# The relationship between financing as capital structure and economic value added

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Abstract: What finance suppliers are encouraged to make use of their resources in certain activities, it is an activity optimum performance. Because optimal performance, to increase corporate value and therefore increase the capital of the owners of the resources are sought. Therefore, in order to increase shareholder capital, one of the major areas of decision managers is the financing of stock companies. To determine to what extent managers maximize the capital of the owners, who have been successful, EVA indicators are evaluated. In this research, evaluation of the financial performance of the two measures of economic performance, economic value added (EVA) is performed. In this present research in order to relationship between variables from the regression analysis and Correlation used EVIEWS software. The survey examined companies in the years 2005 to 2010, the following results were obtained: The companies-years surveyed, there isn't Significant relationship Between external financing and EVA performance scales.

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#### 1-Introduction

Development Growing businesses require substantial financing. Often the task is not a victim. Securities and Exchange for companies that offer the finance resource required funds through financial institutions such as banks or to provide the supply of securities. In other words, the securities and exchange as a conduit for the transfer of resources from the finance act savers to consumers through providing optimal capital of resources of the required finances firms, plays role economy. Managers are striving using the resources in organization for survival and growth (Morad zade fard, 2009)

The past two decades witnessed a radical change in the economic and trade relations between our countries. In this new economy, business unit managers are faced with new challenges, the most important goal of the business unit is Maximizing shareholder capital, and corporate performance evaluation is the most interest of investors, creditors, managers and government (Grant 2000).

The task of the financial manager structure optimization of assets, liabilities and equity to maximize shareholder capital. In this context, the finance director Tuesday decision:1- Analysis of financial planning including creating a fit in the structure of assets, liabilities and equity, improved economic unit and planning for the future. 2 - investment decisions, including decisions relating to the allocation and use of funds provided by the physical assets (such as buildings and machinery) and financial (such as securities) to study more efficiently and effectively.3—Financing decisions, including

decisions related to the financial structure and capital structure as well as to identify and select the best method of financing and composition. Systematic use of external finance-related companies, so that the financing of these activities have affected the company's operating performance and shows reduce of performance. Also the type of external financing (through equity or debt) have a different effect on the company's operating performance. so that Funding has a stronger relationship with the changes in the company's operating performance relative to other funds as long-term debt. Even the relationship between debt, convertible debt stock is stronger than long-term debt (Kasar 2005).

## Literature

Previous studies indicate that foreign firms act to finance (through equity or debt) can affect their performance and operational efficiency. So that between the external financing activities and operating performance before and after, was observed a significant relationship. Iran also has done research on corporate finance. The effect of additional financing (through the issue of shares or long-term loans) on stock returns and stock market value, and have expressed the problems of financing. Several studies of earnings management in relation to external financing are examined. Frydln shows for first time the company's publisher of shares (IPO) in most of the financial statements contained in the Declaration of securities underwriting profit increased use of accruals. In contrast, Aharon and et al will not find evidence of manipulation of the initial offering period. Theo and et al found that companies that have a positive accruals

are reported in the first year as a joint stock company in the next three years, the stock price will experience poor performance (Abraham et al, 2007).

The concepts presented are expressed in a bunch of companies that are doing the financing of future operations will experience a drop in performance. Also, regardless of the type of financing, the financing company will lead to changes in operating performance. However, some of the views they express not only the volume but also the type of external financing, play an important role in the next performance (2005th Kasar).

Fama and Miller (1972) believed that the company's management, external financing for compensation for loss of earnings (profits) or the cash requirements will be used. This work, which enables the company to invest the money needed to operate and provide profitable and generating value. Basically this means that the financing of unforeseen provides new information about the interest rate (Fama and Miller, 1972)

Research on the relationship between external financing and future stock returns often for years that foreign financing through the issue of shares for the first time in public (IPO), republish, stock, bank loans create a debt and is happening in a be lower. Ritter Research in 2003 showed that the relationship between financing activities and stock returns varies according to the type of financing and general activity increased (decreased) cash flows and stock returns is lower (higher) future is concerned.

The automotive companies have 59% of them were financed through loans, were confirmed a significant relationship between lending and corporate profits (subject to BONAB, 2005).

## Research hypotheses

Considering that in the present study to evaluate economic performance, economic value added (EVA) has been so original and secondary research hypotheses are expressed as follows.

The main hypothesis, there is a significant relationship between external financing and economic value added.

# **Materials and Methods**

Since this study, studied the relationship between the two variables, the performance and external financing, so a correlation study using the combined data. In correlation research the main purpose is to investigate whether relationship between two or more variables are quantitative (measurable) and if there is enough and how much is it. Degree of relation between two variables, usually expressed as a correlation coefficient is a number between negative one and positive one. The two variables are interdependent coefficient close to zero and two variables that are strongly linked with a coefficient close to one or a

negative one (Earth, 2005). In this study to test the research hypotheses, statistical techniques such as correlation coefficient and the coefficient of determination or explanation and estimate regression models with panel data are used.

## Community and sample

The population in this study, listed companies in Tehran Stock Exchange under the provisions cited are:

- The accepted companies in the population must be in the form of production and investment firms and intermediaries are not public.
- financial annuals ended 20 March to indices at the end of the financial year, a consistent period of time.
- Companies should at least FY 2005 are listed in the basic financial statements to be submitted to the Stock Exchange.
- Companies should have need financial data needed to calculate the independent variables (net external financing) and dependent (performance criteria) according to the methodology.
- Because some of the parameters is necessary to determine the market value of equity, therefore, the company's shares must be traded at least once during March each year.

Given the above statistical community consists of 119 companies between the years 2005 to 2010 years, respectively.

### **Measurement of variables**

The variables in this study included independent variables and dependent variables are measured as follows

A) The independent variable

The independent variable in this study is a net external financing.

To assess the external financing of the two approaches can be used for one approach, a balance sheet and cash flow statements of the other approaches.

The approach to the balance sheet, net financial debt is defined as the sum of changes in equity. Therefore, the effectiveness of each source of financing of the company's operating performance compared with other sources of financing (Kasar 2005).

$$\Delta XFIN = \Delta EQUITY + \Delta DEBT$$

Changes in capital+ Changes in debt= Changes in financing.

$$\Delta EQUITY = \Delta CEQUITY + \Delta PEQUITY$$

Changes in preferred stock of capital+ Changes in common stock of capital = Changes in capital

# $\Delta DEBT = \Delta LITDEBT + \Delta CVDEBT + \Delta NOTES$

Changes to documents+ Convertible debt (in stock) + Long-term debt = Changes in debt

In this study to calculate the independent variable (net external financing) has been used a balance sheet

approach. So according to the above approach, the net external financing firms is calculated as follows:

# $\Delta XFIN = \Delta EQUITY + \Delta DEBT$

Changes in Long-term debt+ Changes in capital= Net external financing

In calculating the net external financing has the following terms:

The meaning of  $\Delta$  *EQUITY* is Changes in the capital stock is resulting from the publishing and sale of new receivables shares and cash earned shareholders.

the calculated of  $\Delta$  *EQUITY*, Increase in capital reserve and retained earnings arising from the conversion or changes in the nominal money stock, is not considered.

In order of  $\Delta$  *DEBT*, Changes in balance long-term debt that may result from long-term liabilities, including borrowings and repayment of received loans or are long-term commitments.

In order to neutralize the effects of small and large companies, the company's net financing and its components are defined based on the average of their assets.. So  $\Delta XFIN$  in this study have been modified as follows.

 $\Delta$  XFIN =  $\Delta$  EQUITY/average assets +  $\Delta$ DEBT/average assets

needed data for the calculation of the balance of net external financing firms have been extracted from 2005 to 2010 fiscal years.

## dependent variables

Economic Value Added (EVA)

EVA is not a new concept. One of the performance measures of accounting is profit remains that as operating profit after deducting capital expenditures are defined and EVA actually modified version of the dividend remains with the adjustment of profits and capital is done (Anderson et al. 2005).

EVA, was calculated using the following equation:

$$EVA = NOPAT - (WACC * IC)$$

Net operating profit after taxes (NOPAT) and capital employed is calculated from the following equation and were implemented the modifications mentioned a bout them.

Adjustments + interest Tax savings - interest expense+ Profit after tax= Net operating profit after taxes

Adjustments + Other long-term debt +Total interest-bearing debts+ Equity= Employed Capital

Weighted average cost of capital (WACC) is composed of two principal components from sources cost and sources weight.

$$WACC = W_1K_e + W_2K_d$$

W1= Employed Weight Capital in the ordinary shares

 $k_{e=}$ = Employed cost Capital in the ordinary shares  $W_{2=}$  Weight of debt

K<sub>d=</sub>Cost of debt

(Cost of Financing-Interest-bearing debts)\*(1-T)=Cost of debt

Employed cost Capital in the ordinary shares=1(op)

In this research can be used from, profitability model or 1/(P/E) to calculate the capital cost of the three growth models - Gordon, profitability and CAPM model. Sources of weightsis the sum of market value of equity and book value of debt. The weight of debt and common stock is obtained from divided by the total weight of each source (Jhahnkhany and Parsaeian, 2001).

# Results and analysis

For each test research hypotheses, based on the information in the balance sheet and profit and loss firms sample, regression and correlation analyzes were performed by using statistical software (Eviews). To test the hypothesis research in this present study, the relationship between external financing measure and EVA is investigated at the two levels. At the first level the relationship between the external financing net (XFIN) years of the sample companies with EVA reviewed and tested. Providing Significant variables related at the first level, regression analysis is performed at second-level. At the second level, instead of external financing net (XFIN), components of the financing through equity (EQUITY) and financed through debt (DEBT) is measured by performance criteria.. The test facility to investigate the effects of external financing practices (through equity and debt) of the companies surveyed was possible. The results of the linear regression tests for concerning hypotheses is presented in Table 1.

Table 1 - Summary of statistical results

Regression testing at the second level				Regression testing at the first level				
The result of test	Prob	В	Independent variable	The result of test	Prob	В	Independent variable	The Relation of external financing with:
-	-	-	Δ EQUITY	Reject the hypothesis	0.4092	2171.819	ΔXFIN	EVA
-	-	-	Δ DEBT					
Analysis:, there is no significant relationship between				Analysis: There is no significant relationship between				EVA
financing through debt and equity, economic value added				finance and economic value added				

### **Discussion and conclusions**

Due to topics such or theory controversial or agency (separation of ownership from control of the company), which refers to the ownership, control measures to ensure payment of a debt interest are by administrators. Conflict between shareholders and creditors entails consequences such as increased debt cost rate from creditors, increasing monitoring costs and reducing investment. The result of this kind of conflict of interest, suggests that high leverage can lead to poor performance.. can be understand that companies politics and practices has effective in changing the capital structure of the Company. Managers performance is influenced in relation to earnings management on companies performance. And so much research is done between earnings management and financing and capital structure and earnings management.

The results of this study it was observed that external financing and economic value added has been investigated, It can be said that there is no significant relationship between the finance and economic value added at 95 percent.

# Suggestions for future research

During the research process, it was felt necessary to conduct research in the following fields:

- 1) As mentioned in the research records, external financing activities, in addition to the performance measures examined in this study is also associated with topics like the efficiency and value of the company. It is recommended that research on the effects of external financing on operational performance, efficiency and value of the company should be able to be comprehensive.
- 2) Given that cash flows will provide useful information to users, so it is suggested instead of accruals information and similar this research studies done using cash flow approach.
- 3) Since this research is not intended for large and small companies, Suggested relationship between external finance and companies performance done according to company size and industry type as a factor.

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