The impact of firms' earnings on the stock market: A study on Food Beverage and Tobacco industry in Colombo Stock Exchange

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Abstract

The research is conducted with the primary objective of identifying the impact of Earnings Per Share on Market Price Per Share, evidence from the Food, Beverage, and Tobacco companies listed on the Colombo Stock exchange over the period 2013 2019. In this study, the researchers used Earnings Per Share as independent variables and Market Price Per Share as a dependent variable, whereas Firm Size as a control variable. Descriptive Statistics, Correlation Analysis, Panel regression analysis, and Variance Inflation factors were used for the data analysis. The data were collected for 25 companies from the Food, Beverage and Tobacco industry from 2013 to 2019. Moreover, the sampling method used was Random sampling. The data were analyzed using the statistical software named Eviews 9. The findings revealed that Earnings Per Share affects the Market Price Per Share significantly and positively at a 95% confidence level, whereas Firm Size also has a positive and significant impact on Market Price Per Share.
Keywords: earnings per share, firm size and market price per share

Introduction

In the modern era, stock market investments have become one of the various investment options quite attractive to foreign and local investors. With definite regulations and the ease of access to the stock market, stock as an investment instrument is demanded by the top-class investors and has attracted the interest of small investors. The motive that drives an investor or a business entity to invest their funds in stocks is the expectation of a high return rate or the acquisition of a company. The stock prices do not remain constant for long; instead, it fluctuates according to the market expectations. To maximize the share price, the organizations attempt to maintain the stable cash flows by enhancing their revenues and reducing the costs. In a stock market, the factors influencing 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
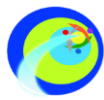
of the main elements that the investors use in making decisions on whether to invest in a company's stock or not.

Investors generally look at financial information by accessing the financial statements of companies. The information on earnings can be retrieved from the income statement and utilized to improve future profitability. The main intention of every organization is to enhance the profitability and maximize the shareholders' wealth. The profitability of corporate companies can be evaluated with the Earnings Per Share, whereas the market capitalization or generation of shareholders' wealth can be measured with the Market Price Per Share. However, those firms with greater profitability do not always generate higher market prices, and those with minute profitability do not lead the market price to fall. Thus, it is significant to identify the relationship between Earnings Per Share and Market Price Per Share. So, this study's objective is to examine the impact of Earnings per share on Market Price Per Share.

Research Problem

Many researchers have researched relationship between Earnings Per Share and Market Price Per Share, taking evidence from different countries' stock exchanges. According to the Colombo Stock Exchange Annual Reports, All Share Price Index of Food, Beverage and Tobacco industry fluctuates continuously (ASPI 30.04.2020 = 697.73, ASPI 31.05.2020 = 724.05, ASPI 31.06.2020 = 737.92, ASPI 30.07.2020 = 736.75). Investors often look at the share price movement before making any investment decisions. So, Earnings Per Share is one of the critical factors determining the Market Price Per Share. Moreover, some researchers have found Earnings Per Share has a significant positive impact (Menaje, 2012) on Stock Returns. Velnampy and Pratheepkanth (2011) examined Earning per share (EPS) and its impact on the Share price in Milanka Companies in Colombo Stock Exchange (CSE) and concluded more than 70% of Milanka companies have a positive relationship between earning per share and share price movements. Some other scholars have proved there is a significant negative relationship between Earnings Per Share and Stock Return. In line with the study undertaken by Anwaar (2016) on the impact of Firms' Performance on Stock Returns (Evidence from Listed Companies of FTSE-100 Index London, UK), findings indicated that there is a significant negative impact of Earnings Per Share on Stock Return. Umar and Musa (2013) intended to examine the relationship between Earning per share and Stock prices of firms listed Nigerian Stock Exchange (NSE), Nigeria. They concluded that the earning per share (EPS) has no predictive power for the stock prices. They suggested that Nigerian firms' stock prices shall not be predicted by the earning per share of the firms. Since several researchers have proved positive, negative, and no impact of

firm performance indicators on stock, this paper examines the impact of firm performance on Stock Return in the context of Sri Lanka. So, that is why the problem still exists what should be the actual impact of firms' performance on Stock Returns. Hence, this research's main problem is to study "to what extent the Earnings Per Share impact Market Price per Share of listed Food, Beverage and Tobacco companies in Sri Lanka".

Literature Review

Tharshiga (2013) examined the Impact of Earning Per Share (EPS) On Share Price (10 Listed Manufacturing Companies in Sri Lanka) and four-year data (2009-2012) were taken on random sampling method for this study. Correlation and regression are used to find out the impact of earning per share on the share price. Analyzed results revealed there is a strong positive relationship between Earning per share and share price. Further earning per share can explain 89.7% on the share price of ten sample manufacturing companies in Sri Lanka. Pushpa Bhatt and Sumangala (2012) also found the same result in their studies.

Wijesundera, Weerasinghe, Krishna, Gunawardena and Peiris (2015) examined the predictive power of five financial ratios on Stock Returns in the Colombo Stock Exchange over ten years from 2004 to 2013. In this study, the Stock Return predictability was measured using financial ratios. As for the regression analysis results, only ROE, EPS, and MV/BV have a significant positive relationship with the Stock Return. Wijerathna, De Silva, Prabod, Sandaruwan and Prashath (2018) concluded that there is a positive relationship between share price and earnings per share in studying the impact of accounting variables on the share price of Sri Lanka. Khan, Islam, Choudhury and Adnan (2014) had undertaken the study on how Earnings Per Share affect share price and firm value. In their findings, they concluded that share price does not increase that much with the earnings per share increase, highlighting the reasons that several other factors such as macro-economic factors, microeconomic factors within the company, director's role, etc. are needed to be considered by an investor before making any investment. In a study conducted on Earnings Per Share and Stock prices of firms listed in the NSE, Umar and Musa (2013) argued that there was an insignificant relationship between earning per share (EPS) and stock prices of the firms in Nigeria with the sample of Nigerian firms.

Methodology

The present study considered the 289 companies listed in CSE, representing 20 business sectors asof 29th May 2020. Out of 20 sectors, the researchers have selected the Food, Beverage, and Tobacco industry, comprising 50

companies. Among 50 companies, only 25 companies were selected as the research sample using random sampling techniques. For this sample, the data were collected from the annual financial statements for 2013 – 2019.

Conceptual Framework

Independent & Control Variables

Dependent Variables

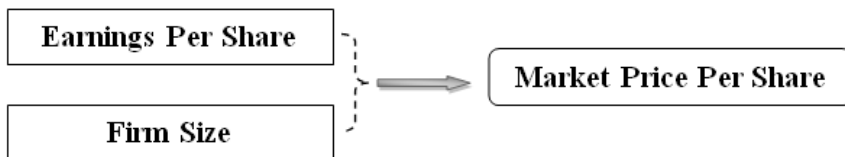| Earnings Per Share |
| Firm Size |

→ | Market Price Per Share |

Fig 1. Conceptual Framework

Hypotheses of the study

H_1: Earnings Per Share significantly impacts share price.
H_2: Firm Size significantly impacts share price.

Regression equation

$MPS = \beta_0 + \beta_1 EPS + \beta_2 FS + \varepsilon$
Where,
MPS = Market Price Per Share
EPS = Earnings Per Share
FS = Firm Size
β = Beta coefficient
ε = Error

Results and Discussions
Descriptive Statistics

Table 1. Descriptive Statistics of the variables

	MPS	EPS	FS
Mean	244.7707	6.101214	12.73096
Median	49.00000	2.160000	14.59966
Maximum	2799.900	80.77000	16.18358
Minimum	0.000000	-6.050000	0.000000
Std. Dev.	505.1721	13.56869	4.434667

According to Table 1, the average value of Market Price Per Share in the Food, Beverage, and Tobacco industry, on average, is 244.77, and its median value is 49. Also, this has a minimum value of 0 and a maximum of 2799.90.

At the same time, the mean value of Earnings Per Share is 6.10, ranging from –6.05 to 80.77. The standard deviation of Market Price Per Share and Earnings Per Share is 505.17 and 13.56, respectively.

Correlation Analysis

Table 2. Correlation matrix of the variables

Correlation	MPS	EPS	FS
MPS	1.000000		
EPS	0.262563	1.000000	
	0.0484		
FS	0.141713	0.189672	1.000000
	0.0949	0.0248	

Based on Table 2, Correlation Matrix, the coefficient value of Earnings Per Share and Market Price Per Share is 0.262563 and its p-value is 0.0484. It is clearly identified that there is a positive correlation between the Earnings Per Share and Market Price Per Share, and its relationship is significant at 95% confidence level. Also, the coefficient value of Firm Size and Market Price Per Share is 0.141713, and its p-value is 0.0949, which indicates Firm Size is positively correlated with Market Price Per Share and their relationship is not significant 5%. However, only the Relationship between Firm Size and Earnings Per Share is significant at 5% (r=0.189672, p<0.05).

Regression Analysis

Table 3. Ordinary Least Square Regression

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	-857.2940	685.8803	-1.249918	0.2138
EPS	0.0359729	0.009212	3.899891	0.0002
FS	0.007524	0.003023	2.488868	0.0140
R-squared	0.927799	Durbin-Watson stat		1.392598
Adjusted R-squared	0.914950			
F-statistic	72.20596			
Prob(F-statistic)	0.000000			

Table 3 describes the Regression analysis. The R squared value is 0.9278 which means the variation explains 92.78% variation in the Market Price Per Share in the Earnings Per Share. The value of F statistic is 72.20 and its probability is 0.000, which is less than 0.05. Overall, this model is best fitted. Moreover, the Durbin Watson Stat value represents 1.39. Concerning the

impact, the Earnings Per Share has a coefficient value of 0.0359, representing a positive impact of Earnings Per Share on Market Price Per Share. Also, this impact is significant at a 95% confidence level. Additionally, the Firm Size is positively and significantly impact on Market Price Per Share.

Variance Inflation Factor

Table 4. VIF Test

Variables	Coefficient Variance	Uncentered VIF	Centered VIF
C	16673.29	9.310077	NA
EPS	10.16327	1.248567	1.037320
FS	95.14193	9.647775	1.037320

Table 4 shows the Variance Inflation Factor. Accordingly, the Centered VIF of Earnings Per Share and Firm Size is less than 10. Thus, there is no multicollinearity problem among the independent variables.

Conclusions and Recommendations

Earnings Per Share is an essential indicator of firm performance since this indicates a firm's prospects. From the findings, it can be concluded that Earnings Per Share affects the Market Price Per Share significantly and positively at 95% confidence level. This is supported by Velnampy and Pratheepkanth (2011) findings, Wijesundera, Weerasinghe, Krishna, Gunawardena, and Peiris (2015). Moreover, Firm Size also has a positive and significant impact on Market Price Per Share. Therefore, Hypotheses H1 and H2 are accepted. Since the other control factors may affect the Market Price Per Share, it is better and useful to incorporate them in future research. Also, to identify the impact on Earnings Per Share on the stock market, it would be better to measure the fluctuations in the stock market return. Investors should pay attention to the Earnings Per Share and Dividend Per Share, Book Value Per Share, the income from main operations ratio, quick ratio, accounts receivable, turnover ratio, inventory turnover ratio, and liquidity ratio which assure investors of more secure income.

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