An Empirical Study on Determinants of Price Earnings Ratio: Evidence from Listed Food, Beverage and Tobacco Companies in Colombo Stock Exchange

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The Price earnings ratio compares a stock's price to earnings. By showing the relationship between a company's stock price and earnings per share (EPS), the Price earnings ratio helps investors to value a stock and gauge market expectations. The ratio is affected by several factors that are responsible for the variations of Price earnings ratio. These variations of Price earnings

ratio have significant impact on investor's perception. This paper attempts to identify the factors and the relationships between the factors and Price earnings ratio of food, beverage, and tobacco companies in Colombo Stock Exchange (CSE). Based on simple sampling, data were taken for this purpose from annual reports of 30 food, beverage, and tobacco companies listed on the CSE for the five-year period from 2015 to 2019. The study focuses on secondary data collected through the published annual reports of the sample. Descriptive statistics, correlation analysis and multiple regression analysis are used to accomplish the objective of this paper. Results revealed that dividend payout ratio and leverage ratio are significant determinants of Price earnings ratio where these both variables have positive influence on Price earnings ratio. Furthermore, return on equity and earnings per share are negative insignificant determinants of Price earnings ratio. Dividend payout ratio and leverage ratio have positive correlation with price earnings ratio. It can be statistically concluded that dividend payout ratio and leverage ratio have positive significant relationship with price earnings ratio. Return on equity and earnings per share have negative correlation with price earnings ratio. Significant values are higher than the test alpha values. Therefore, the researcher can reject the alternative hypothesis. It can be statistically concluded that return on equity and earnings per share have negative insignificant relationship with price earnings ratio. This paper is evidence for fundamental analysts and decision makers to evaluate determinants that explain variations in P/E ratio of food, beverage, and tobacco companies in Sri Lanka.

1. INTRODUCTION

The potential or long-term survival of an organization is greatly influenced by its competitive advantages. The likelihood of developing these competitive advantages is significantly influenced by the level of stock market competition. The goal of wealth maximization always directs publicly traded enterprises to try to capture relative attractiveness in the stock market. On the other hand, investors attempt to evaluate the firm's position in absolute terms and its relative attractiveness. In their investigations, the majority of academics have mentioned the potential for using share capital to gain a competitive edge. Over the past few decades, the value of share capital to commercial organizations has expanded. The failure to replicate the core skills generated through share capital and their capacity to improve the financial and market position of the businesses may be the cause [1-4].

The term "price earning" developed and is used in the context of commercial organizations with the rise in importance of share capital capabilities. As a gauge of relative stock valuation, the Price Earnings (P/E) ratio is frequently utilized. The P/E ratio also referred to as the price multiple, or the earnings multiple [5-8]. Benjamin Graham, known as the father of value investing and the mentor of Warren Buffett,

helped to popularize the P/E ratio. This ratio is a measure of how much investors are ready to pay for each rupee of a company's earnings. It is calculated by dividing the stock price by earnings per share [9-13].

The P/E ratio can be used by investors, internals of the company (management of the company) and academics. It is one of the key elements influencing an investor's decision to invest is the P/E ratio. It reflects the market's knowledge and experience as a whole [14,15]. The indicator of what a company's market value should be in relation to profit per share is crucial for market analysts and prospective investors (i.e., a measure of relative stock valuation). The ratio also gives investors insight into whether a stock may be overvalued, appropriately priced, or undervalued and is useful means of comparing stocks, especially within the same industry [16-18]. Stocks with high P/E ratios may suggest that investors are expecting higher earnings growth in the future. While stocks with high P/E ratios are attractive to growth investors, stocks with low P/E ratios are appealing to value investors because it means they are paying less for every dollar or rupees of earning they receive. The P/E influences investment decisions and reflects investor confidence and opinion regarding the firm's future performance [19-23].

Additionally, the P/E ratio indirectly incorporates key fundamentals of the company such as, future

growth, risk, corporate governance, dividend payout, economic cycle and etc. The ratio helps to growth of the company by comparing a company's P/E ratio against its own historical record and its P/E ratios of competitors. So, among the many ratios, the P/E is part of the research process because it is important for all stake holders of the company.

"Researchers have previously attempted to pinpoint the P/E ratio factors that can affect investors' confidence in firms when making investment decisions. The Price-to-Earnings (P/E) ratio's drivers have been researched in the past using a variety of growth, dividend payout, risk, and discount rate proxies, typically in developed countries" [24-26]. "However, some researchers have examined the variables affecting the price-to-earnings ratio in developing nations" [27,28] and (Azam, 2010). "In the context of Sri Lanka, there is very less research about the determinants of P/E ratio" (Premkanth, 2013 and Atchyuthan and Vijayakumaran, 2017) because, there is no considerable awareness of the determinants of P/E ratio. Here this paper is an attempt to fill the research gap and identify the most impactful determinants of P/E ratio in food, beverage, and tobacco sector in Sri Lanka.

2. PROBLEM STATEMENT

The factors that affect a company's price-to-earnings ratio have varying effects on its success (Shilp, 2007 and Dugney, 2004). "As a result, the success of listed firms is influenced by the price earnings ratio of the companies. The Price-to-Earnings (P/E) ratio's drivers have been researched in the past using a variety of growth, dividend payout, risk, and discount rate proxies, typically in developed countries" [24,25] and (White, 2000). "Some researchers have examined the variables affecting the price-to-earnings ratio in developing nations" [27,28] and (Azam, 2010).

"Numerous studies that looked at the factors that influence price-to-earnings ratios included various independent variables. According to some academics, the primary factors of price earnings ratio include return on equity, dividend payout ratio, market capitalization, retention ratio, and earnings per share" [29] and (Premkanth, 2013) [30,31]. Different discoveries and conclusions connected to the factors that affect price earnings ratio were discovered via exiting research. As a result, when dealing with

investing operations, many investors or members of the public in many nations lack the necessary knowledge and understandings.

There aren't many studies on the factors influencing P/E ratios in Sri Lanka. Premkanth (2013) and Atchyuthan and Vijayakumaran (2017) conducted studies on the factors influencing the price-to-earnings ratio of listed businesses in Sri Lanka. Therefore, it is important to have a comprehensive grasp of the factors that affect the price-to-earnings ratio of Sri Lankan listed firms. Which determinant has the most impact on the price-earnings ratio of the listed companies in Sri Lanka's food, beverage, and tobacco sector is the fundamental research problem of this study.

Research Questions:

1. What is the relationship between Dividend payout ratio and Price earnings ratio of the listed food, beverage and tobacco companies in Colombo Stock Exchange?
2. What is the relationship between Return on equity and Price earnings ratio of the listed food, beverage and tobacco companies in Colombo Stock Exchange?
3. What is the relationship between Earning per share and Price earnings ratio of the listed food, beverage and tobacco companies in Colombo Stock Exchange?
4. What is the relationship between Leverage ratio and Price earnings ratio of the listed food, beverage and tobacco companies in Colombo Stock Exchange?
5. What are the factors have impact on price earnings ratio of the listed food, beverage and tobacco companies in Colombo Stock Exchange?

Research Objectives:

The main objectives of this study are stated as follows.

1. To identify the relationship between Dividend payout ratio and Price earnings ratio of the listed food, beverage and tobacco companies in Colombo Stock Exchange.
2. To identify the relationship between Return on equity and Price earnings ratio of the listed food, beverage and tobacco companies in Colombo Stock Exchange.
3. To identify the relationship between Earning per share and Price earnings ratio of the listed food, beverage and tobacco companies in Colombo Stock Exchange.

4. To identify the relationship between Leverage ratio and Price earnings ratio of the listed food, beverage and tobacco companies in Colombo Stock Exchange.
5. To identify factors which have impact on price earnings ratio of listed food, beverage and tobacco companies in Colombo Stock Exchange.

3. LITERATURE REVIEW

The Pric Earnings Ratio (P/E ratio) determinants have been categorized in the literature already published based on market analysis and sector analysis. Numerous researchers examined the market using various samples of data from developed and developing nations, and they discovered conflicting findings regarding the factors that affect P/E ratio. This study is an effort to shed light on the factors that affect P/E ratio, which was previously investigated by a different researcher but in a very different setting.

Tze et al. (2010) explained that "the P/E ratio could have been employed to build successful investment strategies in predicting stock market highs and that explores whether this approach could be regressed and work as an indicator for forecasting of future stock market is low". "The first person who attempted to determine whether or not the investing performance of common stocks is correlated with their P/E ratios was reportedly" Basu [32]. Penman [33] evaluated "how the market-to-book ratio (P/B) and the price-to-earnings ratio (P/E) related to the increase of current and future earnings. He said that whereas P/Bs produced the effect of future profitability and were effective indications of profits growth, P/Es yielded the effect of present return on equity but were poor indicators of future growth".

Premkanth (2013) carried out "research on Sri Lankan listed businesses' price earnings multiples. The purpose of this study was to identify the relationship between Return on Equity and Price Earnings Multiple, as well as the relationship between Dividend Growth and Price Earnings Multiple, by empirically examining the factors that affect the price earnings multiple of the listed companies on the Colombo Stock Exchange. Thirty firms listed on the Colombo Stock Exchange between 2007 and 2011 made up the study's sample. Retention ratio, dividend payment, market capitalization, and return on equity are explanatory variables. The results showed that, among Sri Lankan listed companies, the market capitalization has a significant negative relationship with P/E multiple, the dividend payout ratio has a significant positive relationship with P/E multiple, and the return on equity has a significant negative relationship with P/E multiple".

Atchyuthan and Vijayakumaran (2017) carried out "research to identify the determinants of P/E ratio. For this purpose the data were obtained from annual reports of manufacturing companies listed on the CSE for the period of five years from 2011 to 2015 based on the convenient sampling. P/E ratio is positively and significantly associated with return on equity and market to book ratio and dividend per share, earnings growth and firm size are not associated with price earnings ratio".

While Taliento [34] observed that "dividend payout ratio has an insignificant link with price earnings ratio, Bhattarai (2014) and Azam (2010) discovered that dividend payout ratio has a strong positive association with P/E ratio". According to Almumani's (2014) research, "price earnings ratio and dividend payout ratio have a bad relationship". Wenjing [35] found that "the price earnings ratio is unaffected by the dividend payout ratio". Jitmaneeroj [36] came to the conclusion that "there is little correlation between the dividend payout ratio and the price-earnings ratio".

Return on equity (ROE) was employed in studies by Taliento [34] and Wenjing [35] to correlate price earnings ratio. Wenjing [35] demonstrated "how (ROE) directly influences P/E ratios and came to the conclusion that ROE is inversely related to P/E ratio". Penman [33] provided "a thorough analysis of the theoretical underpinnings of the P/E ratio and return on equity (ROE). According to the study's findings, P/E ratio is a decision that considers both current and prospective ROE; it has a negative relationship with current ROE". Theoretically, a U-shaped relationship between the forward P/E ratio and return on equity was predicted by Ohlson and Gao in 2006 (ROE). They suggested that companies with extremely high or extremely low ROE have larger forward P/E ratios than other companies.

The projected results support Ramcharran [28], Jones (2000), and Beaver & Morse by showing that leverage has a negative impact on the P/E ratio (1978). According to Arslan et al. [37], P/E

declines as firm leverage rises. Leverage's upward tendency portends the firms' increased danger of insolvency. According to Afza and Tahir [38], leverage has a negative correlation with price earnings ratio, and dividend payout ratio is the most significant factor affecting it.

Reinganum (1992) stated that "an essential part of determining the P/E ratio, earnings per share has also come to be regarded as an important piece of information for the investment community in and of itself. A primary concern of investors is how profitable a company is relative to their investment in the company". Datar and Saumya (2007) contacted the study on Determinants of Price Earnings Ratios: A Study of Listed Firms in India. The objective is to explore that what degree of impact exists with determinants of price earnings ratio. The results revealed that companies have a negative relationship between market capitalization and P/E ratio amongst listed firms in India.

Faezinia [33] investigated "the Quantitative Study of Effective Factors on Price Earnings Ratio in Capital Market of IRAN. The independent variables are company size (market value), returns on equity, dividend yield, Earning per share. There is a direct and significant relationship between variations in return on equity and the price earnings ratio for companies listed on the TSE; there is a significant relationship between earnings per share and the price earnings ratio for companies listed on the TSE. And there is an inverse and significant relationship between dividend yield and the price earnings ratio for companies listed on the TSE. There is a significant relationship between size (market value) and the price earnings ratio for companies listed on the TSE".

4. METHODOLOGY

4.1 Population and Sample

The population comprises 50 listed companies in the Food Beverage and Tobacco sector of CSE. The researchers consider this sector since it is one of major sectors in the Sri Lanka economy and also to fill identified gaps. Then researchers selected 30 companies as a sample, using a simple random sampling technique. Data was collected for the 5 years from 2015 to 2019. The study focuses on secondary data collected through the published annual reports of the sample. Additional pertinent information gathered from the Colombo Stock Exchange website.

4.2 Research Model

$$y = a + \beta_1 X_1 + \cdots + \beta_n X_n + e$$

Where,
y = the predicted value of the dependent variable
a = the y-intercept
$\beta_1 X_1$ = beta Coefficient of first independent variable
… = same for many independent variables
$\beta_n X_n$ = beta Coefficient of the last independent variable
e = model error

4.3 Definitions of Key Terms

Dividend Payout Ratio (DRP): The ratio between the total amount of dividends given to shareholders and the company's net income is known as the dividend payout ratio. It is the portion of profits that are distributed as dividends to shareholders.

The formula for calculating dividend payout ratio is:

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend per Share}}{\text{Earnings per Share}}$$

Return on Equity (ROE): A metric of financial performance known as return on equity (ROE) is obtained by dividing net income by shareholders' equity. Any corporation can calculate its ROE in percentage form if its net income and equity are both positive figures.

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

Earnings per Share (EPS): The fraction of a company's profit allotted to each existing share of common stock is known as earnings per share (EPS). Due to the fact that it shows a company's profitability on a per-share basis, it is a metric that investors frequently use to value a stock or company. Formula:

$$\text{EPS} = \frac{\text{Net Income} - \text{Preferred Stock Dividends}}{\text{Number of Equity Share}}$$

Leverage Ratio (Lev): The leverage ratio reveals how much of an asset is held in the form of debt (loans) and evaluates a company's

capacity to pay debts. Companies employ a combination of stock and debt to fund their operations, making the leverage ratio category crucial. By understanding how much debt a firm has, you can assess its ability to pay off its loans when they become due.

$$Leverage = \frac{Total\ Debt}{Shareholders'\ Equity}$$

Price Earnings Ratio (P/E Ratio): The market price per share to the earnings per share ratio, or price earnings ratio, is a multiple used in equity valuation.

$$Price\ Earnings\left(\frac{P}{E}\right)Ratio = \frac{Market\ Price\ per\ Share}{Earnings\ per\ Share}$$

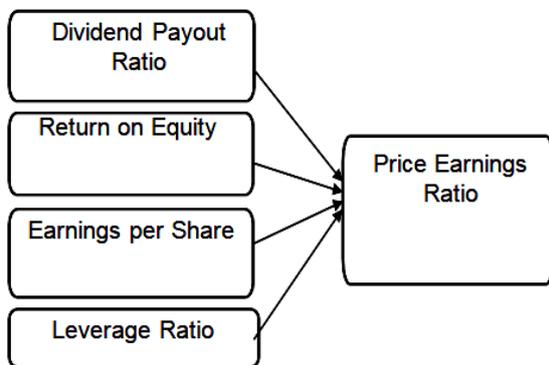## 4.4 Conceptual Framework

Fig. 1.Conceptual framework

4.5 Hypothesis

This study is conducted based on the several hypothesis for the purpose of examining the determinants of price earnings ratio of food, beverage and tobacco companies listed on the Colombo Stock Exchange in Sri Lanka. Following hypothesis are going to be tested.

H1**:** There is a significant relationship between dividend payout ratio and price earnings ratio of listed food, beverage and tobacco companies in CSE.

H2**:** There is a significant relationship between return on equity and price earnings ratio of listed food, beverage and tobacco companies in CSE.

H3: There is a significant relationship between earning per share and price earnings ratio of listed food, beverage and tobacco companies in CSE.

H4**:** There is a significant relationship between leverage ratio and price earnings ratio of listed food, beverage and tobacco companies in CSE.

5. RESULTS AND DISCUSSION

5.1 Descriptive Statistics

All variables are based on 150 observations, as can be seen from the table below where their descriptive values have been derived. The average of all the variables is represented by the mean value.

The minimum and greatest values of the price earnings ratio are -116.670 and 452.980 times, respectively, and the average mean value of the price earnings ratio (PER) is 15.0975 times. The price earnings ratio has a 48.3671-times standard deviation.

Dividend Payout Ratio (DPR) has a mean value of 50.76% and a minimum and maximum of -100.0% and 111.03%, respectively. The dividend payout ratio's standard deviation is 100.72%.

Return on Equity (ROE) has a mean value of 20.46%. The return on equity's minimum, maximum, and standard deviation are, respectively, -519.0%, 394.3%, and 76.64%.

Earnings per Share (EPS) has a mean value of Rs. 17.7083 but a minimum and maximum of Rs. -233.420 and Rs. 147.310, respectively. The earnings-per-share standard deviation is 36.1549 rupees.

The minimum, maximum, and standard deviation of the leverage ratio are 00.0%, 35.70%, and 58.27%, respectively. The mean leverage ratio (Lev) is 38.23%.

All variables have positive and negative values as their minimum and maximum, respectively. However, both dependent and independent variables have positive standard deviations. EPS has a big standard deviation among all independent variables of the study, while PER has a large standard deviation among all variables.

5.2 Correlation Analysis

The correlation analysis findings are shown in the above table. There is no multicolinearity issue in the data set, as shown by the correlation coefficient between the dependent and

independent variables being less than 0.85. As a result, the data can be used for additional investigation.

Additionally, the price earnings ratio (PER) and dividend payout ratio (DPR) have a Pearson correlation coefficient of 0.250, indicating the highest possible positive connection between PER and DPR. It means that when the price-to-earnings ratio rises by one standard deviation, dividend payments will rise by 0.111. The important value is 0.002. It has a lower error value than 0.01 The outcome demonstrates the model's solid standing.

The Pearson correlation value of the Price Earnings Ratio (PER) and Return on Equity (ROE) is 0.018, indicating a minimally positive association between the two metrics. This means that if the Price Earnings Ratio increases by 1 degree, return on equity will also increase by 0.018. The negligible value is 0.827. The error value is bigger than 0.01. Thus, the outcome reveals the model's precarious condition.

The Price Earnings Ratio (PER) and Earnings per Share (EPS) have a Pearson correlation coefficient of 0.025, indicating a positive link between the two metrics. It indicates that earnings per share will rise by 0.025 when the price-earnings ratio increases by 1 degree. The negligible value is 0.763. The error value is bigger than 0.01. Thus, the outcome reveals the model's precarious condition.

The Pearson correlation coefficient of the Price Earnings Ratio (PER) and the Leverage Ratio (Lev) is 0.128, indicating a positive association between the two ratios. This means that if the Price Earnings Ratio increases by 1, the Leverage Ratio will also increase by 0.128. The negligible value is 0.119. The error value is bigger than 0.01. Thus, the outcome reveals the model's precarious condition.

Table 1. Descriptive statistics of all study variables

	N	Minimum	Maximum	Mean	Std. Deviation
PER	150	-116.670	452.980	15.0975	48.3671
DPR	150	-1.000	11.103	.5076	1.0072
ROE	150	-5.190	3.943	.2046	.7664
EPS	150	-233.420	147.310	17.7083	36.1549
Lev	150	.000	3.570	.3823	.5827
Valid N (list wise)	150				

Table 2. Correlation analysis

		PER	DPR	ROE	EPS	Lev
PER	Pearson Correlation	1	.250**	.018	.025	.128
	Sig. (2-tailed)		.002	.827	.763	.119
	N	150	150	150	150	150
DPR	Pearson Correlation	.250**	1	.094	.050	-.025
	Sig. (2-tailed)	.002		.253	.541	.759
	N	150	150	150	150	150
ROE	Pearson Correlation	.018	.094	1	.221**	-.057
	Sig. (2-tailed)	.827	.253		.006	.489
	N	150	150	150	150	150
EPS	Pearson Correlation	.025	.050	.221**	1	-.462**
	Sig. (2-tailed)	.763	.541	.006		.000
	N	150	150	150	150	150
Lev	Pearson Correlation	.128	-.025	-.057	-.462**	1
	Sig. (2-tailed)	.119	.759	.489	.000	
	N	150	150	150	150	150

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

Table 3. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.296[a]	.088	.063	46.829692

a. Predictors: (Constant), DPR, ROE, EPS, Lev

Table 4. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30578.469	4	7644.617	3.486	.009[b]
	Residual	317987.912	145	2193.020		
	Total	348566.381	149			

a. *Dependent Variable: PER*

b. *Predictors: (Constant), DPR, ROE, EPS, Lev*

Table 5. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.194	6.018		.198	.843
	DPR	12.058	3.828	.251	3.150	.002
	ROE	-1.085	5.159	-.017	-.210	.834
	EPS	.132	.123	.099	1.074	.285
	Lev	14.833	7.434	.179	1.995	.048

Multiple regression equation model as under:

$$PER = 1.194 + 12.058(DPR) - 1.085(ROE) + 0.132(EPS) + 14.833(Lev) + e$$

5.3 Multiple Regression Analysis

The overall model overview of this investigation is shown in Table 3. That suggests that R is a composite correlation coefficient that illustrates the link between the variables under examination. R is regarded as one metric for the accuracy of the dependent variable's prediction. R is 0.296, according to this study. Therefore, it might be inferred that price earnings ratio and its drivers have a positive linear link (DPR, ROE, EPS and Lev).

The coefficient of determination, or R square (R^2), indicates how much the independent variables' changes have affected the dependent variable's variance. R^2 is the percentage of the dependent variable's variance that the independent variables can account for. According to the R square value of 0.088, the variation in all the independent variables accounts for 8.8% of the price-to-earnings ratio's volatility. Another factor is responsible for the remaining 91.2% of the price-to-earnings ratio variance. According to the adjusted R square value of 0.063, which has been corrected for the sample size and number of independent variables employed, 6.3% of the variance in the price-earnings ratio can be attributed to variations in all independent variables that have been chosen. The statistical interpretation of these coefficients is that the four independent factors chosen (DPR, ROE, EPS, and Lev) have a much lesser impact on price earnings ratio than other independent variables.

The ANOVA outcomes of the multiple regression analysis are displayed in Table 5. The ANOVA's F-value indicates which independent variable combinations are most likely to have an impact on the relationship between the independent and dependent variables. The F and significance values are 3.486 and 0.009, respectively, according to the table.

Dividend Payout Ratio (DPRbeta)'s coefficient is 0.251, based on multiple regression analysis. This coefficient demonstrated that the Price Earnings Ratio (PER) and Dividend Payout Ratio have a positive link (DPR). T statistic 3.150 and significant value of 0.002 show that Dividend Payout Ratio (DPR) has a considerable impact on Price Earnings Ratio (PER). This finding explains why the Price Earnings Ratio (PER) and Dividend Payout Ratio have a strong positive relationship (DPR).

Return on Equity's (ROE) beta coefficient is -0.017. This coefficient demonstrated that the Price Earnings Ratio (PER) and Return on Equity have a negative association (ROE). T statistic -0.210 and significant value of 0.834 show that Return on Equity (ROE) has a negligible impact on Price Earnings Ratio (PER). It explains that Price Earnings Ratio (PER) and Return on Equity have a negligible negative relationship (ROE).

The beta coefficient for earnings per share (EPS) is 0.099. According to this correlation coefficient, the Price Earnings Ratio (PER) and Earnings per Share have a positive association (EPS). According to T statistic 1.074 and significant value 0.285, EPS has a small impact on Price Earnings Ratio (PER). It illustrates that there is a minor positive association between Price Earnings Ratio (PER) and Earnings per Share (EPS).

Leverage ratio's (Lev) beta coefficient is 0.179. This coefficient demonstrated that the Price Earnings Ratio (PER) and Leverage Ratio have a positive link (Lev). There is a considerable impact of the Leverage Ratio (Lev) on the Price Earnings Ratio, as indicated by the T statistic of 1.995 and significant value of 0.048. (PER). This finding also explains the strong correlation between the Price Earnings Ratio (PER) and the Leverage Ratio (Lev).

6. SUMMARY OF INTERPRETATION AND FINDINGS

6.1 Findings of the Study

The price earnings ratio's factors are shown in this study. It is necessary to assess and evaluate each share's price earnings ratio separately. Using a sample of Sri Lankan listed companies, this study empirically explored the relationship between the price earnings ratio and its variables. To examine the link between the price earnings ratio and its determinants, the Pearson correlation coefficient and multiple regression parameters were obtained. The results of this investigation agree with those of earlier ones.

P/E ratio has a favorable link with dividend payout ratio, return on equity, earnings per share, and leverage ratio, according to the correlation approach. The greatest positive connection between price earnings ratio and dividend payout ratio, as measured by the Pearson of correlation coefficient of price earnings ratio and dividend payout ratio, is 0.250. The price earnings ratio and return on equity have a Pearson correlation coefficient of 0.018. It outlines the minimally favorable link between return on equity and price earnings ratio. Earnings per share and leverage ratio have a Pearson correlation coefficient of 0.025 and 0.128, respectively. It explains how the price earnings ratio and the leverage ratio have a positive correlation with the earnings per share.

Dividend Payout Ratio (DPR) and Price Earnings Ratio (PER) have a substantial positive association, according to multiple regression analysis (PER). There are some known empirical research that back up that conclusion (Thuraisingham, 2001), [24]. Return on Equity (ROE), in this scenario, has a poor correlation and is insignificant. As a result, Sri Lanka's P/E determinant is not significantly impacted by ROE. In 1977, Basu made the case that equities with a low P/E ratio generate higher average returns than those with a high P/E ratio. Additionally, he discovered that better returns from low P/E ratio portfolios were not necessarily accompanied by a higher level of systematic risk.

The price earnings ratio (PER) and earnings per share have a negligibly positive association, according to the regression analysis's beta coefficient and significant value of earnings per share (EPS). The market price and earnings per share have a positive relationship; as earnings per share rise, so does the market price (Bell & Brown, 1968). The outcome for the leverage ratio and price earnings ratio shows that there is a strong positive association between the PER and the LR (Lev). The P/E ratio and leverage have a favorable correlation, according to Liu and Hu (2005).

In this study, the price earnings ratio is influenced by 8.8% of the independent variables, including the dividend payout ratio, return on equity, earnings per share, and leverage ratio. Other factors that affect the price-to-earnings ratio have an impact on another 91.2%.

The empirical findings support alternative hypotheses H1 and H4, which are accepted. When alternative hypothesis H1 is accepted, it is noted that "there is a substantial association between dividend payout ratio and price earnings ratio of listed food, beverage, and tobacco businesses in CSE. Another alternate hypothesis that has been accepted is H4, which states that there is a "strong association between leverage ratio and price earnings ratio of listed food, beverage, and tobacco businesses in CSE."

H2 and H3, the other two hypotheses, are disproven. There is a substantial correlation between return on equity and price earnings ratio of listed food, beverage, and tobacco businesses in the CSE, according to hypothesis H2. The statement in hypothesis H3 that "there is a substantial association between price earnings ratio and earnings per share of listed food, beverage, and tobacco businesses in CSE" is supported by the data.

6.2 Summarized Hypothesis

Table 6. Summarized hypothesis test results

	Hypothesis	Accept/Reject	Tool
H1	There is a significant relationship between dividend payout ratio and price earnings ratio of listed food, beverage and tobacco companies in CSE.	Accept	Multiple Regression Analysis
H2	There is a significant relationship between return on equity and price earnings ratio of listed food, beverage and tobacco companies in CSE.	Reject	Multiple Regression Analysis
H3	There is a significant relationship between earning per share and price earnings ratio of listed food, beverage and tobacco companies in CSE.	Reject	Multiple Regression Analysis
H4	There is a significant relationship between leverage ratio and price earnings ratio of listed food, beverage and tobacco companies in CSE.	Accept	Multiple Regression Analysis

7. CONCLUSION

Since stock valuation is crucial for making investment decisions, it is crucial for individual investors, fund managers, market analysts, and decision makers to understand the P/E ratio and its factors.

For investors to make investing decisions, share value is a must. Investors attempt to gauge the stock's actual value in order to protect their investment and avoid losing money. However, from the viewpoint of the corporation, it works to create a favorable perception of its stock among investors. P/E ratio serves as a channel for communication between the two parties. The P/E ratio only shows the share price in relation to earnings. In a conventional sense, a superior P/E ratio and vice versa imply a firm's position. Therefore, if a company wants to make investors look silly, it might increase the P/E ratio by declaring earnings that are lower than what they actually are.

For technical analysts, P/E ratio factors might not matter. However, there is no room for fundamental analysts to ignore the significance of factors in assessing P/E ratio. Using pooled data, empirical findings reveal that the leverage ratio and dividend payout ratio significantly explain variations in price earnings ratio, with the dividend payout ratio serving as the most important factor among the independent variables. This finding suggests that investors are willing to pay a premium for businesses that offer high dividend payments to their shareholders. Small businesses with significant room for expansion have high investor confidence. To benefit from capital gains, investors favor the shares of companies whose market prices are highly erratic. According to the empirical findings, the leverage ratio has a big impact on the price-to-earnings ratio as well. The relevance of other chosen factors, such as return on equity and profits per share, as the predictors of P/E ratio, however, was not revealed by this study. Because certain specifically chosen samples were eliminated due to data availability. Moreover, not all potential factors are covered by the chosen variables.

By investigating the components that contribute to P/E ratio volatility, this study assists practitioners in determining the important variables that affect the P/E ratio of the companies in the food, beverage, and tobacco industry and aids in portfolio construction decisions. In order to boost investor trust, companies should give significant dividends to their shareholders. In a similar vein, a reduction in leverage is necessary to grab investors' attention and boost their confidence in choosing these companies for their portfolios. The factors chosen and the focus on a particular industry also have limitations on this study.

8. RECOMMENDATION FOR FUTURE RESEARCH

A company's price-to-earnings ratio is influenced by a number of variables. However, only four factors that influenced Sri Lanka's price-to-earnings ratio were examined in this study. Therefore, it is required to study additional variables such dividend yield, retention ratio,

return on assets, and market capitalization in order to better understand the price profits of Sri Lankan enterprises.

A different sampling method might have produced noticeably different results for the study. It is therefore advised to do additional research using various sample techniques. Thirty publicly traded firms in the food, beverage, and tobacco industries that are listed on the Colombo Stock Exchange were used in this study. Future researchers can concentrate on all the food, beverage, and cigarette industries, both listed and unlisted, in order to produce results that are more advanced. Future researchers can select a new industry, like finance, and they should concentrate on a longer time frame, like more than five years, as this will produce the greatest results and be more realistic.

Using SPSS, the data were examined, and regression and correlation analyses were used to evaluate the hypotheses. Future academics will be able to conduct analyses using the EVIEWS program.

9. LIMITATIONS

This study has several limitations. They are: The study's choice of sample size is its main drawback. Only 25 firms from the food, beverage, and tobacco sector were chosen as a sample for the study out of a total of 295 companies and 21 sectors mentioned in the Colombo Stock Exchange as of 31 December 2015. This selection criterion is thought to be the primary cause of this restriction. The study's time frame was only five years (2016-2020). A longer time frame can produce a slightly different outcome. Only four independent variables dividend payout, return on equity, earnings per share, and leverage ratio were employed in the study. Other independent factors that are connected to the price-to-earnings ratio include dividend yield, retention ratio, return on assets, and others.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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