# Relation of Sport Success and Economic Results in the English Premier League

**David Procházka[1]**

[1] Prague University of Economics and Business
Faculty of Finance and Accounting, Department of Financial Accounting and Auditing
Nam. W. Churchilla 4, Praha 130 67, Czech Republic
E-mail: prochazd@vse.cz
ORCID: 0000-0003-4340-8770

***Abstract:*** *The paper focuses on the relation between the sport results and economic stability of professional football clubs. In particular, we relate the final position in the league table with selected financial characteristics (revenue, profitability, and indebtedness) as proxies for the economic strength of the clubs and long-term sustainability of their business model. Data sample consists of 21 clubs playing for at least three seasons in the English Premier League (EPL) in the period 2011-2017. The analysis confirms sport supremacy of TOP 6 clubs as well as their economic dominance. Even repeated losses by TOP 6 do not undermine their economic stability. Referring to aggregate data and overall positive developments in economy of EPL, the UEFA Financial Fair Play Regulations have contributed to a better financial sustainability of English club football. On the other hand, based on individual relations it seems that the FFP Regulations do not constitute an effective framework for competitive balance, as the traditional clubs benefit from the more advantageous starting position.*

***Keywords:*** *football; profitability; indebtedness;Premier League*

*JEL codes: Z230; Z280; M41*

## 1 Introduction

The Union Européenne de Football Association (UEFA) regulates the participation of football clubs in its competitions through the Club Licensing and Financial Fair Play (FFP) Regulations. Regulation’s objectives can be divided into two broad areas: sport (infrastructure) criteria and financial criteria. Regarding the financial objectives of the FFP Regulation, the UEFA aims are to improve the economic and financial capability of the clubs, increasing their transparency and credibility & to place the necessary importance on the protection of creditors and to ensure that clubs settle their liabilities with employees, social/tax authorities and other clubs punctually & to introduce more discipline and rationality in club football finances & to encourage clubs to operate on the basis of their own revenues & to encourage responsible spending for the long-term benefit of football & to protect the long-term viability and sustainability of European club football.

This paper focuses on some of the financial criteria. In particular, we examine the relation between the sport results and economic stability of the clubs on an example of the English Premier League (EPL). The EPL has been selected as a top European league in terms of the financial strength. One would expect that English clubs do not face to severe economic troubles and financial sustainable model required by UEFA can be followed more easily than in other leagues not benefiting from strong broadcasting, matchday and other sponsorship revenue. However as indicated by previous research, quest for sport success is commonly accompanied with limitless spending (Sánchez et al., 2019) and as football clubs face to less strict budgetary constraints (Andreff, 2018), severe financial problems are a widespread phenomenon present in European club football (Solberg & Haugen, 2010).

The FFP Regulation sets therefore several financial criteria which are expected to moderate the clubs' behaviour to running a long-term sustainable economic model under which costs do not exceed revenue (and generation of revenue is as much as possible under the control of clubs). On the other hand, prioritising the financial viability can distort competitive balance which is in the heart of any sport activity. The empirical research brings mixed outcomes with majority studies indicating the deterioration in competitive balance after introducing the FFP rules (Freestone & Manoli, 2017; Plumley, Ramchandani & Wilson, 2019; Birkhäuser, Kaserer & Urban 2019). Consequently, the economic superiority of traditional clubs is further increased and the FFP Regulation contributes to maintaining status quo as it restricts new clubs (or clubs with new owners) to compete by significantly increasing spending (even if the financing is secured by the owners). It can be evidenced a "circle of success", as the traditional clubs benefited from their strong position in the beginning of the regulation (better starting position) leading to better sport results and consequently to higher revenue, which enables higher future spending and thus better results (Peeters & Szymanski, 2014).

## 2 Methodology and Data

The empirical data will relate the sport results (as indicated by the final position in the league table) and selected financial characteristics. In particular, league position is matched against a) financial strength of a club measured by revenue; b) profitability of a club measured by Return on Assets; and c) indebtedness of a club measured as a ratio between liability and total assets. Data sample consists of 21 clubs, competing in the English Premier League over the period 2011-2017 at least in three seasons. 12 clubs have participated in all 6 six seasons covered. Financial data are extracted from publicly available financial statements.

Regarding the methodology, the economic situation of the EPL is assessed by analysing aggregate data about revenue, profitability and financial (in)stability. Secondly, the individual characteristics will be visualised by relating the sport results against corresponding financial features. In order to eliminate the effect of size all data is normalised.

## 3 Results and Discussion

Empirical data reveal that the league on the whole is economically sustainable in the long run, evidenced, e.g., by the increase in average equity from 37 mil. GBP to 110 mil. GBP (see Table 1). Despite improved overall situation and better results compared to other leagues (Franck, 2018), substantial differences among clubs persists as negative equity was reported in 33% of annual reports. In addition, five clubs (Fulham, Hull City, Stoke City, Sunderland, West Ham United) have reported negative equity for all six seasons investigated, despite revenue almost doubled over the period (from 106,079 mil GBP to 208,396 mil GBP).

**Table 1** Financial characteristics of EPL

| | Average revenue | Average profits | Clubs with loss | Average equity | Clubs with neg. equity | Average ROA |
|---|---|---|---|---|---|---|
| **2011** | 106,079 | -11,967 | 17 | 37,280 | 10 | -12,6 % |
| **2012** | 115,633 | -10,602 | 12 | 48,577 | 11 | -10,5 % |
| **2013** | 154,772 | 8,833 | 6 | 85,217 | 7 | 5,1 % |
| **2014** | 161,429 | 3,214 | 8 | 104,024 | 5 | -2,7 % |
| **2015** | 170,145 | -6,668 | 11 | 92,825 | 6 | -7,2 % |
| **2016** | 208,396 | 16,778 | 7 | 109,666 | 7 | 9,0 % |

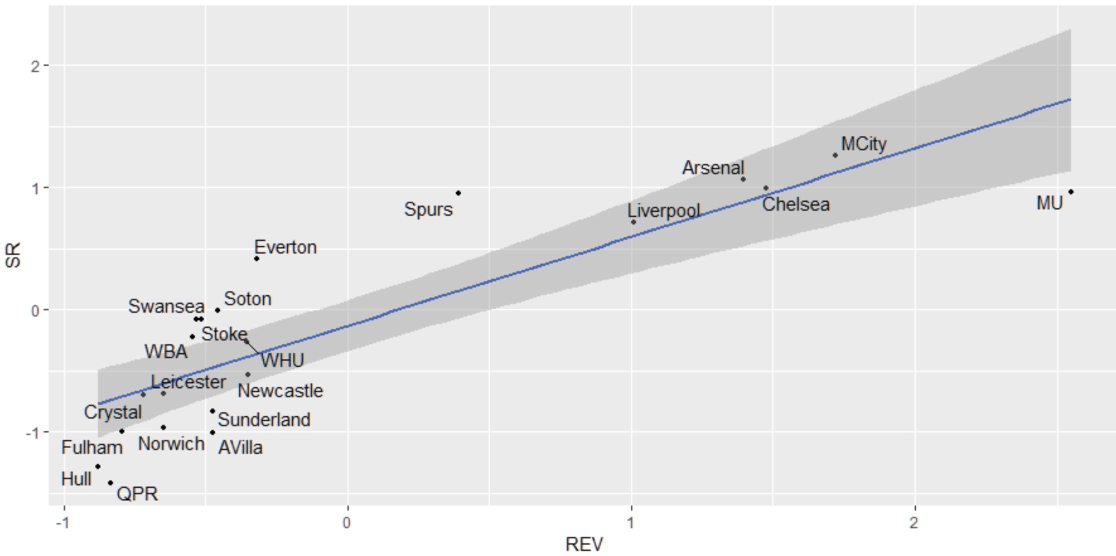
Source: own calculation based on financial statements; Revenue & Profits & Equity in th GBP

Regarding revenue, it improves mainly by increasing broadcasting revenue which is distributed among clubs at a higher level of solidarity compared to other leagues (Peeters & Szymanski, 2014). The most revenue is generated by TOP 6 clubs, namely Manchester

United (2,608 mil GBP in total over six years), Manchester City (2,065 mil GBP), Chelsea and Arsenal (both around 1,850 mil GBP), Liverpool (1,594 mil GBP) and Tottenham (1,184 mil GBP). On the bottom of the ranking is Queens Park Rangers with "only" 339 mil GBP of total revenue over investigated six years.

The superior position of TOP 6 clubs is also confirmed when the (normalised[1] amount of) revenue (measuring the economic strength of a club) is compared to the league results. As Figure 1 indicates, five out of TOP 6 clubs (except for Tottenham Spurs which is seems to form an isolated "one-club group") are placed on the right side (showing higher revenue) and on the upper part of chart (showing higher positions in the league table). Despite higher economic strength, normalised figures combined with the regression line enable to conclude that Manchester United revenue are much higher in relation to sport results. This can be interpreted as that MU is running its business model effectively being able to generate relatively more revenue than it can be expected from its results. It can be proved using Figure 1 by pointing to the average league position of MU which is similar to Chelsea, but normalised average revenue is higher by almost 40%. On the other hand, one could argue that MU is not able to transfer higher economic strength into better sport results. As average profits in the league are close to zero, revenue indicates the extent of spending on and investing into squads. Figure 1 can be use demonstrate that Tottenham Spurs occupies similar league spots on average as MU, but with considerably less revenue (and therefore with significantly lower spending) than United.

**Figure 1** Relation between revenue and sport results



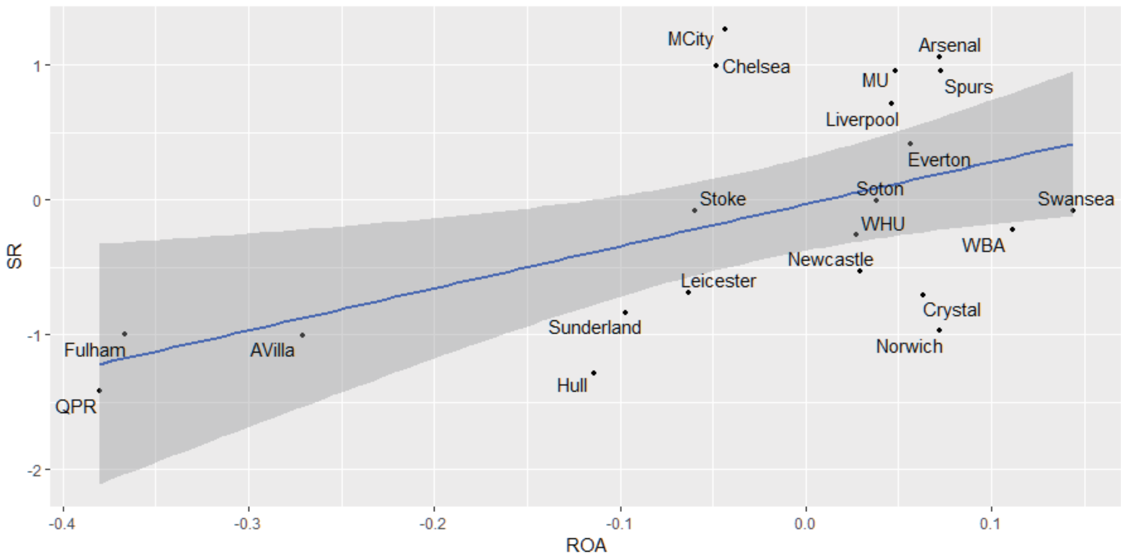

Source: own calculation; SR – sport result (normalised league placement); REV – normalised revenue

To resolve the issue whether sport success is transformed into good economic results (or vice versa), the relation between normalised league position and profitability is assessed. As there are several cases of negative equity, Return on Assets (measured as profits divided by total assets) is applied. Aggregate relation over all six years is depicted by Figure 2. 12 out of 21 clubs have average ROA over 0%, i.e. positive; nine clubs are positioned left to 0% border. The economic situation of Fulham, Queens Park Rangers and Aston Villa is not very good, and their results are weak as well. On the other hand, there are several clubs with average or below-average league placement, but with sound economy beyond. In particular, Swansea and West Bromwich Albion exhibit superior performance with reasonable sport results. Crystal Palace and Norwich City do perform positively as well, although their league position is considerably below the position

[1] The normalisation is made using Z-Score where the amount of revenue of a club in a given season is lowered by the average revenue in the year and the subtotal is divided by standard deviation.

indicated by peer clubs with comparable economic strength. The explanation can be that these clubs prefer economic part of the business over sport success. Interesting findings are also available for TOP 6 clubs. All six clubs are over regression line, meaning that their results are better compared to an average team even after controlling for differences in economic strength. However, Arsenal and Tottenham do overperform not only in terms of sport success, but and especially from the financial point of view. Their position in Figure 2 suggests that they underspend on squad relatively compared to their peers from TOP 6, but still reaching similar results. On the other hand, Manchester City and Chelsea record negative performance together with superior results, which can be interpreted as they overspend in order to secure sport success. However, such a behaviour may not be in the line with licencing rules under the FFP regulation.[2]

**Figure 2** Relation between profitability and sport results



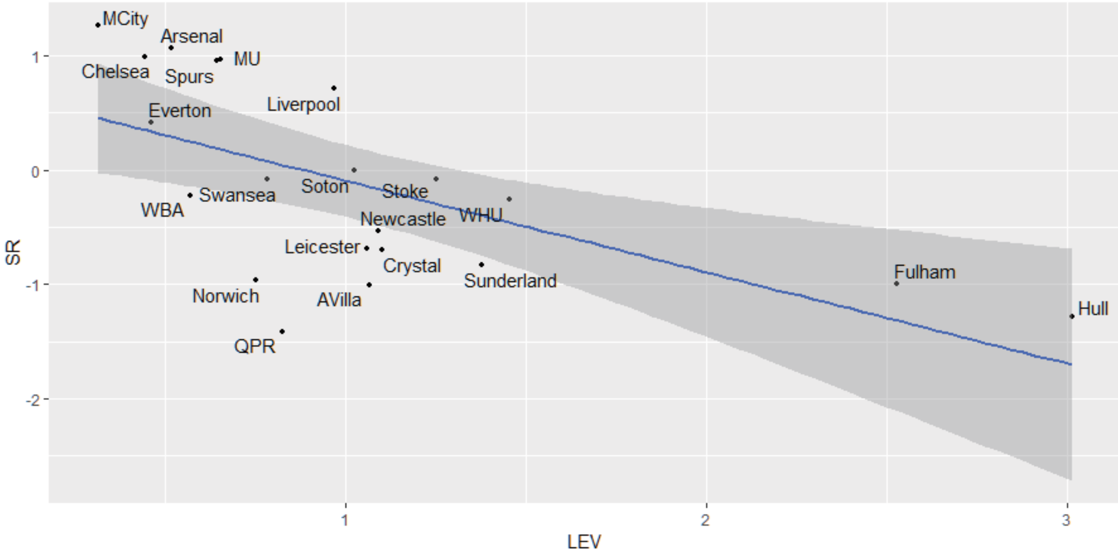

Source: own calculation; SR – sport result (normalised league placement); ROA – Return on Assets

As performance indicates the economic outcomes of a single season, it may not reveal a long-term sustainability (solvency) of clubs. For this reason, the relation of indebtedness and sport results is also assessed. Indebtedness (leverage) constitutes the boards within which clubs should be operating on a long-term basis in order to avoid financial distress and other financial troubles.

Figure 3 captures the relation between indebtedness (measured as liabilities divided by total assets). As many clubs have equity near zero, the indebtedness ration is close to the value of one. It can be concluded that for the majority of clubs (cluster in the left middle), their sport results are in balance with the long-term stability. Only Fulham and Hull City can be labelled as not being economically sound. Norwich City, Aston Villa and Queens Park Rangers have room to operate more aggressively from economic point of view in order to improve sport results. Finally, TOP 6 clubs (except for Liverpool) are in a above-average shape from both perspectives. Even Manchester City and Chelsea do not suffer any major financial troubles (in fact, they are relatively least leveraged clubs) which questions the justifiability of the FFP rules prohibiting "overspending" to avoid economic difficulties. It seems that for clubs with economically strong owners such a rule is too much restrictive and could be replaced by another one.[3]

[2] In fact, the clubs were under investigation of the UEFA for the potential breaching of the regulations.
[3] As clubs shall provide financial outlook when applying for the licence for next season, the FFP rules may include the requirement for a guarantee or for a deposit of amount of expected loss, if projected, instead of making firm restrictions on spending. Such a measure may be beneficial especially for clubs with newly incoming investors.

**Figure 3** Relation between profitability and sport results




Source: own calculation; SR – sport result (normalised league placement); LEV – indebtedness

## Conclusions

This paper focused on the relation between the sport results and economic stability of professional football clubs. Data sample consists of 21 clubs playing for at least three seasons in the English Premier League (EPL) in the period 2011-2017. The empirical data related the final position in the league table with selected financial characteristics (revenue, profitability and indebtedness) as proxies for the economic strength of the clubs and long-terms sustainability of their business model. The analysis confirms sport supremacy of TOP 6 clubs as well as their economic dominance. Even repeated losses by, e.g., Manchester City and Chelsea do not undermine their economic stability. Referring to overall positive developments in economy of EPL, the Financial Fair Play Regulations have contributed to a better financial sustainability of English club football, however, it seems that the regulations do not constitute an effective framework for competitive balance, as traditional clubs hold advantages relating to a wider variety of revenue sources.

## Acknowledgments

The paper is prepared under the Institutional Support of the Faculty of Finance and Accounting.

## References

Andreff, W. (2018). Financial and Sporting Performance in French Football Ligue 1: Influence on the Players' Market. International Journal of Financial Studies, 6(4), 91. https://doi.org/10.3390/ijfs6040091

Birkhäuser, S., Kaserer, C., & Urban, D. (2019). Did UEFA's financial fair play harm competition in European football leagues? Review of Managerial Science, 13(1), 113–145. https://doi.org/10.1007/s11846-017-0246-z

Freestone, C. J., & Manoli, A. E. (2017). Financial fair play and competitive balance in the Premier League. Sport, Business and Management: An International Journal, 7(2), 175–196. https://doi.org/10.1108/SBM-10-2016-0058

Peeters, T., & Szymanski, S. (2014). Financial fair play in European football. Economic Policy, 29(78), 343–390. https://doi.org/10.1111/1468-0327.12031

Plumley, D., Ramchandani, G. M., & Wilson, R. (2019). The unintended consequence of Financial Fair Play: An examination of competitive balance across five European football leagues. Sport, Business and Management: An International Journal, 9(2), 118–133. https://doi.org/10.1108/SBM-03-2018-0025

Sánchez, L. C., Barajas, Á., & Sánchez-Fernández, P. (2019). Sports Finance: Revenue Sources and Financial Regulations in European Football. In Sport (and) Economics (pp. 327–366). Funcas.

Solberg, H. A., & Haugen, K. K. (2010). European club football: Why enormous revenues are not enough? Sport in Society, 13(2), 329–343. https://doi.org/10.1080/17430430903523036