

# COMPANY PERFORMANCE AND STOCK RETURN: A STUDY ON SELECTED MANUFACTURING COMPANIES IN SRI LANKA

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## **ABSTRACT**

The main objective of this study is to investigate the company performance and stock return. Company performance which is the independent variable of this study is represented by price earning (PE) ratio, return on asset (ROA), debt to equity (DE) ratio, company size and firm's growth rate and the dependent variable of this study stock return which is represented by the changes in average share price. The study used annualized data of 20 manufacturing companies listed in Colombo Stock Exchange of Sri Lanka for a period of 5 years, from 2013 to 2017. Ordinary least square is used to estimate the parameters of regression model. Overall results suggest that company performance and stock return are significantly related with the prediction of adjusted R<sup>2</sup> value of 56% among the listed manufacturing companies during the periods of 2013-2017. It is observed that the stock return significantly positively relates to DE ratio and growth rate while it negatively relates to PE ratio, ROA and size.

**Keywords:** Price earnings ratio, Return on asset, Debt equity ratio, Size and Growth rate.

## **Introduction**

Many shareholders invest their money in the shares. But in earlier days they didn't put their money in shares because of panic and they can't know the actions of the share trading. Many corporations are issuing shares to public and they give dividend as a gain to those shareholders. Many investors think that investing in shares is highly profitable investment than other investment. The stock market is a market where the securities are traded. Securities are shares, debentures etc. Companies normally use the mechanism of the stock market to raise debt or equity capital. Companies can come in to the stock market through issuing shares or debentures to the public. It is divided into two markets such as primary and secondary market. Primary market is the market for new shares or debenture issue. The security is bought directly from the issuer. There are two types of primary market transaction. They are public offering and private placement.

The stock market has become important market playing a vital role in economic prosperity that predicting capital formulation and sustaining economic growth. Every year, more and more economic and stock market information becomes available online. Therefore it comes as no surprise that data mining and analysis have really taken off in places like Wall Street. There are many analyst companies out there that constantly publish rating about the much publicity traded companies. These ratings become especially important to investors when a company is about to publish their quarterly or yearly reports. When the companies finally release their yearly or quarterly report, they provide the outside world insight into what's been going on over the past three months. These reports include items such as a performance summary, future outlook, and most importantly, hard numbers for investors to digest. Many parties act on the new information provided in the report.

Stock markets are important for economic growth as they insure the flow of resources to the most productive investment opportunities. Financial markets are the intermediary link in facilitating the flow of funds from savers to shareholders. Providing an institutional mechanism for mobilizing domestic savings and efficiently channeling them into productive investment, they lower the cost of capital to investors and speed up economic growth of the country. The stock market procedure is a key component of the financial sector of any economy.

The behavior of market contributors can also be an important aspect for change in stock return. Predictability of the stock market returns has been important over long multi-year horizons. The current study attempts to examine the influencing factors of some of CSE stocks which are 5 selected as the proxies for their sectors by considering the company financial statements. The researcher attempts to find out the most fundamental financial determinants factors which directly affect on stock return movement and on what bases investors should select their investment portfolio. The main objective of this paper is to identify the company performance and stock return on listed firms in Sri Lanka.

According to the background study and discussed, researcher identified differences in the conclusions. That is the main problem to the current study. Furthermore, not every researcher used the same variables to the most of the researches. Nevertheless, some researchers used mutual variables in the more researches. They used some variables when intending to find the relationship with stock return movement. However, arisen problem is that the decision expressed by them different from various ways. It was in the positive or negative relationship or the relationship with the stock return movement was significant or insignificant. When looking at the conclusions most of empirical studies Jatio et.al (2014), Srivastava (1968), Manao and nur (2001), Sparta and February (2005) stated that similar conclusion with theoretical review which is positive and significant relationship. However most of the researches Pratheepkanth, P. (2011), Uddin (2009) Al- Shubiri (2010) stated that theoretical review which is significant impact on average share price.

## Literature Review

Past studies indicated that, the important factors affecting stock price reveals that earnings per share, return on asset, debt equity ratio, firm size, growth hold substantial roles in influencing the same. This proposes that dividend paying firms are better valued by investors as every investor prefers a consistent dividend policy. Also shares with higher price earnings ratio shows that such firms will have a promising future in the eyes of investors. Leverage is another imperative part affecting share prices and this recommends that investors attach more value to those firms which employ less debt as increased of debt minimizes the earnings of the stakeholders. Stakeholders also select firms which have high earnings per share as it ensures them a better return on the share. Return on equity is also assumed to hold a significant position as it assures the shareholders the amount earned on their investment.

(Muhammad & Ghulam, 2014) Examined 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 share as dependent variable where earning per share as independent variable. The findings of the study disclosed that earning per share (EPS) significantly impact the market value of share.

(Rangan, 2013) Examines the Macroeconomic surprises and stock returns in South Africa. They analyse the sensitivity of industry-specific stock returns to monetary policy and macroeconomic news. The approach which is used by them was an event study, Bayesian vector autoregressive (BVAR) analysis. At last they reached at this conclusion CPI surprise plays a significant role, monetary surprise is the only variable that consistently 28 Negatively affects the stock returns significantly, both at the aggregate and sectoral levels. The BVAR model based on monthly data, however, indicates that, in addition to the monetary policy surprises, the CPI and PPI surprises also affect aggregate stock returns significantly. Though, the effects of the CPI and PPI surprises are quite small in magnitude and are mainly experienced at shorter horizons immediately after the shock.

(Musa, 2013) Intended to examine the link between earning per share and stock prices of firms listed Nigerian stock exchange (NSE) Nigerian 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.

(Macharia, 2013) explored the impact of the financial performance indicators on the stock prices of the commercial bank in Kenya. The study was taken the company size (total assets), liabilities and cost to income ratio as independent variables while market share price was used as dependent variable. The study sample consist 10 commercial bank 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.

(Placido M. Menaje, 2012) Defines share investing is taking a risk and investors seek those financial measures that have significant impact on stock return. Past empirical studies used various financial and economic variables to determine their effect on share price but some of the results were not very conclusive and there were some recent results that seemed to contradict previous studies. Movement of the share price and its direction is very important to the share investor.

(Menje & Placido, 2012) Intended to determine that impact of financial variables on share price of publicly listed firms on the Philippine. For this purpose he used the EPS and ROA as independent variables while the share price as dependent variable. The study sample consisted of 50 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 price.

(Mohamed, Zuraidah, & Roslan, 2012) This examines the role of Capital structure in determining the firm's financial performance. Two measures of capital structure; DTAR (Debt to Asset Ratio) and DTER (Debt to Equity Ratio) are used in the performance model to identify the affiliation of capital structure when regressed with ROA, ROE and ROIC with 1170 observation from companies listed in Bursa Malaysia for nine– year period from 2002 to 2010. It also investigates how firm size 16 weights their role in influencing firm performance. Using multiple regression analysis, they concluded that capital structure is negatively significant with firms' performance from the sample of Malaysian firms are concerned.

(Pratheepkanth. P, 2011) he found that, the business companies in Sri Lanka taking into account the period from 2005 to 2009. According to the study, the Correlation analysis explains, there is a weak positive relationship between gross profit and Capital structure (0.360). At the same time, there is a negative relationship between net profits and capital structure (-0.110). It reflects the high financial cost among the firms. ROI and ROA also has negative relationship with capital structure at -0.104, -0.196 respectively. The Researcher concluded that there is a negative association at -0.114. Co-efficient of Determination is 0.013. F and t values are 0.366, -0.605 respectively. It is reflecting the insignificant level of the Business Companies in Sri Lanka.

## Methodology

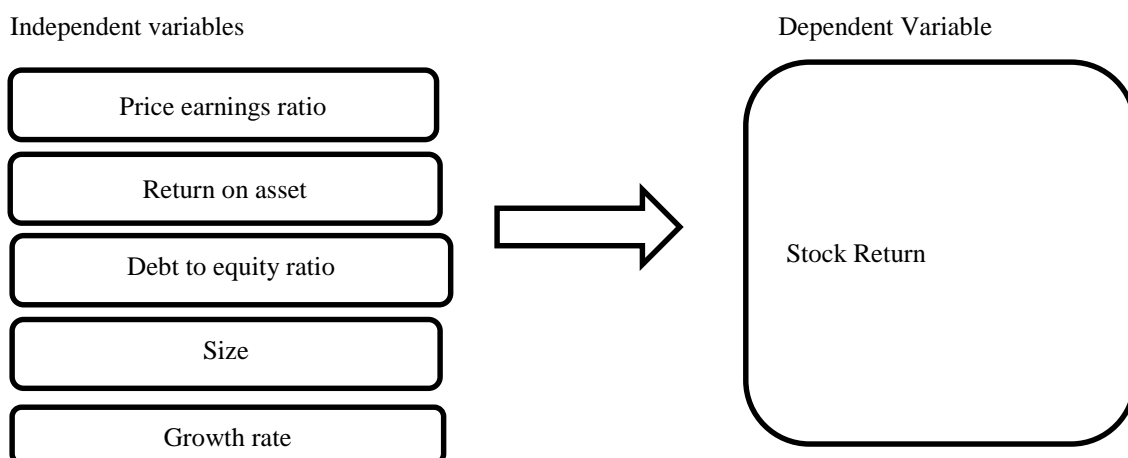
The research methodology is presented since the central part of research activity is to develop an effective research approach or design. Research methodology focus on the research process and the kind of tools and procedures to be used. The study focus on Price earnings ratio, Return on asset, Debt equity ratio Size and Growth rate of Stock return. These studies explained multi-factor models as well as single factor models. The following methodological approach is adopted in the study for establishing the company performance and stock return of selected manufacturing companies in Sri Lanka.

This study used its base as the companies listed in the Colombo Stock Exchange. Therefore, this study considers all the listed companies in the Colombo stock exchange as the population of the study. It has included the all the companies in the year of 2017 end. There in the Colombo stock exchange firms categorized into sectors and index. This study considers manufacturing companies in Sri Lanka 20 Indexed companies.

This study is used companies listed in Colombo Stock Exchange. As a sample, this is used 20 companies out of 38 in section of manufacturing 20 indexed companies, based on market capitalization that follows the performance of 20 leading in public traded companies listed in the Colombo Stock Exchange. For this study, 20 manufacturing companies listed in the main board of Colombo Stock Exchange (CSE) from 2013 to 2017 have been selected as samples for this study. This data collected from Colombo Stock Exchange Official website. The secondary data was used to calculate some of the values of the variables. Data for this study includes the period from 2013 to 2017. The sources of data include the yearly publication of Colombo Stock Exchange (CSE), and annual reports of relevant companies from companies' official websites.

## Conceptualization

Based on the extract literature, the following conceptual model was formulated. Conceptualization model provides an outline to understand the company performance and stock return of the listed companies in Sri Lanka.



The quantitative research approach is used to answer the research questions. Descriptive statistics are used to describe and summarize the behavior of variables and inferential test (Correlation and Regression) were used to

test the research hypotheses. Descriptive statistics has been incorporated in order to see what is the mean value of data and the standard deviation. The maximum and minimum values both in respect of companies in respect of the years. Correlation coefficient of Pearson's coefficient has been calculated in order to generate relation between two variables. Regression analysis over here an attempt has been made to examine the composite company performance and stock return.

### Research Model

To identify the determinants of share prices, the model specified in equation is estimated, where in share price is modelled as a function of Price Earnings Ratio, Return on Assets, Debt Equity Ratio, Size and Growth.

#### Model

$$SR = \alpha + \beta_1 PE + \beta_2 DE + \beta_3 ROA + \beta_4 Size + \beta_5 Growth + \epsilon$$

- SR represents stock return
- PE represents price earnings ratio
- DE represents debt equity ratio
- ROA represents return on asset
- S represents firm size
- G represents firm growth rate
- $\epsilon$  represents error terms
- $\beta$  represents slope coefficient

### Findings & discussions.

The data were analyzed by the computer software known as statistical package for service solution (SPSS 20.0) software. The all data were calculated with SPSS and it was used in investigating, measuring and comparing the specific issues about the company performance and stock return.

#### Correlation Analysis

Correlation analysis measures the relationship between two items. It can be estimated a sample correlation coefficient, more specifically the Pearson Product Moment correlation coefficient. The sample correlation coefficient denoted r. The ranges between -1 and +1 and quantifies the direction and strength of the linear association between the two variables. The correlation between two variables can be positive or negative. The sign of the correlation coefficient specifies the direction of the association. The correlation coefficient indicates the strength of the association, A correlation of  $r = 0.9$  indicates strong, positive association between two variables, whereas a correlation of  $r = -0.2$  indicates a weak, negative association. A correlation close to zero submits no linear association between two continuous variables.

Table 1: Coefficient of Correlation

	Stock Return	PE Ratio	DE Ratio	ROA	Growth	Size
Stock Pearson Correlation	1	-.067	.006	-.005	.688 <sup>aa</sup>	-.161
Sig. (2-tailed)		.113	.038	.920	.000	.001
N	100	100	100	100	100	100

PE Ratio	Pearson Correlation	-.067	1	.056	.081	.061	.041
	Sig. (2-tailed)	.113		.580	.420	.549	.689
	N	100	100	100	100	100	100
DE Ratio	Pearson Correlation	.006	.056	1	-.010	-.173	.020
	Sig. (2-tailed)	.038	.580		.922	.086	.845
	N	100	100	100	100	100	100
ROA	Pearson Correlation	-.005	.081	-.010	1	.032	.047
	Sig. (2-tailed)	.920	.420	.922		.755	.641
	N	100	100	100	100	100	100
Growth	Pearson Correlation			-.173	.032	1	
	Sig. (2-tailed)	.688 <sup>aa</sup>	.061	.086			.115
	N	.000	.549	100	100	100	.254
Pearson Correlation Size	Pearson Correlation	-.161	.041	.020	.047	.115	1
	Sig. (2-tailed)	.001	.689	.845	.641	.254	
	N	100	100	100	100	100	100

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The relationship between the various independent variable and dependent variable used in the study. As it is observed in the table the correlation value were found to be mixed (both positive and negative) between the variable.

The relationship between the several independent variables and dependent variable used in the study. As it is observed the correlation values are found to be mixed (both positive and negative) in this study. DE ratio and

Growth variables are positively correlated and PE ratio, ROA and Size variables are negatively correlated. The positive correlation means if one variable increases, at that time the other variable also increases and vice versa. The negative correlation means if one variable increases, at that time the other variable decreases and vice versa.

### Regression Analysis

Table 2: Regression Analysis

R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson	F	Sig.
0.750 <sup>a</sup>	0.563	0.539		54.97185	1.654	24.180	.000 <sup>b</sup>

R is the multiple correlation coefficients which indication the relationship between the study variables. R can be measured to be one measure of the quality of the prediction of the dependent variable. According to my study R value is 0.750. Hence, it could be concluded that there is a positive linear correlation between Company performance and Stock Return.

R square (R<sup>2</sup>) is the coefficient of determination which tells us the variation in the dependent variable due to the changes in the independent variables. R<sup>2</sup> is the proportion of variance in the dependent variable that can be explained by the independent variables. From the findings as shown in table 2 the value R square was of 0.563, an indication that there was variation of 56.3% there is a relationship between Company performance and stock return and 43.7% there is no relationship between those variables. Stock return are attributed another variables.

Adjusted R Square takes into account the number of explanatory variables (Xs) and the sample size, i.e., it is adjusted based on the df. Adjusted R Square becomes more relevant as a diagnostic tool when used in multiple regressions. According to my research adjusted R Square is 53.9%. Here Durbin Watson explain 2.174. its explain there is no auto correlation.

ANOVA (F- value) means “model explains the most possible combination of predictor variable that could contributed to the relationship with dependent variable”, F and significant values are 24.180 and 0.000 respectively. It reflected that the F significance value is significant at 0.05 levels. Therefore at 5% significant level, it can be statistically concluded that there is strong significant relationship between independent and dependent variable.

The multiple regression statistical models can be established in this way:

$$SR = \alpha + \beta_1 (PE) + \beta_2 (DE) + \beta_3 (ROA) + \beta_4 (GROWTH) + \beta_5 (SIZE) + \epsilon$$

$$SR = 57.425 - 0.110(PE) - 0.146 (DE) - 0.007(ROA) + 0.748(Growth) - 0.246(Size) + \epsilon$$

According to the multiple regression equation DE Ratio, ROA, Growth and Size, would be 57.425. It was found out that PE Ratio increase would cause a Decrease in stock Return (SR) by 0.110. DE Ratio increase would cause decrease in stock Return by 0.146. ROA increase would cause a Decrease in stock Return by 0.007. Growth increase would cause an increase in sock return by 0.748 Size increase would cause a decrease in stock return by 0.246. This shows that there is a positive relationship between growth and stock return. And also there is negative relationship between PE ratio, DE ratio, ROA and size.

### Conclusions

This study considered the effects of company performance and stock return on manufacturing companies in Sri Lanka. This study used its base as the companies listed in the Colombo Stock Exchange. Therefore, this study considers all the listed companies in the Colombo stock exchange as the population of the study. It has included the all the companies in the year of 2017 end. There in the Colombo stock exchange firms categorized into sectors and index. This study considers manufacturing companies in Sri Lanka 20 Indexed companies.

Quantitative data analysis method was used for data analysis. The Data analysis was made utilizing (SPSS 20.0). The following statistical tools were utilized: Descriptive analysis, Pearson’s Correlation Coefficient Analysis, Multiple Regression Analysis.

According to my study descriptive analysis explain mean median mode skewness kurtosis value. The Pearson's correlation coefficient analysis explains the relationship between dependent variable and independent variable. On the other hand the multiple regression analysis showed that, the independence variable's influence on dependent variable. The independent variables are such price earnings ratio, return on asset, debt to equity ratio, growth and size and the dependent variable is stock return. Among these five independent variable growth has around 68.8% of the influence on the dependent variable and DE ratio influence by 0.6% on dependent variable. Other variable are negatively influencing on the dependent variable.

## Recommendation

First the investors should consider the Factors (financial ratios) while they are investing share in the Colombo stock exchange. Next the stock brokers consider the dividend, ROA, PE ratio and other ratios and inform them to their customers efficiently. When the ratios forecast the trend, stock brokers should motivate the investors try to invest in those shares. Next CSE consider the share price movement because its impact on the stock market so the Colombo stock exchange considers the above variables in order to function effectively.

Further shareholders of the company use this information in order to gain capital gain by purchase and selling shares. Shareholders should identify the financial ratio" trend in order to make effective decision about purchase or sell their shares. Listed quoted companies consider the financial ratios of another company. So as to keep the company image and customer satisfaction.

## Suggestions for future research

Stock return is determined by various internal and external factors. But this research investigated internal (micro) financial factors that impact the stock return in Sri Lanka. Therefore to understand the stock return of Sri Lankan manufacturing companies more clearly, it is necessary to analyze external factors as well. Such as GDP, inflation, growth, interest rate, Supply and Demand, Exchange Rates.

Further studies could also incorporate some other internal factors other than mentioned in this study. In this study, the researcher has mainly examined the factors that impact on stock return of Sri Lankan Listed manufacturing companies. It might be an interesting and crucial to extend this research to other sectors of the economy in the country.

This research study obtained the secondary data from the Colombo Stock Exchange, but primary data not included in this study. So further research should also include the primary data. In this study, two statistical analyses are included such as correlation and regression. So it is better to include any recent methodology for future research and also this study focused only five year period (2013-2017) further study must include changes over long time period.

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