The Effect of Different Financing Methods of Firms Accepted in Tehran Stock Exchange, on Their Share Yield

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Received: October 2, 2011 Accepted: November 21, 2011 Published: February 1, 2012

Abstract

In this research has been tried to review the effect of various methods of financing on share yield of accepted firms in the stock exchange of Tehran during 2005-2009. For this reason, the firms which financed through loan or increased capital have been selected and based on noted data on financial statements of them. the effect of two given financing methods (loan & increased capital) on return of their equities following recognition normality of studied variables by Kolmogorov-Smirnov test, correlation analysis and regression analysis. The state of accepted firms in stock exchange of Tehran compared to effect of various financing methods on return rate of equalities during given years has been reviewed. The results of research show that it isn't possible to claim that the financing through increased capital has positive influence on share yield of accepted firms in the stock exchange of Tehran. On the other hand, could be claimed that, financing through loan has positive influence on share yield of accepted firm in the Tehran stock exchange.

Keywords: Financing, Share yield, Tehran stock exchange

1. Introduction

The increasing development and complexity of economic activities as well as fast evolution of commercial transactions in the modern world whether inside or international trade and demand of commercial and production companies to maintain capacity by devaloping of activities and investment desinges to hold or increase competitive power in the inside and world areas have been increased demand of these firms for financial resources. The capability of firm in determination of potential financial resources in order to investments and providing suitable progarams include of main factors of development in firm. In these situation, there is necessary

to benefit from techniques of financial managers in management of firms. Providing right financial policy strengthens firm's capability in reaching strategic amis.

2. Conceptual Framework

2.1 Main resources and structure of financing

The supply finanical resources is the most important issue in finanical mangement. The awareness of finanical managers on various methodas of finanicing (provision) causes to be possible continuity of firms and the finanical structure of firm be flexible law and process current facilated. In some of cases financial resources supply is along with charge payment and commitment. The evaluation of various finanicing is interacted with evaluation of related financial charges to them. Thus, it is necessary that, both categories to be taken account systematically (NikuMaram & Colleges, 2009, 129). Figure (1) shows decision making tree related to various financing methods:

Insert Figure 1 here

2.2 Pyramidal order of financing hypothesis

The conducted resarch by Donohdson in 1961, are confirmation of more reception of interior funds in the firms. If, interior resource isn't adequate to investment by firm, then, firms trend toward commercial exterior financiing which in first step, the borrowing, then convertible securesties (Issuance of securities) and finally issuance of stock will be considered. Mayers introduced such hierarchy as pyramidial order of financing which has been showed in fig (2):

Insert Figure 2 here

3. Research Backgrund

Donaldson, Mayers & Bradley in 1961, observed in reserch on "operation of financing in great firms" that, the management supports intrior financial resource, as new funds resource severely and even put aside exterior ones and if more demand to exterior financing resources, use borrowing. Even when, price to profit rate is high and with suitability of common stock sale time, They reluct to issuance of stocks so that supplied investments charges include of investment in inventory and other current wealths, from intrior resources. Kurwar, in 1983, Skit & Molnz in 1986, Don & Michelson, wormalin & Dianjil, Damjal & Rais, Conclude in own research that moderately while firms issue stock, decrease stock cost and in contrast while proced to redeem it, the costs increase.

Miyers & Majulf reviewed effect of new stock issue on real and inherent value of equity by asymmetrical data and found that, what price of equity be high, lower value obtained by new shareholders. Smith in 1977, reviewed the impact of new stock issue on price and return of stock and found that given event has negative impact on stock price. In recent studies, the significant unnormal negative return is created as to finanicing announcement. Research show that avaraging 3 percent of stock price of industrial firms which issue seasonal common stock, has been decresed. Most theoric explantions, indicate that, this decline is result of negative data that has been taken through new stock issue announcement to market. Antoniou & others reviewed in research under deterministic factors of firms capital structure in 2002, the impact of pyrimidal rates on capital structure and found that firms set influential factors on capital structure so that to obtain optimum one.

Other research has been conducted by Mateus & Balla on selection of optimum capital structure in 2002, they use regerssion method hybrid data for 55 firms since 1995 until 1999 and conclude that, return of firm has direct relation whith pyramid. Richardson & Sloan in own research under "relation of exterior financing with future share yield in 2003, reviewed all exterior financing with expected share yield. They found that, future return forecast of stocks depends to capital structure mostly.

4. Research Objectives

4.1 Main objective

effect of financing methods of firms accepted in Tehran stock exchange, on share yield.

4.2 Minor objects

A: effect of investment increase of firms accepted in Tehran stock exchange, on share yield.

A-1: Effect of investment increase by issuance of stock on share yield in accepted firms in Tehran stock exchange.

A-2: Effect of investment increase by stock dividend on share yield in accepted firms in Tehran stock exchange.

B: effect of loan on accepted firms share yield in Tehran stock exchange.

B-1: effect of short-term loan on accepted firms share yield in Tehran stock exchange.

B-2: Effect of long-term loan on accepted firms share yield in Tehran stock exchange.

5. Methodology

The using methodology in this research is of analytic—descriptive with applied approach. In this resarch, with regard to extracted data from financial statements of accepted firms in Tehran stock exchange during 2005-2009 is respond to hypothesises in order to analyse the situation of acceptd firms in Tehran stock exchange as to effect of various financing methods on stocks return in five years based on these data and analysis of liability rate (short, long term-loan) increased capital percent (stock dividends and issuance of stock) and share yield rate.

5.1 Statistic society

The accepted firms in Tehran stock exchange consist statistical society of this research.

The statistic sample of persent resarch has been extracted by deletion sampling from statistic society as follows:

- 1) The firms which their financial year leads to end of Esfand.
- 2) The firms which have continuous activity dyring research period.
- 3) The firms which have funded during 2005-2009 through increased financing investment.
- 4) The firme which have funded through loan during 2005-2009.

In this research, in order to callect required data on theory issues, method of library has been used, also in line with collection of required finanical data, the audited finanical statements of sample firme and software system which has been provided by "Islamic studies research, and development management of exchang and also Rahavad software system (provided by Novin Idea firm) have been used. About, firstly, the required rates and calculation is estimated as to various finanicing methods on stocks rate during given years would be reviewed.

5.2 Hypothesis

Hypothesis A: The financing through capital increase, has possitive effect on share yield of accepted firms in Tehran stock exchange.

This hypothesis consists of two sub-hypothesis:

sub-hypothesis A-1: the financing has possitive effect on share yield in accepted firms in Tehran stock exchange through increased capital by issuance of stock method.

sub-hypothesis A-2: the financing has possitive effect on share yield in accepted firms in Tehran stock exchange through increased capital by stock dividends method.

Hypothesis *B*: The financing has positive effect on share yield in accepted firms in Tehran stock exchange through loan.

This hypothesis has two sub-hypothesises:

sub-hypothesis B-1: The financing has positive effect on share yield in accepted firms in tahran stock exchange through short-term loan.

sub-hypothesis B-2: The financing has positive effect on share yield in accepted firms in Tehran stock exchange through long-term loan.

5.3 Variables

A. Independent variables: It includes methods of financing, wich are divided to:

- 1) Financing through short-term loan.
- 2) Financing through long-term loan.
- 3) Financing through increased capital from retained earning.
- 4) Financing through increased capital from issuancs of stock.
- B. dependent variables: It include Share yield.

the share yield is calculated by the following equation:

$$r_{iv} = \frac{p_i + p_i (1 + \alpha + \beta) + (p_{i-1} + c\alpha)}{p_{i-1} + c\alpha} \times 100$$
 (1)

Where p_t , p_{t-1} show share cost at conclusion and staring of period t. α , increased capital percent from issuance of stock. β , increased capital percent from retained earning and c, nominal amount payed by investor for increased

capital from cash investment and changes findings.

6. Model Test Research Hypothesis

In order to test variables of this research, the correlation and regression analysis is used, as in this research we try to confirm relationship between two variables. it is notable to say that, if confirmed both correlation coefficient test and regression coefficient significant, the hypothesis are aftirmed.

6.1 The ferst hypothesis (sub-hypothesis A-1)

"The financing has possitive effect on share yield in accepted firms in Tehran stock exchange through increased capital by issuance of stock method"

6.1.1 Correlation coefficient significant test

The results of pearson correlation test for given hypothesis, during research years which has been calculated by SPSS software, has been provided in table (1).

With regard to results of table (1), the signification level if calculated test (sig) is higher than 0.05 during all calculated years. thus, typothesis H_0 isn't rejected, and the linear relation between increased capital percent from issuance of stock and share yield of firms, isn't affirmed, also, with regard to calculated correlation coefficient in table (1), could indicate a negative relation between increased capital percent from issuanse of stock and share yield of firms.

6.1.2 Regression coefficient significant test

in table (2), the canducted tests has been provided to test given hypothesis along with results of it during research data.

With regard to results of table (2), the significant level of calculated test (sig) in all research years is higher than 0.05. thus, hypothesis H_0 isn't rejected and couldn't be claimed that there is relation between increased capital percent from issuance of stock and share yield of firms.

Which, if confirmed, both correlation coefficient and significant of regression coefficient tests, the sub-hypothesis is affirmed, thus couldn't claim that, the financing through increased capital with issuance of stock has positive effect on share yield in theran stock exchange.

6.2 The second hypothesis (sub-hypothesis A-2)

"The financing has possitive effect on share yield in accepted firms in Tehran stock exchange through increased capital by stock dividends method".

6.2.1 Correlation coefficient significant test

The results of pearson correlation test for given hypothesis, during research years which has been calculated by SPSS software, has been provided in table (3).

With regard to results of table (3), the signification level if calculated test (sig) is higher than 0.05 during all calculated years. thus, typothesis H₀ isn't rejected, and the linear relation between increased capital percent from stock dividend and share yield of firms, isn't affirmed, also, with regard to calculated correlation coefficient in table (3), could indicate a negative relation between increased capital percent from stock dividend and share yield of firms.

6.2.2 Regression coefficient significant test

in table (4), the canducted tests has been provided to test given hypothesis along with results of it during research data.

With regard to results of table (4), the significant level of calculated test (sig) in all research years is higher than 0.05. thus, hypothesis H_0 isn't rejected and couldn't be claimed that there is relation between increased capital percent from stock dividend and share yield of firms.

Which, if confirmed, both correlation coefficient and significant of regression coefficient tests, the sub-hypothesis is affirmed, thus couldn't claim that, the financing through increased capital with stock dividend has positive effect on share yield in theran stock exchange.

6.3 The thired hypothesis (sub-hypothesis B-1)

"The financing has positive effect on share yield in accepted firms in tahran stock exchange through short-term loan".

6.3.1 Correlation coefficient significant test

The results of pearson correlation test for given hypothesis, during research years which has been calculated by SPSS software, has been provided in table (5).

With regard to results of table (5), the signification level if calculated test (sig) is lower than 0.05 during all calculated years. thus, typothesis H_0 is rejected, and the linear relation between short-term loan and share yield of firms, is affirmed.

6.3.2 Regression coefficient significant test

In table (6), the canducted tests has been provided to test given hypothesis along with results of it during research data

With regard to results of table (6), the significant level of calculated test (sig) in all research years is lower than 0.05. thus, hypothesis H_0 is rejected and could be claimed that there is relation between short-term loan and share yield of firms.

Which, if confirmed, both correlation coefficient and significant of regression coefficient tests, the sub-hypothesis is affirmed, thus could claim that, the financing through short-term loan has positive effect on share yield in theran stock exchange.

6.4 The fourth hypothesis (sub-hypothesis B-2)

"The financing has positive effect on share yield in accepted firms in tahran stock exchange through long-term loan"

6.4.1 Correlation coefficient significant test

The results of pearson correlation test for given hypothesis, during research years which has been calculated by SPSS software, has been provided in table (7).

With regard to results of table (7), the signification level if calculated test (sig) is lower than 0.05 during all calculated years. thus, typothesis H_0 is rejected, and the linear relation between long-term loan and share yield of firms, is affirmed.

6.4.2 Regression coefficient significant test

In table (8), the canducted tests has been provided to test given hypothesis along with results of it during research data.

With regard to results of table (8), the significant level of calculated test (sig) in all research years is lower than 0.05. thus, hypothesis H_0 is rejected and could be claimed that there is relation between long-term loan and share yield of firms.

Which, if confirmed, both correlation coefficient and significant of regression coefficient tests, the sub-hypothesis is affirmed, thus could claim that, the financing through long-term loan has positive effect on share yield in theran stock exchange.

7. Discussion and Conclusions

With regard to analysis of hypothesis, the conclusions are as fallows: As observed in table (10), the results of research show that, firms which proceed to increase capital in thehran stock exchange in order to financing, didn't have positive effect on their share yield. this result is consistent (result of first hypothesis) with Smiths results (1977), Kurwor (1983), Skit and Molnz (1986). Dan & Michelson (2000), Miyeis & Majulf (2001), Richardson & Slaon (2003), Novravsh (2005).

But firms which proceed to Loan in thehran stock exchange in order to financing, have positive effect on their share yield. this result is consistent (result of second hypothesis) with Margaret results (1998), Bentstwart & Glasman (2001), Mateos & Balla (2002), Izadinia (2009).

8. Recommendations

This research, with regard to resultant evidence of study and results of hypothesises test, provided the recommendation to legislator agencies and thehran exchange, firms management, share holdere, banks, creditor, credit institutions, students, authors and eduational centers as follows:

1) While, financing thourgh increasing (stock dividend and issuance of stock) will cause to decline of any share temporarily and this decline would have negative impacts on cost share yield of that year, the gross change of capital belonged common. stock, is higher in comparison with other financial supply tools. it means that,

- common stock is expensive resource of financial supply and causes to increased capital charges of firm, thus it is better that the firms use this resources which have more profitable inverstment opportunities.
- 2) On the other that, while the long-term loan is constant nearly, if the resultant of these loans be higher than interest cost, the borrower firm will be benefit from these loans with regard to explonation, and based on research finding by considering positive impacts of financial supply though loan (long-term, short-term loan) on share yield of firms and negative effect of financial supply through increased capital (stock dividend and issuance of stock) to shareholders, creditor and investors, it is recommended that, in desions basesd on using financing methods, be caution that be successful in investments of firm.

References

Abazari, M. (2007). The survey and analysis of financing methods of firm accepted in Tehran stock exchange. *Journal of economics evaluation*, no. pp. 73-79.

Antoniou, Gunny and Paudyal. (2002). Determinants of Corporate Capital Structure: Evidence from European Countries, Social Science Research Network. [Online] Available: www.ssrn.com/abstract=285001

Banerjee, A., Heshmari C., & wihlborg, (2000), SSE/EFI Working Paper Sevies in Economies and Finance, pp333.

BESLEY, Scott and Eugene F. Brigham. (1999). Principles of finance. The Dryden Press.

Both L, V. Alvazian. (2001). Capital Structure in developing Countries. *Journal of Finance*, pp. 87-116. http://dx.doi.org/10.1111/0022-1082.00320

Chingfu, Chang, Lee, Alice C & Lee, Cheng. (2007). Determinants of capital structure choice: A structural equation modeling approach. *The Quarterly Review of Economics and Finance*, no.49, pp. 197–213.

Donaldson, G. (1961). Corporate Debt Capacity. Harvard Business School.

Gitman, L. J. (2001). Principles of Managerial Finance. Pearson Education, Asia.

Izadinia, N. (2008). The effect of capital structure on stock rate of return and earning per share. *Journal of accounting research*, pp. 136-161.

Jafari, A. (2004). The survey relationship of financing methods on price and share yield. *Journal of shahed university*, no. 5, pp. 37-46.

Jain, P. K, and Khan M. Y, (2006). *Financial Management: Text, Problems & Cases.* (4th ed.). Tata McGraw-Hill publishing company limited.

Jermias, J. (2008). The relative influence of competitive intensity and business strategy on the relationship between financial leverage and performance. *The British Accounting Review*, no. 40, pp. 71–86.

Margaret, M. Fogarty. (1998). Corporate capital and equity market development in latin American. The sis of Ph. D, gearge town university.

Margaritis, D & Psillaki, M. (2010). Capital structure, equity ownership and firm performance. *Journal of Banking & Finance*, no 34, pp. 621–632. http://dx.doi.org/10.1016/j.jbankfin.2009.08.023

Maria, G, Erika Grundstromer & Jennie Gustafsson. (2007). The Incentives behind Capital structure Decision- A survey of the Swedish market. *The Department of Business Administration*, pp 11-49.

Mate J. Blasko. (1997). Equity Issues and their Impact on Stockholders' Wealth. *The University of Georgia*, pp. 1-32.

Mateus, Dirk & Balla. (2002). *Optimal Capital Structre*. Social Science Research Network. [Online] Available: www.ssrn.com/abstract =277019

Mayers, S.C. (1984). The Capital Structure Puzzle. *Journal of Finance*, pp. 581.

Mojtahedzade, V. (2009). The survey relationship of finanving methods of firm of Tehran stock exchange on operation performance. *Journal of financial*, pp. 53-65.

Raei, R. (2010). Advanced investment management. Samt. REILLY F. K. & K.C. Brown, (2003), *Investment Analysis and Portfolio Management*.

Richard, A. Brealey, Franklin Allen, & Stwart Myers. (2006). Corporate Finance, 8th.

Richard, A. Brealey, Stwart Myers & Alan Marcus. (2003). Fundamentals of Corporate Finance. McGraw hill.

Richardson, Scott A., & Sloan, (2003). External Financing and Future Stock Returns. Social Science Research

Network, [Online] Available: www.ssrn.com/abstract = 285008.

VAN Aukin, E,H. (2005). A model of small firm capital acquisition decisions, International entrepreneurship and Management journal.VAN Horne, J. C. (2002). *Financial Management and Policy*, 10th, Prentice-Hall.

Vasiliou, D, Daskalakis, & Nikolaos. (2009). Institutional characteristics and capital structure: A cross-national comparison. *Global Finance Journal*, no 19, pp. 286–306. http://dx.doi.org/10.1016/j.gfj.2008.09.002

Table 1. Correlation coefficient test between increased capital percent variables from issuance of stock and share yield percent

Year	2005	2006	2007	2008	2009
Pearson Correlation Coefficient	-0.244	-0.130	-0.006	-0.089	-0.413
Significant	0.130	0.596	0.976	0.744	0.071
Affairmation-relation type	NO	NO	NO	NO	NO

Table 2. Liner regression analysis of share yield percent on increased capital percent from issuance of stock

Year	2005	2006	2007	2008	2009
\mathbb{R}^2	0.059	0.017	0.000	0.008	0.170
Significant	0.130	0.596	0.976	0.744	0.071
Rejection or Affairmation for H ₀	Affirmed	Affirmed	Affirmed	Affirmed	Affirmed

Table 3. Correlation coefficient test between increased capital percent variables from stock dividends and share yield percent

Year	2005	2006	2007	2008	2009
Pearson Correlation Coefficient	-0.113	-0.061	-0.018	-0.175	-0.360
Significant	0.575	0.809	0.941	0.587	0.341
Affairmation-relation type	NO	NO	NO	NO	NO

Table 4. Liner regression analysis of share yield percent on increased capital percent from stock dividend

Year	2005	2006	2007	2008	2009
\mathbb{R}^2	0.059	0.017	0.000	0.008	0.170
Significant	0.130	0.596	0.976	0.744	0.071
Rejection or Affairmation for H0	Affirmed	Affirmed	Affirmed	Affirmed	Affirmed

Table 5. Correlation coefficient test between short-term loan percent and share yield percent

Year	2005	2006	2007	2008	2009
Pearson Correlation Coefficient	0.752	0.564	0.696	0.385	0.630
Significant	0.000	0.001	0.000	0.020	0.000
Affairmation -	YES	YES	YES	YES	YES
relation type	-Direct	-Direct	-Direct	-Direct	-Direct

Table 6. Liner regression analysis of share yield percent on short-term loan

Year	2005	2006	2007	2008	2009
\mathbb{R}^2	0.566	0.318	0.469	0.148	0.397
Significant	0.000	0.001	0.000	0.020	0.001
Rejection or Affairmation for H ₀	Rejected	Rejected	Rejected	Rejected	Rejected

Table 7. Correlation coefficient test between long-term loan percent and share yield percent

Year	2005	2006	2007	2008	2009
Pearson Correlation Coefficient	0.752	0.564	0.696	0.385	0.630
Significant	0.000	0.001	0.000	0.020	0.000
Affairmation - relation type	YES -Direct	YES -Direct	YES -Direct	YES -Direct	YES -Direct

Table 8. Liner regression analysis of share yield percent on long-term loan

Year	2005	2006	2007	2008	2009
\mathbb{R}^2	0.566	0.318	0.469	0.148	0.397
Significant	0.000	0.001	0.000	0.020	0.001
Rejection or Affairmation for H ₀	Rejected	Rejected	Rejected	Rejected	Rejected

Table 9. Comparison of research results with other results

Main hypothesis	Result	Consistent result in other research
First hypothesis	REJECTED	Smiths (1977), Kurwor (1983), Skit and Molnz (1986). Dan & Michelson (2000), Miyeis & Majulf (2001), Richardson & Slaon (2003), Novravsh (2005).
Second hypothesis	ACCEPTED	Margaret (1998), Bentstwart & Glasman (2001), Mateos & Balla (2002), Izadinia (2009).

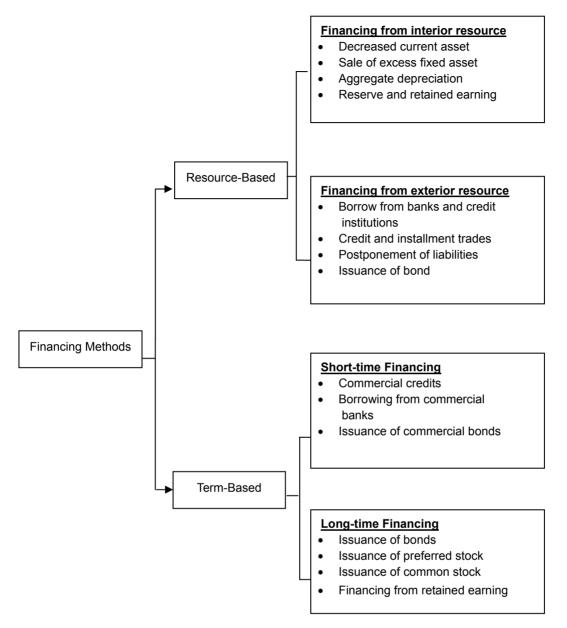


Figure 1. Division of financing methods

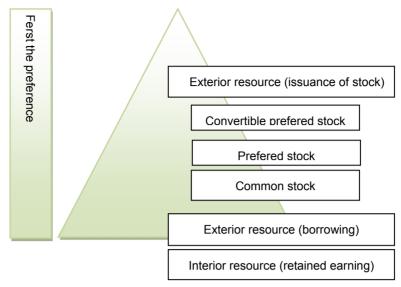


Figure 2. Pyramidal order of financing hypothesis