



FACTORS AFFECTING THE MARKET VALUE OF FOOTBALL PLAYERS IN THE INDONESIAN LEAGUE

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Abstract

The development of accounting science, especially in human resource accounting (HRA), has progressed rapidly. The understanding of human resources (HR) as a vital asset that has an important role in the success of an organization is growing. This research focuses on measuring the market value of professional football players in the Indonesian League by considering individual performance, especially for players who play as central midfielders. Football players, recognized as intangible assets, have a market value that is closely related to their contribution on the field. The research method used is quantitative with a descriptive approach, examining the relationship between performance variables (goals, assists, number of appearances, yellow cards, and red cards) to player market value. The research data was obtained through secondary data sources from the transfermarkt.co.id website with a sample of 52 Indonesian central midfield players in the 2023 season. The results showed that goals, assists, and number of appearances had a significant influence on the player's market value. Assists and number of appearances show a very strong influence on player prices, while yellow cards and red cards do not show a significant influence. This research provides important insights for football club management in determining the market value of players as part of financial reporting and investment decision-making, and enriches the study of human resource accounting in the football industry. The findings also show the importance of players' positive on-field contributions, such as assists and performances, in determining their market value, beyond disciplinary factors such as yellow and red cards.

Keywords: Football player market value, Human resource accounting, Indonesian League, Player performance, Player transfer

Abstrak

Perkembangan ilmu akuntansi, khususnya dalam akuntansi sumber daya manusia (Human Resource Accounting/HRA), telah mengalami kemajuan yang pesat. Pemahaman terhadap sumber daya manusia (SDM) sebagai aset vital yang memiliki peran penting dalam keberhasilan suatu organisasi semakin berkembang. Penelitian ini berfokus pada pengukuran nilai pasar pemain sepak bola profesional di Liga Indonesia dengan mempertimbangkan kinerja individu, khususnya bagi pemain yang berposisi sebagai gelandang tengah. Pemain sepak bola, yang diakui sebagai aset tidak berwujud, memiliki nilai pasar yang terkait erat dengan kontribusi mereka di lapangan. Metode penelitian yang digunakan adalah kuantitatif dengan pendekatan deskriptif, menguji hubungan antara variabel-variabel kinerja (gol, assist, jumlah penampilan, kartu kuning, dan kartu merah) terhadap nilai pasar pemain. Data penelitian diperoleh melalui sumber data sekunder dari situs transfermarkt.co.id dengan sampel 52 pemain gelandang tengah Indonesia pada musim 2023. Hasil penelitian menunjukkan bahwa gol, assist, dan jumlah penampilan memiliki pengaruh signifikan terhadap nilai pasar pemain. Assist dan jumlah penampilan menunjukkan pengaruh yang sangat kuat terhadap harga pemain, sedangkan kartu kuning dan kartu merah tidak menunjukkan pengaruh signifikan. Penelitian ini memberikan wawasan penting bagi manajemen klub sepak bola dalam menentukan nilai pasar pemain sebagai bagian dari laporan keuangan dan pengambilan keputusan investasi, serta memperkaya kajian akuntansi sumber daya manusia dalam industri sepak bola. Temuan ini juga memperlihatkan pentingnya kontribusi positif pemain di lapangan, seperti assist dan penampilan, dalam menentukan nilai pasar mereka, di luar faktor disiplin pemain seperti kartu kuning dan kartu merah.

Kata Kunci: Akuntansi sumber daya manusia, Kinerja pemain, Liga Indonesia, Nilai pasar pemain sepak bola, Transfer pemain.

INTRODUCTION

The development of accounting science has experienced rapid progress where the development of accounting has penetrated into human resource accounting. This is due to the increasing understanding of human energy resources which are vital and valuable assets for business entities. Quality human resources are the key to success for business entities in carrying out activities. According to (Adiwiyan & Harymawan, 2021) Human resources are currently believed to be an important asset in an organization. Human resources are also related to the success of the organization in achieving its goals, so it is appropriate for human resources



to assess their financial statements properly (Adiwiyana & Harymawan, 2021). According to most industries, human energy resources are a valuable relic which can exceed other assets of industrial ownership.

Human resource management can be seen in the football industry (Bhilawa & Fahriansyah, 2022) Football describes the most famous sport in the world which is now globally transformed into an economic phenomenon as a promising business industry thanks to its popularity. According to (Firdausi et al., 2024) Football is the most popular sport in the world. Almost every country has its own football competition which is used as an entertainment spectacle for the people of that country. Every club in the competition in any country has the ambition to become a champion (Firdausi et al., 2024). In line with this, (Kaukab, 2022) states that football is the most popular sport in the world with the number of fans reaching 3.5 billion people or almost half of the population in this world. With its popularity, many people are involved in this industry both as owners, management, coaches, supporters of club and football players. Football is not just a sport with an interesting game but there is a large industry with a long history (Kaukab, 2022).

According to (Pranata & Supatmi, 2016), football clubs will use the maximum possible funds in forming a good and quality team. Investment in football players affects the quality of a team, so club managers will be willing to spend their financial resources to invest in players in order to win on the field (Kesenne, 2015). With such a large industry, everyone who likes it wants to be involved in it, especially as a football player. Besides being a passion but also can make money (Kaukab, 2022). Football players themselves in accounting are included in human resource accounting and are recognized as intangible fixed assets (Margareta & Malinda, 2022). It is not surprising that football players are recognized as assets in football clubs because they are the main instrument for the running of the football industry.

According to (Margareta & Malinda, 2022) football players as intangible assets can be identified in monetary value in the form of market value. Market value is very relevant because of its proximity to economic value. Market value can also be used as a basis for financial reporting (Rowbottom, 1998). For example, football clubs in the UK record their players as intangible assets in the balance sheet (Bhilawa & Fahriansyah, 2022). Players become assets of football clubs, so clubs need to consider the capital gains obtained from buying and selling players. Based on resource-based theory, the ability of football players is an advantage that can create value for football players. Each player has different skills, and the skills possessed will be the basis for determining the selling price of the player. The selling price of the player is reflected in the player's market value (market value). This is what makes football players an intangible asset that is difficult to value. Many considerations can make a football player's market value high or low. Considerations such as whether or not the performance or appearance during the match, the position of the player, and the age of the player.

In general, when a football player has good performance statistics, the player's market value will be high. Likewise, the position of players such as forwards and attacking midfielders who often score goals and assists will make the market value higher. Likewise, at the age of the player, in football there is a productive age of 23-28 years. Beyond that age, the market value will usually be low. The age of football players has always been a problem phenomenon in conducting research. If the productive age of football players is generally 23-28 years old and has a high market value, but in reality it is the players who can contribute significantly to the team they strengthen that have a high market value. Like star players Cristiano Ronaldo, Leonel Messi and Robert Lewandowski who have a high market value even though their age is more than 33 years old, but because of the contribution to the team that makes them more valuable. The development of European football industrialization has made Indonesian football enter the modern football industry. The same thing happened in Indonesia, based on the



transfermarkt.co.id page such as Rizky Ridho has a market value of 7 billion with a productive age of 23 years, Marc Klok as a 33-year-old midfielder with a market value of 8 billion this is due to the productivity of goals and assists that help his club to undergo league 1 in Indonesia. Although Marc Klok played quite productively in the season in the 2023 season, but recording seven yellow cards can affect his market value. Based on the transfermarkt.co.id page, something different happened to Ricky Kambuaya with the same goal and assist productivity as Marc Klok, in fact there is a lower market value difference even though Ricky is at a productive age, namely 28 years.

The number of yellow cards or the number of red cards which is closely related to the negative impression when playing on the field, greatly affects the market value of football players. That is, the number of yellow cards that have a positive effect on market value, the number of yellow cards can be attributed to the player's activity on the field. However, players are not penalized for leaving the area. Meanwhile, the number of red cards earned by players has no significant effect on the market value of football players.

The phenomenon gap occurs in football player market value. Some circumstances show players who have good performance statistics but low market value, and players with low performance statistics but have high market value due to the assessment of potential in the future. Previous research says that Goal Performance has a positive effect on football player market value (Kaukab, 2022). Likewise, Assist has a positive effect on football player market value (Kaukab, 2022) The same thing is revealed by (Sengupta, 2021) that the results of the study show that Performance has a significantly positive relationship with market value. According to (Barbuscak, 2018) the number of goals and assists affects the transfer fee paid for a player. In addition, according to (Kiefer, 2012), the number of goals, minutes played, and total appearances has a positive effect on the market. However, it is different from (Adiwiyan & Harymawan, 2021) who say that goals have no effect on the market value of football players. The same thing is shown by (Adiwiyan & Harymawan, 2021) that minutes played have no effect on the market value of football players.

In previous studies always used all players to determine the transfer price even though goals and assists are more likely to occur in the midfield position. So in this study more emphasis is placed on the midfield position. This study provides additional evidence on what factors can determine the market value of professional football players, especially in Indonesia, where the football league is still relatively developing. This study also provides information for football club management regarding matters that affect the market value of football players in the financial statements. If the player is recognized as an asset, it will better describe the actual condition of the club. In addition, this research can be used as a reference related to accounting in the field of human resources.

LITERATURE REVIEW

Signaling Theory

The theory that can be used on firm value is Signaling Theory. Signaling theory was first introduced by Spence in his research entitled Job Market Signaling. (Spence, 1978) suggests that a signal or signal provides a signal, the sender (owner of information) tries to provide relevant pieces of information that can be utilized by the recipient. The receiving party will then adjust its behavior according to its understanding of the signal (Brigham & Houtson, 2014).

This signal theory emphasizes the urgency of the information stated by the company on investment decisions made for external parties. Information is so important for implementers in business and investors considering that basically investment has the content of various information, records, and depictions of various conditions ranging from current conditions, or



in the future for the continuation of the company. Completeness of information and timeliness are needed by investors so that proper analysis can be carried out.

According to Sharpe (1997) and Ivana (2005) in (Margareta & Malinda, 2022), the announcement of accounting information signals that the company has good prospects in the future (good news) so that investors are interested in trading shares, thus the market will react as reflected through changes in stock trading volume. Signaling theory suggests how a company should signal to users of financial statements. This signal is in the form of information about what management has done to realize the owner's wishes. Signals can take the form of promotions or other information that reports if the company is better than other companies. Meanwhile, according to (Brigham & Houtson, 2014) signaling theory is an attitude of company management in providing instructions to investors regarding management's views on the company's future prospects.

Human Resource Accounting

New developments in the field of accounting, especially Human Resource Accounting (HRA), have been the subject of discussion since 1960. HRA at that time was born as a result of the development of accounting theory itself, but its development still looked at the perspective of human resources and attention to human resources as a component and goodwill for the company (Naukoko, 2014). Human resource accounting is the process of identifying and measuring data about human resources and providing information to interested parties. In brief, human resource accounting includes accounting for humans as organizational resources for managerial and financial accounting purposes.

Flamhotz in (Naukoko, 2014) states that "human resource accounting means accounting for people as an organizational resource". That is, HRA means accounting for people as an organizational resource. This means that HRA is a development of accounting science specifically to measure humans as one of the resources owned by the organization. The Committee on Human Resources Accounting and the AAA (Belkaoui, 1995) define HRA as a process of identifying and measuring data about human resources and conveying this information to those concerned. (Belkaoui, 1995) defines HRA as a process of identifying, measuring data about human resources and communicating this information to interested parties.

In the football industry, players or human resources are very valuable assets for the club, because they can provide added value to the club (Margareta & Malinda, 2022). Even in professional leagues in the world, the value of the players' contracts can reach half of the value of the assets owned by the club. So, if players are not reported as assets in the balance sheet, then it cannot reflect the true value of the club. (Margareta & Malinda, 2022) in their research said that with the increasing necessity of football clubs to report their financial situation, causing the highest international football organization FIFA to issue regulations regarding financial criteria. One of the regulations contained in the FIFA Regulations Club Licensing is the regulation contained in Article 10 regarding financial criteria. FIFA states that the preparation and presentation of financial statements can be different for each entity in different countries due to social, economic and legislative differences so that the implementation of financial criteria in the regulations in each country will provide challenges for members, both associations and clubs. The objectives of the financial criteria are: 1. Improve the economic and financial capability of the club 2. Improve the transparency and credibility of the club 3. Provide protection for creditors The implementation of financial criteria is expected to provide short and long-term improvements for clubs and the world of football in general.

The implementation of financial criteria is expected to provide both short-term and long-term improvements for clubs and the world of football in general. For clubs, financial criteria are expected to help clubs to: 1. Improve the standard and quality of financial



management and planning activities 2. Enable better decision-making by management 3. Improve the club's financial and business credibility with stakeholders 4. Improve financial stability 5. Improve the ability to generate revenue and manage costs. In relation to these financial criteria, as part of the club's compliance with the competition, some minimum criteria must be met. For the fulfillment of these financial criteria, a football club requires the implementation of accounting for the club. And along with the need for accounting, it requires accounting principles that are generally applicable to a football club. However, unlike some industries that are specifically discussed in an accounting standard, the football industry does not get a specific discussion, so that football clubs must be able to filter and choose from various standards which are adequate to apply.

Performance

Signaling theory can be applied in this context to explain how soccer players signal their quality or ability through measurable actions on the pitch, which in turn affects their market value. The main concept of signaling theory is that individuals (in this case soccer players) give signals to other parties (such as clubs or transfer agents) to demonstrate their quality, despite uncertainty regarding the true quality of the individual.

In the context of football, human resource accounting (HRA) is the process used to measure and report the value of human resources (in this case, football players) as an asset to the organization (football club). Soccer players can be considered as human assets that contribute to team performance and the financial value of the club.

Individual performance is the service of a soccer player to his club. Performance will have an impact on team performance. This is shown in several victories obtained in several competitions participated in the team as the theory of Human Asset by Rowbottom which focuses on the performance measure of the value of employee services (Rowbottom, 1998). Each player has a different performance or contribution to the team he defends. players who have superior performance can be seen from some data such as goals scored, passing, goal direction and various other data. The performance in question is the player's performance on the field regardless of whether there is a clear relationship between sportive success (success on the field).

Human resource accounting in soccer can be used to measure a player's contribution to the club. Each player has a different performance or contribution to the team he plays for, and this performance can be measured through a number of relevant indicators, such as goals, assists, number of appearances, yellow cards, red cards, and passing.

In this case, individual on-field performance (such as goals and assists) can be considered as “outputs” that have a direct impact on team performance and the overall success of the club. Human Resource Accounting focuses on measuring the value of a player's contribution to the team and uses that information to make managerial decisions regarding players such as contracts, purchases, and sales. Factors predicted to affect the market value of soccer players in Indonesia are yellow cards, red cards, goals, assists, number of appearances, and number of goals scored.

H1: Goals scored have a positive effect on the market value of soccer players.

H2: Assists made have a positive effect on the market value of soccer players

H3: Number of appearances has a positive effect on the market value of football players.

H4: Yellow cards earned have a negative effect on the market value of football players

H5: Red Cards earned have a negative effect on the market value of soccer players

METHODS

The type of research used in this study is quantitative research. Quantitative research method is one type of research whose specifications are systematic, planned and clearly



structured from the beginning to the making of the research design. Quantitative research methods as stated by (Sugiyono, 2013) “Research methods based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, data analysis is quantitative / statistical, with the aim of testing predetermined hypotheses”. This research data is a secondary data source, which is a research data source obtained by researchers indirectly through intermediary media. The data is obtained from the official website of each club and through the transfermarkt.co.id website.

This research is focused on professional football players who play in the Indonesian league for the 2023 season. This study also uses the variables Goal, Assist, Number of Appearances, Red Card, and Yellow Card obtained during one season. According to (Priandana, 2021) every component used in research, such as items and participants with certain attributes, can be referred to as a population. Population, as defined by academics, is a group of objects or people with certain numbers and attributes from which conclusions can be drawn (Priandana, 2021). According to (Priandana, 2021), a sample represents some of the features of the population as well as the whole. In quantitative research, population is a collection of individuals consisting of objects and subjects with certain characteristics and forms recorded by researchers to be analyzed, tested, and used as the basis for drawing conclusions. There are 52 players on the transfermarkt.co.id page which is a sample of players to be used in research. The sample characteristics used in this study are (a) One hundred players with the position of Indonesian nationality midfielder with the highest transfer price; and (b) Having at least one appearance in one season.

Table 1 Research sample

Criteria	Total
One hundred players with the position of Indonesian nationality midfielder with the highest transfer price	95
Have no appearances in one season	43
Total Sample	52

Source: Processed by the author, 2024

The dependent variable used in this study is market value. Market value is the estimated amount of money that will be obtained from a sales transaction on a predetermined date, or the result of an asset exchange between a buyer and seller. When making transactions that are free of ties, proper offers must be made and from both parties each knows, acts carefully and without coercion, and football players as intangible assets can be identified in monetary value, namely in the form of market value, besides that, market value can be used for financial reporting (Adiwiyanan & Harymawan, 2021). The market value of professional football players is the estimated price of players who can be traded on the transfer market in the form of monetary value. This value is also closely related to the value of services that professional football players can provide to the club related to each player's performance on the field and their ability to increase their finances. The market price of players who play as midfielders and have Indonesian nationality uses billion rupiah units.

The Independent Variables used in this study are goals scored, assists, number of appearances, red cards and yellow cards earned. A goal is the number of balls that a player manages to put into the opponent's goal. The size of the goal in this study is the number of goals scored by professional football players in the Indonesian League in one competitive season in 2023. Assist is a pass that is converted into a goal. Assists are given to players who provide a pass or touch before the ball is given to the last player to score. The assist size in this study is the number of assists scored by a professional football player in the Indonesian League in one season in 2023. The yellow card issued by the referee is given to a player who commits a minor foul or a hard foul repeatedly but is still slightly tolerable. In this study, yellow cards are



calculated from the number of yellow cards earned by professional football players in the Indonesian League in one season in 2023. Red Card. The referee's red card is given directly to a player who commits a hard foul or a player who gets a yellow card twice. In this study, red cards are calculated from the number of red cards received by professional football players in the Indonesian League in one season in 2023. And the number of appearances is the number of matches played by a football player on the field, both playing as a core player and substitute. The size of the number of appearances in this study is the number of appearances for the club defended by each professional football player in the Indonesian League in one season in 2023.

Data testing conducted in this study using multiple linear regression analysis. For the testing model as follows:

$$Price = \alpha + \beta_1 Goal + \beta_2 Assist + \beta_3 Appearance + \beta_4 Yellow_{card} + \beta_5 Red_{card} + e \dots \dots \dots$$

Where α is a constant, Price indicates the market value of the player, Goal is the number scored by the player, Assist is the pass that becomes a goal, Appearance is the number of matches played, yellow and Red are the number of cards earned by the player during one season and e is the standard error.

RESULTS AND DISCUSSION

Based on the test results conducted by researchers using descriptive statistical analysis techniques, the data will be explained as follows.

Table 2. Descriptive Statistical Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
Price	52	0,17	7,82	2,5104	1,48181
Goal	52	0,00	4,00	1,0385	1,13693
Assist	52	0,00	8,00	1,3077	1,50214
Appearance	52	2,00	33,00	21,0577	8,50701
Yellow_Card	52	0,00	13,00	2,9808	2,71156
Red_Card	52	0,00	1,00	0,0385	0,19418

Source: Processed by the author, 2024

Based on Table 2, the data consists of 52 samples that include information on Price, Goals, Assists, Appearances, Yellow Cards, and Red Cards. The price values in this data have a fairly wide range, with the lowest value being 0.17 and the highest value being 7.82. The average price recorded is 2.51, which suggests that prices tend to stay within this range. However, with a standard deviation of 1.48, there is considerable variation, indicating that the prices can vary quite far from the average. Table 2 shows that for the goals variable, the number of goals scored ranges from 0 to 4. The mean number of goals is 1.04, which indicates that most individuals in this data scored few goals. The standard deviation of 1.14 indicates that there is quite a high variation, meaning that although the average goal is relatively low, there are some individuals who score more goals than others. As for the assist variable, the recorded values range from 0 to 8. The average assist is 1.31, indicating that on average individuals in this data provide few assists. However, the standard deviation of 1.50 shows that there is considerable variation, meaning that some individuals provide more assists than average, while others do not provide any assists at all.

Based on table 2, the appearance variable shows considerable variation. The performance scores range from 2 to 33, with an average of 21.06. This indicates that most individuals appeared in around 21 matches. However, the standard deviation of 8.51 illustrates that there are individuals who appear in many matches, while others only appear a few times.



The number of yellow cards received ranged from 0 to 13, with an average of 2.98. This average suggests that individuals in this data generally received around 3 yellow cards. The standard deviation of 2.71 indicates that there is considerable variation in the number of yellow cards received, with some individuals receiving more yellow cards, while others received no yellow cards at all. Receipt of red cards is very rare in this data, with values ranging from 0 to 1. The average red card received was only 0.04, which indicates that most individuals did not receive a red card. The very low standard deviation (0.19) confirms that the occurrence of red cards is almost non-existent in this data.

Multiple linear regression test is the analysis model used in this study. The purpose of this test is to determine whether the independent and control factors have an impact on the dependent variable. It also investigates the possibility that moderating variables may have an impact on the interaction of the independent variable on the dependent. In this study, player market value (Price) is the dependent variable. While goals (Goal), assists (Assist), Number of Appearances (Appearance), yellow cards (Yellow) and red cards (Red) are the independent variables.

In this study, the classical assumptions have been tested with the results of the Independent Variable having a Tolerance Value (> 0.100) and VIF less than (< 10.00), it is concluded that the multicollinearity assumption has been met or there are no multicollinearity symptoms. Another classic assumption test is normality using the One-Sample Kolmogorov-Smirnov Test. The results obtained that the value of asymp. Sig. (2-tailed) value obtained is 0.200 (> 0.05), so it concludes that the data is normally distributed. In addition, in the heteroscedasticity test, the results show that there are no symptoms of heteroscedasticity, but there is one independent variable that has symptoms of heteroscedasticity because the data showing the majority of red card variables have similar numbers.

Based on the findings in Table 3 and the multiple regression coefficient test, we get the following equation:

$$\text{Price} = 0,131 + 0,239\text{Goal} + 0,290\text{Assist} + 0,073\text{Appearance} + 0,076\text{Yellow_car} - 0,465\text{Red_card}$$

Table 3. Summary of Hypothesis Test Results

Variable	Coefficient	t-Statistic	Prob	
(Constant)	0,131	0,358	0,361	
Goal	0,239	1,781	0,041	**
Assist	0,290	2,683	0,005	***
Appearance	0,073	3,757	0,000	***
Yellow_Card	0,076	1,280	0,103	
Red_Card	-0,465	-0,649	0,260	
Adj R Square	0,568			

Notes: Significance level: (***) significance level 0.01, (**) significance level 0.05, (*) significance level 0.1

Source: Data processed by the authorSource: Processed by the author, 2024

Based on Table 3, the regression model presented illustrates the relationship between Price (as the dependent variable) and a number of independent variables, namely Goals, Assists, Appearances, Yellow Cards, and Red Cards. Each coefficient indicates the amount of influence of the independent variables on Price, while the t-statistic and probability (Prob.) are used to test the statistical significance of each coefficient. Based on table 3, the Adj R Square value is 0.568 which can be interpreted that the independent variables in this study can describe 56.8%



to test the dependent variable, while 43.2% is explained by other variables not used in this study.

Table 3 shows that the Goals variable has a coefficient of 0.239 which states that every one unit increase in the number of goals will increase the price by 0.239 units. The prob value. of the goal variable is 0.041, which is smaller than 0.05. This indicates that goals have a significant influence on the Market Price of the players. Players who can score goals have a direct impact on the outcome of the match, which contributes to the team winning. Clubs that need wins to improve their performance in the competition will value players with significant goal contributions more. In addition, midfielders who are able to score goals, even though their main role is to organize the game, show flexibility and higher quality.

In line with signaling theory, by scoring goals they are perceived as more complete and have greater appeal in the player market. In the soccer market, player prices are often influenced by perception and image. Players who successfully score goals, especially in crucial matches, are often seen as players with higher value by observers and big clubs. In the perspective of Human Resource Accounting theory, goals scored by a player not only serve as a technical contribution on the field, but also as an asset that has a high economic value. Players who are able to score goals consistently increase their reputation and popularity, which in turn will have an impact on increasing the player's market value. Therefore, goals not only provide direct benefits in the context of a match, but also contribute to an increase in market value that can be calculated within the framework of the HRA theory. The results obtained show that the more goals scored by a professional soccer player can increase their selling price (Zulianto et al., 2022). However, this contradicts research (Adiwiyan & Harymawan, 2021) which found that goals do not have a significant effect on player market value.

Table 3 shows that the assist variable has a coefficient of 0.290 and a prob. value of 0.005. This coefficient means that each additional one assist will increase the player price by 0.290 units. Based on table 3 the prob. value of 0.005 is much smaller than 0.05, which indicates that Assist has a very significant effect on Price. Assist has a very significant effect on Price. Players who provide more assists tend to have higher prices. Players who have the ability to create chances and provide assists have a higher value because they serve as a link between the midfield and the front line. This shows quality in building attacks and contributes directly to goals, even if they don't score directly.

According to signal theory, assists are positive signals that indicate a player's technical ability. Players who provide many assists signal that they have good technical skills and game vision. This signal makes the club feel that the player is more valuable because of his ability to support the attack. Clubs are more likely to perceive players who can provide a lot of assists as players who have game vision, creativity, and the ability to control the flow of the game. The market price of a player is often a reflection of how clubs value the player. Players who provide a lot of assists are considered to be more valuable because they have a direct impact on the team's performance. In the context of the HRA theory, these assist contributions are seen as part of the "added value" that players provide to the team. Players who have the ability to create assists not only play a role in the technical aspects of the game, but also play a role in increasing the overall assets of the organization, both in terms of achievements and financial benefits. Therefore, assist contribution is an important factor that influences the assessment of a player's market value in the transfer market. This finding is in line with research (Adiwiyan & Harymawan, 2021) which found that assists have a significant effect on player market value. Meanwhile, this finding contradicts (Zulianto et al., 2022) that assists have no effect on the market value of football players in Indonesia.

Table 3 also shows that the appearance variable has a coefficient of 0.073. This can explain that every additional one appearance will increase the price of the player by 0.073 units.



The prob. value is 0.000, much smaller than 0.05, which means that appearance has a significant effect on price. This shows that appearance has a very significant effect on price. Players who appear more often on the field tend to have higher prices. the number of appearances is often interpreted as a direct indicator of the quality and consistency of a player. Players who are often played in official matches are considered to be of higher quality than players who rarely appear. These appearances can be seen as a signal indicating that a player has good technical ability, optimal physical fitness, and enough mentality to compete at the highest level. For other clubs interested in buying players, the number of appearances is the main indicator they look at.

This is consistent with signaling theory, where more appearances can be perceived as a positive signal that reduces uncertainty about the player's quality. In the transfer market, clubs often prioritize players who are able to make long-term contributions. Therefore, even though a player has high individual skills, if he rarely performs, the player's market price is likely to be lower. Human Resource Accounting (HRA) theory explains that human resource assets, in this case football players, can be measured and evaluated based on their contribution to organizational performance, which in this context is a football club. One way to measure a player's contribution is to look at the number of appearances he has made, because appearances on the field represent the player's technical, physical and mental abilities that contribute directly to the results achieved by the team. Players who have a high appearance record are considered more experienced and able to face the pressures and challenges of increasingly fierce competition. This experience, reflected in the number of appearances, can indicate to interested parties that the player has a more stable and reliable quality in the long run. Therefore, even though a player has high individual skills, if he rarely performs, the player's market price tends to be lower. These results are in line with (Müller et al., 2017) that playing minutes have a positive effect on the market value of a football player.

Based on Table 3, the yellow card variable has a coefficient value of 0.076 This coefficient indicates that each additional yellow card will increase the price by 0.076 units, although the effect is small. The prob value owned by the yellow card variable shows a number of 0.103 greater than 0.05, which indicates that the Yellow Card has no significant effect on Price. Yellow Card has no significant effect on Price. This variable does not make an important enough contribution to the price of the player. Midfielders have a very strategic role in football games. They are often involved in various aspects of the match, including ball possession, pass distribution, and defense. To do this job, midfielders often have to engage in physical contact or even commit fouls to stop the opponent's attack. In this context, the yellow cards received could be considered a consequence of their role in the team, rather than an indicator of their overall quality. Midfielders, who are often involved in physical duels, could potentially receive yellow cards more often, but this does not mean they are of lower quality compared to players who rarely receive yellow cards.

Although many yellow cards can create a negative impression of a player's discipline, professional clubs are more likely to assess a player's long-term potential rather than momentary behavior. Therefore, although yellow cards can tarnish a player's image, the impact on a player's market value is not as strong as one might think, provided that the player can continue to demonstrate his quality and contribution on the pitch. This research supports the view that a player's human capital, which is more related to his technical ability, mentality, and potential for long-term growth, is much more influential on market value than the number of yellow cards he receives. This is not in line with (Adiwiyana & Harymawan, 2021) which states that yellow cards have a significant effect on the market value of soccer players.

The same thing is shown in table 3 that the Red Card variable has a coefficient of - 0.465. This negative coefficient indicates that each receipt of one red card will reduce the player price by 0.465 units. The prob value of the red card variable of 0.260 is greater than 0.05, which



indicates that the Red Card has no significant effect on the player's market price. Red Card has no significant effect on Price. Receipt of a red card does not have a considerable impact on the player's price. In football, according to signal theory a red card can be seen as a negative signal that indicates bad behavior, lack of discipline, or a tendency to commit dangerous fouls. These signals may affect a club's view of a player and may lower their reputation in the transfer market. Players who receive a red card not only lose the opportunity to play in the ongoing match, but they can also face a ban in the next match. The absence of a key player for several matches can hurt the team, and this can be seen by other clubs as a risk that reduces the player's value. Therefore, although a player may have high technical quality, frequent red cards can reduce other clubs' confidence in the player. This is in line with the findings (Adiwiyanana & Harymawan, 2021) which state that red cards have no significant effect on the market value of football players.

CONCLUSIONS

The development of accounting science now includes the management of human resources (HR), where HR is considered a vital asset in organizations, including in the football industry. Football players, who contribute directly to the team's performance, are recognized as intangible assets with a market value reflected in their performance on the pitch. A football player's market value is influenced by factors such as goals, assists, appearances, and age. Good performance statistics, especially in midfield positions that are often involved in assists, will increase market value, although other factors such as yellow cards and red cards do not have a significant influence on a player's market value. This suggests that a player's quality and direct contribution in matches is more decisive for their value in the transfer market.

In the growing football industry in Indonesia, the management of players as non-physical assets is crucial to the survival of the club. Football clubs use various indicators such as goals, assists, and appearances to determine the price of players in the market. Although factors such as yellow cards and red cards are also taken into account, their impact on market value is relatively small. Players who have a stable and consistent performance in matches will have a higher market value, which is reflected in the club's financial statements. The limitations of this study lie in the use of data that is limited to players who play in the 2023 Indonesian League 1 season and only positioned as midfielders. Future research is expected to extend the research period to get more accurate results. The addition of other data and variables is also recommended to improve the accuracy of the test results. This research provides important insights into how HR management, especially football players, affects the financial and strategic decisions of clubs in this highly competitive industry.

REFERENCES

- Adiwiyanana, H. I., & Harymawan, I. (2021). Factors that Determine the Market Value of Professional Football Players in Indonesia. *Jurnal Dinamika Akuntansi*, 13(1).
- Barbuscak, L. (2018). What Makes a Soccer Player Expensive? Analyzing the Transfer Activity of the Richest Soccer. *Augsburg Honors Review*, 11(5).
- Belkaoui. (1995). *Akuntansi Sumber Daya Manusia*, edisi Bahasa Indonesia. PT. Prehallindo.
- Bhilawa, L., & Fahriansyah, R. (2022). THE INFLUENCE OF PERFORMANCE, AGE, AND NATIONALITY ON THE MARKET VALUE OF FOOTBALL PLAYERS. *Assets: Jurnal Akuntansi Dan Pendidikan*, 11(1), 1. <https://doi.org/10.25273/jap.v11i1.8422>
- Brigham, & Houtson. (2014). *Essentials of Financial Management*. Dasar-dasar Manajemen Keuangan. Salemba Empat.
- Firdausi, H., Sumarjaya, I. W., & Srinadi, I. G. A. M. (2024). PREDIKSI MARKET VALUE PEMAIN SEPAK BOLA DI LIMA LIGA TOP EROPA MENGGUNAKAN K-



- NEAREST NEIGHBOR. *E-Jurnal Matematika*, 13(2), 89.
<https://doi.org/10.24843/MTK.2024.v13.i02.p446>
- Kaukab, M. E. (2022). FOOTBALL PLAYER MARKET VALUE: APAKAH USIA PEMAIN BERPERAN DALAM PENENTUAN HARGA PASAR? *Jurnal Penelitian dan Pengabdian Kepada Masyarakat UNSIQ*, 9(1), 24–37.
<https://doi.org/10.32699/ppkm.v9i1.2208>
- Kesenne, S. (2015). Revenue Sharing and Absolute League Quality; Talent Investment and Talent Allocation. *Scottish Journal of Political Economy*, 62(1), 51–58.
<https://doi.org/10.1111/sjpe.12062>
- Kiefer, S. (2012). The impact of the Euro 2012 on popularity and market value of football players. *Discussion Papers of the Institute for Organisational Economics*.
- Margareta, L. M., & Malinda, O. (2022). The Effect of Performance, Age, Transfer Fee and Salary to the Market Value of Professional Players (Empirical Studies in European Leagues Football Clubs). *International Journal of Global Operations Research*, 3(3), 101–107. <https://doi.org/10.47194/ijgor.v3i3.148>
- Müller, O., Simons, A., & Weinmann, M. (2017). Beyond crowd judgments: Data-driven estimation of market value in association football. *European Journal of Operational Research*, 263(2), 611–624. <https://doi.org/10.1016/j.ejor.2017.05.005>
- Naukoko, P. A. (2014). AKUNTANSI SUMBER DAYA MANUSIA. *GOING CONCERN : JURNAL RISET AKUNTANSI*, 9(3). <https://doi.org/10.32400/gc.9.3.6123.2014>
- Pranata, E. C., & Supatmi, S. (2016). Analisis Kinerja Keuangan Pada Klub Sepak Bola (Studi Kasus Pada Arsenal, Tottenham Hotspur dan Everton). *Jurnal Ekonomi Dan Bisnis*, 17(2), 41. <https://doi.org/10.24914/jeb.v17i2.268>
- Priandana, M. S. (2021). *Metode Penelitian Kuantitatif (1st ed.)*. Pascal Books.
- Rowbottom, N. (1998). *Intangible asset accounting and accounting policy selection in the football industry*. The University of Birmingham.
- Sengupta, S. (2021). UNDERSTANDING LA LIGA: ARE MATCH PERFORMANCES AND PLAYER MARKET VALUE RELATED? *International Journal of Advanced Research*, 9(01), 12–21. <https://doi.org/10.21474/IJAR01/12274>
- Spence, M. (1978). JOB MARKET SIGNALING. In *Uncertainty in Economics* (pp. 281–306). *Elsevier*. <https://doi.org/10.1016/B978-0-12-214850-7.50025-5>
- Sugiyono. (2013). *METODE PENELITIAN KUANTITATIF, KUALITATIF DAN R & D*. ALFABETA, CV.
- Zulianto, A. N., Lutfillah, N. Q., & Purnomo, H. (2022). PENENTU MARKET VALUE PEMAIN SEPAK BOLA PROFESIONAL LIGA 1 INDONESIA DAN THAILAND. 25.