Impact of Firms’ Performance on Stock Returns (Evidence from Listed Companies of FTSE-100 Index London, UK)

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Panel regression analysis method is used for the data analysis. Results shows that net profit margin, return on assets has got significant positive impact on stock returns while earnings per share has got significant negative impact on stock returns. When earnings per share will increase, than all those investors who wants short term gain and conscious for dividend sell their stock in to the market due to which in near future the stock returns of the company will be decrease due to excess supply of stocks, while return on equity and quick ratio shows insignificant impact on stock returns.

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I. Introduction

a) Introduction

In the modern era, stock investments have become one of the various investment options that are quite attractive to foreign and local investors. With definite regulations as well as the ease of access to the stock market, stock as an investment instrument is not only demanded by the top-class investors, but has attracted the interest of small investors too. The motive which drives an investor or a business entity to invest their funds in stocks is the expectation of high rate of return or the acquisition a company.

In a stock market, the factors that influence the stock prices include financial policy, monetary policy, foreign trade policy and other macro-economic factors, financial information and other internal factors. Financial Information is one of the main elements that the investors use in making decisions whether to invest in company’s stock or not?

The role of financial reporting is to provide information about the fiscal health and financial performance of the firms. Investors use financial reports for the evaluation the past, current and future potential performance and financial position of a companies.

Followings are the financial statements reported by firms in order to evaluate the position and performance of firms.

➢ The Income statement,
➢ The Balance sheet &
➢ The Cash flow statement.

b) Income Statement

Income statement is one of the financial statements that is used to determine the performance of companies. The income statement reports how much revenue the company generated during a time period, the expenses it incurred and the resulting profits or losses. The basic equation underlying the income statement is:

Revenue – Expenses = Income

c) Balance Sheet

Balance sheet is that financial statement used to determine the position of the company as at a period. The balance sheet provides information on what a company owns (assets), what it owes (liabilities), and the shareholder ownership interest (equity). The underlying equation of the balance sheet is:

Assets = Liabilities + Equity

d) Cash Flow Statement

The third major financial statement provided by companies is the cash flow statement. This statement is used to record the cash and cash equivalents entering and leaving company. There are three major elements in the cash flow statement:

➢ Cash flow from operating activities,
➢ Cash flow from investing activities
➢ Cash flow from financing activities.

e) Problem statement

Many researchers have conducted research on the firm performance on stock returns, taking evidence from different countries stock exchanges. Some of the researchers have found significant positive impact and some found that significant negative impact, and some found that insignificant impact of firm performance on...
stock returns by taking two or three independent variables.

So that’s why the problem is still present there that what should be the actual impact of firms performance on stock returns. For that purpose the researcher increase the number of variables for in depth and better results.

f) Research Question
The research has the following research questions:

1. What is the impact of quick ratio on stock return?
2. What is the impact of earnings per share on stock return?
3. What is the impact of return on assets on stock return?
4. What is the impact of return on equity on stock return?
5. What is the impact of net profit margin on stock return?

h) Significance of the Study
Many researchers conducted the research on impact of firm performance on stock returns; some researchers found negative relationship and some researcher’s shows positive relationship. So the confusion is still present there due to which the researcher wants to investigate the actual performance of the companies and its relation to the company stock returns.

Findings of the study are useful for the investors as well as companies who wants to invest in FTSE-100 index. Findings also useful for the Government sectors for collecting more taxes and boost that particular sectors.

II. Literature View

a) Literature Review
Based on literature review there is a plenty of research which intends to enlighten the relationship between capital structure and performance of listed firms.

Fama and French (1993) analyzed stock return average on market risk, company size, finance leverage, stock holders’ salary bond value to market value, stock holders’ salary and profit to price ratio by regression. The study concluded that market risk and company size have no relationship with stock return average, but stock return average has indirect relationship with financial leverage bond value and has a direct relationship with financial leverage market.

Bagherzadeh, Safania and Roohi (2013) aimed to describe the relationship between current ratio and stock prices of the firms listed on the NSE, India using the cross-sectional correlation technique. The study was conducted over 4 years for the period from 2009 to 2012. The study sample consisted of 317 firms; however, the Financial and Investment companies were excluded from the study. According to Fama & French (1992) the relationship between the value and accounting variable are different for these companies. The Share Prices of the companies has been used as dependent variable of the study, while the current ratio has been used as independent variable. The study results interpreted a multiple coefficients of correlation between Current Ratio based on the year and the variable of share price which equaled to: R=.036, R2=.001 and this indicates that Current Ratio could specify .001% of the variable of the share price. The study concluded that there is significant relationship between current ratio and share price.

Hobarth (2006) examined the relationship between financial indicators and firm’s performance of listed firms in USA for 19 years period by using 17 financial indicators and three variables to measure firm’s performance, namely market performance (stock market value), cash flow performance (dividend per share), and profitability (ROI). The result showed that firms with low book to market ratio, efficient working capital management, low liquidity, more equity and less liabilities, and high retained earnings have high profitability based on ROI. Firms with unqualified opinion from auditor, more liabilities and less equity, low total assets and retained earnings have high cash flow performance (measured by cash dividend). Furthermore, firms with low book to market ratio, efficient working capital management, more equity and less liabilities, low total assets, and high EBIT margin have better market performance (measured by changes in stock price).

Basu (1977) revealed that the information of P/E ratio does not reflect in share prices and investment performance very fast, and generally it seems that stock equation in different profit coefficients has been priced incorrectly compared to another type of pricing and other chances obtained for “abnormal return” which has been provided for the investor.

Manao and Nur (2001) examined the relation between financial ratio and stock returns in Indonesia.
Those companies used as sample for the study were divided into three size categories of small, medium and big, based on total assets. The result shows that PBV and EPS have significant influence on all models.

Menaje (2012) aimed to determine that impact of financial variables on share price of publicly listed firms on the Philippine. For this purpose, he used the Earning Per Share (EPS) and Return on Assets (ROA) as independent variables while the Share Price as dependent variable. The study sample consisted of 50 publicly listed firms in the Philippine. The sample set consist financial reports of 2009, which were taken from OSIRIS electronic database. The multiple regression results of the study showed that a strong positive correlation exists between EPS and share price; whereas there exists a weak negative correlation between ROA and share price. Thus, the paper concluded that the chosen model was able to explain the 73% of variation in the Share Prices.

Irungu (2013) explored the impact of the financial performance indicators on the stock prices of the commercial banks in Kenya. The study used the company size (total assets), liabilities and cost to income ratio as independent variables, while market share price is used as dependent variable. The study sample consist 10 commercial banks listed on the Nairobi Stock Exchange (NSE), Kenya for the year 2011. Multiple regression models have been deployed to analyze the impact of the independent variables on the dependent variables. The results concluded that the model is significant.

Umar and Musa (2013) intended to examine the relationship between Earning per share and Stock prices of firms listed Nigerian Stock Exchange (NSE), Nigeria. Linear regression model has been used for the study. The study sample consist a panel data of 140 Nigerian firms over the period from 2005 to 2009. From the results, it was found that there is an insignificant relationship between earning per share (EPS) and stock prices of the firms in Nigeria. Thus, concluded that the earning per share (EPS) has no predictive power for the stock prices. They suggested that the stock prices of Nigerian firms shall not be predicted by the earning per share of the firms.

Jatoi et.al (2014) analyzed the effect of earning per share on market share price. A sample of 13 cement firms listed on Karachi Stock Exchange was selected for the period of 2009 to 2013. The study included market price of shares as dependent variable where earning per share as independent variable. The findings of the study showed that earning per Share (EPS) significantly impact the Market Value of Share.

b) Hypothesis of the Study

Based on above literature review, the researcher formulates the following hypothesis.

\[ H_{0a}: \text{There is no significant impact of quick ratio on stock return.} \]
\[ H_{1a}: \text{There is significant impact of quick ratio on stock return.} \]
\[ H_{0b}: \text{There is no significant impact of return on equity on stock return.} \]
\[ H_{1b}: \text{There is significant impact of return on equity on stock return.} \]
\[ H_{0c}: \text{There is no significant impact of Return on assets on stock return.} \]
\[ H_{1c}: \text{There is significant impact of Return on assets on stock return.} \]
\[ H_{0d}: \text{There is no significant impact of Return on equity on stock return.} \]
\[ H_{1d}: \text{There is significant impact of Return on equity on stock return.} \]
\[ H_{0e}: \text{There is no significant impact of net profit margin on stock return.} \]
\[ H_{1e}: \text{There is significant impact of net profit margin on stock return.} \]

III. Research Methodology

a) Description of the study

Research Methodology is the study of methods by which the work plan for the research is obtained. The research is conducted to test the impact of firm performance on stock returns, evidence from the firms listed on FTSE-100 Index, London Stock Exchange from last one decade. This study has five independent variables and one dependent variable.

b) Sample Set

Secondary data was used to empirically investigate the effect of firms’ performance on stock returns. A sample size of top 30 firms has been selected from FTSE-100 index of London Stock Exchange for the purpose of exploring the impact of firms’ performance on stock returns. The panel data has been collected for the period of 10 years i.e. from 2005 to 2014 in order to ascertain the relationship between financial ratios and stock returns of the firms listed on FTSE-100 index of the London Stock Exchange. List of the firms used in the study is shown on Table 1 in appendix 1.

c) Data Collection Methods

For the data collection, the researcher has used secondary data i.e.; Annual reports of the selected firms listed on FTSE-100 Index, London Stock Exchange and stock price data has been collecting from www.ftse.org.uk.

d) Theoretical Framework / Conceptual Framework

The study uses following variables to investigate the relationship between firms’ performance and stock returns.
i. **Independent Variables**

The current study uses the five measures of performance including Earning per Share (EPS), Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin Ratio (NPM) & Quick Ratio (QR) as Independent Variables.

a. **Earning per share**

Earnings per share are the most important variable used in determination of the share’s price. It is calculated as:

\[
\text{Earnings per Share} = \frac{\text{Net income}}{\text{Average outstanding shares} - \text{dividend on preferred stock}}
\]

b. **Return on Asset**

The ratio of Return on Asset determines how efficient the management is in using its assets to generate revenues. For the study, it is calculated by dividing a company’s total annual earnings to its total assets. ROA is presented as a percentage and is also referred to as “return on investment”. Menaje (2012) calculate the value of return on assets by below given formula:

\[
\text{Return on Assets} = \frac{\text{Net income}}{\text{Total Assets}}
\]

c. **Return on equity**

Return on Equity is an indication on how profitable a company is by comparing its net income to its average shareholders’ equity. The return on equity ratio (ROE) measures the earnings of the shareholders for their investment in the company. The ROE determines that how effectively investor’s money is being employed. The higher the ratio of return on equity, the more efficient the company’s management is in employing its equity and the better return is provided to the investors. Wang, Fu & Luo, (2013) calculate the value of return on equity by below given formula:

\[
\text{Return on Equity} = \frac{\text{Net income}}{\text{Average Shareholders' Equity}}
\]

d. **Net profit margin**

The net profits ratio is the percentage of post-tax and interest profits to sales. It shows how much of the earnings by the company are translated into profits. Muhammad, Shah & Islam (2014) calculate the value of net profit margin by below given formula:

\[
\text{Net Profit Margin} = \frac{\text{Net Profit}}{\text{Revenue}}
\]

e. **Quick Ratio**

The quick ratio is an indicator of a company’s short-term liquidity. It is the measure of a company’s capability in meeting its short-term obligations. For this purpose, the quick ratio eliminates inventories from stock returns.
current assets. Muhammad, Shah & Islam (2014) calculate the value of quick ratio by below given formula:

\[
\text{Quick ratio} = \frac{(\text{current assets} - \text{inventories})}{\text{Current liabilities}}
\]

ii. Dependent Variables

Dependent variable means that the variable which derives its value on the basis of another variable, here in my research I use one dependent variable which is stock return.

\[
SR = \beta_0 + \beta_1 QR + \beta_2 ROA + \beta_3 ROE + \beta_4 NPM + \beta_5 EPS + e
\]

Where:
- \( SR \) = Stock Returns
- \( \beta_0 \) = Coefficient of Intercept (Constant)
- \( \beta_1 - \beta_5 \) = Coefficients of Slope
- \( QR \) = Quick Ratio
- \( ROA \) = Return on Assets
- \( ROE \) = Return on Equity
- \( NPM \) = Net Profit Margin
- \( EPS \) = Earnings per Share
- \( e \) = it is an error term.

IV. Results and Discussions

a. Stock Returns

The current study uses Stock Returns as dependent variable in order to analyze the impact of firms’ performance.

e) Regression Analysis

Regression analysis helps to understand how the value of the dependent variable changes when independent variable is varied. This study uses the following regression models:

\[
SR = \beta_0 + \beta_1 QR + \beta_2 ROA + \beta_3 ROE + \beta_4 NPM + \beta_5 EPS + e
\]

The above table shows the values of descriptive statistics. The maximum and highest mean values have been observed in case of earning per share, following that, the maximum value of earnings per share is 10.44 and the minimum value is -6.16 while mean value is 0.9424 having standard deviation of 1.3495. The maximum value in case of net profit margin is 3.779 and the minimum value is -7.005 while mean value is 0.1693 having standard deviation of 0.7527. The maximum value in case of quick ratio is 7.580 and the minimum
value is 0.190 while mean value is 0.9164 having standard deviation of 0.7286. The maximum value in case of return on assets is 0.6711 and the minimum value is -0.5354 while mean value is 0.0762 having standard deviation of 0.0879. The maximum value in case of return on equity is 9.850 and the minimum value is -2.623 while mean value is 0.3150 having standard deviation of 0.7725. Finally the maximum value in case of stock returns is 2.0144 and the minimum value is -0.6782 while mean value is 0.1048 having standard deviation of 0.3332.

b) Correlation Analysis
Correlation means the relationship between two variables. The correlation shows two things, first it shows the direction between two variables and secondly it shows the strength of associations between two variables. The below table shows the values of correlation among the variable

<table>
<thead>
<tr>
<th></th>
<th>EPS</th>
<th>NPM</th>
<th>QR</th>
<th>ROA</th>
<th>ROE</th>
<th>SR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPM</td>
<td>0.426856</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QR</td>
<td>0.139965</td>
<td>-0.043838</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.703676</td>
<td>0.428179</td>
<td>0.192749</td>
<td>1.000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>0.298253</td>
<td>0.087022</td>
<td>0.005526</td>
<td>0.491299</td>
<td>1.000000</td>
<td></td>
</tr>
<tr>
<td>SR</td>
<td>0.141256</td>
<td>0.194969</td>
<td>0.108433</td>
<td>0.271694</td>
<td>0.065772</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

The highest positive correlation is observed between return on assets and earnings per share, the correlation value of net profit margin and earnings per share is 0.4268, which means that 42.68% positive correlation is present between NPM and EPS. The correlation coefficient of quick ratio and earnings per share is 0.1399, which means that 13.99% positive correlation is present between QR and EPS. The correlation coefficient of return on assets and earnings per share is 0.7036, which means that 70.36% positive correlation is observe between ROA and EPS. The correlation coefficient of return on equity and earnings per share is 0.2982, which means that 29.82% positive correlation is observe between ROE and EPS. The correlation coefficient of stock returns and earnings per share is 0.1412, which means that 14.12% positive correlation is observe between SR and EPS. The correlation coefficient of quick ratio and net profit margin is -0.0438, which means that 4.38% negative correlation is present between QR and NPM, it means that when quick ratio will be increase than net profit margin will be decrease. The correlation coefficient of return on assets and net profit margin is 0.4281, which means that 42.81% positive correlation is observe between ROA and NPM. The correlation coefficient of return on equity and net profit margin is 0.087, which means that 8.7% positive correlation is observe between ROE and NPM. The correlation coefficient of stock returns and net profit margin is 0.1949, which means that 19.49% positive correlation is observe between SR and NPM. The correlation coefficient of return on assets and quick ratio is 0.1927, which means that 19.27% positive correlation is observe between ROA and QR. The correlation coefficient of return on equity and quick ratio is 0.0055, which means that 0.55% positive correlation is observe between ROE and QR. The correlation coefficient of stock returns and quick ratio is 0.1084, which means that 10.84% positive correlation is observe between SR and QR. The correlation coefficient of return on equity and return on assets is 0.4912, which means that 49.12% positive correlation is observe between ROE and ROA. The correlation coefficient of stock returns and return on assets is 0.2716, which means that 27.16% positive correlation is observe between SR and ROA. Finally the correlation coefficient of stock returns and return on equity is 0.0657, which means that 6.57% positive correlation is observe between SR and ROE.

c) Regression Analysis
Regression analysis shows that the effect of one variable to another variable. It shows that the variation of dependent variable has been explained by the variation of dependent variable. Panel regression consists of three major effects which are Common Effect, Fixed Effect and Random Effect. For the purpose of selecting appropriate Effect Model for the study, Likelihood Ratio has been tested. The p – value of the cross-section F in the redundant fixed effect test is 0.9932, which shows that Common Effect Model is the best model for the study.
Table 4.3: Shows the value of likelihood

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>0.457384</td>
<td>(29,265)</td>
<td>0.9932</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>14.652299</td>
<td>29</td>
<td>0.9875</td>
</tr>
</tbody>
</table>

Table 4.4: Shows the values of common effect model regression analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.010968</td>
<td>0.032016</td>
<td>0.342576</td>
<td>0.7322</td>
</tr>
<tr>
<td>NPM_?</td>
<td>0.051739</td>
<td>0.021582</td>
<td>2.397321</td>
<td>0.0090</td>
</tr>
<tr>
<td>ROA_?</td>
<td>1.283147</td>
<td>0.341418</td>
<td>3.758285</td>
<td>0.0002</td>
</tr>
<tr>
<td>ROE_?</td>
<td>-0.030530</td>
<td>0.028036</td>
<td>-1.088962</td>
<td>0.2771</td>
</tr>
<tr>
<td>EPS_?</td>
<td>-0.033389</td>
<td>0.010257</td>
<td>-3.255241</td>
<td>0.0008</td>
</tr>
<tr>
<td>QR_?</td>
<td>0.030931</td>
<td>0.026316</td>
<td>1.175373</td>
<td>0.2408</td>
</tr>
</tbody>
</table>

The coefficient value of net profit margin is 0.05173, which means that 5.17 percent variation of stock returns has been explain by the variation of net profit margin. The t-statistics of net profit margin is 2.3973 with a p-value is < 0.05 shows that net profit margin has got significant positive impact on stock returns. If one unit increases in net profit margin than stock returns will increase at 0.05 units. The coefficient value of return on assets is 1.2831, which means that 128.31 percent variation of stock returns has been explain by the variation of return on assets. The t-statistics of return on assets is 3.7582 with a p-value is < 0.005 shows that return on assets has got significant positive impact on stock returns. If one unit increases in return on assets than stock returns will increase at 1.283 units. The coefficient value of return on assets is -0.30530, which means that 3.05 percent negative variation of stock returns has been explain by the variation of return on equity. The t-statistics of return on equity is -1.0889 with a p-value is > 0.05 shows that return on equity has got insignificant negative impact on stock returns. If one unit increases in return on equity than stock returns will decrease at 0.03 units. The coefficient value of quick ratio is 0.030931, which means that 3.09 percent positive variation of stock returns has been explain by the variation of quick ratio. The t-statistics of quick ratio is 1.1753 with a p-value is > 0.05 shows that quick ratio has got insignificant positive impact on stock returns. If one unit increases in quick ratio than stock returns will increase at 0.030 units.

The values of determination of coefficient R2 is 0.4483, which means that 44.83 percent variation of stock returns has been explain by the variations of all independent variables, which are net profit margin, return on assets, return on equity, quick ratio, and earnings per share.

The value of AdjR² is 0.4120, shows that if the researcher incorporate more relevant variables than it will adjust R2 at the rate of 41, 20 percent.

Model is found statistically significant (F = 6.41, p < 0.01); the value of F-statistics is 6.41 and p-value is < 0.05 shows that the model is good fit for the study.

d) Summary of Hypothesis testing

Based on above results the researcher accepts or rejects the following hypothesis.
V. CONCLUSION AND RECOMMENDATION

a) Conclusion
The research is conducted to test the impact of firm performance on stock returns, evidence from the firms listed on FTSE-100 Index, London Stock Exchange over the period 2005 to 2014. In this study the researcher used has five independent variables and one dependent variable. Earnings per share, quick ratio, return on assets, return on equity, and net profit margin is used as independent variables while stock returns is used as dependent variable.

Results shows that net profit margin, return on assets has got significant positive impact on stock returns while earnings per share has got significant negative impact on stock returns. The reason for that is when net profit margin is increase and the company will retained more cash than it will automatically increase stock returns and if the company net profit will increase it will increase return on assets which will also increase stock returns. When earnings per share will increase, than all those investors who wants short term gain and conscious for dividend sell their stock in to the market due to which in near future the stock returns of the company will be decrease due to excess supply of stocks, while return on equity and quick ratio shows insignificant impact on stock returns.

b) Recommendation
The researcher has conducted the research on the firm performance on stock returns evidence from FTSE-100 index over the period of 2005-2014 by using five independent and one dependent variable. If anyone else wants to conduct the research on the same topic than the researcher must incorporate:

- The researcher must incorporate more independent variables
- The period of the study should be more than 20 years for better results
- The researcher must collect the data more the 50 companies for better results

REFERENCES Références Referencias


