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ORIGINAL ARTICLE

Impact of Corporate Financial Fundamentals on Stock Price: Evidence from KSE – 100 Index

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ABSTRACT
The main aim of research is to determine corporate financial fundamentals. Research also determines selected financial variables that decision makers consider to be important on price of stock. The research study constitutes secondary data of KSE companies to examine the impact of crucial/ significant financial ratios on share price from 2009 to 2014. However, the research study found insignificant relationship between the D/E ratio (capital structure), DCR (dividend) and market stock price. This data excludes some information because it excludes financial companies due to different regulatory and financial measurement indicators. The study assists investors and decision making authorities of domestic and international companies to have a look on considering financial fundamentals. First comprehensive study has been conducted on financial factors determines the stock price of KSE - 100 listed companies within the Pakistan.

Key Words: *DCR, KSE, DE Ratio, Capital Structure*

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INTRODUCTION
The basic purpose of financial information is to provide knowledge to the users of financial information to take important decisions. The companies put in order a set of files at the end of each financial period from which investors, shareholders and strategic policy makers measure the short term and long term financial sustainable position of organization (Hoque and Parker, 2014). The set of financial statements is accompanied by ratio analysis which gives brief review of company's affairs. All the financial statements are prepared and presented as per the IFRS or GAAP and as per Co's Ordinance 1984 in Pakistan.

A company financial statement typically includes statement of cash flows, profit / loss statement, balance sheet, statement of owner's equity and other possible accounting information as well (Ross et al., 2008). It is hard to consider existence of affluent economy without development of Stock market. This is important to attract and collect capital quickly due to easy way of trading securities (Adjasi and Biekpe, 2006). Correction of information provided by financial statements is reasonably verified by Auditors as per national and international applicable Auditing standards. Market ratio is often associated with price or stock returns are price book value. Technical factors measured by several indicators such as inflation, currency exchange, and market risk.

IMPORTANCE OF FINANCIAL (STOCK) MARKETS

In recent era, changes in economic policies and development of global institutions have increased importance of stock market as intermediaries between savers and entrepreneurs in developing countries.

BACKGROUND OF THE STUDY

A number of researchers have determined the impact on stock prices from the important corporate financial factors for different markets, viz., earnings per share, dividend per share, firm size, market to book value, payout ratio, leverage, retained earnings, dividend yield and leverage. Understanding the impact of various fundamental variables on share price is very much helpful to investors as it help them in taking profitable investment decisions

SIGNIFICANCE OF STUDY

The interaction between stock market index and corporate fundamental factors has been area of interest among practitioners and academicians for last few decades.

RESEARCH QUESTION

The research study addresses the following research question:

- What is the impact of corporate financial fundamental factors on stock market price of KSE - 100 listed companies?
- What are the dominant corporatefinancial fundamental factors in affecting the stock price?

LITERATURE REVIEW

The role of stock market in the growth of an economy cannot be denied. It is hard to consider existence of affluent economy without development of stock market.

Pinatih and Lastari (2015)initiated a research work to study the impact of ROE, EPS on stock returns. A data relating to 2010 to 2012 for automobile companies have been taken Busra Efek Indonesia. Multiple linear regression models were utilized simultaneously and individually on the variables under consideration for the study. Further, the study originated that the systematic risk, earnings per share and return on equity partially also have strong positive relation to the stock returns as well.

Raza (2010) studied the impact and magnitude of financial performance variables of a firm on their stock prices. The data was obtained from the Pakistan stock exchange. Stock prices were used as a dependent variable, whereas few financial ratios, such as return on assets (ROA), cash flow ratio (CFR), earnings per share (EPS), return on equity (ROE), current ratio (CR), return on assets (ROA), earnings per share (EPS) and dividend cover ratio (DCR) were employed as independent factors for the study. The findings suggested that the all financial variables impact positively and significantly on the stock returns of the firms. Whereas, paper and board sector earning the lower returns and fuel and energy sector earning the higher returns in all six sectors.

Singh and Sharma (2006) in their research study measured the influence of important corporate financial fundamental factors on the stock price of the companies. The study found that all variables, that is, earnings (EPS), dividend coverage (DCR), P/E ratio, cash dividends per share (DPS), book value ratio (PBS) and firm size have positive and direct significant association with the share price and considered to be the important determinants of the market share prices. Docking and Koch (2005) also found positive relation among the dividend announcement and earnings per share with the movements in share prices.

Zahir and Khanna (1982) examined the relationship between the stock prices and selected corporate financial fundamental variables. The research study aimed to examine the determinants of stock prices in India for the 101 listed companies. Dividends per

share, earning yield, market to book value and earning price multiplier were used as independent variables to measure their influence on the share prices (dependent variable). The study results showed that price to earnings yield and dividends per share have positive and significant influence on the share prices of the companies. Also, the study concluded that the book value per share coefficient was positive and highly significant except for the time period 1977 - 78. However, the impact of earnings multiplier appeared to be weak compared to other variables on the share prices.

METHODOLOGY

Modes of data collection are generally referred as data sources. Data sources are normally classified into Primary data and secondary data. Primary data is congregated by the investigators directly from the participants while the secondary data is such type of data which has been already gathered by and eagerly available from the other sources.

For the present empirical investigation secondary source and quantitative research technique are applied. For this research study data is collected for six years time period i.e. 2009 to 2014 from different sources and these sources are:

- Previous articles
- Books
- Audited financial reports.

SAMPLING

For this research study 75 non-financial firms are selected as a sample from KSE-100 index. The reason for not selecting the financial sector of Pakistan is due to different regulatory framework from the non financial system.

TARGET POPULATION

This investigation focuses on all the non-financial firms that are quoted in KSE-100 index as its target population.

ECONOMETRIC MODEL

$Y_{i,t} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + €_o$

Where,

Y = Closing Price of Company's Shares listed in KSE - 100 index
α = Constant
B_1toβ_6 = Regression Coefficient
X_1 = Total Assets Turnover Ratio of Company's listed in KSE - 100 index
X_2 = Debt Equity Ratio of Company's listed in KSE - 100 index
X_3 = Return on Equity of Company's listed in KSE - 100 index
X_4 = Dividend Ratio of Company's listed in KSE - 100 index
X_5 = Net Profit Margin of Company's listed in KSE - 100 index
X_6 = Earnings per Share of Company's listed in KSE - 100 index
$€_o$ = Error Term

So, the regression equation can be formulated as:

$$\mathbf{Y_{i,t} = \alpha + \beta_1 TATR + \beta_2 DE + \beta_3 ROE + \beta_4 DR + \beta_5 NPM + \beta_6 EPS} + €_o \quad \textbf{... (A)}$$

HYPOTHESIS

H_1: The assets turnover ratio (TATR) has no significant influence on the market price of shares.

H_2: The financial structure (D/E ratio) has no significant influence on the market price of shares.

H_3: The return on equity (ROE) has no significant influence on the market price of shares.

H_4: The dividend ratio (DR) has no significant influence on the market price of shares.

H_5: The net profit margin (NPM) has no significant influence on the market price of shares.
H_6: The earnings per share (EPS) have no significant influence on the market price of shares

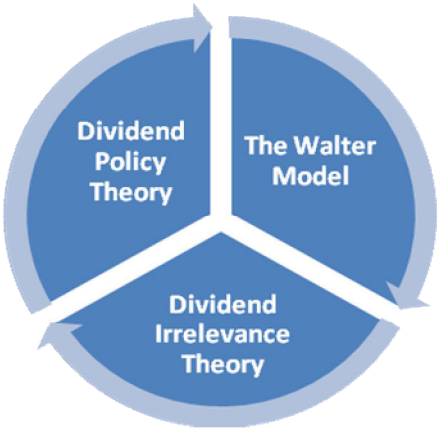
VARIABLES

Dependent Variable:
Market price of stock is considered as a dependent variable. Market share price is measured by taking end of year closing values of stock market index of all selected companies in the study.

Independent Variables:
The independent variables used under the research study are:
Assets Turnover Ratio: The formula for measuring this ratio is Net Revenue / Total Assets.
Debt Equity Ratio: The formula for measuring this ratio is Total Debt / Total Equity.
Return on Equity: The formula for measuring this ratio is Net Profit / Total Equity.
Dividend Cover Ratio: The formula for measuring this ratio is Net Income for the same period / Total Dividend Amount.
Net Profit Margin: The formula for measuring this ratio is Net Profit / Net Sales (Revenue).
Earnings per Share: The formula for measuring this ratio is Net Profit / Number of Outstanding Shares.

CONCEPTUAL FRAMEWORK

THEORETICAL FRAMEWORK



RESEARCH DESIGN

To make a shape to your Research effort, Research design is genuinely needed. It endures significant influence on reliability (truth) of the outcomes attained and therefore gives a concrete base for the entire research.

Thus for the target of the research study E Views 8 (Econometric Views) Software will be used and with its assistance Panel Regression Analysis will execute in which Fixed and Random Effect Models will run and further for decision making about which estimation is suitable from both Fixed and Random Effect, Hausman Specification test will be applied.

RESULTS AND DISCUSSION

The data for present study consists of cross sectional observations over time, so panel data analysis techniques are appropriate. The panel data has many advantages as it provides large number of data observations that help to increase degree of freedom and to decrease co-linearity among the variables. The panel data technique is also suitable to develop well – organized economic and financial estimates (Hsiao, 1986). To check the normality of data set, descriptive statistics are developed. Ordinary least square regression, fixed effect and random effect techniques of analysis are applied to examine the impact of earnings per share (EPS), net profit margin (NPM), dividend cover ratio (DCR), assets turnover ratio (ATR), return on equity (ROE) and debt to equity ratio (D/E ratio) on the stock price (SP).

DESCRIPTIVE STATISTICS

The research study is specifically designed to determining the factors that plays an important part in estimation of stock prices with major emphasis on the KSE - 100 index listed firms. In order to measure the impact of selected financial variables on the stock price for the time duration of FY 2009 - 2014, first it is important to study the descriptive statistics of the financial ratios which are used as an explanatory variables to measure the major impact on the share prices (exploratory variable) taken in the study.The Table 1 shows the descriptive statistics of all the dependent and independent variables considered for conducting this research study. The Stock price (Y) is taken as a dependent variable, whereas all other variables from X_1 to X_6 are independent variables. The mean value of stock price is 339.22 for the non - financial companies listed on the Karachi Stock Exchange (KSE 100 index) for the time period 2009 to 2014. It indicates the average or central value for the set of data points or numbers. Similarly, the average value of assets turnover ratio is 1.30, 2.59 for debt to equity ratio, 26.76 for return on equity, 1.55 for dividend cover ratio, 11.8 for net profit margin and 20.51 for earnings per share.

Standard error gives an estimate of the degree to which the sample mean varies from the population mean and this measure is used to the confidence interval. Standard error is basically measures the standard amount of difference among the actual population mean and sample mean, that is reasonable to expect simply by chance. The stand error for stock price is 5.07, assets to turnover ratio has 0.05 value of standard error, 3.63 for debt to equity ratio, 3.26 for return on equity, 1.15 for dividend cover ratio, 0.75 for net profit margin and 1.84 for earnings per share. Similarly, standard deviation shows the variation in the data set. If the data is close together, the stand deviation will be small. If the data is spread out, the standard deviation will be large. Stock price has a standard deviation value of 104.52, assets turnover ratio with 1.02 values, total debt to equity has 76.99, return on equity has value of 69.16, and dividend cover ratio with a standard deviation value of 24.36, 15.98 values for net profit margin and earnings per share has a value of 39.06. The standard deviation value of stock price and return on equity is high as the few companies in the data set has extreme outliers in the form of higher annual share prices and net profit margins over the years compared to other companies chosen for conducting the analysis.

The skewness shows the degree of symmetry in the variable distribution and the coefficient of kurtosis is the measure of flatness / peakedness degree in the variable distribution. The descriptive statistics of skewness is in between +1 and -1 for all variables and kurtosis is closer to 3 for all variables. There seems to be no issue of kurtosis and skewness in the variables as the values of all ratios are in the range except the dividend ratio. Dividend ratio depicts the negative skewness in the data set. Both these values have lower kurtosis and skewness when compared with stock prices, which is on high side with a value of -4.43 for kurtosis and 1.05 for skewness respectively.
The last two columns in the Table 4.1 show the minimum and maximum values of the stock price and all independent variables (Turnover ratio, D/E ratio, ROE, Dividend ratio, NPM and EPS. The minimum value of share prices in the KSE – 100 index listed companies remain PKR 1.02 where maximum a share price of the firm for the period 2009 to 2014 is PKR 11,203.80. Similarly, the minimum value of assets to turnover ratio over the time period remains 0.00 to maximum value of 6.48. Debt to equity ratio with minimum value of -1604.52 to 45.4 as a maximum value, return on equity has -451.97 minimum values and 1113.82 maximum values, dividend cover ratio has -500.01 minimum value and maximum value of 64.10, minimum value of net profit margin over the time period remains -39.56 and maximum is 92.69. Also, the minimum value of the earnings per share is -67.39 for the selected companies and the maximum value is 289.97 for the time period 2000 to 2013. The significance level used for this study is 0.05. The Jarque - Bera value of normality test shows normality distribution in all the variables as all variables are insignificant at 0.05 (5 %) level of significance, representing that data is normally distributed.

Table 1: Descriptive Statistics

Variables	Mean	Standard Error	Median	Standard Deviation	Kurtosis	Skewness	Min	Max	JarqueBera
SP (Y)	339.22	5.07	68.23	104.52	4.43	1.05	1.02	11203.80	0.36
ATR (X1)	1.30	0.05	1.07	1.02	1.19	-0.03	0.00	6.48	0.45
D/E (X2)	-2.59	3.63	1.01	76.99	1.46	0.27	-1604.52	45.40	0.59
ROE (X3)	26.76	3.26	22.32	69.16	2.48	0.36	-451.97	1113.82	0.80
DCR (X4)	1.55	1.15	1.66	24.36	2.64	-1.01	-500.01	64.10	0.35
NPM (X5)	11.80	0.75	8.83	15.98	1.16	0.74	-39.56	92.69	0.95
EPS (X6)	20.51	1.84	8.13	39.06	1.75	0.87	-67.39	289.97	0.32

ORDINARY LEAST SQUARE REGRESSION ANALYSIS

The impact of selected financial fundamental factors on the KSE - 100 listed companies share price is estimated through the following multivariate regression model.

$$SP_{i,t} = \beta_0 + \beta_1 ATR_{i,t} + \beta_2 D/E_{i,t} + \beta_3 ROE_{i,t} + \beta_4 DCO_{i,t} + \beta_5 NPM_{i,t} + \beta_6 EPS_{i,t} + \varepsilon_{i,t} \ldots (A)$$

Whereas, the individual impact of each independent variable is shown with the help of the following equations from model (B) to model (G).

$SP_{i,t} = \beta_0 + \beta_1 ATR_{i,t} + \varepsilon_{i,t}$ ..... (B)
$SP_{i,t} = \beta_0 + \beta_1 D/E_{i,t} + \varepsilon_{i,t}$ ..... (C)
$SP_{i,t} = \beta_0 + \beta_1 ROE_{i,t} + \varepsilon_{i,t}$ ..... (D)
$SP_{i,t} = \beta_0 + \beta_1 DCO_{i,t} + \varepsilon_{i,t}$ ..... (E)
$SP_{i,t} = \beta_0 + \beta_1 NPM_{i,t} + \varepsilon_{i,t}$ ..... (F)
$SP_{i,t} = \beta_0 + \beta_1 EPS_{i,t} + \varepsilon_{i,t}$ ..... (G)

Where,

SP = Firm stock price
ATR = Assets turnover ratio
D/E = Debt to Equity ratio
ROE = Return on Equity
DCO = Dividend cover ratio
NPM = Net profit margin
EPS = Earnings per share
β_0 = Constant term
β =Coefficient of variables
ε =Error term

Now to assess that panel data regression model with the assistance of E-Views software, one has to fulfill the following main assumptions of regression model for the model (A) to model (G).

LINEAR REGRESSION MODEL ASSUMPTIONS

Autocorrelation Test:

The second main assumption to run the linear regression model is to have data considered for the study without an autocorrelation as illustrated in the Table 2. To examine the autocorrelation issue among the financial variables, Durbin Watson test and Breusch Godfrey Serial Correlation Lagrange multiplier (LM) test is exercised. The Durbin Watson value also let the researcher know about the presence or absence of the autocorrelation in the variables. A value close to the 2.00 specifies that there is no existence of the autocorrelation in the data taken for the research study. On the other hand, the LM test states that there is no issue of serial autocorrelation of any order in the residuals, indicated by the null hypothesis. The alternative hypothesis assumes that there is an autocorrelation in the residuals.

Table 2: Breusch-Godfrey Serial Correlation Test

F-statistic	63.047	Prob. F	0.000
Obs*R-squared	135.412	Prob. Chi-Square(6)	0.000
Durbin-Watson stat	1.893		

H_o: There is no autocorrelation H_1: There is an autocorrelation

As the value of Durbin Watson test indicates no autocorrelation among the residuals of the variables as shown in the Table 2, since the value is closer to the 2.00 and the resulted value of F-statistic shows model is statistically significant at 95% level of significance. Similarly, the Breusch Godfrey Serial Correlation LM test p - value is below the 0.00, so the researcher fails to accept the alternative hypothesis that there is an autocorrelation among the residuals of the variables and thus accepts the null hypothesis.

Multicollinearity Test:

One of the important assumptions of linear regression technique is that there should be no issue of multicollinearity (correlation) among the independent variables taken for conducting the study. To overcome the issue of multicollinearity, correlation matrix is used to check the subsistence of multicollinearity in between the selected corporate financial variables. Correlation coefficients can be observed to check the degree of linear dependence between the variables. Strong correlation between the variables may cause the issue of multicollinearity which may cause problem in regression analysis. Table 3 shows the pearson correlation (multicollinearity) test of all the variables used in study.

From the Table 3, it is founded that there is no issue of multicollinearity in the variables used for the study. The table shows that all variables are not interdependent on each other and lacks correlation among them as the value of each variable is less than the 0.40,

which means that all financial variables are free from the issue of correlation (multicollinearity), which may be confirmed later on after performing variance inflation factor (VIF) test.

Table 3: Correlation Matrix

	SP	ROE	NPM	EPS	DCO	D/E	ATR
SP	1.000	0.211	0.045	0.071	0.011	0.015	0.154
ROE	0.211	1.000	0.156	0.221	0.190	0.309	0.146
NPM	0.045	0.156	1.000	0.222	0.116	0.090	-0.229
EPS	0.071	0.221	0.222	1.000	0.051	0.030	0.237
DCR	0.011	0.190	0.116	0.051	1.000	-0.022	-0.014
D/E	0.015	0.309	0.090	0.030	-0.022	1.000	0.039
ATO	0.154	0.146	-0.229	0.237	-0.014	0.039	1.000

Table 4: Variance Inflation Factor (VIF) Test

Variables	VIF	1 / VIF
ROE	9.50	0.133
NPM	7.78	0.157
EPS	5.37	0.186
DCR	3.87	0.258
D/E	3.55	0.281
ATO	1.61	0.620

Variance inflation factor (VIF) test is applied to check the issue of multicollinearity in data. In case of absence of multicollinearity, value of VIF should be less than 10 and VIF tolerance value should be greater than 0.100. The results of Table 4 indicates that value of VIF for all variables is less than 10 and similarly the value of VIF tolerance level is greater than 0.100, concluding that there is no problem of multicollineraity prevails in the data.

Heteroskedasticity Test:

Heteroskedasticity test stated that variance of error term should be constant, that is there is no heteroskedasticity or existence of homoskedasticity in regression results. Breusch Pagan Godfrey testhad been applied to find out either residuals are homosekedastic or not. The results of the test are shown in the Table 5.

The null hypothesis for conducting the Breusch Pagan Godfrey test is that there is a no heteroskedasticity among the residuals, whereas alternative hypothesis is that there is a heteroskedasticity between the residuals.

Table 5: Breusch Pagan Godfrey Test

F-statistic	1.758	Prob. F	0.121
Obs*R-squared	3.285	Prob. Chi-Square (6)	0.434

The above table depicts that both the F test and the Godfrey Test (Obs*R-squared of the auxiliary regression) conclude for the acceptance of null hypothesis, as the p-values are above level of significance of 0.05. This means the null of heteroskedasticity in the regression model. The insignificant value of Chi Square probability is an indication of absence of heteroskedasticity in data. It means that the variance across the cases is same and there is no issue of heteroskedasticity in the data set.

Linear Model (Normality) Test:

Normality of the research data is another main assumption of running the linear regression analysis. According to the central limit theorem, a data set with more than 30

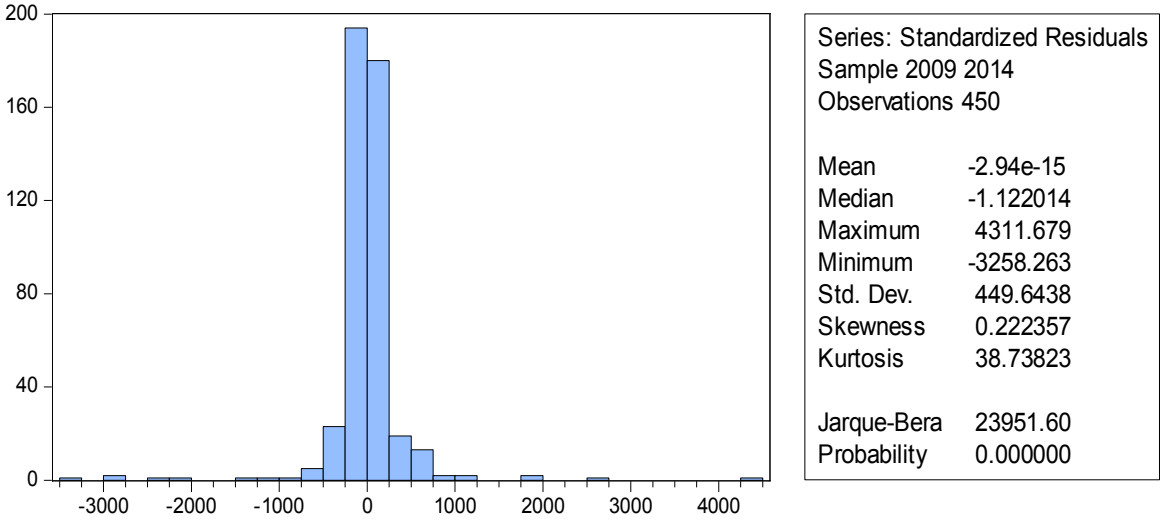
observations could be categorized as sufficiently large and can be considered normal pattern of distribution. The study takes time period of 6 years with cross sections firm's data of 75, making up to 450 observations. Jarque - Bera test is used to measure the normality assumption. The hypothesis for Jarque - Bera test of normality are:

H_o: Normal distribution

H_1: Non - normal distribution

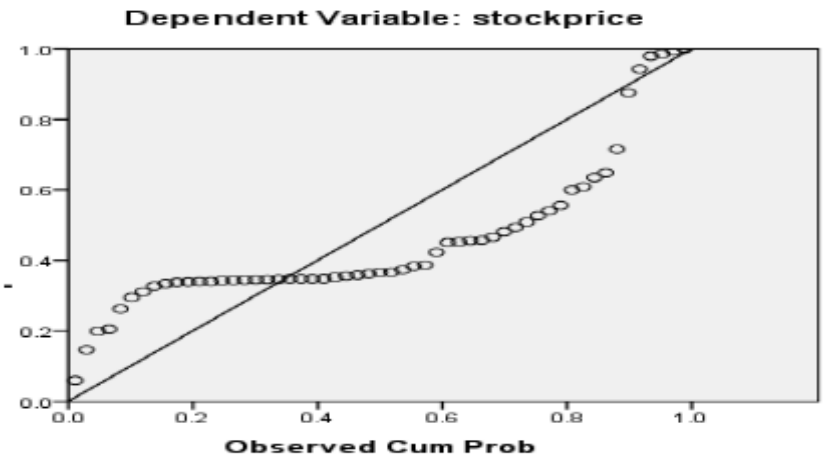
If the value of Chi - Square probability exceeds the level of significance, the null hypothesis of normality is accepted, and vice versa.

Figure 1: Normality Test Series



Based on the results obtained the data processed PP plot description as below:

Figure 2: P-P Plot Normality Test



The Normality test series in Figure 1 indicates that there is no issue of normality among the data set variables for the time period 2009 to 2014. The Figure 2 shows that the scattered dots are interconnected to form a pattern thatfollows the diagonal line. From the picture it does not look too out of the pattern variables (outlier), so theresearchers assume that the data used in this study were normally distributed.

Regression Analysis Model:

Regression analysis is used to measure the impact and direction of influence on the dependent variable being caused by the independent variables.The Table 6 summarizes the regression statistics. In the below table, different types of R values have been calculated. The most relevant is the R square for the multiple regression models. In this

scenario, the value of the R square is 0.623, which is usually acceptable in cross sectional studies.A total of450 observations used in regression analysis. Fitness of regression line is measured through the value of R-square. It measures the strength of association between the variables. Explanatory power in regression model is 63.30% which means that 63.30%variance from total variation in share price is due to ATR, D/E ratio, NPM, ROE, DCR and EPS used whereas remaining 36.70 % is explained by other factors which are not taken in current research study. There may be some other variables which affect this dependent variable. Standard deviation of error term is highindicating not a good strength of regression estimation. The result of regression model also revealsthat model is significant as its F value is 0.000 which is less than the level of significance of 0.05.

Table 6: Regression Statistics

Multiple R	0.789
R Square	0.623
Adjusted R Square	0.617
Standard Error	682.72
Observations	450
F-statistics	122.02
Prob (F-statistics)	0.000

Now, in order to measure the impact of independent variables on the share price of the KSE– 100 non financial listed companies, one of the models that are applied is OLS regression model. Table 7 shows the results of OLS regression parameter estimates of all the independent variables that were consider to check the impact on dependent variable (share price) for the research study. The value of beta for each variable represents the positive or negative impact on the respective dependent variables, if variable is increased by 1 percent. Similarly, t-stat and p-value indicates whether the variables have a significant impact on the share price. The study found that assets turnover ratio (ATR), return on equity (ROE), net profit margin (NPM) and earnings per share (EPS) have significant impact on the share price (SP), as their p-value at 5% level of significance is less than the 0.05 respectively. Moreover, ATR found to be impact negatively on the share price, whereas ROE, NPM and EPS found to be have direct positive influence on the share price. However, the debt to equity ratio (D/E) and dividend cover ratio (DCR) found statistically insignificant and had no impact on the SP of the KSE – 100 listed companies as their p-value is greater than the alpha value of 0.05, that is, D/E p-value = 0.601 and DCR p-value = 0.345 is greater than alpha value of 0.05 at the 95% level of confidence.

This significant relationship among variables can also be explained by looking at the t-statistics values in the Table 7. In statistics, the rule of thumb for checking the t-statistics value is that if value of t-statistics is less than -1.96 or greater than +1.96, it means the variable has a significant impact on the dependent variable at the 95% of confidence. The variable ATR, NPM, EPS and ROE have t-stat value greater than +1.96 or less than -1.96 resulting in the significant association with the SP. The results of t-stats are also consistent with the p-value of the OLS model. To determine the direction of impact that regressorsposses on regressand is indicated by the value of regression coefficients. The regression coefficient of ATR is -94.90, D/E is -0.23, ROE is 1.27, DCR is -1.27, NPM is 11.27 and EPS is 22.99 which means that 1 unit increase in any independent variable may increase or decrease the SP value by its coefficient valuekeeping other variables constant.

The estimated regression model is as follow:

SP = 90.96 – 94.90 ATR – 0.23 D/E + 1.27 ROE – 1.27 DCR + 11.27 NPM + 22.99 EPS

Table 7: Regression Parameter Estimates

	Coefficients	Standard Error	t stat	P-value
Intercept	90.96	62.77	1.44	0.14
ATO Ratio	-94.90	34.51	-2.74	0.00
D/E Ratio	-0.23	0.44	-0.52	0.60
ROE	1.27	0.51	2.45	0.01
DCR	-1.27	1.35	-0.94	0.34
NPM	11.27	2.20	5.12	0.00
EPS	22.99	0.89	25.57	0.00

Fixed and Random Effect (Panel Data) Analysis:
Table 8and Table 9 represent the results of panel data analysis of the fixed and random effect model. For panel regression analysis with the assistance of E-Views software, this investigation administered two momentous models before applying Hausman test, the first model is Fixed effect model (Table 4.8) and the other model is Random effect model (Table 9).

Fixed Effect Model:
The findings of fixed effect model are shown in the Table 8.

Table 8: Fixed Effect Model

Dependent Variable: STOCK PRICE				
Method: Panel Least Squares				
Sample: 2009–2014				
Total panel (balanced) observations: 450				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	191.0290	112.3975	1.699584	0.0901
ROE	1.716309	0.429307	3.997862	0.0001
NPM	5.449740	2.888774	1.986524	0.0500
EPS	12.86423	1.390667	9.250404	0.0000
DCR	0.802072	1.103214	0.727032	0.4677
D/E	0.459005	0.350394	1.309967	0.1910
ATR	-4.221198	82.43238	-0.051208	0.9592
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.834275	Mean dependent var		339.2186
Adjusted R-squared	0.798346	S.D. dependent var		1104.523
F-statistic	23.21977	Durbin-Watson stat		1.7291
Prob (F-statistic)	0.000000			

The Table 8 represents the results of fixed effect regression. The results of below table indicate that model is statistically good fit as value of F-statistic is significant at the 95% level of significance. The value of R square (R^2) is 0.834, explaining 83.4 % variation in the share price through the dependent variables, while the remaining variation in share prices is unexplained and could be resulted by the other financial variables that are not taken in to consideration for this study. According to the results of the fixed effect regression model, only ROE, NPM and EPS has positive and significant impact on the stock price. DCR, D/E ratio and ATR has insignificant association with the stock price. The estimated regression model is as follow:

$$SP = 191.09 - 4.22\ ATR + 0.45\ D/E + 1.71\ ROE + 0.80\ DCR + 5.44\ NPM + 12.86\ EPS$$

Random Effect Model:
The findings of randomeffect model are shown in the Table 9.

Table 9: Random Effect Model

Dependent Variable: STOCK PRICE				
Method: Panel EGLS (Cross-section random effects)				
Sample: 2009 2014				
Total panel (balanced) observations: 450				
Swamy and Arora estimator of component variances				
Variable	**Coefficient**	**Std. Error**	**t - Statistic**	**Prob.**
C	89.89054	72.32092	1.242940	0.2145
ROE	-0.463553	0.408367	-1.135138	0.2569
NPM	8.454986	2.180383	3.877752	0.0001
EPS	20.01221	0.946845	21.13567	0.0000
DCR	-0.108672	1.062667	-0.102264	0.9186
D/E	0.181103	0.340248	0.532269	0.5948
ATR	-37.27802	39.74699	-0.937883	0.3488
Effects Specification				
			S.D.	Rho
Cross-section random			303.4639	0.2724
Idiosyncratic random			495.9965	0.7276
Weighted Statistics				
R-squared	0.454349	Mean dependent var		188.2808
Adjusted R-squared	0.446959	S.D. dependent var		745.2479
S.E. of regression	554.2165	Sum squared resid		1.36E+08
F-statistic	61.47913	Durbin-Watson stat		1.078955
Prob (F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.600621	Mean dependent var		339.2186
Sum squared resid	2.19E+08	Durbin-Watson stat		0.766648

The subsequent imperative model administered before applying Hausman test is Random effect model as shown in the Table 9. The probability of the F - statistics value shows that overall the model fitted good as the F-stat value is less than the 0.05 level of significance. The value of R square (R^2) is 0.600, which means that 60.0 % of the fluctuationin share prices value is due to the independent variables, while the remaining 86 % is due to other financial factors lacking in the scope of this research study. According to the results of the random effect regression model, only NPM and EPS have positive and significant impact on the stock price. ROE, DCR, D/E ratio and ATR has insignificant association with the stock price.
The estimated regression model is as follow:
SP = 89.99 – 37.27 ATR + 0.18 D/E - 1.46 ROE + 0.10 DCR + 8.45 NPM + 20.01 EPS

SELECTION OF ECONOMETRIC MODELS

Hausman Test:
Durbin - Wu Hausman's test (DWH) is applied to select between the fixed effect regression model and random effect regression model. Thus, in order to choose between fixed or random effect models, we run a Hausman test (Table 10). If Chi square value of hausman test is significant at the level of significance, then we reject the null hypothesis and fixed effect model is selected but in case of insignificant value of Hausman test, we accept the null hypothesis and random effect model is selected. The null hypothesis for the Hausman test is that the preferred model is random effect and the alternative is the fixed effect. To run a Hausman test one need to first estimate the fixed effects model, save

the coefficients so that it can compared with the results of the next model, estimate the random effects model, and then do the comparison. Hausman test results are given below:
H_0: That random effect will be used
H_1: That random effect will not be used

Table 10: Hausman Test Result

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary		**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random		116.102169	6	0.0000
Cross-section random effects test comparisons:				
Variable	**Fixed**	**Random**	**Var (Diff.)**	**Prob.**
ROE	1.716309	-0.463553	0.017541	0.0000
NPM	5.449740	8.454986	3.590943	0.1128
EPS	12.86423	20.01221	1.037438	0.0000
DCR	0.802072	-0.108672	0.087822	0.0021
D/E	0.459005	0.181103	0.007008	0.0009
ATR	-4.221198	-37.27802	5215.274820	0.6471

As the p-value of Hausman test for the model is less than level of significance value, that is, the p - value less than 0.05, therefore fixed effect model is used. It means that we fail to accept the null hypothesis, and accept the alternative in favor of null hypothesis.

Chow Test:
The chow test used to choose between the fixed effect model and ordinary least square in estimating panel data. In order to conduct chow test, following hypothesis is developed:
H_0: Ordinary least square regression model
H_1: Fixed effect model
The F statistic value of the chow test is calculated by using the following formula:

$$F = \frac{\frac{(SSE1 - SSE2)}{(n-1)}}{\frac{SSE2}{(nt-n-k)}}$$

Where,
SSE1: Sum Square Error from model Ordinary Least Square
SSE2: Sum Square Error from Fixed Effect Model
n: Number of companies (cross section)
nt: Total cross section x total of time series
k: The number of independent variables
The rejection of the hypothesis above is the calculation of the F statistic comparing the Ftable. The comparison of the results calculated F is used when larger than the F table then null hypothesis (H_0) is rejected, indicating that the best fitted model for consideration is the fixed effect model. By putting the values in the above model, we get,
F = 19.35 > 4.28
Based on the calculations, the results of the F value were greater than the value of F statistics from the F table, and then H_0 is rejected, which means that the best models in between these two models are the fixed effect model.

Panel Regression Model Results (Simultaneously):

The Table 11 represents the results of fixed effect regression which is selected on the decision of Chow and Hausman tests for the current study. The results of table indicate that model is statistically good fit as value of F-statistic is significant at the 95% level of significance. The value of R square (R^2) is 0.834, explaining 83.4 % variation in the share price through the dependent variables, while the remaining variation in share prices is unexplained and could be resulted by the other financial variables that are not taken in to consideration for this study. According to the results of the fixed effect regression model, only ROE, NPM and EPS has positive and significant impact on the stock price. DCR, D/E ratio and ATR has insignificant association with the stock price.

Table 11: Fixed Effect Model

Dependent Variable: STOCK PRICE				
Method: Panel Least Squares				
Sample: 2009 – 2014				
Total panel (balanced) observations: 450				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	191.0290	112.3975	1.699584	0.0901
ROE	1.716309	0.429307	3.997862	0.0001
NPM	5.449740	2.888774	1.986524	0.0500
EPS	12.86423	1.390667	9.250404	0.0000
DCR	0.802072	1.103214	0.727032	0.4677
D/E	-0.459005	0.350394	-1.309967	0.1910
ATR	-4.221198	82.43238	-0.051208	0.9592
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.834275	Mean dependent var		339.2186
Adjusted R-squared	0.798346	S.D. dependent var		1104.523
F-statistic	23.21977	Durbin-Watson stat		1.7291
Prob (F-statistic)	0.000000			

Simple Regression Models (Partially):

The simple regression linear models were also applied to measure the impact of each independent variable on the dependent variable, that is, stock price (SP) of KSE – 100 listed companies for the time period 2009 to 2014 partially. The Table 12 to Table 17 shows the results of simple regression analysis for the model (B) to model (G).

Relationship between Assets Turnover Ratio (ATR) and Stock Price (SP):

Table 12: Relationship between ATR and SP

Dependent Variable: Stock Price (SP)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	121.22	83.46	1.45	0.14
ATR	168.18	50.68	3.31	0.00
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.023	F-statistic		11.00
Adjusted R-squared	0.021	Prob (F-statistic)		0.0000

The Table 12 shows the influence of assets turnover ratio (ATR) on the stock price (SP) of selected listed companies partially. The results found that ATR and SP have positive and direct significant association among them, and that the model is significant at the 0.05

level of confidence. The study found that ATR is the strong indicator of influence on the SP. The regression equation is as follow:

$SP_{i,t} = \beta_0 + \beta_1 ATR_{i,t} + \varepsilon_{i,t}$ ……. (B)

$SP_{i,t} = 121.22 + 168.18\ ATR_{i,t} + \varepsilon_{i,t}$

Relationship between Debt Equity Ratio (D/E) and Stock Price (SP):

The Table 13 shows the influence of total debt to total equity ratio (D/E ratio) on the stock price (SP) of selected listed companies partially.

Table 13: Relationship between D/E and SP

Dependent Variable: Stock Price (SP)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	339.80	52.14	6.51	0.00
D/E	0.22	0.67	0.33	0.73
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.000	F-statistic		0.112
Adjusted R-squared	-0.000	Prob (F-statistic)		0.737

The findings show a positive and insignificant relationship among the SP and D/E ratio individually at the 5% level of significance. The t - stat value also shows the insignificant relationship between the D/E and SP, as the t - stat value is less than the 2.32 at 95% level of confidence. One unit increase in D/E results in 0.22 units increase in the stock price. The R^2 value of the model show that 0.000 % variation in the model is only explained by the D/E. F - statistics value also shows the overall fitness of the model.The regression equation is as follow:

$SP_{i,t} = \beta_0 + \beta_1 D/E_{i,t} + \varepsilon_{i,t}$ ……. (C)

$SP_{i,t} = 339.80 + 0.22\ D/E_{i,t} + \varepsilon_{i,t}$

Relationship between Return on Equity (ROE) and Stock Price (SP):

Table 14: Relationship between ROE and SP

Dependent Variable: Stock Price (SP)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	248.91	54.63	4.55	0.00
ROE	3.74	0.73	4.57	0.00
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.044	F-statistic		20.934
Adjusted R-squared	0.042	Prob (F-statistic)		0.000

The Table 14 shows the influence of return on equity(ROE) on the stock price (SP) of selected listed companies partially. The results found that ROE and SP have positive and direct significant association among them, and that the model is significant at the 0.05 level of confidence. The study found that ROE is also an important indicator of influence on the SP when regressed partially. The regression equation is as follow:

$SP_{i,t} = \beta_0 + \beta_1 ROE_{i,t} + \varepsilon_{i,t}$ ……. (D)

$SP_{i,t} = 248.91 + 3.74\ D/E_{i,t} + \varepsilon_{i,t}$

Relationship between Dividend Cover Ratio (DCR) and Stock Price (SP):

The Table 15 shows the influence of dividend ratio(DCR) on the stock price (SP) of selected listed companies partially. The results found that DCR has no significant impact

on the SP of the KSE - 100 listed companies when regressed partially. The p-value of the DCR is greater than the critical p-value at the 95 % level of significance. Also, the t statistics value is less than the 1.96 at the 5% level of confidence. The regression equation is as follow:

$SP_{i,t} = \beta_0 + \beta_1 DCO_{i,t} + \varepsilon_{i,t}$ ..... (E)

$SP_{i,t} = 0.51 + 2.14\ DCR_{i,t} + \varepsilon_{i,t}$

Table 15: Relationship between DCR and SP

Dependent Variable: Stock Price (SP)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	338.41	52.22	6.47	0.00
DCR	0.51	2.14	0.24	0.80
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.000	F-statistic		0.050
Adjusted R-squared	0.002	Prob (F-statistic)		0.808

Relationship between Net Profit Margin (NPM) and Stock Price (SP):

The Table 16 shows the influence of net profit margin(NPM) on the stock price (SP) of selected listed companies partially. The results found that NPM has significant positive impact on the SP of the KSE - 100 listed companies when regressed partially, as the p-value of the NPM (0.03) is less than the critical p-value at the 95 % level of significance. Also, the t statistics value is greater than the 1.96 at the 5% level of confidence. The regression equation is as follow:

$SP_{i,t} = \beta_0 + \beta_1 NPM_{i,t} + \varepsilon_{i,t}$ ..... (F)

$SP_{i,t} = 302.05 + 3.14\ NPM_{i,t} + \varepsilon_{i,t}$

Table 16: Relationship between NPM and SP

Dependent Variable: Stock Price (SP)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	302.05	64.75	4.66	0.00
NPM	3.14	3.26	3.96	0.03
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.022	F-statistic		13.932
Adjusted R-squared	0.004	Prob (F-statistic)		0.034

Relationship between Earnings per Share (EPS) and Stock Price (SP):

Table 17: Relationship between EPS and SP

Dependent Variable: Stock Price (SP)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-108.44	37.44	-2.89	0.00
EPS	21.82	0.84	25.69	0.00
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.595	F-statistic		660.321
Adjusted R-squared	0.594	Prob (F-statistic)		0.000

The Table 17 shows the influence of earnings per share (EPS) on the stock price (SP) of selected listed companies partially. The results found that EPS and SP have positive and direct significant association among them, and that the model is significant at the 0.05

level of confidence. The study found that EPS is also an important indicator of influence on the SP when regressed partially. The regression equation is as follow:

$SP_{i,t} = \beta_0 + \beta_1 EPS_{i,t} + \varepsilon_{i,t}$ ……. (G)

$SP_{i,t} = -108.44 + 21.82\ EPS_{i,t} + \varepsilon_{i,t}$

CONCLUSION

In a nut shell, it is very important to have a glance on financial statements. By doing this Investors will get benefit to take decisions and to maximize their profits. If financial statements are prepared and presented as per applicable financial reporting framework like IFRS or GAAP and audited by IAS then these financial statements will help users to take economic decisions regarding companies on the basis of financial statements of these companies.

Some Factors have key importance to have deep financial analysis, which are as follows:

1. When regressed partially, assets turnover ratio found to be statistically significant factor that may impact the stock price.
2. Earnings per share arealso found to be significant fundamental factors that impact positively on the value of stock price in various companies.
3. The leverage shows positive and insignificant relationship with the value of the firm. And this positive relationship between the leverage and the value of the firm shows that the high leveraged firms use more derivatives for the purpose of hedging (Modigliani and Miller, 1983).

RECOMMENDATIONS

1. Stock exchange market in an economy provides central network of financial transactions.
2. Company's management should take serious nsteps to control expenses and to maximize profits.
3. External environmental should be considered while determining Company's stock prices.
4. The properly planned and implemented financing, investment and the dividend policies will not only assist the companies in attaining their primary goal of maximizing the wealth of shareholders, but may also enhance the market value of the firm and economic stability.

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