International Journal of Scientific Research and Reviews

An empirical study on fundamental analysis of selected it companies listed in NSE

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ABSTRACT

In this paper, Book to Market, Total Asset Turnover and Current ratio are used as fundamental factor affecting the Stock return. Using multiple regression method, these ratios are analyzed to determine which financial factor effects stock return. The result shows that Book to Market, Total Asset Turnover and Current ratio give significant effect to Stock return. This result explains that these financial ratios are indeed useful in making decision on investment and have same level of interest with other ratios.

KEYWORDS: Stock Return, Regression, Financial statement

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INTRODUCTION

Fundamental analysis is a method of finding out the future price of a stock which an investor wishes to buy. It relates to the examination of the intrinsic worth of a company to find out whether the current market price is fair or not, whether it is overpriced or underpriced. It believes that analyzing the economy, management, strategy, financial status, product and other related information will help to choose shares that will outperform the market and provide consistent gains to the investor. It is the examination of the underlying forces that affect the interest of the economy, industrial sectors and companies. It tries to forecast the future movement of the capital market using signals from the Economy, Industry and Company.

LITERATURE REVIEW

Khusnul Khotimah and Isrochmani Murtaqi 2015[1]conducted a study in Indonesian Stock Market. The author considered book to market ratio, asset turnover and current ratio as fundamental factor affecting stock returns. Using multiple regression method, these ratios are analyzed to determine the financial factor affecting stock return. The result shows that there is significant effect on stock return.

Ozlen and Ergun 2015[2] investigated the relationship between share price and fundamental determinants of company such as debt ratio, total assets turnover ratio, current ratio, price to earnings ratio, book value and net profit margin in different sectors and found that the book value is the most significant fundamental determinant of the stock price for all industries taken under study. The study also revealed that fundamental factors have very less effect on the stock prices of commercial industry whereas, stock price movements of metal and energy sectors are strongly correlated with the internal factors.

Malhotra and Tandon2014[3] examined the relationship between stock prices and company specific fundamental factors for NSE 100 companies during the period 2008 to 2013. A linear multiple regression model has been employed and the results of the study shows that firm's book value, price-earnings ratio, dividend yield and earning per share are significant determinants of the stock prices. On the other hand dividend per share and dividend cover is not significantly impacting the stock prices.

Sireesha 2013[4]analyzed the impact of macroeconomic variables on the movements of the Indian stock market index Nifty, silver and gold prices through linear regression technique. Gold returns, Silver returns are selected for the analysis and are studied along with the stock returns. Gold return is significantly influenced by money supply and Stock return is significantly influenced by GDP and inflation. External variables show positive impact on dependent variables.

Er and Vuran2013[5]conducted a study in Istanbul Stock Exchange(ISE) to investigate the factors affecting stock returns which motivate investors. The author examined 64 manufacturing firms that are continuously listed in ISE during the period 2003-2007. The author applied Dynamic Panel Data Analysis Methods to analyse the factors affecting stock returns of. The result shows that stock returns are affected by financial ratios, previous year's returns and macroeconomic variables.

METHODOLOGY

The study is analytical in nature. The sample is selected from the top 6 companies in IT sector listed in NIFTY during the year January 2019 that includes Cyient, HCL technologies, Infosys ltd, Wipro, Info edge(India) ltd. The data has been collected from the annual reports of the selected companies for a period of 5 years from 2014-19. As for variable tested in this paper, stock return is considered as dependent variable and book to market, current ratio and total asset turnover as independent variable.

DATA ANALYSIS

TheRegression analysis in this study uses Stock return as dependent variable and Book to Market, Total Asset Turnover and Current ratio as independent variable.The research model is shown by the figure below.

Fig: 1 Research Model of the Fundamental Analysis
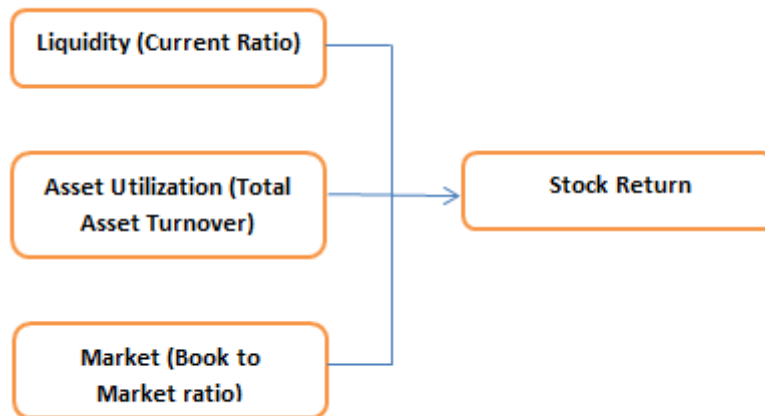
RESULT AND DISCUSSION

Assumption test

The assumption test should be concluded before testing hypothesis. The assumption test in this research is Normality test and Multicollinearity test.

The first assumption test is Normality test. It is generally done to examine whether the residual variable is normally distributed or not in the regression model. In this paper, Kolmogorov-

Smirnov test is used to analyse the residual variable. The normality test will be positive if the significant value is greater than 0.1.

	Kolmogorov-Smirnov		
	Statistic	Df	Sig.
Stock Return	.186	5	.200'
Current Ratio	.302	5	.154
Total Asset	.316	5	.114
Book to Market	.251	5	.200'

The Normality test result which is shown in the above table shows that residual variable have significant value greater than 0.1. It can be concluded that Null hypo-thesis is rejected which means the data tested has the normal distribution.

The next test is Multicollinearity test. It is used to examine whether there is correlation among independent variables. In order to test the correlation among independent variable, the study uses Variance Inflation Factor(VIF) of each independent variable. The Multicollinearity test is positive if the VIF value is greater than 10.

Table:1Multicollinierity Analysis

Model	Collinearity Statistics	
	Tolerance	VIF
1. (constant)		
Current Ratio	.961	1.040
Total Asset turnover	.795	1.257
Book to Market	.821	1.219

From the above table, it is clear that all the value of VIF (independent variables) is below than 10. Thus, all the variables in this test have no multicollinierity problem.

Coefficient of Multiple Determination(R^2):

The coefficient of Multiple Determination which is represented by R^2 measures how much percent of independent variable can explain dependent variable.

Table 2: R^2 Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.874	.763	.052	.24286	2.462

Based on the above table, it is found that R^2 score is 0.763. It indicates that the determined independent variablesi.e., Current ratio, Book to market ratio and Total asset turnover ratio jointly affect 76.3% of dependent variable. The remaining 23.7% is probably affected by other financial ratios or other information besides internal fundamental factors that also affect the movement of firm's stock price which lead to stock return.

Hypothesis testing

F-Test

F-test statistics is used to check whether all independent variables included in this model have significant effect to the dependent variable. Analysis of Variance(ANOVA) is used to test the hypothesis.

Table 3: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.11	3	6.70	12.59	0.002
	Residual	8.52	16	0.53		
	Total	28.64	19			

Based on the above table, the F value is 12.59 with significant value of 0.002. Therefore, the significant value is lesser than the significance level(0.05), it can be concluded that the predicted variables i.e., Current Ratio, Total Asset turnover and Book to Market ratio simultaneously affect dependent variable i.e., Stock return.

T-test:

T-test analysis is used to examine the partial hypothesis. This test shows the significant impact from each independent variable to dependent variable. The T-test result is shown by the following table.

Table 4: T-test

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.464	.640		5.056	.007
	Current ratio	.087	.088	.492	4.574	.010
	Total asset	.751	.718	.570	11.342	.000
	Book to Market ratio	.156	.682	.123	4.051	.015

Current ratio

Current ratio, sometimes called as Bankers ratio or Working capital ratio is reliable indicator of the ability to pay current liabilities. From the above table, the coefficient variableis 0.087 and significant value is 0.010 which is lesser than α value of 0.05. Thus, current ratio has positive impact on stock return.

Total Asset turnover ratio

Total Asset turnover ratio is an Efficiency ratio where it measures a company's ability to generate sales from assets by comparing average total assets with net assets. As evidenced by above

table, Total Asset Turnover has coefficient variable of 0.751 and the significance value of 0.000 which is lesser than α value of 0.05. Thus, it has positive impact on stock return.

Book to Market ratio:

The Market ratio represented by B/M ratio (Book to Market ratio) has the coefficient variable of Book to market ratio is 0.156 and significant value of 0.015 which is greater than α value of 0.05. Thus, it has positive impact on stock return.

Multiple Linear Regression Equation:

Based on the data processing in table, an equation of regression model is formulated.

$Y= 0.464+0.087(X_1)+0.751(X_2)+0.156(X_3)$

Where,

Y= Stock Return

X_1= Current Ratio

X_2=Total Asset turnover ratio

X_3=Book to Market ratio

CONCLUSION:

Fundamental analysis of Indian Stock Market has main objective of determining variables that influence stock return gained by investors. The research result shows whether stock return is affected by financial ratios such as Current ratio, Book to Market ratio and Total Asset Turnover ratio. The relationship between stock return with independent variables are positive for Total Asset turnover, Current ratio and Book to Market ratio. This result explains that financial ratio is indeed useful in making decision on investment.There is also possibility of various other factors which may influence stock price which lead to stock return.

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