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Impact of Micro Economic Variables on Firms Performance

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Highlights

- The paper investigates the firm performance in Pakistan.
- The panel OLS approach is applied for empirical analysis.
- Leverage has a positive impact effect on the performance of the firm.

Abstract

Purpose: *The aim of our study is to analyze the factors that affect performance of the cement sector focusing particularly on Pakistani firms. The study further finds the impact of size on performance, to examine the relationship between age of the firm and firm performance, to measure the effect of growth on firm's performance and to highlight the impact of leverage on performance of the firm. There are twenty six cement companies listed in KSE. However, for the purpose of this paper only twenty companies were selected whose data was readily available over the period of eleven years from 2002 to 2012.* ***Methodology:*** *The data for the study was extracted from the annual reports of all the companies. In this study panel data analysis is used.* ***Findings:*** *After analyzing the data we have come to a point that all of the four variables have significant impact on the performance of the firm. We have seen that leverage has a positive impact effect on the performance of the firm when ROA is analyzed. Size, age and growth have a positive impact on return on equity (ROE) while leverage has a negative impact.* ***Recommendations:*** *This paper shows new insights for policy makers to improve the performance of Pakistani firms.*

Keywords: Microeconomic Variables, ROA, ROE, Panel approach, Cement sector
JEL Classification: O12

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I. Introduction

Performance of a firm or an industry is very important as it shows the results achieved over a time period. Firm performance is dependent upon micro economic variables and macro-economic variables. Micro-economic variables are the internal firm specific variables. Management is able to control these variables. Macro-economic variables are the external variable which the management is not able to control. We have put our attention on the micro economic variables which can be handled by the management. From the prior studies we see that lot of research have been conducted on the micro economic variables but combined effect of micro variables have not been seen globally and in Pakistani Context especially on the cement sector. Therefore we have put our attention in determining the impact of micro economic variables on cement sectors performance. For our convenience we have selected four micro economic variables these are Size, Age, Growth and Leverage as previous literature on these variables was available but combined effect was not studied. Performance of firm is determined by Return on Investment and Return on Equity. ROI is a measure of performance which is used to determine the competency of an investment or a number of different investments. ROE is basically the amount of net income of a firm which is given to the shareholders as a return on their shares. Size of the firm indicates the amount of resources available to the firm. Size of the firm is measured by the log of total assets of the firms. Total assets of the firms indicate the value of the firm. Firm age indicates the firm experience which is gained over time. Age of the firm is measured since the incorporation of the company. Debt to Equity is ratio of financial leverage of any firm. It tells about the proportion of equity and debt being used by any firm for financing the assets. Sales growth rate is measure of firm's growth which indicates what the company receives or expects to receive in revenue. Pakistan differs from other countries on many bases, so it is not necessary that the results found for other countries will also apply on Pakistani firms. It is important to study the Impact of micro economic variables on the firm's performance in context of Pakistan.

The performance of cement sector is quite unpredictable. Its performance has shown varying trend in the past few years. Cement industry has faced immense losses during the past few years. Loss faced by cement sector in 2009-10 was Rs 13.60 billion (All Pakistan Cement Manufacturing Association). Capacity utilization of cement sector has shown an increasing trend of 1.82% from the previous year. High cost of energy, heavy taxation, high freight charge, low spending upon PSDP, fluctuating interest rates, declining international market share political instability, law and order situation, economic constraints to retrieve back to original situation and international market competitiveness are some of the factors affecting this sector. Performance is an important tool to judge the value of the firm. As Performance is a highly important tool and is affected by many variables therefore this study tries to investigate the impact of micro-economic variables on the financial performance of cement industry. This research tries to analyze the impact of firm level variables on the performance of the firm so that in future managers and policy makers investigate the problem and suggest best solution to maximize the profits and hence cement sector can contribute to the economy of Pakistan. This research will be beneficial for the shareholders who have the ultimate stake in the company. As the interest rates of the cement sectors are fluctuating therefore it will be beneficial for the debtors as well. Investors will invest in this sector when performance of this sector will be analyzed. This study will be beneficial for the students for getting help in their future research and getting guideline to enter this sector. Financial experts will be helped out from this research as it shows the performance of the cement sector. Policy makers will be helped by this research.

The aim of our study is to analyze the factors which affect Performance of the cement sector focusing particularly on the Pakistani firms. The major aim of the study is to find the impact of size on performance, to examine the relationship between age of the firm and firm performance, To measure the affect of growth on firm's performance and to highlight the impact of leverage on performance of the firm. Moreover, this study also tends to provide recommendations for top management and decision makers of cement sector to deal with micro-economic variables which are under the control of management. This study provides guidance to management of cement sector, to enhance the financial performance of their company.

I.I Research Theory

Literature shows mixed results of the age and performance relationship. Firm age is a good indicator of firm performance as it shows the experience of the firm and over the course of their life span they discover what they are good at and learn to become efficient with time. Firms standardize and speed up their production process by getting specialization over time (Ericson and Pakes, 1995). With the passage of time weakest firms are eliminated from the market due to selection effect which occurs because of competition and other operational pressure. As the number of firms decrease with time rest of the firms face high market demand which results in the increased productivity level.

Seniority rule and organizational memory is another concept which explains the relationship between age and performance. Senior employees get benefit over the newly coming employees. Employees with the status of seniority arise with time which deteriorates the performance of the firm (Katz, 1982). Relationship between age and performance also gets affected by the diversification. Age is positively related to diversification where as negatively to performance (Campa and Kedia , 2002). According to Easterbrook and Fischel (1999) as the age of the firm increases it results into high probability of takeover. Newly listed firms start with few provisions and this protects them from market takeover. Kipesha (2013) states that age shows the experience of the firms and it has a positive impact on sustainability, revenue level, efficiency but negative impact on profitability. Firm size has an impact on the performance this is due to the advantages and disadvantages which the firm face at a specific level of growth. According to Yang and Chen (2009), larger firms are easily able to get capital for investment this is due to their size of operations. Liargavas and Skandalis (2008) found that size has a positive influence on the firms performance that is larger firms are better performer. Study of Prasetyantoko and Parmono (2008) found that size of the firm is positively related to profitability. Larger firms are more profitable than smaller firms (Stierwald, 2009). Older firms are more prolific but less profitable where as younger firms are more profitable but less productive (Majumdar and Chhibber, 1999). According to Asimakopoulos et al. (2009) profitability of the firm is positively influenced by the size of the firm and managerial efficiency whereas it is negatively affected by leverage. According to Yang and Chen (2009) Small firms face less agency problem and they are exemplified by more flexible non-hierarchical structures.

Performance has always been concern for financial managers and it has been extensively studied. From prior literature we see that there are number of factors affecting performance. Liargovas and Skanalis (2008) studied the factors affecting firm's financial performance. The results showed that the key determinants of financial performance are leverage, export activity, location, size and management competence index. Asimakopoulos et al. (2009) measured the factors which affect profitability of the firm. It was seen that profitability is positively influenced by the size of the firm and managerial efficiency whereas it is negatively affected by leverage, while sales growth induces more profits for small firms but is insignificant for large ones. Nagy (2009) measured the factors affecting firm's profitability. Study concludes that there are number of factors which include sales, current ratio, debt-to-equity ratio, and net profit margin. Almajali et al. (2012) found out the factors affecting the firm performance. They found out that liquidity, size, leverage and management competence has a significant impact on the firms performance where as age has no impact on the firms performance. Ching et al. (2011) indentified the factors that affect the performance of the firm and determined which of the factors mostly influence the profitability The result of the study indicated that firm size affects the most whereas financial debt has least impact on the performance of the firm. Factors influencing the ROA were found to be gross profit margin and the amount of equity while leverage had an impact on ROE. Leverage affects the value of the firm. Financial manger's major objective is to maximize the value of the shareholders due to this reason leverage has been studied a lot in terms of capital structure. Both direct and indirect relations have been seen in the literature. According to Myers (2001) debt offers firm a tax shield and therefore firms try to increase debt in order to get tax benefit. Tax advantage results in the improved profitability. Along with this advantage it also has disadvantages and one of the disadvantage is that higher level of debt increases the cost of bankruptcy. Financial distress is another disadvantage offered by debt (Kim, 1978). Another disadvantage of debt is agency cost (Meckling, 1976). According to Pandey (2008) leverage results in the variability of the return offered to the shareholders therefore it adds risk. According to Ward and Price (2006) leverage is quite effective in determining the value of the firm but along with this effectiveness it also has disadvantages and the biggest disadvantage of leverage is that as the increase in interest rate occurs the positive effect of the leverage declines and there comes a point where the leverage has a negative impact. Peswani (2011) conducted research and found that a high leveraged firm was able to provide better return on equity to its shareholders but the profitability of both the companies was similar. Akhtar et al. (2012) conducted a research findings of the study show that a positive relation exists between the financial leverage and financial performance of the companies. According to the study the firms having higher profitability can improve the performance of the firm by taking higher leverage. From prior literature we see that firm growth has variation. According to (Markman and Gartner, 2002) growth is used as a measure of firm performance. Sexton et al. (2000) found that the profitability of the firm is positively associated with the sustainable growth of the firm. Fitzsimmons et al. (2005) conducted research and found out that no relationship exists between growth and profitability when longitudinal nature of growth is considered. Vlachvei and Notta, (2008) conducted a research the results of the study show that the relationship between growth, size and age of firms is very sensitive with respect to the methods of estimation and growth and size definitions.

Following are research hypotheses:

H_{01}: Performance of firm is not affected by the size of the firm
H_1: Performance of firm is affected by the size of the firm
H_{02}: Performance of firm is not affected by the age of the firm
H_2: Performance of firm is affected by the age of the firm
H_{o3}: Performance of firm is not affected by the growth of the firm
H_3: Performance of firm is affected by the growth of the firm
H_{o4}: Performance of firm is not affected by the leverage of the firm
H_4: Performance of firm is not affected by the leverage of the firm

II. Research Method

The study seeks to examine the impact of firm level characteristics on the financial performance of firm operating in Pakistan. There are twenty six cement companies listed in KSE. However, for the purpose of this paper only twenty companies were selected whose data was readily available over the period of eleven years from 2002 to 2012. The data for the study was extracted from the annual reports of all the companies. The data is secondary in nature. In this study panel data is used. Number of researchers claim that panel data can control individual heterogeneity, ca give more volatility, more information, more degree of freedom, less co linearity and more informative data. Panel data is better able to identify and measure effect that are not detectable in pure time series or in pure cross section data. It helps us to construct and test more complicated behavioral modes than pure time series or cross section. Multiple regression is used when we have more than one variables. Technique which we have used in this study is ordinary least square(OLS) multiple regression for checking the impact of firm level characteristics on the financial performance of firm. OLS is used for estimating the unknown parameters. This method minimizes the sum of squared vertical distances between the observed responses in the dataset and the responses predicted by the linear approximation. Almajali et al. (2012) conducted research on factors affecting the financial performance of Jordanian Insurance Companies listed at Amman Stock Exchange and towards data analysis multiple regression and T-Test were applied. Fitzsimmons et al. (2005) conducted research on growth and profitability in small and medium sized Australian firms and towards data analysis Annova was applied. Byiers and Iacovone conducted research (2011) on an analysis of pre-crisis Madagascar firm performance and towards data analysis Ordinary Least Squares regression was applied. Asimakopoulos et al. (2009) conducted research on firm- specific and economy wide determinants of firm profitability and towards data analysis OLS regression was applied. Loderer et al. (2009) conducted research on firm age and performance and towards data analysis standard OLS regression was applied.

Akhtar et al. (2012) conducted research on relationship between financial leverage and financial performance and towards data analysis OLS regression was applied. Singh and Luthra (2013) conducted research on impact of leverage on the capital structure practices of selected telecommunication companies and towards data analysis one way Anova and T-test was applied. Majumdar and Chhibber (1999) conducted research on impact of size and age on firm-level performance and towards data analysis OLS regression was applied. Kipesha (2013) conducted research on impact of size and age on firm performance and towards data analysis OLS regression was applied. Bhattacharyya and Saxena, (2009) conducted research on does the firm size matter? and towards data analysis OLS regression was applied. Kakani et al. (2000) conducted research on determinants of financial performance of Indian Corporate Sector and towards data analysis linear multiple regression was applied. Vlachvei and Notta (2008) conducted research on firm growth, age and size on Greek firms and towards data analysis OLS regression was applied. Ching et al. (2011) conducted research on determinants of financial performance in Brazilian companies and towards data analysis multiple regression was applied.

$$PF = \beta_0 + \beta_1(LV) + \beta_2(G) + \beta_3(SZ) + \beta_4(AG) + \mu_i \quad (1)$$

Where
PF= Performance
LV=Leverage (Total debts divided by total assets)
G=Growth (Sales growth)
SZ=Size (Log of Total Assets)
AG=Age (till year of observation)

III. Results and Discussion

It includes statistical procedures used to explain the population. This measure is used to explain that the data sets are the determinants of mean and standard deviation. Mean is the measure of central tendency of data and is calculated as sum of all values divided by number of observations. Table-1 illustrates that our total number of observations are 219. Standard deviation shows dispersion from mean. Results of ROA are "0.70009" which shows "0.70009" dispersion from mean value and results of ROE are 1.83597 which shows 1.83597 dispersion from mean value.

Table-1: Descriptive Statistics

Variables	Mean	Std. Deviation	N
ROA	0.0932	0.7000	219
ROE	-0.1013	1.8359	219
Age	40.1324	35.7530	219
Size	8.5346	3.2290	219
Leverage	1.5039	1.4780	219
Sales Growth	0.1900	1.0027	219

Table-2: Robustness Test

	ROA	ROE
Parameters	**Values**	**Values**
R Square	0.675	0. 72
Adjusted R Square	0.668	0.714
Durbin-Watson	1.792	1.684

Table-2 shows the results of R-square, Adjusted R-square and Durbin-Watson values as 0.675, 0.668 and 1.792 respectively of ROA. Durbin Watson shows that auto correlation exists in our model or not. According to the literature, Durban-Watson should be between 1.25 and 2.5. Table-2 shows that Durbin-Watson is 1.792 that means that there is no auto correlation and the results of R-square and adjusted R-square showed very less difference between them so, it means that data is normal. R Square is the coefficient of determination which shows the percentage of variation in dependent variable which is explained by variation in independent variable. Further the result about ROE shows that R-square, Adjusted R-square and Durbin-Watson values as 0.72, 0.714 and 1.684 respectively. According to the literature, Durban-Watson should be between 1.25 and 2.5. Table-5 shows that Durbin-Watson is 1.684 and the results of R-square and adjusted R-square showed very less difference between them i.e. 0.0006 so, it means that data is normal

Table-3: Regression Analysis

Estimates	C	Age	Size	Leverage	Growth	R-Square	F- stat
Coefficient	0.044	0.230	-0.017	0.131	0.011	0.675	4.352
Std. Error	(0.021)	(-0.002)	(0.001)	(0.001)	(-0.002)		
t-Statistic	[0.304]	[2.66]	[2.29]	[3.33]	[2.167]		
Prob.	*0.761*	*0.049*	*0.023*	*0.000*	*0.049*		0.002

Correlation tells us that how two variables move in relation to each other. Correlation coefficient ranges from -1 to +1. Perfect positive correlation tells that both the variables are moving in the same direction and perfect negative correlation tells us that if one variable moves in one direction the other variable will move in the opposite direction. If correlation is "0" means there is no relation between the variables. Table-3 shows that p value is less than 0.05 so, overall model is significant value of R-square is 0.675 which explained the financial performance of firm with the given independent variables. All the four variables have significant impact on the financial performance of firm because their values are less than 0.005. Age has p-value 0.049 which is less than 0.05 which means that it has significant impact on firms financial performance its beta is 0.230 which shows positive impact with firms financial performance. Size has P-value less than 0.05 which means it has significant impact on financial performance. Its coefficient is -0.017 which shows negative relation between size and financial performance of firm. Leverage has p-value less than 0.05 and its coefficient is 0.131 which indicate positive significant impact on dependent variable. Growth is the fourth independent variable results showed that growth has significant positive impact on firms financial performance. Its coefficient is 0.011 which means is has significant impact on firms financial performance. From the above results we found that age has p-value less than 0.05 which means that age has significant impact on

firms financial performance on the basis of this result we have accepted first hypothesis of the study. Results of size indicated that size has significant impact on firms financial performance on the basis of this result we have accepted the second hypothesis. Leverage has p-value less than 0.05 which means that leverage has significant impact on firms financial performance so third hypothesis is also accepted. Growth showed significant affect on financial performance because its p-value is less than 0.05. On the basis of this result we have accepted fourth hypothesis.

Table-4: Correlation Matrix ROA

Variables		**ROA**	**Age**	**Size**	**Lever age**	**Growth**
ROA	Pearson Correlation	1	.035**	.031**	.263**	0.15
	Sig. (2-tailed)		.001	.002	.000	.021
	N		220	220	219	220
Age	Pearson Correlation		1	.008	-.127	-.048
	Sig. (2-tailed)			.010**	.060	.048
	N			220	219	220
Size	Pearson Correlation			1	.180**	.078
	Sig. (2-tailed)				.008	.052
	N				219	220
Leverage	Pearson Correlation				1	-.004**
	Sig. (2-tailed)					.005
	N					219
Growth	Pearson Correlation					1
	Sig. (2-tailed)					
	N					

Note: ** denotes correlation is significant at the 0.01 level (2-tailed).

Results in the Table-4 show that financial performance of firm is positively correlated with all the explanatory variables. Positive correlation means any increase in explanatory variable causes increase in firms financial performance and decrease in explanatory variables causes decrease in financial performance similarly in case of negative correlation it is vice versa i.e. increase in explanatory variable causes decrease in firms financial performance. Results further indicate that correlation between ROA and age is 0.035. Correlation between ROA and size is 0.031, correlation between leverage and ROA is 0.263, correlation between growth, and ROA is 0.15. The relationship between ROA and the entire explanatory variable are significant at 5% level of significance. Age has positive significant correlation with size. Correlation between age and size is 0.010 correlation between age and growth -0.048 there exist negative but significant relation between age and leverage is negative and insignificant. Size has positive correlation with leverage and growth. There exist positive significant correlation between growth and leverage coefficient of correlation between size and growth is 0.78. Correlation between size and leverage is 0.180. Leverage has negative correlation with growth. Coefficient of correlation between leverage and growth is -0.004.

Table-6 shows that p-value is less than 0.05 so, overall model is significant value of R-square is 0.72 which explained the financial performance of firm with the given independent variables. All the variables have significant impact on the financial performance of firm except with size. Age has p-value 0.031 which is less than 0.05 which means that it has significant impact on firms financial performance its beta is 0.1000 which shows positive impact with firms financial performance. Size has p-value greater than 0.05 which means it has insignificant impact on financial performance.

Table-5: Regresion Analysis

Estimates	**C**	**Age**	**Size**	**Leverage**	**Growth**	**R-Square**	**F- stat**
Coefficient	.177	0.1000	-0.016	-0.073	-0.093	0. 72	4.25
Std. Error	(0.014)	(-0.002)	(0.001)	(0.001)	(0.126)		
t-Statistic	[0.456]	[2.171]	[1.834]	[2.066]	[2.017]		
Prob.	*0.649*	*0.031*	*0.068*	*0.040*	*0.045*		*0.000*

is the fourth independent variable results show that growth has significant positive impact on firms financial

performance. Its coefficient is -0.093 which means it has negative impact on firms financial performance. From the above results we found that age has p-value less than 0.05 which means that age has significant impact on firms financial performance on the basis of this result we have accepted first hypothesis. Results of size indicated that size has insignificant and negative relation with firms financial performance on the basis of this result we have rejected the second hypothesis. Leverage has p-value less than 0.05 which means that leverage has significant impact on firms financial performance so third hypothesis is also accepted. Growth showed significant affect on financial performance because its p-value is less than 0.05. On the basis of this result we have accepted fourth hypothesis.

Table-6: Correlation Matrix ROE

Variables		**ROE**	**Age**	**Size**	**Leverage**	**Growth**
ROE	Pearson Correlation	1	0.03**	.043**	-.061**	.051**
	Sig. (2-tailed)		.009	.003	.003	.004
	N		219	219	219	219
Age	Pearson Correlation		1	.008**	-.127	-.048
	Sig. (2-tailed)			.009	.060	.048
	N			219	219	219
Size	Pearson Correlation			1	.180**	.078
	Sig. (2-tailed)				.008	.042
	N				219	219
Leverage	Pearson Correlation				1	-.041**
	Sig. (2-tailed)					.005
	N					219
Growth	Pearson Correlation					1
	Sig. (2-tailed)					
	N					

Results in the Table-7 show that financial performance of firm is positively correlated with all the explanatory variables except leverage. Positive correlation means any increase in explanatory variable causes increase in firms financial performance and decrease in explanatory variables causes decrease in financial performance similarly in case of negative correlation it is vice versa i.e. increase in explanatory variable causes decrease in firms financial performance. Results further indicate that correlation between ROE and age is 0.03. Correlation between ROE and size is 0.043, correlation between leverage and ROE is 0.061, correlation between growth, and ROE is 0.051. The relationship between ROE and the entire explanatory variable are significant at 5% level of significance. Age has positive significant correlation with size. Correlation between age and size is 0.008. Correlation between age and growth -0.048 there exist negative but significant relation and between age and leverage is negative and insignificant. Size has positive correlation with leverage and growth. There exist negative but significant correlation between growth and leverage coefficient of correlation between size and growth is 0.78. Correlation between size and leverage is 0.180. Leverage has negative correlation with growth. Coefficient of correlation between leverage and growth is -0.041. After analyzing the data we have come to a point that all of the four variables have significant impact on the performance of the firm. We have seen that leverage has a positive impact effect on the performance of the firm when ROA is analyzed. This result of ours is supported by many studies. Positive impact of leverage has been supported by many studies (Akhtar et al., 2012; Ward and Price, 2006; Sharma, 2006, Myers, 2001) which concluded that an increase in leverage has a positive impact on the performance of the firm. Positive impact of leverage can be offset by the justification that debt offers firm a tax shield and therefore firms try to increase debt in order to get tax benefit that higher the level of debt the higher is the tax advantage which ultimately results in the improved profitability. Therefore firms try to incorporate debt in their capital structure. High level of leverage improves the managerial incentives and it forces the mangers to make optimal investment. Debt is cheaper source of financing. Leverage results in lower risk and after tax cost of debt is lower than that of equity.

Our results also show that leverage is negatively related to ROE which is inconsistent with the (Pandey, 2008; Kim, 1978). Higher level of debt increases the cost of bankruptcy. Bankruptcy cost is not linearly related to Debt to Equity ratio but bankruptcy cost increases with an increase in debt to equity ratio. Bankruptcy cost has a negative impact on the value of the firm. Increase in debt results in the increase in the required rate of return of the investor. According to Pandey (2008) leverage results in the variability of the return offered to the shareholders

therefore it adds risk. Beta of levered firm increases due to the introduction of debt. Size has seen a positive impact on the performance. Size has a positive impact on Performance when ROE and ROA is analyzed. This is consistent with the studies (Yang and Chen, 2009; Serrasqueiro and Nunes, 2008). According to the previous studies larger firms enjoy higher negotiation power, ease of access to capital and broader pool of qualified human capital. Larger firms have greater chance for strategic diversification as compared to the small firms due to their size of operations. Larger size indicates the greater amount of resources is available to them and they can utilize them. Age of the firm has shown a positive relation in our study. We have seen that age is positively related to performance when ROA and ROE is considered. The positive impact of age is due to the fact that firms learn with the passage of time and get experienced and they can tackle the problems easily as compared to the new firms. As the age of the firm increases it leads to higher level of productivity, higher profit which results in larger size of the firm, lower debt ratios, higher equity ratios. As the age of the firm increases it results in the increased experience of the firm due to which over the time they learn that what should be done to improve its performance. From our results we see that growth is positive both in terms of ROE and ROA. Growth has been measured by sales growth as the sales of the firm increases it leads to higher profitability and hence improves the performance of the firm. Our results have been consistent with many studies in the past (Markman and Gartner, 2002; Cowling, 2004). Growth is used as a measure of firm performance. It is generally based on the belief that growth results in the attainment of sustainable competitive advantages and profitability.

IV. Conclusion and Policy Recommendation

The focus of this paper was to examine the impact of micro economic variables on the performance of the cement sector. For this purpose we selected 20 listed cement firms from the period of 2002-2012. The result of the Ordinary Least Square Regression has shown a significant impact of the micro economic variables on the firm performance. Our result shows that micro economic variables do have an impact on the performance of the cement sector. Size, age, growth, and leverage have a positive impact on the performance of the firm when ROA is considered as the performance measure. Size, age, and growth have a positive impact on return on equity (ROE) while leverage has a negative impact. Attention should be put paid towards these micro economic variables in order to improve the performance of the cement sector and reach an appropriate outcome. From the results we come towards the following recommendations: consideration attention should be paid on increasing the company's assets as it has been seen from the result that relation between size and firm's performance is positive. By increasing the assets of the may lead the company to sustainable position and improve competitive advantage. Larger companies have more negotiating power and enjoy economies of scale. Therefore attention should put be made on this regard. More attention should be paid on leverage. Leverage has shown positive results. The results show a positive relation between leverage and performance when ROA is considered where as it has a negative relation when ROE is taken as the performance measure. Increased level of leverage provides the firm with tax advantage but leverage beyond certain level increases the bankruptcy cost. If the increase in interest rates occur than advantages related to the leverage can have a negative impact. Companies may default if it is unable to pay its interest along with principle. So leverage increases the risk of default. Age has shown a positive relation with the performance. These findings suggest that age helps the firm to learn new things with the passage of time. Growth of the firm which is measured by sales growth has shown a positive relation in both the cases when ROA and ROE is considered. Sales of the firm should be increased by keeping in mind that firms have the potential to meet the increased demand.

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