

# The effect of sports performance and financial performance on European soccer club stock prices

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## ABSTRACT

This study discusses the effect of sports performance and financial performance on the price of European football. This topic is still a hot topic of discussion considering that football is a sport that is starting to develop into a real business industry that has a big impact on society. This phenomenon is caused by many speculations that football can become an industry that is in demand by investors. research conducted from 2016 to 2021 using articles with credible sources. Empirical results show that sports performance has a positive and significant effect on the stock price of football clubs. The liquidity ratio with the Current Ratio indicator has a positive and significant effect on the stock price of football clubs. The solvency ratio with the Debt to Asset Ratio proxy has a negative and significant effect on the stock price of football clubs. However, the profitability ratio with the NPM indicator has no effect on the stock price of the football club. The limitation of this study is that it focuses on European football clubs listed on the Stock Europe Football. Future research is expected to expand the scope of research such as the sample used and measurement indicators. aims to provide more accurate arguments and results regarding the effect of sports performance and financial performance on the stock price of football clubs.

## KEYWORDS

Stock price; Sports Performance; Financial performance; Liquidity ratio; Solvability ratio; Profitability ratio

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## Introduction

Globalization has an impact on sports, especially football. Football has developed into an industry, not just entertainment. The development of the football industry that occurs into a real business has a big impact on society (Rey & Santelli, 2017). Football has the number one sport market share in most countries in the world. The development of football has become a rapidly growing industry on the European continent. Whereas Europe is famous for being the epicentre of football, which shows the growth of the football market, which tends to be stable and even continues to increase every year, as shown in Figure 1.

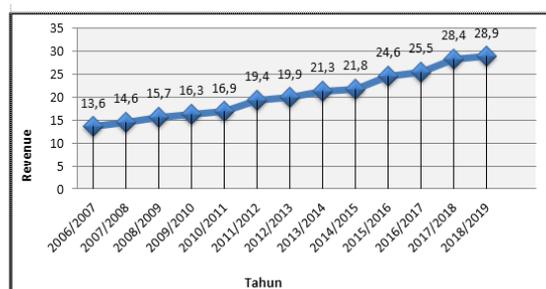


Figure 1. European football market size (€ billion).

Figure 1 shows that there is an increase in revenue every year from the European football market as a whole during the 2006/2007 to 2018/2019 season. The highest increase was in the 2018/2019 season with revenues of €28.9 billion, of which the largest revenue came from the Big Five European Leagues, generating €17 billion, an increase of 19% from the previous year. This indicates that football provides great enthusiasm for the community, thus enabling football to become an increasingly large industry in the industrial world. The development of football that continues to occur encourages football clubs to conduct Initial Public Offerings (IPO). In line with this, on June 17, 2019, for the first time in Southeast Asia, especially for the Indonesian football club, namely, Bali United,

conducted an IPO by releasing 2 billion initial shares at a price of 175 per share. The initial demand for shares exceeded the offer, so that the initial offering of Bali United shares was oversubscribed (Pradhan et al., 2017). Another opinion about the football industry is that many European football clubs are in trouble with debt so that they go bankrupt. Factors that allow this to happen are expenditures on purchasing new players, player salaries, coach salaries, building stadiums and so on (Ika et al., 2021)

The phenomenon above gives speculation that not all football clubs have managed to survive in market share. An indicator of the success of a company can be reflected in the stock price, where there is a sale and purchase transaction of shares reflecting the strength of an industry's market share on the stock exchange. The football industry will not succeed without good financial and sporting performance. Based on the facts on the ground, a good football club is a club that has the ability to balance financial performance and sports performance or appearance in a match (Ay & Enes, 2020). Sports performance and good financial performance are attempts by the football club to reflect the success of the football club, especially for clubs that have sold their shares to the public. Sports performance and good financial performance certainly provide a good signal of information on the stock market and attract investors to invest. To support the performance of football clubs, investment activities carried out by investors allow football clubs to obtain funds from parties who have invested funds in the capital market. Meanwhile, investors benefit from the investments made because investment activities by investors are one of the foundations for the survival of the football market share. So, sports performance and financial performance are things that describe how a football industry can generate profits for investors who invest their capital.

Sports performance is information that is quite considered by investors, because when a football club is able to provide its best performance in a league, the football club is considered to have good performance and is able to generate profits. Good sports performance information has an influence on the attractiveness of investors in investing because it is seen as having a good performance so that it can add value to the company. Financial statements act as a medium of communication between creditors and management. The publication of financial statements has an impact on making rational economic decisions on the risks inherent in investments. This decision will shape the price of a share. Maci et al (2020) explain that the positive impact of sports outcomes is the increase in the share price of football clubs. This increase is due to the emotional component that drives the choice of investors, who may be frequent fans and very sensitive in the short term to sports outcomes. However, there are other factors that support success in the market, one of which is financial performance. Research Maci et al (2020) provides results that show sports performance and economic performance have a positive and significant impact on the stock price of football clubs. Research by Nurcahyani & Bhilawa (2021) concludes that the liquidity ratio, solvency ratio, profitability ratio, and sports performance have an effect but not significantly on the stock price of football clubs. Other studies with various research results related to this topic include Ay & Enes (2020), Yudistira & Adiputra (2020), Oral (2016), Allouche & Soulez (2015), Rey & Santelli (2017)

## Literature review

### *Signaling theory*

Signal theory or signaling theory is an action taken by the company's management that informs investors about how management views the company's prospect (Spance.M, 1973). Signaling theory explains that management acts as a signal giver while outside parties act as signal recipients, for example, investors. Signaling theory is broadly related to information availability (Ay & Enes, 2020). Signaling theory describes an action taken by the company in giving instructions to stakeholders, especially investors, in the form of information signals about the company itself. The information in question can be in the form of information on company policies, information on financial statements, or other information disclosed by company management voluntarily (Rey & Santelli, 2017). Signaling theory also provides an explanation that reducing information asymmetry can be done by signaling by managers, where managers provide information on the application of conservatism accounting in financial statements. The quality of disclosure of financial statement information can affect the quality of investor decisions. Therefore, the quality of the information is intended to reduce information asymmetry (Supriadi & Ariffin, 2018). Field performance information and financial reports that show positive information will have an impact on market reactions and have an influence on changes in stock prices that occur (Nurcahyani & Bhilawa, 2021).

### *Hypothesis development*

#### *The effect of sports performance on soccer club stock prices*

Sports performance is information that is quite considered by stakeholders, because when a football club is able to provide its best performance in a league, the football club is considered to have good sports performance (Maci et al., 2020). Sports performance information has an influence on the attractiveness of investors in investing in soccer clubs because they are seen as having a good performance so as to add value to the company (Arkan, 2016).

H1: Sports Performance Affects Stock Prices of Football Clubs Listed on Stock Europe Football Season 2016/2017-2020/2021

*The effect of liquidity ratio on football club share prices*

The liquidity ratio is able to describe the company's financial situation by providing information on the extent to which the company can meet current obligations without having to increase capital (Pratama et al., 2020). A good liquidity ratio certainly gives an idea that it is possible for the football club to continue operating, so this is good information for investors (Nurchayani & Bhilawa, 2021).

H2: Liquidity Ratio Affects Stock Prices of Football Clubs Listed on Stock Europe Football Season 2016/2017 - 2020/2021

*The influence of solvency ratios on soccer club stock prices*

A high solvency ratio allows it to influence investor interest, thus having an impact on the demand and supply of shares. Information about the solvency ratio is available to influence the rise and fall of stock prices (Nuraini et al., 2019). The increase in debt will have an impact on the company's net profit. The larger debts have a negative impact on the performance of a company. The cause of this is the greater the interest expense that is borne and reduces profits. So that it will also affect the dividends to be distributed (Rohde & Breuer, 2016).

H3: Solvency Ratio Affects Stock Prices of Football Clubs Listed in Stock Europe Football Season 2016/2017 - 2020/2021

*The effect of profitability ratios on football club share prices*

A good profitability ratio is positive information for investors from the perspective of the profits to be obtained, so that it will affect the investment decisions of investors. So that will have an effect on stock (Ika et al., 2021). The demand and supply of soccer shares occur due to the existence of good information signals about the company's profits so that it has an influence on investors' profit expectations on their investments, which in turn will have an impact on the soccer club's stock price (Sumantri & Agustianti, 2017).

H4: Profitability Ratio Affects Stock Prices of Football Clubs Listed in Stock Europe Football Season 2016/2017 - 2020/2021

## Methods

This study uses quantitative data types, while the data sources use secondary data. Secondary data is data obtained directly by researchers or data collectors (Widarjono, 2018). Sources of data in this study were obtained from sites, Stox.com, Investing.id, Football Club Annual Report, Yahoo Financial, Uefa.com, and other official websites that provide information needed by researchers. Data was collected by using the documentation method, and the secondary data needed were articles that were relevant to the topic of this research.

The European football clubs registered with Stock Europe Football during the research period 2016-2021 were the research sample used. Purposive sampling is a research sampling method with the following criteria: The selected sample is a football club that has complete data, either in the form of an annual report or published on the official website that presents data on the financial statements of football clubs during the research period, 2016-2021. Based on predetermined criteria, 21 football clubs met these criteria, with a long research period of five years. So the total research sample is 100 samples, with 5 outlier data.

## Research Model

$$Y = \alpha + \beta_1 KO + \beta_2 CuR - \beta_3 DAR + \beta_4 NPM + e$$

Information:

Y : Stock price

$\alpha$  : Constant

KO : Sport performance

CuR : Current ratio

DAR : Debt to asset ratio

NPM : Net profit margin

$\beta$  : Coefficient of independent variable

e : Error term

## Measurement Indicator

### Stock price

The stock price is the price of shares formed as a result of the demand and supply of shares on the stock exchange under certain conditions (Putri, 2019). The measurement of the stock price variable in this study considers the Euro currency (€). Football clubs that do not use Euros in their share prices and financial statements will then be converted into Euros according to the date of the research data. The average monthly closing share price is used to measure the stock price variable, with the following formula:

### Sports performance

Sports performance is the performance or ability of a football club in obtaining points in a match with the result of victory or defeat. In this study, sports performance assessment indicators use point weighting taken from Silva (2015). The point weighting is intended to provide an assessment relevant to the level of the league the football club participates in. The sports performance assessment indicator uses the  $KO = CL + EL + LAK$  formula.

### Liquidity ratio

The liquidity ratio is a measurement of a company's capability to meet various short-term debt demands. The current ratio is an indicator used in assessing the liquidity ratio in this study. The current ratio describes the overall ratio of the company's current assets to current liabilities. As a reflection of efforts to return current liabilities within a certain period. The average Current Ratio value is 2 times, or 200%.

### Solvency ratio

The solvency ratio provides information on the comparison of assets owned by creditors to assets owned by shareholders. In other words, this ratio compares the overall level of both short-term and long-term liabilities to the company's total assets. The solvency ratio in this study uses a debt to asset ratio proxy, DAR, to measure the magnitude of the influence of debt on the company's asset management. The greater the value of the debt to asset ratio that projects the solvency ratio, the higher the risk for the company.

### Profitability ratio

A company's profitability ratio is a company's ability to generate profits. In other words, this ratio measures how effective management is in managing assets in order to earn a profit. High net income certainly gives the assumption that the company will generate finance for stakeholders. The profitability ratio in this study was measured using a net profit margin.

## Results

### Descriptive statistics

The statistical tool used in this research is using SPSS (Statistical Package for Social Science). With the results of descriptive statistics as follows:

**Table 1.** Results of descriptive statistics

	N	Minimum	Maximum	Average	Std. Deviation
HS (Y)	100	,067	8,075	2.28357	2.394851
KO	100	1	8	2.81	1,868
CuR	100	,087	2.145	,78411	,485113
DAR	100	,097	3,472	,92962	,555186
NPM	100	-,880	,910	,08580	,319789

Note:HS (Stock price), KS (Sport performance), CuR (Current ratio), DAR (Debt to asset ratio), NPM (Net profit margin)

Based on the tests that have been carried out, the results obtained show that the stock prices of European football clubs listed on Stock Europe Football have an average value of 2.28357 Euros from the entire sample of football clubs. While the standard deviation value is 2.394851, The minimum share price value for the stock price variable is 0.067 Euro, namely the Brondby If B football club for the 2020/2021 season and the 2020/2021 season. The maximum share price value for the football club's share price is 8.075 Euros, which is the 2018/2019 season for the Borussia Dortmund football club. This shows that the Borussia Dortmund football club has good value in the eyes of investors because it has the highest share price value of all the football clubs in the research sample. Sports performance ( $X_i$ ) shows the minimum value of the variable is 1.00 (one). This shows the lowest level of sports

performance, namely at the football clubs AGF, Aik Football, Brondby If B, Rangers (RFC), Silkeborg, Sporting Clube De Portugal, and Trabzonspor Sportif Yatirim in the 2020/2021 season. The 2019/2020 season is for football clubs Aalborg Boldspilklub, Aik Football, Besiktas, Brondby If B, Fenerbahce Sportif Hizmet, Futebol Clube Do Porto, Galatasaray, Silkeborg, Sporting Clube De Portugal. The lowest level of sports performance was also shown by football clubs Aik Football, Besiktas, Brondby If B, Silkeborg, Trabzonspor Sportif Yatirim in the 2018/2019 season. The 2017/2018 season was for football clubs AGF, Rangers (RFC), Silkeborg, Sporting Clube De Portugal, and Trabzonspor Sportif Yatirim. In addition, the 2016/2017 season was one of the seasons with the lowest sports performances, namely at the football clubs AGF, Galatasaray, Olympique Lyonnais, Rangers (RFC), Silkeborg, and Trabzonspor Sportif Yatirim. The maximum value of the sports performance variable is 8.00 (eight), which is the highest level of sports performance produced by the AFC Ajax and Juventus football clubs in the 2016/2017 season. The average value of the sports performance of the football club during the season is 2.81 and the standard deviation is 1.868.

The second independent variable ( $X_2$ ) used in this study is the liquidity ratio proxied by the Current Ratio (CuR). Based on the results of descriptive statistical analysis calculations, the lowest value of Current Ratio is 0.087, where this value was generated by the Silkeborg football club in the 2016/2017 season. This value illustrates the Silkeborg football club's ability to pay short-term obligations that will soon mature with a very low current asset value. The highest value of the Current Ratio is 2.145, produced by the football club Aalborg Boldspilklub in the 2017/2018 season, which shows a good liquidity ratio performance because the Current Ratio value is greater than 200%. The average value of the liquidity ratio as proxied by the Current Ratio is 0.78434 with a standard deviation of 0.484865. This shows that the average ability of a football club to fulfil its short-term obligations with its current assets is 0.78443. Although the Current Ratio of the football club Aalborg Boldspilklub is considered good, based on the results of tests conducted, there are still many football clubs that have an unfavourable Current Ratio (Hagen and Cunha, 2019). This can be seen from the average value, which shows a value of 0.784, or 78.4%, which is smaller than 200%.

The solvency ratio with the Debt to Assets Ratio indicator is 3,472 by the football club Aik Football in the 2016/2017 season. The value of the Debt to Assets Ratio shows that the football clubs, Aik Football and Juventus, have the ability to meet short and long-term obligations, which are considered less good because they have a value greater than the average standard Debt to Assets Ratio for an industry. Silkeborg in the 2016/2017 season and Sporting Clube de Portugal in the 2019/2020 season are football clubs that have a minimum debt to assets ratio value of 0.097. The average value of the solvency ratio with the Debt to Assets Ratio indicator in this study is 0.92962 with a standard deviation of 0.555185. Based on the average value of the Debt to Assets Ratio in this study, it can be explained that the average football club has a large solvency ratio. Because the average value of the Debt to Assets Ratio for the entire football club is above 0.35. So it can be said that these conditions indicate that the average football club in this study is not good. The fourth independent variable ( $X_4$ ) is the profitability ratio with the net profit margin indicator. The results of the descriptive test show that the minimum value of the profitability ratio with NPM proxy is -0.880 at the Trabzonspor Sportif Yatirim football club in the 2017/2018 season and the maximum value is 0.901 at the Olympique Lyonnais football club in the 2020/2021 season and Aalborg Boldspilklub in the 2017/2018 season. The average value of the profitability ratio with the NPM proxy in this study is 0.0858 with a standard deviation of 0.319789. These conditions show that the average football club can make a profit from sales or income of 8.58%.

### ***Classic assumption test***

One of the requirements for the multiple regression test is to meet the classical assumption test. The classical assumption tests in this study consisted of a normality test, a multicollinearity test, a heteroscedasticity test, and an autocorrelation test.

The Kolmogorov-Smirnov test results demonstrated that the data in the study were normally distributed. This can be seen in the results of the normality test, which shows that the value of Sig KS is greater than 0.05, which is  $2.00 > 0.05$ . Based on the tests that have been carried out, the VIF values are obtained for all dependent and independent variables. Namely, Stock Price, Sports Performance, Current Ratio, Debt to Asset Ratio, and Net Profit margin show a value of less than 10 with a tolerance value of more than 0.10. This value indicates that there is no multicollinearity or correlation between variables.

Tests related to the heteroscedasticity test showed that the significance value of all independent variables was greater than 0.05 ( $\text{sig} > 0.05$ ). These results prove that all independent variables in this study are homoscedastic and there is no difference in variance in the regression function. The number of samples in this study was 100, with the number of independent variables being namely 4. Based on the results of statistical tests, it was determined that D was 2.010 with a dl value of 1.8498. With the calculation that is  $1.8498 < 2.010 < 2.1502$ . So it can be concluded that the data does not experience symptoms of autocorrelation because it meets the requirements  $du < d < 4 - du$

## Hypothesis testing

### Multiple Regression Analysis Results

Based on the tests that have been carried out, the multiple linear regression equations in this study are as follows:

$$HS = 1.249 + 0.466KO + 1.012CuR - 0.088 NPM$$

The equation above shows a constant value of 1.249, which means that if the independent variable does not increase, the value of the stock price will be 1.249. The value of sports performance shows 0.466, which means that each addition of one sports performance unit will add 0.466 to the stock price. The Current Ratio shows a beta value of 1.012, which means that the stock price will increase by that value if there is an increase in the CuR value of one unit. -1.161 in the Debt to Asset Ratio shows that each addition of one unit of solvency ratio with the DAR proxy will reduce the stock price by 1.161. The profitability ratio with the Net Profit Margin proxy shows a value of -0.088, which means that for each additional NPM of one unit, it will reduce the stock price by 0.088.

### Coefficient of Determination Test

The result of the coefficient of determination test shows the value of R<sup>2</sup> is 0.563. This figure shows that the relationship between the dependent variable and the independent variable can be explained by 56.3% and that 43.7% is explained by other factors. This means that changes in the soccer club's stock price can be explained by sports performance, liquidity ratios, solvency ratios, and profitability ratios of 56.3%.

### Model Validity Test

Based on the F test, the significance value is 0.00 while the F table shows the value of 2.03 and the F count is 8.213. From the results above, it can be concluded that the model meets the eligibility requirements and the research can be continued. Because F count > F table and the significance value is less than 0.05.

**Table 2. Results of Individual Parameter Significance Test**

Model	Ha	T	Sig.	Information
Constant		1,698	,093	
KO	H1	4,147	,000	<b>Supported</b>
CuR	H2	2,124	0.036	<b>Supported</b>
DAR	H3	-2,610	0.011	<b>Supported</b>
NPM	H4	-,130	,897	<b>Not Supported</b>

Note:HS (Stock price), KS (Sport performance), CuR (Current ratio), DAR (Debt to asset ratio), NPM (Net profit margin)

Based on the statistical t test above, it can be seen that the sports performance variable has a significance value of 0.00 or less than 0.05, so that H1 is stated to be **supported**. The liquidity ratio with the Current Ratio indicator has a significance value of 0.036, so that H2 is also stated to be **supported**. H3, which states that the solvency ratio has an effect on the stock price of football clubs, is also **supported**. Because the significance value for the Debt to Asset Ratio is less than 0.05, which is 0.011. While the profitability ratio with the Net Profit Margin proxy has a significance value of 0.897, which is greater than 0.05, so H4 is declared **not supported**.

## Discussion

The results of the individual parameter significance test (*t-test*) also show a significance value of 0.000 or less than 0.05 with a t-count value of 4.147. Based on the significance value of the test, it can be concluded that sports performance has a significant effect on stock prices. Sports performance has a positive and significant effect on the stock price of football clubs because a victory can encourage investors' emotions, especially for fans who are sensitive to sports results in the short term. Good sports performance is also able to increase the value of players, brands, income, and others. Winning has an impact on increasing revenue from bringing popularity to the football club, so the players will also become popular, even more popular than their own club. This popularity will also affect how much money the club makes, which will draw investors looking for good investment opportunities (Pranata & Supatmi, 2016). The effect of sports performance on soccer club stock prices is in line with the results of research by Allouche & Soulez (2015), Sarac & Zeren (2015), Rey & Santelli (2017), Hagen & Cunha (2019), and Maci et al (2020). The previous research above states that sports performance has a positive and significant influence on the stock price of soccer clubs but is not in line with the results of research by Nurcahyani & Bhilawa (2021). These results are possible because of the good sports performance it is possible for the football club to experience an increase in the value of the football club.

The liquidity ratio with the Current Ratio indicator has a significance value of 0.036, so that H2 is also stated to be supported. The greater the liquidity ratio, the more positive the stock price will be. Having a liquid ratio means the more likely the club is to be able to cover its short-term debt, so that in the short term, investors will

benefit if the soccer club earns a profit, assuming that short-term obligations will be fulfilled without allocating a big profit. The results of this study are in line with the research of Nurcahyani & Bhilawa (2021) which states that the liquidity ratio affects the stock price of football clubs. The extraordinary information contained in the ability of short-term operating activities of a football club, will affect the market value of the football company itself, in this study the market price is intended for the stock price of the football club. The ability of football clubs to be a concern for investors, because good or bad liquidity football clubs will give an idea of whether the invested capital will provide profits or not. So that the magnitude of the liquidity ratio of a football club will affect the interest of the investors themselves (Prameswari, 2015). Of course, the liquidity ratio will also affect the development of the football industry. Because the better the liquidity ratio of a football club company, the investment activity by investors in the soccer club's shares will increase. This will encourage the development of the football industry (Sartori, 2020).

The third hypothesis, which states that the solvency ratio has an effect on the stock price of football clubs, is also supported. Because the significance value for the Debt to Asset Ratio is less than 0.05, which is 0.011. The solvency ratio is certainly a concern for investors for the fate of their investments in the future. A high solvency ratio allows a reduced interest in attracting investors to buy shares of a football club because of the risk of bankruptcy and the failure of the football club to pay its long-term obligations. So that will affect the demand and supply of shares of the football club. Previous studies that gave the same results were Riyandhono et al (2021), Supriadi & Ariffin (2018), and Putri (2019) which stated that the solvency ratio with the Debt to Assets Ratio proxy had a negative and significant effect on the stock price of football clubs. The solvency ratio is certainly a concern for investors for the fate of their investments in the future. Before making an investment, investors must analyze the benefits and risks of the investment (Arsita, 2021). Investors take into account the fate of their investment, with the aim of determining the performance of the stock and how much risk investment in a football club is associated with the company's debt. The solvency ratio has an influence on the stock price of football clubs, this illustrates that the existence of default, bankruptcy, debt repayment is a risk that is quite considered by investors who invest their capital in football clubs. So that this ratio will also affect the market share of the football industry it self (Rey & Santelli, 2017).

The profitability ratio with the Net Profit Margin proxy has a significance value of 0.897, which is greater than 0.05, so H4 is declared unsupported. Profitability ratios that have no effect on stock prices are possible because investors do not only focus on football clubs generating high profits. High profits allow football clubs to also have to meet high obligations and costs, so investors do not get an increase in profits as their investment returns (Nurcahyani & Bhilawa, 2021). Investors do not only look at the internal capabilities of football clubs in generating profits, but also focus on external factors. Other external factors that may be considered by investors are market conditions that occur, the achievements of football clubs, inflation, and economic conditions. Riyandhono et al (2021) explained that when Ronaldo moved from Real Madrid to Juventus, there was a high spike in Juventus shares. In line with the research results Nurcahyani & Bhilawa (2021), Riyandhono et al (2021), and Ay & Enes (2020) the profitability ratio has no effect on the stock price of football clubs. Contrary to the research results of Maci et al (2020) which states that the profitability ratio has a positive and significant effect on the stock price of football clubs. The results of this analysis indicate that the profitability ratio cannot contribute and significantly to changes in the stock price of football clubs.

## Conclusion

The purpose of this study was to obtain empirical evidence regarding the effect of sports performance and financial performance on stock prices of football clubs listed on the Stock Europe Football 2016/2017-2020/2021 season. The results of this study are expected to provide answers to all phenomena and problems on the research topic.

Based on the results of statistical tests from 100 research samples, it can be concluded that sports performance has a positive and significant effect on the stock price of football clubs. The Liquidity Ratio with the Current Ratio indicator has a positive and significant effect on the stock price of football clubs. The Solvency Ratio with the Debt to Asset Ratio indicator has a negative and significant effect on the stock price of football clubs. The stock price of football clubs is affected by the profitability ratio with the net profit margin proxy.

This study has limitations, namely, there is no standard provision as a reference in determining sports performance so that indicators in the same category can be different for each researcher. There are still many clubs that have not made an Initial Public Offering (IPO) so they have a limited sample. In addition, there are football clubs that have good sports performance and are popular but are not listed in Stoxx Europe Football such as Real Madrid, Barcelona, and others. Future researchers are expected to be able to choose proxies or other indicators in measuring research variables by increasing the research period in order to obtain even better results

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