stock market were tested.

2.2 Data Gathering

The current research is considered as post-event type and in terms of categorizing the researches based on their objective; this study can be considered as applied type. In terms of execution, it is from descriptive-correlative type. Also the data gathering method is library study. The data required for the literature of research is extracted from the Persian and Latin specialized books and journals and the papers extracted from internet and a series of information required for testing the hypotheses of research are

extracted from financial sheets of studied companies. The other part of this information is prepared from equity data banks and the software Rahavarde Novin and Tadbirpardaz then by the software EVIEWS 6, respective tests are performed.

2.3 Variables and Research Models

2.3.1 Independent variable

The independent variable of this research is the cash gained from financing that is estimated by use of following models:

RET:$\alpha_0 + \alpha_1 \Delta XFIN$

RET = α_0 + $\alpha_1 \Delta EQUITY + \alpha_2$ $\Delta DEBT + \alpha_3 SIZE + \alpha_4 LEV + \alpha_5 ROA + \alpha_6$ PRO

ΔXFIN: net cash flows received from external financing activities

ΔEQUITY: net cash received from selling the equity

ΔDEBT: net cash received from debt

2.3.2 Dependent variable

RET: equity returns

2.3.3 Control variables

The control variables in this research are including:

SIZE: sum of company assets

LEV: lever (debt proportion)

ROA: Returns of Asset

PRO: net profit

RESULTS AND DISCUSSION

Table 1- Descriptive Statistics

TITLE	LEV	PRO	RET	ROA	SIZE	DDB	DEP
Mean	0.595395	517788.4	27.12623	12.84623	13.79746	204457.1	39996.97
Median	0.615	97331.5	17.835	10.78	13.59673	7745	0
Maximum	1.02	15374504	452.07	42.67	18.13596	13738984	10088472
Minimum	0.1	-1098702	-57.94	-23.98	11.14166	-5314846	-442970
standard deviation	0.189684	1742552	58.74368	10.84169	1.50308	1396931	670046.3

The descriptive statistics are provided in table No. 1. In general, descriptive statistics are indicating that at first the selected sample has a lot of diversity. For example, the descriptive statistics related to returns of per share in period prior to appeal in standard indicates that maximum and minimum profitability is 15374504 and -1098702 and the standard deviation is equal to 1742552. Regarding other variables this is indicative of the diversity of selected companies and as a result the ability of generalizing the results of sample to the research community.

The variables of debt changes and equity changes are considered as external financing criteria and in order to investigate its relation with the future stock returns, below model is applied:

$$RET_{it} = \alpha_i + \alpha_1 EQUITY_{it} + \alpha_3 DEBT_{it} + \alpha_3 SIZE_{it} + \alpha_4 LEV_{it} + \alpha_5 ROA_{it} + \alpha_6 PRO_{it} + \varepsilon_{i,t}$$

By taking into account the combined state of research data, at first F test (Chow test) is performed for selecting model's estimation method among two solutions of pooling and panel.

In this research, by considering the type of model, the fixed, sectional and time effects are tested. Table (2) and table (3) indicate the results of F test for determining regression proportion in relation to the hypothesis.

H0: all latitudes are equal ⟷ pooled

H1: latitudes are different ⟷ fixed effects model

By taking to account the statistic of Chow test, if the probability of model is less than 0.05, the H0 based on equality of latitudes is rejected and the model of fixed effects is prioritized.

The results related to Chow test are provided in table 2 and 3.

Table 2- results of sectional fixed effects

Redundant Fixed Effects Tests			
Test cross-section fixed effects			
Effects Test	**Statistic**	**d.f.**	**Prob.**
Cross-section F	**.582168**	**(45.176)**	**.9727**
Cross-section Chi-square	**31.3143**	**45**	**.943**

Table 3- results of time fixed effects

Redundant Fixed Effects Tests			
Test period fixed effects			
Effects Test	**Statistic**	**d.f.**	**Prob.**
Period F	**13.160**	**(4.217)**	**0**
Period Chi-square	**49.5216**	**4**	**0**

By taking into account the Chow statistic, regarding the sectional fixed effects, its probability is larger than 0.05 and regarding time fixed effects, its probability is less than 0.05. Therefore, the hypothesis H0 based on equality of latitudes for sectional fixed effects is rejected and the model of fixed effects is prioritized. The results related to test of hypotheses are brought in table 4

Table 4- analysis of hypotheses

Period estimate:2007-2011	
$RET_{it} = \alpha_i + \alpha_1 EQUITY_{it} + \alpha_3 DEBT_{it} + \alpha_3 SIZE_{it} + \alpha_4 LEV_{it} + \alpha_5 ROA_{it} + \alpha_6 PRO_{it} + \varepsilon_{i,t}$	
Period fixed (dummy variables)	
0.28	**balanced determination coefficient**
8.420045	**Statistical F**
0	***)Prob(***
2.145587	**Statistical Durbin-Watson**

Confidence level	Probability	Statistical *t*	Coefficient	Explanatory variable
Withoutmeaning	0.0954	1.675088	54.28783	Intercept
95%	0.0248	-2.26062	-5.36798	SIZE
99%	0.0003	3.688566	1.416968	ROA
99%	0.0094	2.619844	5.74E-06	PRO
Withoutmeaning	0.0724	1.805507	34.45722	)LEV(
95%	0.0156	-2.43818	-8.29E-06	(DEBT)
Withoutmeaning	0.2874	-1.06651	-2.97E-06	(EQUITY)

Determination coefficient is indicative of the rate of changeability in dependent variable which can be explained by regression. According to table 4, the balanced determination coefficient for model is 0.28 Therefore, in average 28 percent of the changes of dependent variable (RET) are explained by this model.

By considering the statistical F and the probability related to that which is less than 0.05, the hypothesis for linear relation of dependent and independent variables is confirmed. Therefore, we can conclude that in reliance level of 99% the general regression model is significant. The results related to statistical of Durbin-Watson (lack of self-correlation of error phrases) for the model is indicative of relative independence of the data.

After investigating the significance of the general regression model, the partial regression coefficients shall be investigated for confirming or rejecting the hypothesis of research. Table 4indicates the partial regression coefficients. By considering the probability of change in variables, the variables for returns of asset and profitability which have probability less than 0.01 are significant in reliance level of 99 %. Also, the variable for company size is significant with the probability less than 0.05 in reliance level of 95%. However, among the main variables of model, the probability of debt variable is less than 0.05 and the probability of equity sale variable is more than 0.05. Therefore, the debt variable in is significant in reliance level of 95 %, as a result there is relation between financing via debt and RET and since the coefficient of this variable is negative, this relation is inverse. In other words, by increase in the company's debt level, the RET is reduced. However, no relation exists between financing via equity and the RET.

CONCLUSION

The results gained from the research indicate that there is no relation between financing via

equity sale and the stock returns and this result is in compliance with the researches of Moradzadeh Fard and Nadelipour Monfared (2009), however it is not compatible to the studies of Bradshaw, Sloan and Richardson (2003), Cohen and Thomas (2006) and Baker and Wurgler (2000).

As it is expected, there is an inverse relation between financing via debt and the RET which is in compliance to the results of past researches provided in the background of research.

By taking into account the results gained in this research and for having a better cognition from the performance of capital market in Iran items below are suggested for future investigations:

1- Studying the effects of other control variables such as industry, risk, etc.
2- The financial lever can be calculated based on the office value and market value (Fama and French, 2000).
3- Investigating the relation of macroeconomic variables such as inflation and interest rate on stock returns

This study has limitations that need to be mentioned

1- By considering limitation of statistical community for companies accepted in Tehran Stock Market which has at least once took actions for debt and equity issuance, generalization of the results to other companies shall be conducted cautiously.
2- This research is conducted in the level of the whole industries and its execution in the level of each industry might lead to different results for each industry.
3- The data extracted from companies' balance sheets are not balanced in terms of inflation. In case of balancing the mentioned data, some results different to the current ones might be obtained.

REFERENCES

Baker, M., Jeffrey, and Wurgler.2000.The Equity share in New Issues and Aggregate stock Returns .Journal of Finance, 55(5):2219-2257

Bradshaw M., A. Raichardson, 2006. the relation between corporate financing activities, analysts forecaster and stock returns. Journal of accounting and economic42.pp53_85

Cai,J.,z.Zhang,2005.Capital structure Dynamics and stock Return" The university of lowa, Department of Finance (January)www.FMA

Brick, I., A. Ravid, 1985.On the relevance of debt Maturity structure. Journal of Finance 40,NO 5:pp.1423-1437

Chul,p., M. pincus ,2001.Internal vs External Funding Sources and Earning Responsecoefficients"Review of Quantitative Finance and Accounting,16:33-52

Cohen, D., z. Thomas.2006.Weighing the Evidence on the Relation Between External Corporate Financing Activities, Accruals and Stock Returns. Journal of Accounting and Economics 42(2006) 87-105

Fama,E.,K.Ferench,2002.Testing trade-off and pecking order prediction about dividends and debt. Review of Financial Studies,15:1-33

Jafari samimi, A., M. Yahyazadeh, K. Ebadi dolatabadi,2004.Investigation of relation between financing methods and stock price return in companies accepted in Tehran stock market .Science and Research Journal of Shahed University. NO 5.Persian

Jensen, C.M.1986.Agency cost of free Cash Flows Corporate Finance, and Takeovers. American Economic Review,76(2):71-92

Loughran ,T., J.R.Ritter.2000.University Least Powerful Tests of Market Efficiency",Journal Financial Economic,55,361-389

Maria,T, M.Garcia, 2006.Capital structure and Debt Maturity: Evidence from Emerging Markets"13th Annual Conference of the Multinationed Finance Society, june 25-27,-Edinburgh,uk.

Miller and Modigliani, 1985. Corporative Finance and The Legacy of Miller and Modilgiani "Journal of Economic Perspective, Fall 1988-p.p 135-147.

Modigliani, F., M.Miller, 1958. The cost of capital, corporate Finance, and the theory of Investment " The American Economic Review, 48 (3):261-297

Moradzade fard, M., H. Nadeali pour, 2009. The relation between cash flows from financing activities and stock returns. Journal of Financial Accounting and Auditing:89-96.Persian

Myers, S.,N. Majluf,1984.Corporate Financing and investment decisions when firms have information those investors do not have. Journal of Financial Economics,13:187-221

Taghavi, M.,A.Esmaeizadeh,M.Ahmadsher,A.Zaman,2011.2011.Evaluation of extera-balance sheet financing method on the stock price and profit companies accepted in Tehran stock market. Quantitive Studies of the Free Management of Abhar. NO 2.Pesian.