



THE IMPACT OF PRICE-EARNINGS RATIO ON BLUE-CHIP INDEX: AN EMPIRICAL ANALYSIS ON WORLD STOCK EXCHANGES

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Abstract

There is high demand for firms with strong performance in the stock markets, leading to elevated prices for these shares. In this context, the study presented examines the impact of the price-to-earnings (P/E) ratio on the blue-chip index (BCI) across global stock exchanges. The aim of the study is to identify this effect, elucidate its rationale, and provide a different perspective on the topic. Accordingly, the research encompasses an 8-year period from 2016 to 2023, utilizing a sample of 9 global stock exchanges. The methods employed in the study include descriptive statistics, Pearson correlation coefficient, F-test, and simple linear regression analysis. The correlation analysis revealed the existence of a weak negative relationship between the P/E ratio and the BCI. The significance of the regression model was tested using the F-test, confirming that the model is significant. Based on the parameter estimates derived from the final regression equation, an increase in the P/E ratio reduces the BCI. The results obtained align with the effects of the P/E ratio emphasized in the literature. Therefore, firms with a low P/E ratio exhibit high performance. The BCI in the sample consists of high-performing, strong, stable, healthy growing, reliable, large, and well-known stocks.

Keywords: Price-to-Earnings Ratio, Blue-Chip, Blue-Chip Index, Stock Exchanges

JEL Classification: G11, G15, G17

FİYAT-KAZANÇ ORANININ BLUE CHIP ENDEKSİNE ETKİSİ: DÜNYA BORSALARI ÜZERİNDE AMPİRİK BİR ANALİZ

Öz

Borsalarda performansı yüksek olan firmalara talep yüksek olup, bu hisselerin fiyatları da yüksektir. Bu bağlamda ortaya konulan çalışmada, dünya borsalarında fiyat-kazanç oranının blue-chip endeksine etkisi incelenmiştir. Çalışmada hedeflenen ise bu etkiyi belirleyerek, gerekçelerini ortaya koymak ve konuya farklı bir bakış açısı kazandırmaktır. Bu doğrultuda ilerleyen araştırmada; 2016-2023 yılları arası 8 yıl ve 9 dünya borsası örnekleme oluşturmaktadır. Çalışmada kullanılan yöntemler ise betimleyici istatistikler, Pearson korelasyon katsayısı, F testi ve basit doğrusal regresyon analizidir. Korelasyon analizi sonucunda; fiyat-kazanç oranı ile blue-chip endeksi arasında negatif yönlü zayıf bir ilişkinin varlığı tespit edilmiştir. F testi ile regresyon modelinin anlamlılığı test edilmiş ve modelin anlamlı olduğu saptanmıştır. Parametre tahminleri yapılarak son şekli verilen regresyon denklemine göre; fiyat-kazanç oranındaki artış, blue-chip endeksini azaltmaktadır. Elde edilen sonuç, literatürde vurgulanan fiyat-kazanç oranı etkisiyle örtüşmektedir. Bu nedenle düşük fiyat-kazanç oranına sahip firmaların performansı yüksektir. Örneklemden blue-chip endeksi; performansı yüksek, güçlü, istikrarlı, sağlıklı büyüyen, güvenilir, büyük ve tanınmış hisselerden oluşmaktadır.

Anahtar Kelimeler: Fiyat-Kazanç Oranı, Blue-Chip, Blue-Chip Endeksi, Borsalar

JEL Sınıflandırması: G11, G15, G17

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1. Introduction

Individual or institutional investors make their investment preferences by considering various factors. This is because there are numerous rational and irrational variables that can influence investment decisions. In some models that are effective in making investment decisions, humans are described as rational beings possessing all information. However, this characterization is not entirely accurate. Although individuals may have rational thinking abilities, there are many irrational factors that can influence their emotions and thoughts. This situation gives rise to behavioral finance, a field that emerges from the sciences of psychology and sociology. Therefore, it is impossible to completely eliminate risk. Investor sentiment is subject to change due to psychological and sociological factors. Nevertheless, diversification can be employed to minimize this uncertainty when making investment decisions, as outlined in Markowitz's Modern Portfolio Theory. The primary purpose of diversification is to spread risk by investing in different financial products.

When determining a portfolio composed of financial products, examining market performance ratios is extremely important. This is because, in analyses conducted for investment purposes, profit alone is not sufficient; financial and theoretical values such as dividend yield and profit distribution percentage of the shares must also be analyzed. Indicators such as earnings per share ratio, dividend yield ratio, dividend payout ratio, market value-to-book value ratio, and price-to-earnings (P/E) ratio are ratios used in the analysis of market performance (Şamiloğlu & Akgün, 2015: 440-442).

In this study, the P/E ratio, which is one of the market performance ratios, is examined. The P/E ratio indicates how many times a share is sold relative to its earnings, or in other words, how many times the price of a share is relative to its earnings per share (Sayılğan, 2013: 197-198). The primary reason for selecting the P/E ratio is its use as a benchmark criterion for stock investments. P/E ratios can be compared by sector, company, or stock exchange to facilitate more rational investment decisions.

P/E ratios are interpreted to mean that shares with a low P/E ratio tend to perform better than those with a high P/E ratio. In other words, portfolios consisting of shares with low P/E ratios yield higher returns than those with high P/E ratios, and such impact is referred to as the P/E ratio effect (Bodie, Kane & Marcus, 2009).

If the P/E ratio experiences an abnormal increase, it may indicate that either the period's earnings are very low or that speculation is occurring. Excessive volatility complicates the estimation of the P/E (Gürsoy, 2007: 307).

Stocks with temporarily rising P/E ratios may be overlooked, and due to seasonal effects, stocks with low P/E ratios may be purchased, potentially resulting in low profits when the P/E ratio rises and they are sold in the future due to economic conditions. Therefore, when making evaluations based on the P/E ratio, relying solely on low P/E ratios can lead to erroneous conclusions (Senhack & Martin, 1987).

In the literature, a study conducted by Graham & Dodd (1940) recommended stocks with low P/E ratios. Additionally, this effect was first tested by Basu (1977). Another variable in the study is the blue-chip index (BCI).

Blue-chip stocks represent an opportunity for novice investors. This is because blue-chip stocks are those that generate sustainable large profits, have low risk, and provide regular payments to their investors. Furthermore, these stocks distribute profits under all conditions, including adverse market conditions during economic downturns, and are characterized by national recognition, high reputation, quality, and reliability. In times of economic crises or sudden market changes, they demonstrate resilience due to their large market capitalizations. Blue-chip stocks consist of shares

from well-established and long-standing firms that have been growing steadily. For these reasons, blue-chip stocks can be considered the stars of the stock market (Al-Daniah & Jasuni, 2023: 273).

The concept of blue-chip was first introduced by Gingold in 1920 and refers to stocks with the highest value. This term originated from the blue-chip designation in poker, which refers to the most valuable chips in the game. Similarly, in finance, blue-chip stocks are the most valuable and reliable shares. Today, their status, reputation, and recognition are more important than their value. Due to these characteristics, the prices of blue-chip stocks are expected to be high. Another advantage of blue-chip stocks is that they are companies that distribute dividends to shareholders, have high credit ratings, and are low in debt. The nature of blue-chip stocks continuously sustains supply and demand for these shares. Therefore, they are characterized by high liquidity (GoCardless, 2021).

The BCI is an index that tracks the shares of large, well-known companies that are characterized as healthy, financially stable, and publicly traded. Blue-chip stocks increase their attractiveness by providing consistent returns, such as dividend payments, and demonstrate the strength of an economy or industry. Additionally, the companies included in the BCI are determined by a committee and consist of the strongest stocks. For example, the FTSE 100 index tracks the top 100 blue-chip stocks on the London Stock Exchange (Altaş, 2010: 14-15).

Despite the solid and reliable structure of blue-chip stocks, no investment is entirely risk-free. Although blue-chip companies possess the ability to withstand adverse economic conditions, this characteristic may occasionally lose its functionality. Negative examples, such as the decline of Nokia and the removal of Deutsche Bank from the BCI due to its inability to recover from the 2008 crisis, are also present. Despite these unfavorable examples, blue-chip stocks are more likely to survive and continue competing during periods of financial turbulence characterized by economic difficulties compared to other firms. However, when constructing a portfolio, it is advisable to diversify rather than allocate all investments solely to blue-chip stocks to mitigate risk, as there is no guarantee of success for every blue-chip firm (GoCardless, 2021).

Blue-chip stocks constitute a part of the major stock market indexes. In the USA, indexes such as the Dow Jones Industrial Average, Dow Jones Titan, and Dow Jones Stoxx Blue Chip are types of BCI and are linked to the Dow Jones index series. The Dow Jones index tracks the performance of the largest 30 blue-chip companies. In Türkiye, the Borsa İstanbul 30 (BIST 30) and in the United Kingdom, the FTSE 100 indices consist of blue-chip stocks. All these indices are more recognized in the market due to blue-chip stocks and possess high liquidity, making them preferred by investors for stock trading. Blue-chip companies are predominantly found in the technology, finance, healthcare, energy, and consumer goods sectors. Notable examples of blue-chip stocks worldwide include major technology firms such as Apple, Microsoft, and Google, as well as Amazon, Unilever, Volkswagen, Samsung Electronics, Procter & Gamble, large banks in the finance sector like JPMorgan Chase, Goldman Sachs, and Bank of America, leading energy companies such as Exxon Mobil, Chevron, and Royal Dutch Shell, as well as major healthcare companies like Johnson & Johnson and the leader in the consumer goods sector, Coca-Cola. In Türkiye, İş Bankası, Turkcell, and Türk Hava Yolları are among the most recognized blue-chip stocks within the BIST 30. These firms have a broad customer portfolio globally and hold dominant positions in their respective sectors (Duru, 2024).

Investing in blue-chip stocks has both advantages and disadvantages. While advantages include financial stability, profitability, dividends, liquidity, and recognition, disadvantages encompass market and industry fluctuations, limited growth potential, and the absence of zero risk. Therefore, it is crucial not to overlook these characteristics when determining blue-chip investment strategies (Duru, 2024).

The study tested the impact of the P/E ratio on the BCI. The examination of the BCI in the study highlights both the unique value of the research and offers a solution to a gap that needs to be

addressed. This is because the effect of changes in the P/E ratio of global stock exchanges on the BCI, composed of reputable and well-known companies, is of interest. The objective of the study is to identify this effect, elucidate its rationale, and provide a new perspective on the topic.

The content of the study consists of five sections. Firstly, the purpose and subject of the study, namely the P/E ratio and the BCI, are explained in the introduction part. Subsequently, related studies are summarized in the literature section. The methodology section provides information about the sample of the research and the techniques used. In the findings section, results are presented and evaluated through tables. Finally, the conclusion section discusses the purpose, significance, and content of the study, interprets the findings, and concludes with recommendations.

2. Literature Review

Studies examining the direct association between the P/E ratio and the BCI have not been identified, leading to a division of the literature into two groups. The first group summarizes studies related to blue-chip stocks or indices.

Wei (2024) utilized machine learning algorithm techniques to predict the returns of blue-chip stocks. The objective was to determine the relationship between the targeted blue-chip stocks and market indices. The market indices used were VIX, ISEE, and Nasdaq-100, while the blue-chip stocks analyzed included Apple, Amazon, and IBM. The findings indicated that the regression tree model provided better predictions for Amazon, while the support vector tree model performed better for predicting stock returns for Apple and IBM.

Pushpalatha & Shankar (2024) investigated the risk-return balance in blue-chip mutual funds. This research was conducted for the banking sector using Sharpe, Treynor, and Jensen ratios. The analysis was performed using a 6-year dataset. As a result, positive returns were found in favorable market conditions, while negative returns were noted in stagnant and adverse market conditions. The variability among funds was emphasized, highlighting the critical importance of risk management in decision-making.

In Havidz et al. (2024), the financial characteristics of blue-chip tokens were examined. The Generalized Method of Moments and the Least Squares Method were utilized. According to the findings, blue-chip tokens, referred to as NFTs, are identified as a secure investment avenue against cryptocurrencies; however, they were found to be inadequate compared to traditional products.

Hasbiy et al. (2023) investigated the factors determining the capital structure of non-financial blue-chip firms on the IDX. The study was conducted between 2020 and 2022, using financial leverage, diversification, corporate ownership, and asset structure indicators as determinants of capital structure. During the specified time frame, there were 125 companies operating on the IDX, while the sample of 52 companies identified via purposive sampling techniques. The analysis results indicated that diversification, corporate ownership, and asset structure significantly affected the capital structure.

Pang (2023) predicted asset returns in blue-chip stocks. The study aimed to determine whether investing in targeted blue-chip stocks would yield income when adjusted for inflation. Quantitative analyses were conducted using a dataset from 2010 to 2021. The sample comprised stocks from the Dow Jones, Nasdaq, and S&P 500 indices. The analyses concluded that blue-chip stocks, when evaluated over the long term after adjusting for inflation, are likely to provide net income.

Ardhitha, Sulistianingsih & Satyahadewi (2023) conducted a risk value analysis for a portfolio consisting of blue-chip stocks. This analysis was performed using the Gaussian Copula method. Blue-chip stocks were preferred due to their low risk, stability, and recognition. According to the analysis results, an increase in the confidence level is positively associated to the value of the Value at Risk (VaR) portfolio, which is expressed as the exposure to risk. It was noted that a higher confidence level also increases the VaR value.

Edukon, Rotich & Odongo (2023) measured the impact of corporate social responsibility practices on the performance of blue-chip companies, conducting this measurement in Kenya. A stratified random sampling method was employed to select 94 participants. As a result, it was determined that economic responsibility negatively affected the performance of blue-chip companies due to taxes, as there was a reduction in tax-related profits, which adversely reflected on financial performance.

Manurung, Simatupang & Puspitasari (2022) predicted the prices of blue-chip stocks in the Indonesian banking sector using the ARCH-GARCH model. The prediction was made during the COVID-19 pandemic, a period characterized by market anomalies. The results indicated that the stocks chosen by risk-averse and risk-seeking investors differ significantly.

Shankar, Sridhar & Sivakumar (2021) forecasted the returns and risks of blue-chip firms at the NIFTY 50 Index. They utilized the ANFIS machine learning technique for this prediction. The findings suggested that investors willing to take risks might invest in aggressive securities for a higher probability of returns. It was determined that the ANFIS technique could be applied using various parameters established for stock and return predictions in the stock market.

In a study conducted by Herberger, Horn & Oehler (2020), the applicability of daily reversal and momentum strategies for German blue-chip stocks was tested. No indications were found regarding the applicability of the momentum strategy in the prices of blue-chip stocks. However, strong indications were detected concerning reversals. It was concluded that reversal strategies are significant and also validate stock return efficiency.

The literature in the second group includes studies that examine the P/E ratio.

Saputra (2022) investigated the effects of active profitability, equity profitability, and the P/E ratio on stock prices. The research sample consists of a dataset from 15 coal companies listed on the IDX between 2018 - 2021. The F-test results indicated that active profitability, equity profitability, and the P/E ratio explained 39% of stock prices. The T-test showed that active profitability affected stock prices; however, equity profitability and the P/E ratio did not affect stock prices.

Wulandari (2022) measured the effects of the P/E ratio and market value/book value on stock returns. This measurement was conducted for 30 firms operating in the food and beverage sector on the IDX, between 2016 - 2020. The results of multiple linear regression analysis revealed that the P/E ratio negatively affected stock returns, while the market value/book value positively influences stock returns. This result suggests that an increase in market value/book value enhanced both investor confidence and stock returns. However, it is stated that an increase in the P/E ratio may lead to a departure from rationality in the trading of the stock.

Yanya & Tanrıöven (2022) examined the variables affecting the P/E ratio of the manufacturing sector companies of the BIST 100. For this examination, 70 manufacturing companies from the years 2015 to 2019 were utilized. The panel data analysis method was employed. According to the findings, the independent variables explain 34.9% of the P/E ratio. It was determined that short-term foreign liabilities/total foreign liabilities, current ratio, and market value/book value positively affected the P/E ratio.

Sari & Veterina (2021) tested the effects of return on assets, the P/E ratio, total asset turnover, and dividends per share on stock prices in the IDX. The sample consisted of 17 companies in the mining sub-sector, identified using purposive sampling techniques. It was found that all variables had significant impacts on stock prices.

Juliani, NurLaela & Masitoh (2021) analyzed eight companies operating in the chemical and pharmaceutical sub-sector on the IDX using purposive sampling methods. The analysis results indicated that net profit margin, earnings per share, the P/E ratio, and market value/book value affected stock prices.

In a study by Karadeniz & Koşan (2021), the impact of high stock value and low P/E ratio among tourism companies listed on the Borsa İstanbul on financial performance was analyzed. It was determined that changes in the P/E ratio exhibited significant differences with stock turnover, active profitability, equity profitability, net profit margin, growth rate, and stock returns.

Wahasanah & Nilowardono (2020) examined the effects of equity profitability, the P/E ratio, and the debt/equity ratio on stock returns on the IDX. This examination covered food and beverage companies from 2012 to 2014. Multiple linear regression analysis was utilized. The analysis revealed that equity profitability, the P/E ratio, and the debt/equity ratio had significant effects on stock returns for the identified sample.

Tannia & Suharti (2020) investigated the effects of debt/equity, debt/assets, market value/book value, and P/E ratios on stock prices in the agricultural sector. Eighteen firms on the IDX were identified using purposive sampling methods. The results indicated that the debt/equity and P/E ratios do not significantly affect stock prices; however, the debt/assets ratio has a negative effect, while the market value/book value ratio has a positive effect.

Baraz & Daşbaşı (2016) tested the association between the P/E ratio and index returns for the BIST-100 index. Regression equations were established using monthly, quarterly, 6-month, 1-year, 2-year, and 3-year returns through regression analysis. According to the findings, although the degree of explanation is low, a relationship between P/E ratios and BIST-100 index returns was identified.

In the study conducted by Horasan (2009), the impact of the P/E ratio on stock returns was examined for the ISE 30 index. The sample consisted of 30 companies between 2000 and 2006. The analysis results revealed that the P/E ratio positively affected closing stock prices. However, it was found that the P/E ratio had a negative impact on stock returns. Thus, it was concluded that an increase in the P/E ratio reduced stock returns.

The literature divided into two groups shows that the former group generally consists of studies aimed at predicting the returns or prices of blue-chip stocks, whereas the latter similarly concentrates on studies examining the relationship between the P/E ratio and stock prices or returns. In this study, the association between the P/E ratio and the returns of the BCI was tested. The originality of the study lies in its ability to reveal both the association between the P/E ratio and blue-chip stocks and the association between index returns and the P/E ratio.

3. Methodology

In this section, the dataset, variables, and methods utilized in the research are described.

3.1. The Sample of the Study

The research comprises nine stock exchanges that have been actively operating between 2016 and 2023 and possess annual data related to the P/E ratio and the BCI. Access to the dataset relevant to the research was obtained from the World Federation of Exchanges.

Table 1: Sample of the Research

Years	Exchanges	Variables
2016	Colombo Stock Exchange	Blue-Chip Indexes (BCI)
2017	Hong Kong Exchanges and Clearing	Price to Earnings Ratio (PER)
2018	Taipei Exchange	
2019	Taiwan Stock Exchange	
2020	The Stock Exchange of Thailand	
2021	BME Spanish Exchanges	
2022	Borsa Istanbul	
2023	The Stock Exchange of Mauritius	
	The Egyptian Exchange	

In the sample presented in Table 1, there are 8 years, 9 global stock exchanges, and 2 variables. In the research, the BCI is used as the dependent variable, while the P/E ratio serves as the independent variable.

3.2. The Method of the Study

The sample of the research consists of 72 observation values, which indicates that it conforms to a normal distribution in the context of the “Central Limit Theorem.” Accordingly, a sample size greater than 30 is sufficient for normal distribution. Therefore, parametric tests were utilized as the method in this research. These tests include descriptive statistics, Pearson correlation coefficient, F-test, and simple linear regression analysis.

Descriptive statistics provide a table that displays measures such as mode, median, mean, and standard deviation. The Pearson correlation coefficient is used to determine the direction and degree of the relationship between two continuous variables. It is applicable to normally distributed data with a linear relationship. The F-test is a value used in analysis of variance to test the validity of established hypotheses. Simple linear regression can be formulated as “ $y = ax + b$ ” (Kalaycı, 2010: 51, 116, 131, 199).

4. Findings

Firstly, a descriptive statistics table was created to provide an overview of the variables used in the research, and the analysis commenced.

Table 2: Descriptive Statistics

Variables / Indicators	N	Minimum	Maximum	Mean	Standard Deviation	Mode	Median
BCI	72	4.93	11.86	8.0204	1.76179	4.93 ^a	8.0070
PER	71	1.60	3.42	2.6775	0.37992	1.60 ^a	2.7040
Valid N (listwise)	71						

Note: a. Multiple modes exist. The smallest value is indicated.

In the descriptive statistics presented in Table 2, the results of the statistical indicators for the BCI and the P/E ratio are displayed. The data for the BCI is annual and has been normalized by taking logarithms. The number of observations (N) for the BCI is 72, while for the P/E ratio, it is 71. Therefore, a common observation value of 71 has been taken. This result indicates that the dataset conforms to a normal distribution in the context of the Central Limit Theorem. The table includes minimum, maximum, mean, standard deviation, mode, and median values. By examining these values, a general overview of the dataset is provided. The correlation analysis results are shown below.

Table 3: Correlations

		BCI	PER
BCI	Pearson Correlation	1	-.380**
	Sig. (2-tailed)		.001
	N	72	71
PER	Pearson Correlation	-.380**	1
	Sig. (2-tailed)	.001	
	N	71	71

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

There is a negative linear relationship between the blue-chip index (BCI) and the P/E ratio (PER). The significance (Sig.) value of this relationship, in other words, the degree of significance or probability value, is 0.001. This value indicates that the established correlation is significant at both the 1% and 5% probability levels. The presence of a linear correlation relationship was measured using parametric correlation tests, specifically the Pearson correlation test, resulting in a value of

-0.38 or -38%. This implies a weak negative association between the two variables, which can be interpreted as “as the P/E ratio increases, the BCI decreases, or conversely, as the BCI increases, the P/E ratio decreases.”

The simple regression equation, which exhibit a negative correlation, is expressed as “ $BCI = aPER + b$.” In this equation, the BCI is the dependent variable, while the P/E ratio is the independent variable.

Table 4: **Model Summary**

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.380 ^a	.144	.132	1.64953

Note: a. Predictors: (Constant), PER

In the regression equation presented in Table 4, the R^2 value is provided, which is 0.132. According to this result, 13.2% of the variation in the dependent variable is explained by the independent variable in the model, meaning that, 13.2% of the changes in the BCI are accounted for by changes in the P/E ratio.

H_0 : The P/E ratio has no effect on the BCI.

H_1 : The P/E ratio has an effect on the BCI.

To determine whether the established regression model is significant, an F-test was conducted, and the results are presented below.

Table 5: **Variance Analysis**

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.666	1	31.666	11.638	.001 ^b
	Residual	187.745	69	2.721		
	Total	219.411	70			

Note: a. Dependent Variable: BCI, b. Predictors: (Constant), PER

The F-statistic indicating the significance of the model to be interpreted, along with the Sig. value representing the level of significance of this value, is presented above. If the F value is significant, the model is statistically significant. Since the significance level in the ANOVA table is Sig. < 0.05 (Sig.: 0.001), the model is deemed significant. Therefore, H_0 is rejected, and H_1 is accepted, indicating that the P/E ratio has an effect on the BCI. This relationship is expressed by the equation “ $F(1,69) = 11.638; p < 0.01$.”

Following the testing of the significance of the established regression model, the results of the parameter coefficient estimates conducted to determine the coefficients of the variables are presented in Table 6.

Table 6: **Parameter Estimates**

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Standard Error			
1	(Constant)	12.747	1.403		9.084	.000
	PER	-1.770	.519	-.380	-3.411	.001

Note: Dependent Variable: BCI

The values presented in Table 6 provide the regression coefficients used in the regression equation and their levels of significance. In the study, the coefficient for the P/E ratio is -1.770, while the constant value of the equation is 12.747. Thus, the regression equation is formulated as “ $BCI = -1.770 PER + 12.747$.” This implies that an increase in the P/E ratio would reduce the returns of the BCI.

5. Conclusion

Stock exchanges play a significant role in capital formation and are generally regarded as fundamental indicators of a country's economic strength, status, and development. There is high demand for shares of firms that perform well in stock markets, leading to increased share prices, while shares with poor performance experience low demand. However, this situation is applicable under normal conditions. Market manipulation may occur, which refers to activities such as rumors, speculation, and short selling that lead to fluctuations in stock prices. Strategies should be developed to minimize these activities to enable investors to make informed decisions.

This study analyzes the impact of the P/E ratio on the BCI. The BCI comprises financially stable, large, recognized, and healthily growing firms. Consequently, the performance of the stocks within the BCI is high. Changes in the P/E ratio indicate how many times a share is sold relative to its earnings. When trading stocks, it is suggested that investors should consider shares with low P/E ratios, as these tend to perform better, and thus, portfolios should be constructed from these stocks.

A review of the literature reveals that most studies focus on predicting stock returns or prices. Unlike the studies in the literature, this research analyzes the returns of the BCI, which consists of blue-chip stocks, and examines the impact of the P/E ratio on the BCI.

The study encompasses an 8-year dataset from 2016 to 2023 and includes 9 global stock exchanges. The dependent variable in the study is the BCI, while the independent variable is the P/E ratio. The methods employed include parametric tests such as descriptive statistics, Pearson correlation coefficient, F-test, and simple linear regression analysis.

As a result of the analyses, a statistically significant weak negative correlation was identified between the P/E ratio and the BCI. Following the identification of the correlation relationship, hypotheses were tested to determine whether the P/E ratio affects the BCI in the established regression equation. First, the R^2 value of the regression equation was examined and found to be 0.132. This result indicates that 13.2% of the variation in the BCI is explained by the P/E ratio. Subsequently, an F-test was conducted to assess the significance of the model, leading to the rejection of the null hypothesis and confirming that the model is significant and that the P/E ratio has an effect on the BCI. Finally, the coefficients of the regression equation were determined, indicating that an increase in the P/E ratio reduces the BCI.

The findings suggest the presence of the P/E ratio effect, as it is stated that firms with low P/E ratios exhibit high performance (Bodie, Kane & Marcus, 2009). The BCI in the sample consists of high-performing stocks.

When examining the results in the literature, they align with the findings of Wulandari (2022), Lubis (2021), and Horasan (2009). Wulandari (2022) found that the P/E ratio negatively affects stock returns. Similarly, Horasan (2009) determined that the P/E ratio decreases stock returns in his study conducted in Türkiye. Unlike the studies mentioned in the literature, Lubis (2021) identified factors affecting blue-chip stock returns in a manner similar to this study. The independent variables included the P/E ratio, net profit margin, market value/book value, equity profitability, debt/equity ratio, and dividend payout ratio. The key question is the impact of the P/E ratio on blue-chip stock returns, which was similarly found to be negative. The difference between this study and the one conducted by Lubis (2021) is the use of the BCI instead of blue-chip stock returns.

The findings obtained from the study are expected to contribute to the literature; however, the results are limited to the specified sample. The findings align with theoretical expectations and are anticipated to provide recommendations for company managers and investors. To advance this study further, it is suggested that the number of independent variables, the time frame, and the

number of stock exchanges in the sample be increased, which would undoubtedly lead to more generalizable findings.

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