Is Experience or Fund Type Effect the Firm Performance?
A Study of KSE Listed Organizations in Pakistan

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Abstract

This paper examined the impact of firm's age and capital structure on firm's performance of cement sector in Pakistan. In this paper sample of 10 firms of cement sector is taken data duration consists of five years from 2007 to 2011. In this paper return on assets, return on equity, assets turnover, current liabilities to total assets, long term liabilities to total assets, firm age and debt to equity variables are used. Multiple regression models are applied in order to test data. The results of this study show that firm's age has a significant impact on firm's performance. As firms move towards maturity its performance also decreased. Business life cycle theory also supports this statement that firms lose their value with the passage of time. It is analyzed that older firms are highly leveraged. Results of this study show that firms with average age 33 years have 63% debt in their capital structure. Short term debts of such firms are higher and their long term debts are lower. Short term debts are costly as compare to long term debts which ultimately negatively impact on firm's performance. It is also analyzed that there is a negative relationship between firm's age and debt equity ratio. Long term debts have significant impact on performance.

Introduction

Significance of the Study: Firm's age and capital structure are two most important aspects that affect a company's performance. Capital is an amount of money and all economic resources used in a business to earn profit. Capital structure means that how a company is being financed? What are the sources of its capital it may be equity financing or debt financing or combination of both. Capital structure decision is most important because capital is like life blood for business organizations. Without capital no organization can run its business activities. That is why capital structure is given the most importance in present age because all the company's returns and performance depends upon it. If it is not structured well it may bring heavy losses for the organizations. It is the responsibility of managers to make a good combination of debt and equity in order to maximize returns.

Concept of capital structure was firstly given by the Modigliani and Miller in 1958. They argued that capital structure does not impact a firm's performance and its returns but soon Modigliani and Miller realized its importance and in 1963 he gave the concept of tax in his theory. They said that if firms take into consideration tax benefits received by them their profitability will go up. If a company inject debt financing it receives tax rebate on interest payments so, it increases its profitability. Myer and Majlufintroduced Pecking order theory. According to pecking order theory firms must prefer to use equity financing. Only those firms can practice this, which are well established and these have enough capital. Small or medium term firms cannot adopt this practice. Except of this agency cost theory was also introduced. Agency cost theory explains agency cost. Agency cost is that amount that arises due to conflict between the management and owners.

Firm age also put a significant impact on firm's performance. Firm age is calculated from the date of incorporation minus present year. As a firm grows older its assets depreciate, productivity decreases and its ability of competition decreases. As a firm gets older its ability to compete also decreases only those firms can compete which adopt the changes with the passage of time. Firms with higher age are facing a problem of poor performance and governance issues. Older firms face a problem of employee turnover and cannot retain its employees because these firms cannot pay higher wages to their employees. Older firms also face a problem of non-availability of deb. These kind of firms are mostly highly leveraged which cause a lower return to its shareholders.

Capital structure is given much importance because it enables an organization to work properly. Organizations can make good planning on the basis of good capital structure because it gives surety about funds availability. Capital is like life blood and capital structure determines the sources of capital for the organizations. Capital structure must consist of a good combination of debt and equity in order to obtain tax rebates. Now organizations are adopting optimal capital structure. An optimal capital structure is that where the cost of capital is equal to tax rebate. If a firm takes loans from institutional investors they will supervise and will keep check and balance and will

take into consideration each and every decision made by the managers. Managers are watch dogs appointed by the shareholders to take care of their interests but sometimes they deviate from their duties and play with the money of shareholders. In this case if institutional investors are there they can keep check and balance on managers.

Capital structure is one of the most important studies because it determines the sources of finance for the firms. Every investor wishes to get maximum return from the capital invested and it depends upon the best utilization of that capital. A good capital structure choice gives a firm competitive edge. Firms try to choose an optimal capital structure in order to minimize cost of capital and get tax benefit from interest payments. The higher leveraged cause a positive impact on firm's performance. As firms take loan the creditors want surety that their interest amount as well as principal amount is saved. They also take part in company's management and provide their suggestions for better performance. Each shareholder wants his wealth maximization and it is only possible through proper investment decisions and it is only possible if firms' capital structure decision is good.

Aim of the study: This research will examine the impact of capital structure and firm's age on firm's performance in Pakistan. Firms are still facing a problem of incorrect choice of capital structure in Pakistan due to which their performance is going down.

Research objectives: The objective of this study is to analyze whether a firm's capital structure and its age impact its performance and after analyzing it to draw some recommendations for the firms of cement industry of Pakistan. It is also an important objective of this study is to enable these firms to choose an optimal capital structure to get tax benefit.

Research questions: This study will try to find the answers of the following questions; Does the firm's performance go down as a firm grows older? Does an appropriate combination of debt and equity is necessary for the better performance? Whether a capital structure impacts a firm's performance or not?

Delimitation of the study: This study only analyzed the five years data in order to draw results from 2007 to 2011 which is very limited. Except of this sample size is also very limited. Some ratios are not used due to non-availability of data such as; market to book value and Tobin's Q.

The remaining paper is arranged as follow; chapter two discusses literature review. Chapter three describes sample size, data and methodology. Chapter four defines model and results and their interpretation. Chapter five discusses conclusions and recommendations.

Literature Review: Capital structure gives information about how a firm is financed? It may be debt financing or equity

financing. Capital structure may be mix of debt and equity. Firm's age describes that since how long a firm is in business. Firm's age is derived by the difference of the year of incorporation and current year.

Loderer and Waelchli observed the effect of a firm's age on its performance[1]. As it is common observation that all material things lose their value with the passage of time, firms also lose their value with the passage of time. Due to use of firms' assets they start to depreciate and their working capacity also reduced which in turn a cause a decrease in the value of firms. According to Loderer et al. firms should adopt changes with the passage of time, learn through experience, hire experienced employees and consistently show progress in R&D in order to retain themselves[1]. Firms need to know their competitive edge. According to Loderer et al. older firm face many problems such as depreciation of assets, increasing cost of production, an increase in board size an increase in employee's pays which took its performance towards negativity. According to Firm's life cycle theory firms after attaining maturity starts to decline. Loderer et al. used different variables to obtain desired results which are as follow; Return on assets, Tobin's Q, Management age, size, Management tenure, Ownership structure and capital expenditures[1]. The regression model is applied to obtain results. On the basis of Loderer et al. analysis they concluded that as firms grow older their profits decreased, costs increased, board size also increased and their performance goes down due to assets depreciation[1]. It was supposed that firms with higher age learn through experience and earn high profits by high investments in R&D but it is analyzed that there is negative relationship between firm's age and its performance.

Coad, Segarra and Teruel said that as firms grow older their size decreased and their capacity of loan taking from external creditors decreased and they rely on equity financing[2]. It is because of firms' decreased value with the passage of time. New firms are more productive and their performance is also good as compare to older firms. Business life cycle theory also explained that a firm's performance also changed at different stages of its life. Entrepreneur who done business on the basis of their experience they showed better performance. According to Loderer et al firms learn from their experiences[1]. It means as firms grow older they got business experience. Entrepreneur who did not know his jobs and his environment he could not survive his business. A firm that rapidly responded to changes enjoyed higher profits. Firms' with low age has great productivity, high growth and profits. According to Barron firms have a 'liability of obsolesces' which means as firm grow older it could not adjust itself in the changing environment which cause its downfall. Variables used by Coad et al. are; firm's age, return on sales, gross profit, short term and long term debt ratio[2]. Regression model is applied to analyze the relationship of different variables. New firms find it difficult to take loan because there may be a risk of non-payment because new firms have no working experience and their business projects might fail. Such firms could not take long term loans

and they finance their firms with short term loans which is more expensive for them. Coad et al. proved that old firms have negative trend in performance meanwhile some older firms are enjoying higher growth and profitability[2]. Older firms which responded to rapid changes are more profitable. Young firms have a high growth and higher productivity.

Majumdar said that there is a negative relationship between firm's age and performance. As firms grown older their productivity went down[3]. So, these are negatively correlated. Majudar divided the firms into three groups on the basis of age and in each group there was a different Government policy which had an effect on firms' performance[3]. The purpose to analyze the firms according to Government policies is to determine that what kind of policies were beneficial for the businesses. Firms with older age were negatively affected because these were already facing a decrease in performance due to their age. Firm size also effects firm's performance. Firms with large size face a decrease in performance and small firms enjoy great profitability. The reason as a firm expended its business check and balance became weak and performance went down due to large number of departments. Only those older firms grew which had experienced and they use their experience in capturing new opportunities. It is also observed that decision making became tough in older firms as compare to younger firms. Different variables were used firm's size, age, leverage ratios, profitability ratios, and pattern of holding and fixed assets growth. Regression model was applied in order to derive results. Result showed a negative relation among firm's age and its performance.

Durand and Coeurderoy analyzed the impact of firm's age, order of entry and strategies orientation on firm's performance[4]. They observed that there is a negative relationship between a firm's age and performance. An older firm showed less growth as compare to new firms but new firms had a liability of newness. Liability of newness means that new firms have more chance of failure. According to them firms which enter in a market are more profitable because it is new inventor of that market as compare to its competitor so, earned higher profit but these also face a risk of failure. Firms which enter late they may find it difficult to get success in getting a satisfactory market share. Variables used to support this relationship are firm's age, order of entry, strategic orientation, return on assets, return on equity, return on securities and technology diffusion. Multiple regression models are applied and results showed that firms which are first mover enjoyed higher profits but they also face a risk of failure. Companies which move later face less risk as compare to first mover these also enjoy high profits. It is proved that firm's age does not have a significant impact on firm's entry. If a firm makes decision after a longer time than firm's age will affect its entrance.

Casmir and Anthony said that capital structure decision is most vital for the organizations. If an incorrect decision is taken it may cause failure of business[5]. Modigliani and Miller said that

in a perfect capital market, a firm's capital structure is not affected by cost of capital[6]. Introduced agency theory which argues that managers must work for wealth maximization of shareholders. If they do not work for the shareholders' prosperity it causes agency problem among shareholders and managers. To get rid from this problem Pingersuggested that capital structure must consist of high amount of debt because outer parties will put a check and balance on managers. Managers are said watch dogs that is why they are responsible to keep an eye on owners' interests. Different variables such as; assets turnover, firm's age, assets tangibility, return on equity, Debt equity ratio, size of firm and growth. Regression model is applied to analyze the different variables relationship. It is proved that capital structure of a firm has great importance for a firm and a correct decision creates value for the firms.

Ahmad, Hasan and Roslan analyzed the effect of firm's capital structure on its performance[7]. Modigliani and Miller said that in a perfect capital market a firm's capital structure is not effected but in 1963 they came to know the importance of capital structure and they recommend that a firm must use debt in its capital in order to get tax rebate[6]. Presented pecking order theory according to that a firm must be financed by equity. Firms with higher profits can finance through equity. Return on assets, return on equity, short term debt, long term debt and total debt are used in order to analyze relationship of firm's capital structure and its performance. Results are derived by adoption of regression model. It is proved that there is positive relationship between short term debt, total debt and return on assets. There is negative relationship between return on equity and long term debt.

Umar, Tanveer, Aslam and Sajid examined the relationship between firm's capital structure and firm's financial performance[8]. Capital is like a blood for any organization or firm, no firm can live without it. To run its operations it needed capital. Umar et al. used least square regression model to analyze the relationship between firm's capital structure and firm's performance[8]. According to them there are three important components which explained capital structure; short term debts to total assets, long term debt to total assets and total debt to total assets. Net profit margin, earning per share, return on assets, price earnings ratio and return on equity were used as profitability measures. The results shown that there is a negative relationship between current liabilities to total assets and profit margin, return on assets, earnings before interest tax and depreciation and price earnings ratio. There is negative relationship between current liabilities to total assets, long term liabilities to total assets and return on equity. Positive relation found between return on equity and total debt to total assets.

Boodhoo said that capital structure is most important for the organizations it not only enable it to meet its capital needs but also enables it to compete in its competitive environment[9]. An optimal capital structure is needed by the firms because it provides tax rebate on interest payments. An optimal structure

is that in which debt and equity are used in a specific proportion. Managers of the firm must define that how much debt must be included in capital structure. Modigliar and Miller found that an optimal capital structure is more profitable for the firms[6]. It is found that mostly companies do not have optimal capital structure because managers do not perform well and they enjoy on others' profits/income. Such kind of behavior cause agency problem. The directors always not work for the shareholders' wealth maximization. The difference of interests cause agency problem and owners have to pay agency cost to keep an eye on managers' performance. Recent studies proved that capital structure is itself a monitoring device. If debt is used in capital structure, external parties will force the managers to take correct decision and they will investigate managers about each decision. Debt to market value, an effective tax rate, percentage of shareholding, return on assets, tangibility of assets, return on investment, return on equity, EBIT to market value, fixed assets to total assets and annual capital spending to market value are taken as variables of the study and results are derived by usage of generalized least square model. It is proved that agency cost, ownership structure, tax rate and capital expenditures are important components of financial decision and an optimal capital structure is important to save tax.

Chowdhury and Paul said that capital structure choice depends on discounted future cash flows and weighted average cost of capital[10]. It is desired by every businessman to maximize future returns and minimize weighted average cost of capital. Modigliani and Miller said that leverage cause an increase in firm's value because it receives a tax rebate or discount on interest payments[6]. Earnings per share, dividend paid ratio, percentage of public shareholding, fixed assets turnover, long term debt to total assets, current ratio, operating leverage, sales growth and share capital are variables used in this paper. Regression model is applied and results shown that an appropriate capital structure is required by the firm with a combination of debt and equity.

Amjed said that capital structure choice has been a very important with reference to financial decision making[11]. In past its importance was not realized but recently it has been attaining management's attention. Correct combination of capital structure has a very vivid impact on firm's performance. Return on assets, return on equity, short term debt to total assets, long term debt to total assets and total debt to total assets are used as measure of relationship between firm's performance and capital structure. Results are obtained by application of ordinary least square model. It is found that leveraged capital structure has negative impact on firm's performance. It is analyzed that profitable firms prefer to use financing generated by their resources.

Cai and Zhang proved that there is a negative relationship between firm's capital structure and its performance[12]. Cross sectional regression model is applied on different measures of performance and capital structure. These measures are; return on assets, return on equity, EBIT&D, book to market value, firm size and debt to equity ratio. It is analyzed that firms with high leverage has a negative impact on performance. It is also observed that firms with high leverage reduced their borrowing capacity and their future investment went down.

P.Eriotis, Frangouli and Ventoura proved that firms that used debt financing earned less profit because they had to give a part of its profits to creditors as a fee against the usage of their money[13]. Firms which used equity financing showed more profit. P.Eriotis et al. used profit margin, four firms' ratio and debt equity ratio are taken as measures to support their hypothesis[13]. Fix effect model is used to derive results. It is proved that capital structure is one of the most important elements of financial decisions. Firms which used high amount of debt face a negative trend in performance. Debt ratio has a negative impact on firm's performance.

Gill and Obradovich analyzed the impact of Corporate Governance and Financial leverage on American firm's value[14]. Corporate Governance put an effect on wealth maximization of shareholders. Variables used to support their hypothesis are; firm's value, Tobin's Q, CEO duality, board size, audit committee, financial leverage, and firm's size, return on assets and insider holding percentage. Regression model is applied to obtain desired results. Results shown that there is negative relationship between board size and firm's performance, while a positive relationship is found between CEO duality, audit committee, financial leverage, firm size, insider holding and performance. Board size negatively affected firm's performance while leverage and return on assets positively affected performance of firms.

From the study of all these papers included in literature review, it is cleared that firm's age and capital structure has a significant impact on firm's performance but still it is not cleared in developing countries. This paper will examine the impact of firm's age and capital structure on firm's performance in Pakistan.

From the study of literatures by different researchers it is observed that as firms grow older their performance decreases. It is also analyzed that capital structure put significant impacts on firm's performance. Firms should choose a capital structure with a good mix of debt and equity. Firms which selected a capital structure with a mix of debt and equity earned higher profits.

All the papers only talked about optimal capital structure but sometimes firms could not avail debt due to strict restrictions of the creditors. Tax system in every country is different it is also overlooked. It is said that debt must be included in capital structure but no ideal limit of debt is defined.

Research Methodology

Sample selection: Sample is a representative part of total population. It consists of all characteristics of population. It is very difficult for the researcher to analyze whole population. So, a sample is taken to draw results and to avoid complications regarding data. Sample of this paper is derived through convenient base sampling.

All the sample size firms of this paper are listed in KSE under the head of Cement sector. Total population size of cement sector is 38. Cement sector is one of the growing sectors of Pakistan. It is growing rapidly due to rehabilitations and construction works at local and international level.

The sample of this paper consists of 10 firms which are listed at Karachi Stock Exchange. Karachi Stock Exchange was established in 1947, 654 companies are listed under 34 different heads on it. As the reliability of data is most important so I select Karachi Stock Exchange (KSE) as a source of data. The data taken from KSE is also verified from the webs of those companies and website of State Bank of Pakistan.

It is a quantitative research. Sample of ten firms is selected through random sampling technique. In quantitative research statistical model is used. Data is taken for five years from 2007 to 2009. The most recent years' data is taken in order to analyze the most recent effects of different variables.

Variables' definitions: Variables values are those values which are characterized to change their value with the passage of time. Variables show a change in one value with respect to change in other value. This change is measured in order to analyze the dependence of two variables. Variables used in this study are; return on assets, return on equity, assets turnover, debt to equity, current liabilities to total assets, long term debts to total assets and firm age.

Return on assets shows that how much an asset contributes to net income. It calculates number of money units earned against each asset contribution. This ratio also called asset turnover ratio. It is calculated as: ROA= $\frac{Net\ Income}{Average\ Total\ Assets}$

Asset turn over ratio shows that how much an asset gives return. If it is high it means that assets of a company are used accurately. If it is low than it means that the returns can be increased by maximum use of assets. It is calculated as
ATR= $\frac{Net\ Sales}{Average\ Total\ Assets}$

Return on equity shows that how much a firm is paying to its equity holders. It is the desire of each investor to obtain maximum gain from his/her investment. Return on equity is calculated as
ROE= $\frac{Net\ Income}{Average\ Shareholder's\ Equity}$

Debt equity ratio tells about debt and equity percentage. It also tells about firm's leverage. If this ratio is very high it means firm is highly leveraged. This ratio is very important from creditors' perspective because they want assurance of their principal as well as interest amount. It is calculated as
Debt to equity ratio= $\frac{Total\ Debt}{Total\ Euity}$

Current liabilities to total assets ratio shows that how much assets are contributing toward the payment of current obligations. It is calculated as
CL to TA= $\frac{Current\ liabilities}{Total\ assets}$

Long term liabilities to total asset ratio shows a contribution of assets in long term debt payment. It is calculated as
LTL to TA= $\frac{Long\ term\ liabilities}{Total\ assets}$

Empirical Model: There are different kinds of data analysis techniques such least square model, fix model technique, OLS technique and multiple regressions models. Model can be developed depending upon the nature of the data. The model of this paper is adopted. It is least square regression model. Model of this paper is as follow
$$\gamma = \alpha + \beta^1 DTE + \beta^2 CL/TA + \beta^3 LTL/TA + \beta^4 FA + e$$

Hypothesis: H^1=Firm's age has significant impact on firm's performance. H^o=Firm's age has insignificant impact on firm's performance. H^2=capital structure has significant impact on firm's performance. H^o=Capital structure has insignificant impact on firm's performance

Results and Discussions

Descriptive Statistics: The research sample consists of large number of calculations which are very difficult in order to reduce this problem 'Descriptive statistics' are used. These statistics present large amount of data calculations in a very concise way. There are different descriptive statistics used for calculations which are; mean median, mode, range, standard deviation, quartile deviation, coefficient of variance and variance.

Mean is also called average because it calculates average value of a data. It is derived as; Mean=$\frac{Sum\ of\ all\ values}{Number\ of\ values}$

Median is the middle value of data if it is written in an order. If median is even (two middle values) than it is calculated as;
Median=$\frac{Sum\ of\ two\ values}{2}$

Mode is that number that is repeated most in the data. Standard deviation is calculated as; S=$\sqrt{\Sigma\ (xi - x)^2/ (n - 1)}$

Variance measures variability of data sets from mean. Its formula is $s2 = \Sigma(xi - x)^2 / (n - 1)$

Rang is calculated as Range= Maximum-Minimum

Correlation shows the interdependence of one variable with another. It can be positive or negative. If it is +1 it means that two variables are perfect positively correlated. If it is -1 it is said that two variables are perfect negatively correlated. It can be within this limit of -1---------0---------+1. Its formula is

$$R = \frac{1\Sigma(x-xbar)^2 + (y-ybar)^2}{n-1}$$

Model of this sample is adopted not developed. Model can be developed on the basis of needs but the model of this paper is selected. Least square model is applied to draw results. There were different models but this model is selected due to feasibility with the data.

Data of this paper is secondary data. Data of this paper is collected from website of Karachi Stock Exchange, website of State Bank of Pakistan and websites of companies. Sometimes data is selected for the first time by the researcher it is called primary data. To collect this type of data questionnaire are developed.

Discussions: Results are derived by applying least square model. Results are obtained in order to analyze the impact of firm's age and capital structure on firm's performance. Results consist of descriptive statistics, correlation and regression model results. These are as follows;

Table 1 describes Descriptive statistics. This table shows different calculations such as mean, median, standard deviation and skewness etc. Mean is calculated by dividing sum of all values by their number. It consists of all values of data and that is why providing good results about data. So, mean is average value that represents whole data. Average of asset turnover ratio

is 0.545374, return on assets is 0.267959, return on equity is -2.324082, current liabilities to total assets is 0.320671, long term liabilities to total assets is 0.319856, debt to equity ratio is 4.95102 and average firm age is 33.7551.

Average of assets turnover ratio is explaining that how much an asset is contributing in sales within a specified period of time. It is 0.545374 which is almost 54.5374%. It means that assets are contributing 54.5374% in sales of the companies. Return on assets show that how much an asset is giving return to a company. Average of return on assets is 0.267959 which is almost 26.7959% which is comparatively low. Average of return on equity shows a negative return on equity that is -2.32 times. Average of current liabilities to total assets is 0.320671 which is almost 32.0671% which indicates that only 32% current liabilities are covered by total assets. Long term liabilities to total assets ratio is contributing only 31% of long term debts can be recovered by the total assets. Total debt to equity ratio shows that debt is 4 times than equity which causes a negative impact on firm performance. Average firm age is 33.7551 years.

Median is showing the middle values of data. Standard Deviation indicates the extent to which results can vary from the expected results. Skewness may be positive or negative. when it is shown through diagram if it has longer tail on right it is called positively skewed and if its left tail is longer it will be negatively skewed.

Average age of firms is 33 years and assets turnover is almost 54%. Return on assets is 26% and return on equity is negative 2.32 times. Average of current liabilities and long term liabilities are 32% and 31% respectively which is 63% collectively. It means that these firms are highly leveraged. This shows that as firms age increases its profitability decreases. These results are same like the results of Loarder and Waelchli (2010), Coad et al. (2010) and Majumdar (1998).

Table-1
Descriptive statistics

	ATR	CL	LTL	ROA	ROE	DE	FA
Mean	0.54537	0.32067	0.31986	0.26796	-2.3241	4.95102	33.7551
Median	0.38	0.3029	0.28756	0.26	2.37	1.22	32
Maximum	1.53	0.80275	1.51882	30.97	277.69	175.8	60
Minimum	0.01	0.08775	0.0261	-18.2	-265.2	-8.24	20
Std. Dev.	0.40673	0.15634	0.26777	10.0398	64.2836	25.0149	9.71796
Skewness	0.86634	1.2869	2.97912	0.57238	0.04909	6.69897	1.76657
Kurtosis	2.57226	4.8027	13.3059	4.01338	14.2066	46.2797	6.08566
Jarque-Bera	6.50303	20.1599	289.328	4.77223	256.427	4190.79	44.9258
Probability	0.03872	4.2E-05	0	0.09199	0	0	0
Sum	26.7233	15.7129	15.673	13.13	-113.88	242.6	1654
Sum Sq. Dev.	7.94044	1.17317	3.4415	4838.24	198354	30035.9	4533.06
Observations	50	50	50	50	50	50	50

Table 2
Correlation table

	CL	DE	FA	LTL
CL	1	-	-	-
DE	0.115898	1	-	-
FA	0.273257	-0.02137	1	-
LTL	0.364448	0.122756	-0.09024	1

Table-3
Regression table

		ATR			ROA		
		Coefficient		t-Statistic	Coefficient		t-Statistic
C		-0.08606		-0.44672	9.784375		1.952446
CL		-0.01118		-0.03189	-*30.1199		-*3.30226
LTL		-0.37412		-1.89158	*-4.03481		-0.78426
DE		-0.00032		-0.16409	-0.06504		-1.27502
FA		0.022405		*4.220194	0.051984		0.376422
R-squared		0.374434			0.305301		
total observations		50			50		
F-statistic		6.584067			4.834185		

Correlation table shows the relationship or correlation among different variables that how strongly different variables are correlated. Correlation may be positive or negative. A positive correlation shows that two variables change in same direction. If two variables move in two different directions it is called negative correlation. There is a positive relationship between current liabilities to total assets and debt equity ratio. There is a positive relationship among current liabilities to total assets and firm's age. There is a negative relationship among debt to equity and firm age. It means as a firm grows older its debt increases. Long term liabilities to total assets are positively correlated with debt to equity and current liabilities to total assets. A negative relationship lies among firm's age and long term liabilities to total assets.

Correlation results show that as a firm's age increases, its ability to pay long term debts decreases. Assets depreciate and productivity decreases ultimately a firm's ability to pay long tern debts also decreases. Only those firms which adopt new changes of the environment can survive. So, it is proved that firm's age has a significant impact on firm's long term debt paying ability.

Table 3 indicates the relationship between asset turnover ratio and independent variables. According to these table current liabilities to total assets, long term debt debts to total assets and debt equity ratio has negative co-efficient. This means that current liabilities to total assets, long term liabilities to total assets and debt equity have a negative relationship with assets turnover ratio. Firm age has a positive coefficient with assets turn over. T.statistic also has negative relationship with current liabilities to total assets, long term liabilities to total assets and debt to equity and positive with firm's age. According to co-efficient and T.statistics results long term debt has a significant impact on firm's performance while other has insignificant impact on asset turn over. R-square is 0.374434 which means 37.4434%. It means that it explains impact of capital structure and firm's age on firm's performance only 37.4434%.

Table indicates that the co-efficient of current liabilities to total assets, long term liabilities to total debt and debt equity is negative. This indicates that as firm's long term debts increases its performance decreases so there is an inverse relationship among these. Co-efficient of firm's age is positive which indicates a positive relationship with return on assets. T.statistic of current liabilities to total assets, long term debt to total assets and debt to equity is negative but positive of firm's age. According to this table current liabilities to total assets has a significant impact on return on assets (on firm's performance. R-square is 0.305301 which is 30.5301%. it shows only 30.5301% impact of firm's age and capital structure on firm's performance.

From the above table it can be observed that firm's age has a significant impact on its performance. As firm grows older its performance also decreases. Firm's long term debts and short term debts has a significant impact on asset turnover ratio and return on assets ratio. Long term debt and short term debt are showing negative relationship with assets turnover and return on equity which means that debt after a certain time has a negative impact on firm's performance.

Table-4
Regression table

ROE			
	Coefficient		t-Statistic
C	6.425036		0.224344
CL	48.86233		0.937401
LTL	-10.20247		-0.347003
DE	-1.720402		-5.901833
FA	-0.374367		-0.47435
R-squared	0.446578		
Total observations	50		
F-statistic	8.876341		

Table shows that current liabilities to total assets have a positive co-efficient and positive T.statistics. Long term liabilities to total assets, debt to equity and firm's age has a negative co-efficient and negative T.statistics which shows a negative relationship with return equity. According to these table current liabilities to total assets, long term liabilities to total assets, debt to equity and firm's age has a significant impact on return on equity. R-square is 0.446578 which only defines 44.6578% impact of capital structure and firm's age on firm's performance.

According to table 4 current liabilities has positive significant impact on return on equity. Long term liabilities also have a negative significant impact on firm's performance. It means that as firms move toward maturity their ability to take long term debts decreases and these have to take short term loans to meet their needs. These results match with the results of Ahmad et al. and Umer et al.[7,8].

Conclusion

In this study impact of firm's age and capital structure on Pakistani firms' performance is examined. All these firms are listed on Karachi Stock Exchange as public limited companies. Different ratios are used to calculate the results these are debt to equity, current liabilities to total assets, long term liabilities to total assets, firm's age, assets turnover, return on equity and return on assets are used. There are different variables which effect a firm's performances are long term debts, debt to equity, employees' turnover and Tobin's Q etc. all these variables have great effect on firm's performance. Some of these variables are not included in this paper due to non-availability of data.

There are four independent variables firm's age, current liabilities, long term debt and debt to equity and three dependent variables return on assets, return on equity and assets turnover. According to results long term debt has a significant impact on firm's performance or assets turnover ratio. Current liabilities to total assets, debt equity and firm's age has insignificant impact on assets turnover ratio. Current liabilities to total assets has a significant impact on return on assets while debt to equity, firm's age and long term liabilities has insignificant impact on return on assets. Current liabilities and long term liabilities have

significant impact on return on assets while firm's age and debt equity has insignificant impact on firm's performance. Current liabilities have significant impacts on firm's performance and other variables have insignificant impact on firm's performance.

The results show that current liabilities have a significant impact in all models. This shows that short term debts are available to the companies easily as compare to long term debts. In all model short term liabilities have significant impact on firm's performance. As firms' grow older their abilities to take long term debts due to negative trend of firm's performance reduces. As firms' grow older their production capacity decreases and their performance starts to move toward down and one day come when performance becomes negative. Due to this negative trend their capital structure becomes changed. Debt burden of firms' got increased and equity reduced due to these firms has to pay large amount of its returns to pay interests and it becomes very difficult for the firms to manage their finance to meet their needs. To fulfill their working capital needs and other needs they took loans. They have to take short term loans to meet their needs which may be costly. Cost of capital is determined on the nature of business repute. As a firm grows older, its ability to take long term loans decreases. These results match with the results of Ahmad et al. and Umer et al. [7,8].

Current liabilities have a significant impact on firm's performance firms must use current liabilities in their financing decision. Results show that long term liabilities have a significant impact on return on assets and return on equity so; firms can also use it in their financing decision. Results show that all the variables of capital structure have significant impact on return on equity. Current liabilities have significant impact on return on equity. Debt to equity has significant negative impact on firm's performance.

Results also show that there is a negative relationship between a firm's age and its performance. As a firm moves toward maturity, its performance also reduced. According to table 1 shows that firms with average age 33 years have highly leveraged capital structure. Debt is almost 63% and 37% is equity. it cause a negative impact on firm's performance. These results are same like with the results of Loarder and Waelchli, Coad et al. and Majumdar[1,2,3].

Capital structure is of great importance in the business world. Its importance is admitted but still organizations are using an incorrect choice of capital structure. It is observed through this study that performance of new firms is better as compare to old firms and new firms have a capital structure with a good combination of debt and equity. As firms grow older their debt burden increases and their capital structure becomes leveraged. Older firms face many problems regarding governance, employees retaining and cost of production etc. Due to this leverage level of firms increases.

In this study corporate governance issues are not discussed due to limited time duration except of this only five years data is analyzed from 2007 to 2011 which could not define results better as these should be. Tax factor is also not discussed in it should be discussed for better results. Ownership structure of firms is also important but not included in this study. In future there is a chance of future researches on corporate governance, ownership structure and CEO turnover. Some variables can also be used such as Tobin's Q, employee's turnover and sales to growth ratios. These may better define the results.

Recommendations and suggestions for the communities involved: On the basis of results of this study following suggestions are for the investors and communities involved; firms must use optimal capital structure to get tax rebate and better performance. If the management of a company is competent enough than firm's performance is sure and capital structure will be a good mix of debt and equity. Results show that as a firm moves towards maturity its long term debts reduced and short term debts increased which is against the company performance. Short term loans are expensive and it increases a firm's cost of capital which ultimately affects its performance. So, it is suggested that older firms must use long term debts in its financing decisions and avoid short term loans. To improve performance of firms it is necessary to include institutional investors in ownership because they will exercise better practices on firm's governance and will provide their professional expertise. Especially older firms include institutional investors in their ownership structure.

References

1. Loderer C. and Waelchli U., Firm age and performance. http:/ssrn.com/abstracts, **(2010)**

2. Coad A., Segarra A. and Teruel M., Like Milk or Wine. Does firm's performance improve with age?.http://ssrn.com/abstracts, **(2010)**

3. Majumdar S., The hidden hand and license Raj. An evaluation of the relationship between age and the growth of firms in India, *J. of Business Venturing,* 1-36 **(1998)**

4. Durand R. and Coeurderoy R., Age, Order of Entry, Strategic Orientation and Organizational Performance, *J. of Business Venture*, **16,** 471-794 **(2001)**

5. Casmir O. and Anthony O., Impact of capital structure on the financial performance of Nigerian Firm, *Arabic J. of business and Management Review,* **1(12),** 43-61 **(2012)**

6. Modigliani F. and Miller M., Corporate Income Taxes and the Cost of Capital: A Correction, American Economic Review, **53**, 433-43 **(1963)**

7. Ahmad Z., Abdullah M. and Roslan S., Capital Structure Effect on Firm's performance, *Int. review of Business Research Papers*, **8(5),** 137-155 **(2012)**

8. Umar M., Tanveer Z., Aslam S. and Sajid M., Impact of capital structure on firm's financial Performance, *Research J. of Finance and Economics,***3 (9),** 1-12 **(2012)**

9. Boodhoo R., Capital Structure and performance of Mauritius listed firms. Retrieved from http/ssrn.com/abstracts, **(2009)**

10. Chowdhury A. and Paul S., Impact of capital on firm's value, *BEH-Business and Economics Horizons*, **3(3),** 111-122 **(2010)**

11. Amjed S., Impact of financial structure on firm's performance. http://ssrn.com/abstracts, **(2010)**

12. Cai J. and Zhang Z., Capital structure dynamics and stock returns, http:/ssrn.com/abstracts, **(2006)**

13. Eroitis P., Frangouli Z. and Ventoura Z., Profit Margin and Capital Structure. *The J. of Applied Research*, **18(2),** 85-88 **(2011)**

14. Gill A. and Obradovich J., The impact of Corporate Governance and Financial leverage on firm's performance. *Int. Research J. of Finance and Economics*, **91,** 46-56 **(2012)**