European Online Journal of Natural and Social Sciences 2013;
vol.2, No. 3(s), pp. 25-34 ISSN 1805-3602

Analysis between financial leverage with the stock price and the operational performance of the accepted companies in Tehran's stock market

Vahid Bahreini, Mehdi Baghbani, Rezvan Bahreini

Payame Noor University, Boushehr, Iran

Abstract

In this study, the relationships between the changes of the economic leverage and the operational performance of the accepted companies of Tehran's stock market were analyzed. The main goal of this study is to determine if there is a meaningful relationship between the changes of the economic leverage and the operational performance of the accepted companies of Tehran's stock market. For this purpose, 145 companies from 2005 to 2006 with systematic elimination method were selected. The results indicated that there was a meaningful relationship between the economic leverage and the stock price. The results showed that an increase in the debt led to an increase in the relationship between the economic leverage and the stock price. Also, the study showed that the relationship between the economic leverage and the stock price is a meaningful and negative relationship. Finally, the study indicated the change of the economic leverage and the ratio of expenses to property is a negative and meaningful relationship.

Keywords: Economic leverage, operational performance, stock price, investment rate, structure of capital

Introduction

The discussion about how a company chooses its capital structure and the factors affecting this matter has a great value and a topic of ongoing debates. There are hundreds of articles about the financial choices and the factors affecting this matter, many of the theory works have chosen to analysisof the relationship between debt and the rights of the owners in achieving the optimal ratio (Yang, 2010), based upon this, we can say that its fund and the optimal ratio of it or in other words, the financial support of the company by different methods is one of the topics that was first debated by Modigliani and Miller (1958) and has been the base of many analyzes since then which sometimes have led to new theories. Even though there have been many studies on this topic, the capital structure still remains a topic of financial management that has never found a proper solution.

Review of Literature

Choosing the capital structure is definitely one of the most important choices of a manager and the changes of the economic leverage can affect to the financial capacity, the risk of investment, strategic choices and investment and finally the wealth of the investors (Kay and Jhang, 2011).

The literature of the capital structure is consisted of a big list of variables which can be important due to the ratio of the financial leverage. Because all the elements of the capital structure are not considered in this study, all of the variables are not included in the regression model.

The leverage is consisted of the permanent expenses in the list of the company's expenses. This leverage depends on the permanent financial expenses like the addition of the loans; this matter plays an important role in calculating the profit before

Corresponding author: Vahid Bahreini, Payame Noor University, Boushehr, Iran. Email: vahid.bahreini@gmail.com

taxes and/or profit of each of the company's shares (Namazi and Khajavi, 2004).

The leverage is that part of the expenses which will guarantee the risks; the operational leverage will be derived from the operational risk and points out the permanent expenses both in profit and loss situations. This leverage points to the properties of the company which will need permanent and continuous financial support and aim to increase the normal shareholder's performance. The bigger this leverage is, the bigger the risk of the company will be. The expense of the property increases because the expense of financial support increases with risk (Abdullahzade and Sabzevari, 1984).

Economic managers believe that the financial leverage is one of the most important factors, to the extent that it has a special place in managing the capital structure. The capital structure of a company is the relationship between the debts and the rights of the shareholders who will secure the financial support needed. The company that has no sort of debt will have a capital structure based upon the rights of the shareholders.

But, because in most cases the capital structure is accompanied with debt and the rights of the shareholders, the financial managers are very careful about receiving loans and the effects it will bring. If a company reaches a good state by receiving a loan (the leverage has been good), the gain of each shareholder will increase, compared to declining the loan (VakiliFar, 1996), based upon this, the shareholders who have claim over the remaining rights, will be faced with more risk in a leveraged company rather than a normal one (Scordis *et al*, 2008).

The term rising curve of the debt is used when the debt of a company or country goes up more than it the company or the country can repay it. This curve predicts that the negative effect of the change in the financial leverage is more for the companies which have a higher level of debt curve (Kay and Jhang, 2001) the meaning of the curve is companies which have more than acceptable debt. In this study and for this aim we have categorized the companies with more possible curve of debt, the theory of this curve was proposed by miser in (1977).

This theory predicts that in companies with more financial leverage there is a higher possibility of losing future projects with the present net worth, because in many situations the final outcome after reducing the expenses will be less than the amount the shareholders had to invest. This reduction in the investment will decrease the rise of the company's worth. Because of that, an increase in the financial leverage can lead to dropping the stock price and the other factors will follow it as well. We can say that when a company has the potential to achieve over debt, an increase in the financial leverage will lead to harder and greater effect which will come in the future (Kay and Jhang 2011).

This problem indicates that the existence of debt will increase the chance of company's bankruptcy. The increase in a company's debt level will lead to increased debt expenses. The higher this level gets will lead to prevention on growth by gaining outside payment support. Because of that many companies will give up on growth projects and reduce their worth in the end. So Miser (1977) emphasizes that lower financial leveragehas a directrelationship with the higher worth of companies (Carter, 2011).

Review of Related Literature

Nasim and Pitman (1998) have used financial relationships for elevating the valued documents. In this study a model is presented that is based upon their work but instead of using income it used the financial relationships indicating the overall income and by predicting the changes with market they determined the future price of the stock shares. They calculated by the model of predicting income that the price of the stock shares is determined by two relationships, profiting and growth; and this relationship can be used for determining the value (SalehNejhad and Ghaiour, 2009).

Lam (2002) by using the effects of the beta variables, the size of the company, the ratio of the calculated value and the market value and the ratio of profit to performance in Hongkong's stock market has reached the conclusion that beta cannot determine the value but the three variables have relationships with each other.

Zaiton and Tian (2007) have used 167 companies information to determine the relationship between the capital structure and the performance of the companies during 1989 to 2003 and reached the conclusion that there is a meaningful relationship between the ratio of the debts to properties and the

ratio of the debts to the rights of the shareholders in ROA relationship.

Chen and Zhang (2007) have analyzed the relationship between financial variables and the profits. The variables they used consist of the profit, the amount of the owner's investment, the changes in the profit, the changes in the growth chances and the changes in the reduction rate. Their studies showed that there is a meaningful relationship between the five variables mentioned above.

Elenjar and Tailor (2008) have reached the conclusion that in Jordan's companies the profit, the size of the company, growth rate, the ratio of the calculated value to the market value, capital structure and the cash in hand are all factors which will determine the capital structure which are similar to the factors which play a remarkable role in the growing market conditions.

Hossein and Gol (2011) have done a research in cement industry in Pakistan's stock market; their aim was determining the relationship between the stock price and the capital structure. The period of the study has been 2005 to 209 and the samples were 11 companies of that country. They used three factors, the ratio of debt to the rights of the shareholders, the ratio of debt to the property and the coverage ratio. The results showed there is a negative relationship between the variables of the study and the price of company's stock shares.

Dimitrov and Jin (2008) have determined a negative relationship between the annual changes in the leverageand the profit of the stock in the present and the upcoming year. They have also found a negative relationship between the leverage and the upcoming income and determined that a company may increase its debts when the expected performance is ruined. They also say that an increase in the debt signals will weaken the operational performance and will result in weakening the stock share.

Kay and Jhang (2011) have done a research named changes of the leverage, the debt curve and the stock value. They have reached this conclusion that the changes of the leverage will send out new information to the market about the value of the stock share. They have also verified that there is a negative relationship between changes in the leverage and the stock share prices. This effect will be higher for companies with higher leverage and more risk in payment of the debts. Also, the companies with an increase in the leverage are drawn to less future investments.

Regarding the studies done in Iran, Bahramfar and Shams Alam (2004) have done a study to determine the effect of the accounting information on the extraordinary performance of the stock. The variables they used were the degree of the financial leverage, the promises, the ratio of the investment return, the increase in the permanent properties, the changes in the operational cash, the market value of the company, the ratio of the debt to the rights of the shareholders and financial expenses. Their findings show that the accounting variables other than profit have a high value in determining the value of the stock share.

Bagherzade (2005) have analyzed the elements which affect the share's profit in stock market. His findings showed that there is a linear positive relationship between the systematic risk and the profit of the stock share. He has also determined that between the variables, the size of the company, the ratio of the calculated value to the market value and the ratio of profit to income play the most important role. Despite that and against the expectations, they were all in contrast with the profit in the literature.

Saghafi and Salimi (2005) have analyzed the relationship between some of the base elements of the accounting and theprofit of the stock share. Their results showed that the changes in the profit, the total of the properties and the kind of the report of the accountant have a meaningful relationship with extraordinary of the stock market. The three mentioned variables explained 48% of the changes in the extraordinary profit of the stock market.

Poorheidari et al (2005) have analyzed the relationship between the amount of profit and the calculated value with the value of the accepted companies in Tehran's stock market. Their period of study was 1996 to 2004. Their results showed that, first,a considerable part of the market value of companies is determined by profit; second, most of the power of the explanation between calculated value and total profit is based upon profit and third, the calculated value doesn't have a good power of explanation when comparing with each share's profit.

SalehNejhad and Ghaiour (2009) have analyzed the effect of the ratio of the property's effect, the ratio of the shareholder's right and the financial leverage on the stock share price of the accepted companies in Tehran's stock market. They have done this research on all the compa-

nies and in the industry categorized level. In the overall method, they reached the conclusion that ROA and ROE have effect on the stock value but the financial leverage doesn't have a meaningful relationship. In the industry categorized method the results of the financial rates and the stock price were varied between different industries which show the independence nature of industries.

HasanZade and Bonab (2010) have analyzed the relationship between the elements of determining the performance and risk with the stock share's investment return with emphasizing on the midterm financial reports. They analyzed the traditional value elements like the quality of the shareholder's right, the return of the properties and elements of risk like systematic risk, the ratio between calculated value and market value and the relationship between the financial leverage and stock share's return. The results showed that there is a meaningful relationship between the traditional elements and the ratio of the changes in the calculated value with market value and also the ratio of the changes in the calculated stock value in stronger when compared to the ratio of the shareholder's rights and the return of the investments, the results also showed that there is not a meaningful relationship between elements of risk and stock returns.

Ibrahim and Saeedi (2010) have analyzed the effect of the accounting variables and the features of the company on the stock price. The period of the study was 2001 to 2007 and the statistic society was consisted of 92 accepted companies in Tehran's stock market. The results showed that there is a direct relationship between the stock price and share's profit, property's return and the previous period's stock price, and the operational flow of each share, the period of company's activity and the ratio of property to stock share does nothave any effect on the stock price. But, there is a reverse relationship between the size of the company and the stock prize.

Hypotheses

1. There is a negativerelationship between the changes of the leverage and the company's stock price.

2. The debt curve will lead to increased relationship between the changes of the leverage and the stock prize.

3. There is a meaningful relationship between the changes in the leverage and the future investments of the company.

4. There is a meaningful relationship between the changes in the leverage and the operational performance.

Methodology

In this type of study, the data were collected from the events of the past and were analyzed. In order to test the hypotheses, simple and multiple regression were used. The methods used in this study are descriptive statistics and we have used SPSS and Excel programs to determine the meaning between relationships.

Participants

In this study, the accepted companies in Tehran's stock market were chosen as the statistical society. The reason behind this choice was the attention of the investors and availability of the information and the clarity of the financial reports. The stock market's requirements for on time financial reports have led to a proper environment for the researchers. Also, the accepted company's stock shares and the wide variety of the users of the share have led to the decision of taking the mentioned companies as the statistical society.

Based upon this the sampling done by systematic elimination, we selected the companies with following qualities from all of the accepted companies:

1- They were accepted before 2005

2- The company's end of financial year should have been in Isfand.

3- The company should not have changed the financial year during the study period.

4- The data of the mentioned companies should be available.

5- The investment companies, banks and insurance companies were deleted from the list.

Because of the restrictions mentioned above a total of 145 companies were chosen from the accepted companies in Tehran's stock market.

Variables of the study and methods of calculating the variables

The variables of the study are listed in the following table, along with methods to calculate each of them.

Table 1. Variables and methods of measurement

Method of measurement	Symbol	Variable name	
Rahavardnovin software has been extracted.	P_t	Stock Prices	Dependent variables
Earnings before interest and taxes / Assets, beginning of period	ROA	Return on assets	
$\frac{(Assets_t - Assets_{t-1}) - (Debt_t - Debt_{t-1})}{Assets_t}$	Capex/Assets	Investment spending to assets ratio	
Prior period financial leverage- financial leverage= change in current period's financial leverage	Lev ch	Changes in financial leverage	
Book value of total liabilities / Book value of total assets	Lev	Financial Leverage	
$\beta_i = \frac{Cov(r_i, r_m)}{\sigma^2(r_m)} = p_{im} \cdot \frac{\sigma_i}{\sigma_m}$ Abbreviations are as follows: Variance of market efficiency or = $\sigma^2(r_m)$ market risk; p_{im} = Yields a relationship coefficient of i and market share, and SD = standard deviation of return = σ_m, σ_i on the share market returns (share risk and market risk). To calculate the beta of the market, based on the above model, using software – software rahavardnovin to calculate it.	Beta	Beta	Independent variables
The market value of shares at end of period * Number of shares	MV Equity	The market value of the company	
Liabilities - intangible assets - total assets / Number of shares * Market price per share	BM	Book-to-market ratio stocks	
Net Income / Average current and prior period book equity	ROE	Return on equity	
Logarithm of the value of corporate assets	Size	Company Size	

Data analysis

In this study, in order to test each hypothesis, we have used both single and multiple regression models.

The first hypothesis

To test the first hypothesis, the companies were categorized in three sub groups based on the changes in the leverage, the group 1 had the least (most negative) and the group three had the most (most positive) changes in the financial leverage. For each of the sub groups the model 1 has been used.

Model 1: $p_{i,t} = \beta_0 + \beta_1 LEV\,CH_{i,t}$

The second hypothesis

In order to test the debt curve or the over rated debt, the companies were categorized into 4 groups and then they were divided into three levels. We placed the companies from the small to large about their financial leverage, then they were divided into four groups. Then, the group 1 was known as first level, group 2 and 3 was known as second level and the group 4 was known as the fourth level. Then, the model 1 was used for each of them.

The third hypothesis

In order to calculate the upcoming investments we have used the ratio of the investment expenses to properties. Then, we used the model 2 for testing the hypothesis

$$Capital\ expenditures\ /\ total\ Asets_{i,t} =$$

Model 2: $\beta_0 + \beta_1 LEV\,CH_{i,t} + \beta_2 B/M_{i,t} +$

$$\beta_3 Log(MV\ Equity)_{i,t} + \beta_4 ROE_{i,t}$$

The fourth hypothesis

In order to determine the operational performance we have used the effectiveness of the properties. Then, the third model was used to test the hypothesis

Model 3:

$$3)\ ROA_{i,t} = \beta_0 + \beta_1 LEV\,CH_{i,t} + \beta_3 LEV_{i,t} + \beta_4 Log(Size)_{i,t} + \beta_5 B/M_{i,t}$$

Table 2. The results of correlation between stock price and the subgroups

							Subgroup
	Shift leverage	0.345-			Pearson		
		0.000			Sig		
38.543	Goodness of fit (F)	1.955	Durbin Watson	0.119	Be explained	Stock price	Group 1
0.000	Sig						
	P_t=3428.786-26662.534 levch				The model		
	Shift leverage	0.46-			Pearson		
		0.000			Sig		
76.607	Goodness of fit (F)	1.759	Durbin Watson	0.211	Be explained	Stock price	Group 2
0.000	Sig						
	P_t=4350.165-66619.151 levch				The model		
	Shift leverage	0.207-			Pearson		
		0.000			Sig		
13.355	Goodness of fit (F)	1.887	Durbin Watson	0.043	Be explained	Stock price	Group 3
0.000	Sig						
	P_t=7444.547-21864.320 levch				The model		

Results and discussion

Hypothesis one

The aim of the first hypothesis was analyzing the negative relationship between the stock price and the variable of the financial leverage. In order to do that the samples were divided into three groups based upon the changes of the leverage. The first group had the least change of the leverage and the third ones had the most changes.

The statistical sample was divided into three subgroups. As we can see, the significance level is less than 0.05. Therefore, we can determine that there is a meaningful relationship between the changes of the leverage and the stock price and due to the negative sign of each of the coefficients. We can say that there is a negative relationship between the changes of the leverage and the stock price. The negative solidarity between the changes of the financial leverage and the stock price is more in the second group. We expected the increasing line of coefficient from group 1to 2, which was 0.345 to 0.46 to continue in the third subgroup but the third one showed less solidarity.

The strength of determination in the group 2 is bigger, indicating that the companies with middle level leverage have a higher level of determination than those with high or low leverages. The third subgroup has a low leverage level, as we can see in the table the findings of the Watson has an error domain between 1.5 and 2.5 which shows independence in the errors. The F test shows sig level less than 0.05 in all three subgroups which shows that the regression equation is meaningful. The result of the regression in each of the subgroups is also presented with them.

The results indicate that in all three subgroups the negative relationship exists. The solidarity rate in the subgroup 2 is the most, as we expected the rate reached from 0.345 in subgroup one to 0.46 in subgroup two but against our expectations, this amount was decreased in subgroup three. Kay and Jhang (2011) have reached a similar result, only difference was that they reached the conclusion in their work that the portfolio in the levels with higher financial leverage has a higher solidarity as well.

On the other hand, in the portfolio of the companies in the second subgroup which was consisted of middle ranged companies, in addition to the mentioned situation about solidarity the changes on the leverage variables is much more determining to explain the stock price.

As a result, the hypothesis of the study about a negative relationship between the stock price and the changes in the financial leverage is correct.

Hypothesis two

The aim of performing the financial limit test was to determine the effect of the financial leverage on the relationship between the financial leverage and the stock price. In order to do this the samples were divided into three groups and the first group has the least and the thirds one has the most financial leverage.

Table 3. The effect of the financial leverage on the relationship between the financial leverage and the stock price

		Lev Ch					**Class**
		0.139- 0.041			Pearson Sig		
4.220 0.041	Goodness of fit (F) Sig	1.970	Durbin Watson	0.019		P_t	1
	P_t=6397.127-9399.401 Lev Ch				The model		
		Lev Ch 0.287- 0.000			Pearson Sig		
38.472 0.000	Goodness of fit (F) Sig	1.985	Durbin Watson	0.082		P_t	2
	P_t= 4900.481-15340.962 Lev Ch				The model		
		Lev Ch 0.466- 0.000			Pearson Sig		
60.903 0.000	Goodness of fit (F) Sig	1.945	DurbinWatson	0.217		P_t	3
	P_t= 6282.002-37673.656 Lev Ch				The model		

As we can see, the significance of the independent and dependent variable is below 0.05 in all three groups, rejecting the nullhypothesis and shows that there is a meaningful relationship in all levels between the financial leverage and the stock price. The negative mark of the solidarity between the dependant and independent variable shows that there is a negative relationship between them. The solidarity rate in groups one, two and three are -0.139, -0.278 and -0.466 which shows an increasing rate.

In other words, the more the financial leverage-increases the more effect it will have on the stock price. The strength of determination by independent variable is also higher in the third group. The statistics of Watson has been between 1.5 and 2.5 in all of thelevels which shows independency between the errors. The level of sig in the F test also shows that the regression has meaning in all of the levels. The final model of the study is also presented for each of the levels.

The results of the study showed that the coefficient of solidarity in the first to third group have been -0.139, -0.287 and -0.466 which shows the companies with higher level of leverage also have a higher relationship with stock price. So we can determine that more debt and leverage will strengthen the relationship between the financial leverage and the companies' stock price. This theory is in accordance with Kay and Jhang's (2011) findings.

The final result indicates that the hypothesis about the strengthening of the solidarity between the financial leverage and the stock price is correct.

Hypothesis three

In the third hypothesis, in order to determine the future investment,thevariables of coefficient of the expense to income were used. The results of the analysis of the third model are listed in the following table.

Table 4. The results of coefficient of the expense to income

ROE	Log MV	B/M	Lev Ch	Independent variables		
0.024-	0.220	0.169-	0.605-	Pearson	Capital Expenditure/ Total assets	Dependent variable
0.473	0.000	0.000	0.000	Sig		
---	0.37	0.030	0.588-	Coefficient β		
---	0.000	0.000	0.000	Sig		
240.801	Goodness of fit (F) 0.000	1.756	Durbin Watson	0.451		
Capital expenditure/T Assets= -0.126-0.588Lev Ch-0.030B/M+0.37Log MV				The model		

The sig level of the changes of the leverage's variables B/M and market value is all is below 0.05, indicating the rejection of null hypothesis and we can conclude that there is a meaningful relationship between these variables and the dependant variables. The ROE variable has a sig level more than 0.05. So, the null hypothesis is approved and we can say that there is no significant relationship here.

Also, the sig level for all β coefficients is below 0.05 in all the variables with meaningful relationship with future investments which shows that that the null hypothesis is declined and these variables can enter the final model. The power of determination by independent variables is 0.451 and the Watson statistic is 1.5 to 2.5 which shows the independence between errors. The sis level of the F test also proves that regression is meaningful and the final model is also presented in the table.

The results showed that there is a positive relationship between the two variables which means by increasing the financial leverage the amount of investment increases as well. In other words, the more leverage a company gets the more investment ratio will be achieved the next year. In one hand, the change means more leverages in a year than the previous one and on the other hand the ratio of the investment means the difference between this year's property and the previous one. So we can say that by increasing the leverage the properties are also increased. This is in contradiction with Kay and Jhang's (2011) findings. They said there is a negative relationship between the ratio of investment and the changes of the financial leverage.

Results and findings of the fourth hypothesis

The other aim of the study is to determine the relationship between operational performance and ROA with the company's financial leverage. The following table shows the results.

Table 5.The relationship between operational performance and ROA with the company's financial leverage

B/M	Log Size	Lev	Lev Ch	Independent variables		
0.094	0.100	0.036-	0.244-	Pearson	ROA	Dependent variable.
0.005	0.003	0.280	0.000	Sig		
0.088	0.035	---	1.238-	Coefficient β		
0.027	0.026	---	0.000	Sig		
22.223	Goodness of fit (F) 0.000	1.983	Dorbnwatson	0.071	Be explained	
ROA= -1.238 Lev Ch +0.035 Log Size + 0.088 B/M					The model	

The results show that the sig of the leverage variables, size and coefficients of calculation to market are less than 0.05 which declines the zero hypothesis and proves that there is a meaningful relationship between them. This relationship is negative for the changes of the leverage and positive for the size and the value. This means that the less the leverage gets the efficiency of the property increases and vice versa. The sig for the variable of the leverage is more than 0.05 which approves the zero hypothesis and shows that there isn't any meaningful relationship here.

Also, the sig level for all β coefficients is below 0.05 in all the variables with meaningful relationship with future investments which shows that that the zero hypothesis is declined and these variables can enter the final model. The power of determination by independent variables is 0.071 and the Watson statistic is 1.5 to 2.5 which shows the independence between errors. The sis level of the F test also proves that regression is meaningful and the final model is also presented in the table.

The results show that there is a negative meaningful relationship between these two variables. In other words, by increasing the leverage in this year, the income will be reduced compared to the previous one. This is in contradiction with Kay and Jhang's (2011) findings; they approved a positive relationship.

Regarding the financial leverage, we can say that by increasing the leverage the efficiency of the companies reduces. The other variable is size. The results show a positive relationship which means the bigger the companies get the better their efficiency becomes.

Finally, there was a positive and meaningful relationship. The more this ratio gets, the more efficiency we can see but it shows a small amount due to small solidarity (0.09).

Conclusions

As it was mentioned before, the change in the financial leveragehas a negative effect on the stock price of the company. This means by increasing the leverage in each year, the stock price gets lower and lower. Also, based upon the financial restrictiontheory, we can say that in companies with higher level of debt or with bigger debt curve, the changes in the leverage will have more drastically effects. Also, by analyzing the elements chosen for future investment, we can say that the changes in the leverage will have negative effect as well, which means by increasing the leverage changes and amount of investment decreases. The other thing we analyzed was the effect of the leverage change on operational performance and we used property efficiency for this. In this regard, we saw that the change in the leverageled to a decrease in efficiency. Therefore, we can determine that the companies can have a positive effect on their stock price, efficiency and operational performance if they can control the changes in their financial leverage and lead to increased wealth for the shareholders.

References

Abraham, M., &Saidi, A. (2010). The impact of accounting variables and characteristics of the company's stock price companies list in Tehran Stock Exchange, *Journal of Accounting and Auditing,* 17 (62), 16-1.

Al-najjar B, &Taylor, P. (2008). The Relationship between capital structure and ownership structure, *Managerial Finance*, (34), 919-933.

Bagherzadeh, S. (2005). Effective factors on stock returns in Tehran Stock Exchange, *Financial Research*, 19, 25-64.

Bhramfr, M.N., & Shams Alam, S.H. (2004). Examining the impact of accounting variables on future abnormal returns, *Journal of Accounting and Auditing*, 23, 37-50.

Cai, J., & Zhang, Z. (2011). Leverage change, debt overhang, and stock prices. *Journal of Corporate Finance,* 17, 391-402

Carter, K. (2011). Capital structure, Credit rating d and sarbanes-Oxley, University of South Florida.

Dimitrov, V., & Jain, P.C. (2008). The value-relevance of changes in financial leverage beyond growth in assets and GAAP earnings. *Journal of Accounting Audit Financ*.191–222.

Hassanzadeh, R. &Rainy,H. (2010). Examining the relationship between stock returns and risk evaluation criteria (focusing on the quarterly Financial Statements, *Journal of Financia Engineering, portfolio management*, 108, 8.

Hussain M. N., &Gul, S. (2011). The impact of capital structure on stock price of cement sector in Pakistan, *Interdisciplinary Journal of Contemporary Research in Business,* 3(3), 778-800.

Lam, K. (2002). The Relationship between size, book-to-market equity ratio, earnings-price ratio, and return for the Hong Kong Stock Market, *Global Finance Journal,* 13, 163-17.

Myers, S.C. (1977). Determinants of corporate borrowing, *Journal of Financial Economics*, 146-175.

Namazi, M., & Shokrollahi Khajavi, R. (2004). The usefulness of accounting variables to predict the systematic risk of listed companies in Tehran Stock Exchange, *Accounting and Audit Investigations,* 38, 119-93.

Pourhedari, O., Soleimani, A., Sfajv, G. (2005). Assessing the relationship between profits and stock market value of listed companies in Tehran Stock Exchange, *Accounting and Audit Investigations,* 42.

Saghafi, A. & J. Solomon (2005). Fundamental accounting variables andstock returns, *Journal of Social Sciences and Humanities of Shiraz University*, 4, 20.

Saleh, , S.H., &Ghaior, G.H. (2011). The effect ROA and financial leverage on return on equity and stock price-listed in Tehran Stock Exchange.

Scordis, N.A., Barrese, J. & Wang, P.2008(. The Impact of cash flow volatility on systematic risk, *Journal of Insurance Issues*, 31(1), 43-71.

Tian,G.G., &Zeitun, R. (2007). Capital structure and corporate performance, *Australasian Accounting Business and Finance Journal*, 4, 40.

Vakili Far, H. &Farr, M. (1986). Financial management, Samareh Publication.

Yang, J. (2010). *Essays in capital structure*, Duke University.

Zadeh, F. &Sabzevari, A. (1994). Theory and problems of financial management (Volume II), forthcoming.