

## Investigate the Relationship between Age of Fixed Assets whit Co-Financing Ratio

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**Abstract** *This research examines the association between Corporate age and Tangibility & capital Structure. Prior research suggests showed that age and Tangibility influence on Capital Structure. This essay investigates whether of age and Tangibility and Capital Structure. For investigating this relationship; we use data for 90 listed companies on Tehran Stock Exchange for period of 2007-2011. The results of this research, shows that there is not a reasonable relation between age and capital Structure.*

**Key words** Capital Structure, corporate age, tangibility, capital structure

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### 1. Introduction

Many studies have been done in the field of corporate structure in Iran and a great number of researches had been extended to the subject. Nowadays the phrase “corporate structure ” has become a really important and developing concept in the great world of business. Today corporate age is the basis of company’s relations with the beneficiary groups. The main difference within the attitudes and standpoints is related to the amount of company’s relations with the stockholders. The present research examines the association between the capital structure and corporate structure mechanisms. Muller and mudileyani (1958) the pioneers of the field of capital structure analysis had scrutinized the capital structure of the companies and analyzed the effective elements of the company’s value. They kept in their mind that we can consider the debt structure of the company as the controller mechanism of the agency costs and concluded that the existence of extreme free cash flow can be used in non-optimal activities.

So, it could be said that the aim of considering the capital structure is to specifying the composition of any company’s capital resources in order to maximize the wealth and possession of its stockholders. As the costs of the company’s capital is considered as the accessory of its capital structure, the selection of desirable capital structure leads to the decrease in the costs of the company’s capital and the increase of its market value. So, there is a close relation between the corporate structure and capital structure, because the criteria of corporate governance is looking for the ways of increasing the company’s value and securing the revenue of the all beneficiary groups and the structure of the desired capital is looking for the ways of achieving the goals. If the company has a desirable capital structure, it could approach the highest value of the firm.

### 2. Literature and theoretical framework

No doubt one of the important components of any company’s is its capital structure. So presenting a desirable capital structure in a company can leads to the division of suitable benefit, the decrease of tax costs and the increase in the supervision of company and its management. Muller and Mudileyani (1958) had scrutinized the capital structure of the companies, during their researches they suggested, according to

the value of the company, there is no difference between the securing firm's capital needs by use of stockholder's salary and the debt. As if, the numerous methods of securing company's financial needs had no supplementary value and, there are no boundaries for the manager but the later researches of Muller and Mudileyani indicated the capital structure of the corporate are broader than the issue while numerous factors are involved in determining capital structure. Abor and Biekpe, (2007) stated that board members can be considered the highest authority on most decisions made by the company or companies involved will have direct supervision. We can also consider the board members of the company as the highest position of the company, having the direct control and hand on the major decision makings in the company. Wong (2009) showed that there is a close relation between the capital structure and the board members, their scene of responsibility and also the membership of the chairman in the structure of the board. Gellatly, G. (2003) showed that companies who have more experience and knowledge about the density structure and debt problems are Useless debt and to reinvest profits from its operations back. Bhaduri, S. (2002) as they the effect of possessing state companies as an important criterion in corporate governance couldn't be ignored. There is a direct relation between the ownership of the state companies and the debt ratio which means the more position of the state companies leads to increase of supervision for the company. Sykes, J. (2009) the role of the main stockholder is another criterion in corporate governance which has a very important supervisory role in a firm. The companies owning main stockholder go through the absorbance of new investors, paying attention to their sales and marketing system. So there is a meaningful inverse relation between the corporate structure and the main stockholder.

### 2.1. Literature review

Kumar (2004) stated, distributing the shares between the managers and former and new stockholders have a direct relation with the intensity of the debt structure which leads to the more stockholders' supervision on the managers. So the higher capital structure ratio is the sign of weaker corporate governance and leads to the decrease of stockholders ownership in the firm. It was also specified that the analysis of the corporate governance structure and its effects on the capital structure has a great effect on the way of securing its capital. Qian and *et al.* (2007) in a research with the title of "capital structure and corporate governance in China" concluded the size of the company and the positions' structure, tangibility, has a positive and meaningful relation with the capital structure ratio. Yung Byun (2007) scrutinized the debt intensity ratio and the corporate governance criteria and concluded: suitable method of corporate governance decreases the information asymmetry of the companies and also decreases the debt ratio of them. Besides that the effect of company's size was considered during the research in Korea and specified that the effect of corporate governance is bigger on the greater companies. Odeck and Sunde, (2001) established a research in Indonesian with the title of profit division and debt ratio and concluded that the main stockholders have negative direct relation with the debt ratio. Ramiz and Raoof. (2010), according to his research "weather the corporate governance has any effect on the capital structure or not?" concluded that there is a weak positive relation between the capital structure and corporate governance. Methodology The present research methodology according to its usable aim and its implementation is descriptive. And according to the scrutinizing the relationship between the variables it is correlation.

For the analysis of the hypothesis we use the multivariate regression techniques, presented as:

Capital structure =  $\alpha + \beta_1(\text{tan}) + \beta_2(\text{age}) + \beta_3(\text{DI}) + \beta_4(\text{Insale}) + \epsilon$  The variables of the equation involve: capital structure  $\alpha$ : constant coefficient  $\beta_1$ : tangibility  $\beta_2$  age  $\beta_3$ : The intensity of distribution structure  $\beta_4$ : Gross sales  $\epsilon$ : Error rate

### 3. Research findings

Descriptive statistics: it is consist of branches, using for the better description and analysis of the data. The branches provided by the software, include: the maximum and minimum for specifying highest and lowest observations, mean and median as the central indexes, standard deviation and the range of variations for evaluating the distribution.

Table 1. Descriptive statistics of variables in quantitative research

Elongation	Skewness	Standard deviation	Average	Maximum	Minimum	Description
-1.20	-0.22	11.97	31.90	53	8	The age of the company (from the time of establishment)
62.37	7.66	9266937	2332637	94290078	13184	Gross sales
0.92	1.04	0.17	0.27	0.90	0.02	Tangibility

### 3.1. Scrutinizing the first hypothesis

There is a meaningful relation between the debt structure and the Institutional shareholders of the firm.

For scrutinizing the hypothesis we need to the practice of regression equation between the tangibility possession and capital structure.

$$y_{it} = \alpha_0 + \alpha_1 A_{it} + \alpha_2 E_{it} + \alpha_3 F_{it} + \epsilon_{it} \quad (1)$$

Totally, if the above equation is a meaningful equation with the independent variation it could be accepted that, the tangibility possession is effective on intensity of the capital structure. It could be said that the below hypothesis is being scrutinized:

$$\begin{cases} H_0: \alpha_1 = 0 \\ H_1: \alpha_1 \neq 0 \end{cases}$$

$\alpha_i$  is the coefficient of regression line? The hypothesis could be rewrite in this way:

$$\begin{cases} H_0 \text{ There is no meaningful relation between the capital structure and the tangibility of the firm.} \\ H_1 \text{ There is a meaningful relation between the capital structure and the tangibility of the firm.} \end{cases}$$

For scrutinizing the hypothesis, after specifying the best regression line we express our opinion according to the significant test of regression line. It should be noted that due to the absence of normal dependent variables and its effects on the occurrence of normal condition, the remains had become normal according to the box-Cox( $y^{0.4}$ ) conversions.

Table 2. Regression table between tangibility and capital structure

Regression statistics	
0.290	The correlation coefficient
0.084	Coefficient of determination
0.075	Adjusted coefficient of determination

Table 3. ANOVA

P_value	F_value	Mean square	Sum of squares	Degrees of freedom	
0.000	8.778	0.106	5	0.529	Model
		0.012	478	5.763	Error
			483	6.293	The total

Table 4. Estimated parameters

P_value	T_value	Standard deviation	Estimate	
0.000	13.678	0.0509	0.6955	Intercept
0.616	0.502	0.0002	0.0001	B
0.486	0.698	0.0004	0.0003	E
0.000	-3.675	0.3175	-1.1671	F

According to the table of variance analysis the model is statistically meaningful and could be said that according to the model about 8.4 percent of intensity of *capital structure* is explained by the model.

$$y_{it} = 0.6955 + 0.0001A_{it} + 0.0003E_{it} + \epsilon_{it}$$

Although the increase tangibility leads to the increase of *capital structure*, according to the mentioned model and the amount of probability and its comparison with the level of meaningfulness it could be accepted that the assumption of zero or the fact that "there is no meaningful relation between the tangibility and the intensity of *capital structure*" is not denied in the level of 5% and the hypothesis cannot be generalized to the population.

### 3.2. Scrutinizing the second hypothesis

A model like this should be scrutinized.

$$y_{it} = \alpha_0 + \alpha_1B_{it} + \alpha_2E_{it} + \epsilon_{it} \tag{2}$$

Totally, if the above equation is a meaningful equation with the independent variation it could be accepted that, the percentage of out- directors is effective on *capital structure*. It could be said that the below hypothesis is being scrutinized:

$$\begin{cases} H_0: \alpha_1 = 0 \\ H_1: \alpha_1 \neq 0 \end{cases}$$

$\alpha_i$  is the coefficient of regression line. The hypothesis could be rewrite in this way:

$$\begin{cases} H_0 \text{ There is no meaningful relation between age the percentage of capital structure} \\ H_1 \text{ There is a meaningful relation between the age and percentage of capital structure} \end{cases}$$

For scrutinizing the hypothesis, after specifying the best regression line we express our opinion according to the significant test of regression line. It should be noted that due to the absence of normal dependent variables and its effects on the occurrence of normal condition, the remains had become normal according to the box-Cox( $y^{0.4}$ ) conversions.

Table 5. Regression Table between age and Percent financial instructor

Regression statistics	
0.295	The correlation coefficient
0.087	Coefficient of determination
0.078	Adjusted coefficient of determination

Table 6. ANOVA

P_value	F_value	Mean square	Sum of squares	Degrees of freedom	
0.000	9.128	0.110	5	0.548	Model
		0.012	478	5.744	Error
			483	6.293	The total

Table 7. Estimated parameters

P_value	T_value	Standard deviation	Estimate	
0.000	14.064	0.0499	0.7019	Intercept
0.174	-1.362	0.0102	-0.0139	B
0.436	0.780	0.0004	0.0003	E
0.001	-3.397	0.3220	-1.0937	F

According to the table of variance analysis the model is statistically meaningful and could be said that according to the model about 8.4 percent of intensity of *capital structure* is explained by the model.

$$y_{it} = 0.7019 - 0.0139B_{it} + \epsilon_{it}$$

Although the increase in the percentage of out- directors leads to the decrease of *capital structure*, according to the mentioned model and the amount of probability and its comparison with the level of meaningfulness it could be accepted that the assumption of zero or the fact that "there is no meaningful relation between the age and the *capital structure*" is not denied in the level of 5% and the hypothesis cannot be generalized to the population.

#### 4. Conclusions

In the present research we scrutinized the relation between the intensity of debt structure and Corporate Governance Mechanisms. The evaluation of first hypothesis of the research indicated that there is no meaningful relation between the institutional ownership and the intensity of debt structure, also the evaluation of second hypothesis of the research indicated that there is no meaningful relation between out-directors and the intensity of debt structure. The results coming from the evaluation of these hypotheses do not conform to the research of Yung Beyun (2007), Abur & Bekipeh (2007) and Kumar (2004).

The evaluation of the third and fourth hypothesis indicated there is a meaningful relation between the main stockholder and the intensity of debt structure and also the State-owned company's possession of the firm and the intensity of debt structure, which conform to the research of Burcherding and *et al.* (1982) and Alo (2010).

#### Limitations

Some of the limitations of the study are inherent and some of the conditions and time limitations of the study. The most important limitations are stated in below, which should be considered in the explanation of the results and it's Generalizing:

- lack of control over some factors affect results, including variables such as economic factors, political conditions, global economic conditions, laws and regulations, and ... Outside the reach of the researcher which could affect relation.
- Companies In terms of size, type of industry and products do not necessarily represent all economic units operating in the country, so the generalizing of the findings should be done with care.

#### Recommendations based on findings

As it was seen, despite the theoretical concepts no relation was observed between the mechanisms of institutional shareholders and out-directors' compact structure of debt (*capital structure*) with the intensity of debt structure. The issue is the result of incorrect corporate governance, so institutional shareholders are advised to respect their rights, and other stakeholders to play their role more appropriately. The shareholders of the companies are also advised to pay special attention to the selection of non-required board members or appointees board members to play a supervisory role appropriately.

As the State-owned company's possession of the firm have a positive relation with the intensity of debt structure and according to the researches the mentioned companies are very effective, and in contrast with other companies having higher debt in their *capital structure*, in order to preventing any kind of abuse their stockholders and non-required board members should play their supervisory role appropriately.

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