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Original Article

Player Power: Exploring the Impact of Player Metrics on the Valuation of Football Clubs

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Abstract *- The global football industry is a key economic driver, generating substantial revenue and employment opportunities worldwide, with Europe standing out as a hub of popularity and influence. Despite numerous studies on factors affecting football club value, the impact of player-related metrics has often been overlooked. This research aims to fill this gap by analyzing various player-related indicators, including the number of players, average age, average market value, talent investment, average player rating, and league performance of six elite English football clubs from the 2015/16 to 2022/23 seasons. Using a panel data approach with fixed effects regression, supported by Hausman test results, the study reveals significant relationships between specific player-related metrics and club valuation. Specifically, we find a significant positive impact on the number of players and the players' average market value, as well as a negative impact of the squad's player rating on the enterprise value of football clubs. Surprisingly, we observe no significant impact of average age, talent investment, and club league performance on the club's value. This research contributes valuable insights to the literature on football club valuation dynamics, highlighting the importance of considering player-related metrics. The findings have practical implications for stakeholders in the football industry, offering insights for strategic decision-making and resource allocation.*

Keywords *- English Premier League, Enterprise value, Fixed-Effects Regression, Football club valuation, Player metrics.*

1. Introduction

The global football industry is a pivotal contributor to the world economy, yielding significant revenue and offering employment to millions globally. Particularly prominent in Europe, football, widely regarded as the most popular sport, has a substantial following. Today, 1.5 million people play football in England [1], around 5000 of them are professional. In the 2021/22 season, Premier League clubs' revenue increased by 12% (£586m) to an all-time high of £5.5 billion [2]. This financial success underscores the industry's economic impact and its resilience and appeal on a global scale.

It would not be wrong to say that there is a lot of value attached to these football clubs. On May 30, 2022, the Todd Boehly-led consortium finalized the $5.25 billion (£4.25 billion) acquisition of Chelsea, bringing an end to Abramovich's 19-year ownership of the club. A total of $3.1 billion would go towards taking over the shares of the club from Abramovich, and the rest would be invested in the club, making it the most expensive team transaction in professional sports [3].

Sports have long been a significant part of people's lives, both directly and indirectly. Recognizing the immense popularity of sports, especially football, brands have leveraged this enthusiasm for many years. In the 20th century, a new marketing strategy emerged centered on promoting products through sports. This approach allowed numerous brands to grow and improve their visibility. Additionally, brands have capitalized on their associations with prominent athletes to maximize their impact. Amidst this, football has seen exponential growth, becoming the world's most popular sport with over 4 billion followers.

Although it is evident that football clubs are extremely valuable, determining the valuation of a company in the football industry poses considerable challenges. This is because the market expresses an "appreciation" that is unique to this sector, often despite unsatisfactory or even negative profitability. Therefore, the market values in this industry are not solely dictated by profitability [4]. Indeed, as also shown in the literature [5], the sector generally experiences negative profitability at the operating profit level. Nevertheless, the discrepancy between market value and book value is significantly positive, indicating that the market assigns a 'quid pluris' to these companies. This suggests that investors and stakeholders perceive these companies as having something extra or unique that enhances their value beyond what traditional financial valuation methods would explain.

The issue stems from intangible assets that, from an accounting perspective, do not fully capture all the elements contributing to a club's value. Research in this area has revealed a direct connection between a football club's value and its social media presence [6]. However, there is currently no systematic and straightforward method to identify and quantify the economic impact of this relationship.

The valuation of football clubs has been studied in existing literature. A study by Tiscini and Strologo (2016) seeks to empirically explain why The valuation of a football company cannot be determined only by projected financial results. It must also consider the broader benefits to shareholders, including private control benefits and socio-emotional factors. Empirical evidence shows that football clubs generally have negative economic results. However, this does not suggest that the sector is not profit-focused. Unlike most businesses, the value of football clubs is more closely related to turnover rather than income [4].

A lot of studies have also analyzed club stock prices. A study analyzed the relationship between stock returns and the results in national league matches for 13 clubs in six European countries [7]. The researchers suggested that stock prices should respond only to the unexpected components of match results, employing betting odds to differentiate between anticipated and unanticipated outcomes. They examined both unweighted results and those modified by a new metric for match significance that they developed. The findings indicated that most teams display a significant positive correlation between match results and stock performance. Another study investigating the impact of scandals on the investor's valuation of a sport found interesting results [8]. This was done through analyzing the changes in share prices of the football clubs involved in the 2006 Italian "Calciopoli" scandal. Despite speculation and high volatility, the share prices of all three clubs implicated in the scandal outperformed benchmark indices. This suggests that scandals can enhance the investor valuation of football clubs.

Research on the impact of transfer spending on the on-field performance of EPL clubs found a strong correlation between higher transfer spending and improved performance on the soccer field [9]. Finding an extremely strong RAE (relative age effect) in elite football [10], particularly among younger players. Using their methodology, the study interprets RAE as a partial effect, suggesting that players born earlier in the calendar year tend to have higher market values. Additionally, findings from another study indicate that better player performance leads to an increase in their market value [11].

An annual report released by Football Benchmark called 'The European Elite' gives a comprehensive understanding of how factors like profitability, popularity, sporting potential, sporting potential, broadcasting rights, and stadium ownership affect the 'enterprise value' (defined as the value of the club derived from the formula Equity + Net Debt - Cash and Cash Equivalents) [12].

The aggregate enterprise value (EV) of European football clubs surged to a record EUR 51.7 billion, a 40% year-on-year growth, with all top ten clubs now exceeding EUR 2 billion in EV. This growth is driven by higher recent club transaction multiples, increased revenues from international competitions, and new Union of European Football Associations (UEFA) Financial Sustainability regulations promoting financial stability [12].

Several studies have analyzed the impact of different factors on the value of football clubs. However, there are only a few analyzing the impact of only player-related metrics on the midpoint enterprise value of a football club. The absence of research on player-related factors impacting football club value underscores a critical gap.

This empirical study examines the influence of player-related metrics on the enterprise value (EV) of English Premier League football clubs. The findings seem to match some of the results of the above papers. Using a sample of six clubs from KPMG's 'The European Elite' list from 2015/16 to 2022/23, we employ panel-data analysis to explore the relationship between EV and variables such as the number of players, average player age, average market value, talent investment, average player rating, and league performance. We use fixed effects regression, verified by the Hausman test, to control for individual club differences and ensure robustness against endogeneity. The data is sourced from transfermarkt.com and whoscored.com, with EV data from KPMG reports.

2. Methodology

This empirical study aims to examine the impact of various variables on the enterprise value of English Premier League football clubs using a matrix of player-related metrics.

2.1. Sample and Research Design

This study examines a sample of six clubs from the Premier League (United Kingdom) that consistently met the criteria set by KPMG's "The European Elite" from May 2016 to May 2023, spanning eight sporting seasons. The selection of these clubs follows the shortlisting methodology employed by KPMG to identify 'elite' European football clubs. In addition to the requirement of having available annual financial statements, KPMG uses three parameters for a club to qualify for the elite group. The two primary criteria, which must both be met, are:

- The club must rank among the top 50 European teams by total operating revenues and
- The club must be in the top 50 teams according to the 5-year UEFA coefficient.

If a club does not meet one of these primary criteria, it can still be considered if:

- It ranks among the top 30 European teams by the number of social media followers (including Facebook, Twitter, Instagram, YouTube, TikTok, and Weibo).

The rationale behind these selection criteria is that the selected clubs are typically successful on the field, have a low risk of relegation, and boast a brand with substantial international recognition. Based on these established criteria, KPMG analyzed 35 clubs from 9 European countries. This study focuses on the Premier League clubs that consistently met these criteria from 2016 to 2023 [12]. The six final clubs included in the sample used for this empirical study are Manchester City, Manchester United, Chelsea, Liverpool, Arsenal, and Tottenham Hotspur.

Regression analysis explains the cause-and-effect relationship between two or more variables. Two types of variables are used: one whose value is being predicted – the outcome variable or the dependent variable, and the other(s) which is (are) used to predict the value – the predictor variable or the independent variable. In this study, regression analysis is used to understand the impact of player-specific factors on the enterprise value of elite English football clubs. This study employs a panel-data analysis that merges time series and cross-sectional data to differentiate clubs using individual constants. Utilizing panel data underscores individual heterogeneity, provides a higher level of information, and facilitates the measurement and identification of effects that are not easily observed with only time series or cross-sectional analysis. When working with panel data, it is essential to decide the type of regression model. The Hausman test shows that fixed effects regression is most appropriate for this study. Most importantly, it helps remove the problem of endogeneity, which is unavoidable in such studies. The model was tested for serial correlation with the help of the Wooldridge test (0.054>0.05), multicollinearity with the help of the Variance inflation test (2.26<10), and heteroskedasticity with the help of the Modified Wald Test (0.4026 > 0.05). The model may be expressed as follows:

$$y_{it} = \alpha + v_i + \beta' x_{it} + e_{it}$$

In this model, y_{it} represents the dependent variable, x_{it} is the vector of explanatory variables for each club i (where i = 1, …, 6) in each season t (where t = 1, …, 8), β' is the vector of coefficients, and α is the constant term. According to the fixed-effects approach, v_i is a constant specific to each club i. This term is intended to capture cross-unit differences, along with e_{it}, the error term.

2.2. Variables and Hypotheses

The primary objective of the study is to measure the impact of player-related metrics on the enterprise value of English football clubs. For that purpose, six player-related variables have been considered as independent variables. All the variables included are quantitative in nature, and the data for them have been collected from various secondary sources. The variables and their data collection sources have been mentioned below:

2.2.1. Midpoint Enterprise Value (MPT_EV)

The dependent variable in this study reflects the value of the business regardless of its capital structure. The midpoint enterprise value (EV) is determined as the average of the top and bottom approaches, calculated from the sum of the market value of the owners' equity, total debt, and cash and cash equivalents. EV serves as a capital structure-neutral metric, facilitating comparisons between companies (in this case, football clubs) with different debt and equity configurations. This variable is obtained from the annual Football Benchmark report, 'The European Elite' [12]. Football Benchmark uses five pillars of value: profitability, popularity, sporting potential, broadcasting rights, and stadium ownership.

The following are the explanatory variables considered in the study:

2.2.2. Number of players (NUM)

Number of players is the total number of players in a club during a sporting season. This variable will help us find the influence of squad depth on the enterprise value of the club. Number of players was taken from www.transfermarkt.com. This variable's hypothesis proposes

H_{01}: There is no significant impact of the number of players on a club's enterprise value.
H_{a1}: There is a significant positive impact of the number of players on a club's enterprise value.

2.2.3. Average Age of Players (AVG_AGE)

The average age of players is calculated by dividing the sum of the age of all players in a club in a particular season by the total number of players in the club during that season.

$$AVG\_AGE = \frac{Sum\ of\ the\ age\ of\ all\ players\ in\ a\ club}{Number\ of\ players\ in\ a\ club}$$

This variable will help us find the influence of the age of the players on the enterprise value of the club. The requisite data for calculating this variable was collected from www.transfermarkt.com. The corresponding hypothesis for this variable is

H_{02}: There is no significant impact of average player age on a club's enterprise value.
H_{a2}: There is a significant negative impact of average player age on a club's enterprise value.

2.2.4. Average Market Value of Players (AVG_MV)

The average market value of players is calculated by dividing the sum of the market value of all players in a club in

a particular season by the total number of players in the club during that season.

$$AVG\_MV = \frac{Sum\ of\ the\ market\ value\ of\ all\ players\ in\ a\ club}{Number\ of\ players\ in\ a\ club}$$

This variable will help us find the influence of the average market value of the players on the enterprise value of the club. The average market value of players was taken from www.transfermarkt.com. The hypothesis for this variable is

H_{03}: There is no significant impact of average market value of players on a club's enterprise value.
H_{a3}: There is a significant positive impact of average market value of players on a club's enterprise value.

2.2.5. Talent Investment (T_INV)

The study uses 'transfer expenditure' as a proxy of talent investment. Talent investment can thus be defined as the amount of transfer expenditure by a club during a particular season. This variable will help us find the influence of expenditure on acquiring players on the enterprise value of the club. Data for this variable was obtained from www.transfermarkt.com. Mentioned below is the hypothesis for testing the effect of talent investment.

H_{04}: There is no significant impact of talent investment on a club's enterprise value.
H_{a4}: There is a significant positive impact of talent investment on a club's enterprise value.

2.2.6. Average Player Rating (AVG_PR)

The average player rating of a club is measured as the average of the sum of player ratings for all the games in a season.

$$AVG\_PR = \frac{Sum\ of\ the\ performance\ rating\ of\ all\ \ players\ in\ a\ club}{Number\ of\ players\ in\ a\ club}$$

This variable will help us find the effect of the player's performance in a season on the enterprise value of the club. The data for player ratings was collected from www.whoscored.com. The following hypothesis will be tested for the same.

H_{05}: There is no significant impact of average player rating on a club's enterprise value.
H_{a5}: There is a significant positive impact of average player rating on a club's enterprise value.

2.2.7. League Performance (PL_PTS)

The study uses 'English Premier League (EPL) points' as a proxy of league performance. It can thus be defined as the total number of EPL points of a club during a season. This variable will help us find the effect of the overall team performance in a season on the enterprise value of the club. The following hypothesis will be tested for the same.

H_{06}: There is no significant impact of league performance on a club's enterprise value.
H_{a6}: There is a significant positive impact of league performance on a club's enterprise value.

3. Results and Discussion

In this section, we explore phrases pertinent to the results and discussion sections, including findings, limitations, arguments, and comparisons to other studies.

Descriptive statistics summarize the data and are the numerical representation of the entire data being used for the study. Four major parameters are covered under the purview of descriptive statistics. These are the average mean, standard deviation, and minimum and maximum values of the variables under the study. The descriptive information for all the variables will be discussed simultaneously in order to have a comparative view of the parameters of all the variables.

Table 1. Descriptive statistics of variables

Variable	Obs	Mean	SD	Min	Max
MPT_EV	48	2228.48	747.95	801.00	4073.00
NUM	48	40.50	5.42	31.00	56.00
AVG_AGE	48	24.65	0.71	23.30	26.40
AVG_MV	48	19.39	6.04	8.53	33.70
T_INV	48	149.39	95.11	0.00	611.49
AVG_PR	48	6.90	0.13	6.62	7.15
PL_PTS	48	73.38	12.93	44.00	100.00

Source: STATA Output

As seen in Table 1, The Midpoint Enterprise Value (MPT_EV) of elite football clubs averages 2228.4 million euros, with a wide range from 801.00 to 4073.00 million euros and a standard deviation of 747.95 million euros. Clubs typically have around 40 players (mean = 40.50, SD = 5.42), with squad sizes varying from 31 to 56. The average player age is 24.65 years (SD = 0.71), indicating a preference for youth. Player market values average 19.39 million euros (SD = 6.04), with a range of 8.53 to 33.70 million euros.

Talent investment averages 149.39 million euros (SD = 95.11), showing wide spending disparities, from nothing to 611.49 million euros in a season. Player performance ratings average 6.90 (SD = 0.13), with minimal variation. Clubs' league points average 73.38 per season (SD = 12.93), ranging from 44 to 100.

Table 2. Summary Statistics of the Mean of Study Variables

Year	MPT_ EV	NUM	AVG_ AGE	AVG_ MV	T_ INV	AVG_ PR	PL_ PTS
2023	3329.17	40.00	24.85	22.88	252.73	6.76	69.83
2022	2266.17	43.50	24.30	18.91	124.87	6.90	76.17
2021	2023.83	40.00	24.73	21.00	130.83	6.84	69.83
2020	2457.17	40.50	24.25	20.39	128.89	6.86	71.17
2019	2279.33	41.83	25.03	23.68	104.57	6.90	79.00
2018	2024.67	37.83	25.05	23.22	203.98	6.99	77.67
2017	1828.33	40.67	24.73	13.59	135.08	7.01	79.50
2016	1619.17	39.67	24.23	11.45	114.21	6.95	63.83

Source: Author-Compiled

Table 2 analyzes the average of each variable for each year. The value of the clubs (MPT_EV) can be seen to increase year on year, showing the growing value of football. The only decline during 2021 can be linked to the impact of COVID-19 [13]. Broadcasting and matchday income were impacted to the greatest extent by the pandemic. The impact of the pandemic is apparent in clubs' profitability as well.

The exponential increase of 2023 can be attributed to the post-COVID resurgence, characterized by the gradual easing of restrictions, the resumption of matches with spectator attendance, and the revitalization of broadcasting and matchday revenue streams.

Remaining stable throughout the years, the number of players (NUM) and Average Age (AVG_AGE) did not increase or decrease and remained fairly constant. This shows that clubs try to achieve a similar squad depth with younger players, which has not changed over the years.

The talent investment (T_INV) by clubs has remained fairly stable except for the years 2018 and 2023. The Neymar transfer saga can explain the 2018 exponential increase. In August 2017, PSG signed Neymar for a €222 million record-breaking fee. Neymar's sale single-handedly raised everyone else's valuation in just a year [14]. Despite inflation, after 2018, the player's value decreased, on average, showing the market coming back to normal.

An exponential increase in 2023 can be due to the post-COVID inflow of revenue and the clubs coming back to financial stability. These spikes can also be attributed to clubs' panic buying.

Transfer expenditure has a domino effect as seeing one club spend a lot in a season can also make other clubs increase transfer expenditure to match the sporting performance, increasing the average talent investment by a lot.

Table 3. Summary Statistics of the Mean of Clubs

	Manchester City	Liverpool	Chelsea	Manchester United	Tottenham Hotspur	Arsenal
MPT_ EV	2443.88	2209.5	2038.13	3160.00	1655.50	1863.88
NUM	36.75	42.88	43.88	41.25	36.63	41.63
AVG_ AGE	25.13	24.28	24.86	24.81	24.48	24.34
AVG_ MV	25.82	19.29	19.38	17.50	18.90	15.46
T_ INV	182.28	110.75	214.41	166.00	101.29	121.64
AVG_ PR	7.04	6.93	6.87	6.84	6.88	6.84
PL_ PTS	86.38	79.38	67.00	69.38	69.50	68.63

Source: Author-compiled

Table 4. Fixed Effects Regression for the Impact of Player-related Factors on Enterprise Value of Football Clubs (N=6)

Variable	β	SE	t	p
NUM	34.109	18.375	1.86	0.072*
AVG_AGE	115.659	122.519	0.94	0.351
AVG_MV	38.84	20.214	1.92	0.063*
T_INV	.566	.888	0.64	0.528
AVG_PR	-2463.619	1033.015	-2.38	0.022**
PL_PTS	7.849	11.822	0.66	0.511
Constant	13581.79	7350.473	1.85	0.073*
R-squared		0.461	Obs	48
F-test		5.128	Prob>F	0.000

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

This table scrutinizes the average of each variable for every club. Despite Manchester United's on-field performance being the lowest, their average Enterprise Value remains the highest. This phenomenon underscores the profound influence of the club's rich history and immense popularity on its financial standing, highlighting the enduring impact of legacy and fan base dynamics in shaping a football club's financial trajectory. Having one of the lowest squad depths (NUM) on average, Manchester City had the most sporting success and best performance, as seen by average player performance (AVG_PR) and league performance (PL_PTS) over recent years. This shows the decision-making ability of the club, creating a solid squad with less players. This also shows that different teams prefer a varying number of players, reflecting

different strategies. Manchester City have the most high-quality players, as seen by Average Market Value (AVG MV). This high value of players can also be attributed to sporting success, which increases the market value of players. Liverpool has the second-lowest average transfer spending but the second-highest sporting success over the years. Liverpool invests in players strategically and achieves good sporting success even with low spending.

The effect of the Average Market Value of players on enterprise value was found to be significant, with a coefficient of 38.84 and $p<0.10$. Based on these results, H_{03} is rejected, which means that there is a significant and positive effect of average market value of players on a club's enterprise value. The presence of star athletes in a sports club can significantly impact its revenue potential and valuation. Star players not only contribute to on-field success but also drive ticket sales, viewership, and merchandise revenue, as also seen in the literature [15]. This is particularly evident in the NBA, where star power has been found to be a significant factor in promoting fan interest [16]. Hence, a higher average market value can enhance the overall valuation of a sports club.
On the contrary, Literature also highlights the role of monopsony rents in the football labor market [17]. Monopsony rents in the football labor market occur when clubs, acting as dominant employers, exert significant control over player wages, often paying less than the players' market value. This allows clubs to retain more value from player contracts due to the limited competition for players' services, suggesting that the market value of players may not directly translate to club profits, hence, not impacting the enterprise value.

The effect of the number of players on enterprise value was found to be significant, with a coefficient of 34.109 and $p<0.10$. Based on these results H_{01} is rejected, which means that there is a significant and positive effect of the number of players on a club's enterprise value. The explanation for this is that having more players leads to the possible aggregation of their individual popularities and market values, which leads to increased enterprise value for the club (as popularity is a component of the calculation of MPT_EV). It also increases the profitability of the club as more players lead to higher jersey sales. As also seen in a study [18], fans' strong identification with their favorite teams is often more pronounced than their identification with individual players.

However, the relationship between a fan's favorite team and a player can impact both identifications. Football clubs, as symbols of regional identities, also play a crucial role in fan loyalty and identification [19]. These results are different from the results of some studies that found that the number of players does not significantly impact the value of a football club [20], as other factors such as financial power, team quality, league performance, and bargaining position play a more significant role.

Contrary to prior studies [21, 22], this study has found there is no significant impact of age on the club's value. This could be explained by the fact that the average age as a metric has been seen to be extremely consistent for all clubs across the entire study period (lying in the range of 23.30 to 26.40 across all years and clubs). This is contrasted by the highly dynamic enterprise values in the same study period, which can explain why there can be no mathematically conclusive relationship drawn between the two variables. This also indicates the adoption of mostly similar selection strategies by elite English football clubs, which does not show up in their diverse values.

Although research has also consistently shown that transfer spending can have a positive impact on the enterprise value of a football club, this study found no relationship between the two. The effect of Talent Investment on enterprise value was found to be non-significant. Based on these results, H_{04} is accepted, which means that there is no significant positive effect of transfer expenditure on a club's enterprise value. Transfers, even though made after numerous calculations by a club, may or may not work out. Cristiano Ronaldo's 2003 move from Lisbon to Manchester United for £12.1M was a resounding success, leading to numerous titles and his 2008 Ballon d'Or win.

Similarly, Neymar's €57.1M transfer from Santos to Barcelona in 2013 resulted in a treble win in the 2014/15 season, cementing his status as one of the best players. In contrast, Eden Hazard's €100M move from Chelsea to Real Madrid in 2019 (rising to €146M with add-ons) has been disappointing, with just one goal in the 2019/20 season and five by early 2021/22, hampered by injuries. Ousmane Dembele's €105M transfer to Barcelona in 2017 (rising to €145M with add-ons) is another cautionary tale, marred by injuries and disciplinary issues, missing 85 games from 2017 to 2021.

As seen from this, talent investment can have both a positive and a negative impact. These effects may nullify each other and mathematically cause a lack of relationship between the EV and transfer expenditure. Another reason for this might be that other things like the brand value of the player are more important for the club's value (as popularity is a component in MPT_EV), and transfers are done more with the thought of sporting potential in mind. As also seen by previous studies [23], the intangible benefits of sports teams may not be directly influenced by transfer expenditure.

The effect of average player rating on enterprise value was found to be significant, with a p-value < 0.05. Based on these results, H_{05} is rejected, which means that there is a significant and negative effect on the average player performance and a club's enterprise value. This anomalous result may be explained by the fact that Manchester United's season rating has been declining year on year, yet their

midpoint enterprise value continues to rise. The study period also weighs in on this as it considers only the time when ManU started losing, without any effect whatsoever on its EV. As also seen in the literature [24], despite declining on-field performance, Manchester United's enterprise value has continued to increase, driven by its diversified revenue streams. There is a phantom relationship between the club and its fanbase despite the declining performance.

The hope of the fans is also renewed each year, with a new coach coming in who will not let the EV fall. There is also a lot of history and legacy attached to the club. All this is leading to higher demand for TV and broadcasting rights, jersey sales, and diversified revenue streams, particularly for this club. A study found that the substantial broadcast television income from the Premier League is a key source of external financial flows to the home region of a club [25], contributing to its economic value. This relationship is so strong that it is overpowering all the other clubs' season rating's effect on EV. This result presents a limitation of the study as we have only taken a limited sample size; one relationship may be so strong that it causes the model to present results that appear to be skewed.

The effect of League Points on enterprise value was found to be non-significant, with a coefficient of 7.849. Based on these results, H_{06} is accepted, which means that there is no significant positive effect between PL pts and a club's enterprise value. Thus, having more points in a season does not impact the enterprise value of a football club. This may be due to the fact that playing well for the season does not build into the EV, but winning the league does. This is supported by a report which argues that while EPL points indicate on-field performance, a sports club's enterprise value is primarily shaped by financial metrics, market value, and overall business operations [26]. Factors such as financial stability, revenue generation, brand value, and external investments outweigh the impact of EPL points in determining enterprise value. A study further supported this [27], demonstrating that a club's final league position, not merely points, can enhance its economic value. Research also indicates that a football club's league points can indeed enhance its enterprise value.

4. Conclusion

This study aimed to find the relationship between player-related metrics and the valuation of a football club. The research revealed several significant insights into the factors influencing the Enterprise Value (EV) of football clubs. Notably, the number of players and their average market value emerged as key drivers, while player performance unexpectedly showed a negative effect on EVs. These findings are crucial for football club owners, managers, and investors who seek to understand the financial dynamics shaping club valuations. Knowing that the number and value of players significantly contribute to EV underscores the importance of strategic player acquisitions and team management in enhancing the club's financial health. Conversely, the unexpected negative impact of season ratings suggests that off-field revenue streams and brand equity may outweigh on-field performance in determining club value. The non-significant effects of average player age and transfer expenditure indicate that clubs doing talent investment will have no impact on their EV. League points were also found to be non-significant, emphasizing that overall business operations and financial stability are more critical to a club's value than seasonal performance alone. Understanding these dynamics can guide resource allocation and marketing strategies to maximize club valuation. The study acknowledges limitations such as the sample size and the specific timeframe analyzed, which may not capture long-term trends or broader market variations. Additionally, while certain variables like transfer expenditure did not show a direct correlation with EV in this study, external factors such as media influence and club legacy could potentially influence these relationships differently over time. Future research could explore these complexities further and incorporate different leagues and regions to provide a more comprehensive understanding of football club valuation dynamics.

In conclusion, this research contributes valuable insights into the multifaceted factors influencing football club enterprise value, offering actionable knowledge for stakeholders navigating the intersection of sports management and financial strategy.

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