

The History of Investing in Football and Factors Affecting Stock Price of Listed Football Clubs

Jan Hagen*, Maria Nascimento Cunha**

Abstract

Historically, investing in stocks of football clubs has been equal to high risk, low return, and losing money. In this article, we will present the recent financial development in European football, the clubs' introduction to the stock exchange and their history as investment objects. By performing a systematic review of the literature, we will explain the typical behavior of football clubs and their shareholders, and which factors that might affect the pricing in European football stocks. In other words this paper provides a state of the art on the economic development in European football, shows its significance on financial and sporting performance, evaluates the behavior of clubs and their shareholders, and studies what affects the stock price of listed football clubs. The paper also reviews different ownership structures in nowadays football, the impact of UEFA's Financial Fair Play, and the history of investing in football clubs. Ultimately, it highlights the increased attractiveness of investing in football stocks given the recent years' growth in corresponding stock price.

Keywords: Football, History, Investment, Stocks

Introduction

Measured in TV viewers, stadium attendance, and total revenue, football is the biggest sport on the planet (Collignon, Sultan et al., 2011). In 2011, football alone had 43 percent of the world's sports market in terms of ticket, media, and sponsor revenue. This makes football interesting beyond the sportingly perspective. The industry has, during the last decades, developed into a worldwide billion euro industry with global actors and major investments.

Historically, investing in stocks of football clubs has been equal to high risk, low return, and losing money. It has been done out of sentiment or as a childhood dream to support one's club rather than out of pure financial reasons. However, the development over the last few years has shown that return on football stocks has been superior to the return of typical benchmark indexes, such as the FTSE 100¹.

STOXX's European Football Index² has over a 6-year period³ had a total return of 35.6 percent, with an annual average return of 5.2 percent. In comparison, the FTSE 100 index has had an overall return of 11.2 percent, with an average annual return equal to 1.8 percent, in the same period. In the 6 years leading up to 2013, the STOXX European Football Index had a negative return of 43.7 percent with a negative annual return of 9.1 percent.

In this article, we will present the recent financial development in European football, the clubs' introduction to the stock exchange and their history as investment objects. By performing a systematic review of the literature, we will explain the typical behavior of football clubs and their shareholders, and which factors that might affect the pricing in European football stocks.

Presentation of the Industry

In the presentation of the industry, we will seek to provide the reader with a greater understanding of the recent economic development in football, the different club owner structures, and stock listing of football clubs.

¹ A share index of the 100th highest priced companies on the London Stock Exchange.

² An index that monitor all the 22 football clubs currently listed on European stock exchanges.

³ February 4th 2013 to February 4th 2019.

* Norwegian University of Life Science.

** Instituto Universitario da Maia. Email: maria14276@gmail.com.

The Economic Development in Football

Revenue

Already in 1999, in their first annual financial report on European football, Deloitte described the economic growth in football as something “all other industries would die for” (Finch, 1999). Since then, the management of football clubs has gone through massive commercialization that has skyrocketed the clubs’ revenue level.

Looking at the numbers from Deloitte’s first Football Money League report, covering the season of 1997/1998, Europe’s 20 richest clubs had total operating revenue of 1.4 billion euros (BBC, 1999). If we look at the numbers 20 years on, Deloitte’s FML report for the 2017/2018 season shows that the 20 richest clubs had total operating revenue of 8.3 billion euros (Deloitte, 2019). This corresponds to a revenue growth equal to 593 percent.

Looking at the financial numbers for the entire European football industry, operating revenue has grown 77 percent only the last 10 years. From 2008 to 2017, total operating revenue⁴ for all European top tier clubs increased from 11.4 billion to 20.1 billion euros (UEFA, 2019).

By diving into the numbers, we can see that the largest revenue growth has come from the increase in prize money from participation in the European tournaments, such as the Champions League and Europa League, and sales of broadcasting rights. This revenue items have grown by 228 and 113 percent, respectively, during the last 10 years and will typically benefit the biggest clubs and the biggest leagues. Furthermore, sponsorship and ticket revenues have increased by 73 and 16 percent in the same time frame (UEFA, 2019).

Unexpectedly sponsorship and tickets had an absolute increase in revenue. This increase was the largest in what we traditionally categorise as the five biggest leagues⁵. The teams in the English top-flight, with total operating revenues equal to 5.3 billion euros in 2017, have increased their operating revenues by 2.9 billion euros since 2008. The clubs in the Spanish and German top divisions have increased their total operating revenues by 1.4 billion

euros each since 2008, putting them at 2.9 and 2.8 billion euros in total operating revenues.

These three leagues alone accounted for 55 percent of the total operating revenues of football Europe’s 55 top-flight divisions in 2017. In comparison, these three leagues had 48 percent of the total operating revenues of football Europe in 2008. The difference in revenue level between the biggest and the second biggest leagues has thus continued to increase over the last 10 years.

Expenses

With increased revenues in an industry that always fights for the biggest titles and the best players, the clubs’ squad investments have also expanded. Money spent by the European clubs on player transfers has increased with 213 percent from 3 billion euros during the 2008/2009 season to 6.4 billion euros in 2017/2018.

The relative purchasing power of the smaller European clubs has been halved during these years. In 2008/2009, European clubs outside the traditionally five biggest leagues were accountable for 21 percent of the global player investments. Ten seasons later, the same clubs were only responsible for ten percent of the money spent on players. Clubs in the five major leagues were responsible for 79 percent of the global player investments for the 2017/18 season, an increase from 69 percent in 2008/2009.

Growth in interest for football, and subsequent investments, have seen clubs in Asia and the Middle East increase their share of global player investments from 5 to 10 percent for the same time frame.

The European top-flight clubs’ total labour expenses have grown from 7 to 12.3 billion euros from 2008 to 2017. Of these 12.3 billion euros spent on paying players, and technical and administrative staff, the clubs in the five biggest leagues are responsible for 8.7 billion euros of these expenditures.

Although we have seen an overall increase in labour expenses, the percentage of operating income spent on wages has however remained fairly steady during this time period (62 percent in 2008 compared to 61 percent in 2017).

⁴ Operating revenue = total revenue, excluding profit on player sales and financial revenue.

⁵ The English Premier League, the Spanish La Liga, the Italian Serie A, the German Bundesliga and the French Ligue 1.

The Introduction of Financial Fair Play

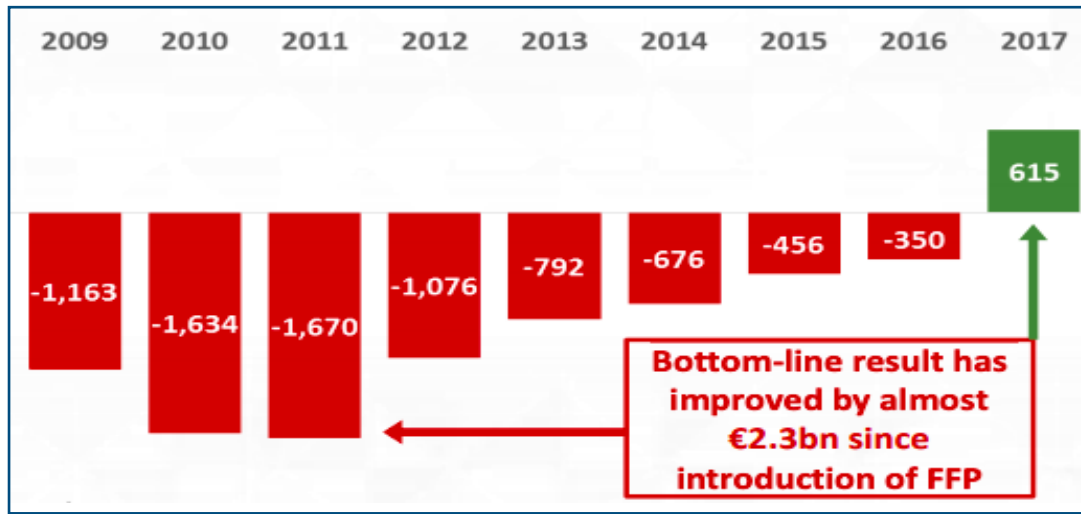


Fig. 1: The Cumulative Profit/Loss for the Year from Continuing Operations for Europe's Top-Flight Clubs, Before and After the Introduction of Financial Fair Play (UEFA, 2019)

From 2007 to 2011, Europe's top-flight clubs had an annual average operating revenue growth of 5.6 percent each year, while wage expenses alone grew on average 9.1 percent. During the same time frame, the clubs' total salary and net player transfer expenses increased from 62 to 71 percent of the clubs' operating revenue. A consequence of the teams' increased squad investments was that a majority of the clubs during these years significantly weakened their financial situation for each passing quarter. The European top-division clubs cumulative loss almost tripled from 600 million euros in 2007 to 1.7 billion euros in 2011.

In 2011, 38 percent of all top-flight football clubs in Europe operated with negative equity. 55 percent of all clubs reported a loss from continuing operations⁶, while the clubs' total debt position had risen to 18.5 billion euros.

In September 2009, as a response to the negative economic trend, the European Football Association (UEFA) decided to implement stricter rules for club licensing and Financial Fair Play regulations. The Financial Fair Play regulations were established to prevent clubs from spending more money than they actually earn and they apply to all clubs that are participating in one of UEFA's continental club tournaments.

The most important regulation of FFP is the break-even requirement, which objective is to make sure the clubs maintain a healthy balance between what UEFA has labelled football-relevant revenues and expenses. Typical football-relevant revenue includes revenue from sales of tickets and broadcasting rights, prize money and commercial income. Football-relevant expenses mainly consist of salary expenses, depreciation of the player squad and other expenses related to operating the club's first team. The purpose of FFP is to ensure that the clubs manage their football-related expenses without external funding, such as cash injections from wealthy owners or bank loans.

Investments outside of the first team, including infrastructures, such as stadium, training complex and youth academy, can be externally funded as UEFA considers this to be long-term investments made to benefit the club. Over 3 years, the club cannot have a greater loss in its football-relevant activities than 5 million euros.

UEFA will penalise clubs that do not comply with the Financial Fair Play regulations. Fines points deductions, withholding of prize money and disqualification from the European club tournaments are some of the penalties UEFA can utilise.

Although the development in the clubs' operating revenues has increased significantly over the past 10 years, 2017 was the first year that the European top-

⁶ Profit/loss from continuing operations = operating profit – net costs of finance and tax.

flight clubs operated with a cumulative profit from their continuing operations. This cumulative profit was equal to 615 million euros in 2017, massively helped by the profits provided by English (549 million euros), Spanish (168 million euros) and German (92 million euros) top-flight clubs.

As displayed by Fig. 1, the growth in the clubs' cumulative profit from their continuing operations has been positive since the implementation of Financial Fair Play ahead of the 2011/2012 season. However, upon closer examination, these numbers suggest that the biggest clubs and the major leagues are the ones making profits, while many of the smaller leagues and their teams continue to operate with losses.

Increased Differences on and Off the Pitch

One of the most influential persons in football, both as a player and manager, Johan Cruyff once said: "Why couldn't you beat a richer club? I have never seen a bag of money score a goal." Cruyff was right that the importance of what happens on the pitch is more significant than what happens off it. However, the economic development in football has increased the differences on the pitch between Europe's best and the second-best teams.

By comparing Deloitte's annual list of Europe's top 20 richest clubs and annual semi-finalists of the Champions League, we can obtain a greater understanding of the growing differences.

- From the 2003/2004 season to the 2005/2006 season, five of twelve Champions League semi-finalists were teams outside Deloitte's rich list for that respective year.
- For the following twelve seasons, only two of 52 Champions League semi-finalists were not on Deloitte's rich list that respective year. The exceptions were Monaco during their impressive 2016/17 campaign and Ajax's incredible 2018/2019 Champions League run.
- Not since the 2003/2004 season has teams outside Deloitte's rich list made it to the final of the Champions League, in a campaign where Monaco and Porto, both outside the rich list, made it to the final.

Porto and Monaco are also the two only teams outside the English, Spanish, Italian and German top division to play a Champions League final during the last 23 editions. In comparison, ten teams from five different nations outside these four major leagues reached the UCL final in the ten campaigns before this period. The tournament format was somewhat different during this time, but the effect of the economic growth in football is nevertheless pointing in a more polarising direction.

It has become increasingly harder for teams that are not playing in the major leagues or not backed by wealthy owners to assert themselves in the most distinguished club tournament in Europe.

Ownership Structure in Football

In European football, we often distinguish between three types of ownership structure: private ownership, fan ownership and publicly traded clubs.

Private Ownership

Clubs with private ownership are often owned by one or several entities that retain all or a major part of a club's shares. Private acquisitions of European football clubs have become more common in recent decades. Powerful and wealthy investors have willingly injected great amounts of money to make their club competitive, both in domestic and European competitions.

Historically, privately owned clubs have been less regulated than publicly listed clubs, especially in terms of private investments and their public reporting. UEFA has managed to neutralise some of these differences through the Financial Fair Play regulations. Private investors are no longer in a position where they can feed the clubs millions of euros to buy and pay footballers. Also, the FFP regulations, to increase transparency, force the non-traded clubs to disclose more in their annual reports than previous years.

Rohde & Breuer (2016) argue that risk associated with privately owned clubs is greater than for publicly traded clubs. Privately owned clubs are financially dependent on their owners, which in many cases mean that only one or a few shareholders bear the responsibility of the club's future. This increases the chances of bankruptcy and may make it more difficult to raise external funding.

Many clubs have enjoyed the fruits of being privately owned by wealthy investors, who have backed them with close to unlimited capital. However, being owned and controlled by a private investor isn't always a fairytale. Fans of Portsmouth, QPR and Blackburn are still haunted at night by how foreign investors treated their clubs as expensive toys before leaving them in financial ruins. These three are just a few examples of clubs where titles and glory were the ultimate goal but were relegation and financial problems became a reality thanks to careless decisions and little to no football knowledge in the boardroom.

Many private football club investors have also been accused of using the clubs to increase own social status or to divert attention away from external factors. Abu Dhabi United Group, owned by Sheikh Mansour bin Zayed Al Nahyan, is among those who have received a lot of criticism from Human Rights Watch for their presence in football. Sheikh Mansour is the deputy prime minister of the United Arab Emirates and half-brother of the country's president Khalifa bin Zayed Al Nahyan. Manchester City is criticized for being used to market and overshadow a regime accused of multiple human rights violations, including child slavery, torture, blackmail and general oppression of its inhabitants (McGeehan, 2018).

Fan and Member Ownership

In Germany, all the clubs in the country's top two divisions are under fan ownership through the law, often referred to as the 50 + 1 rule. The club and its members must have

majority control over the votes (at least 50 percent plus one vote) to get club license and to compete in the German top divisions. This is to ensure that the fans retain control and to protect the club from external investors.

In Spain, Barcelona and Real Madrid are member-owned clubs. Payment of an annual membership fee gives supporters the right to vote at the clubs' board meetings and general assemblies.

The Introduction of Football Clubs on the Stock Market

In the pursuit of external capital, several European clubs decided to get stock listed in the time period between 1983 and 1999 (Cooper & McHattie, 1997). Cheffins (1999) argued that the stock listing of football clubs was based either on a short-term or long-term mindset. The clubs whose purpose were to raise capital for player purchases sought a short-term effect of the initial public offering (IPO). Other clubs were motivated by increased capital to improve infrastructure. These sought a more long-term effect through the maintenance or construction of new stadiums and/or training facilities. The aim of the IPO was to increase future profits either through increased ticket revenues or from better results on the pitch.

With Tottenham Hotspurs leading the way to the stock market in 1983, several English clubs ended up on the stock exchange. At its peak, 32 European clubs were stock listed at once (Fig. 2).

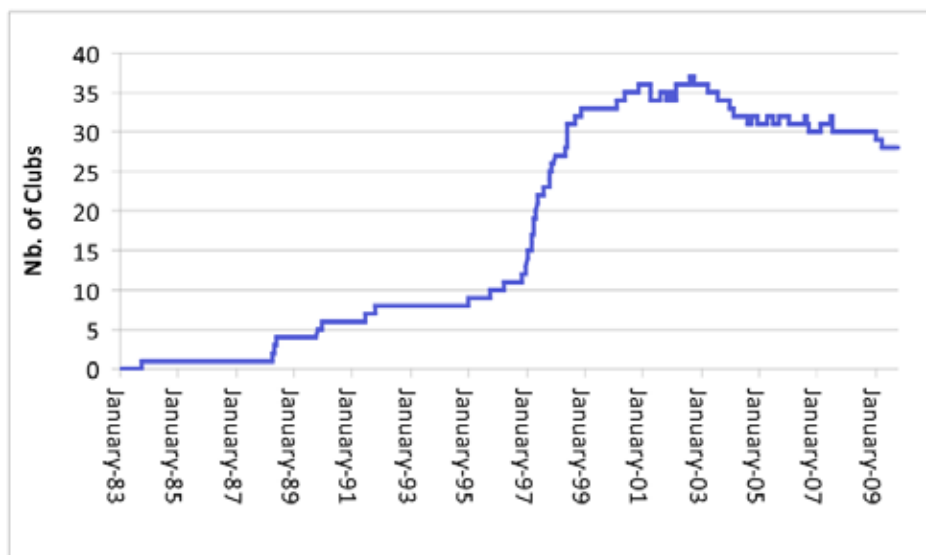


Fig. 2: The Development of the Numbers of European Stock Listed Football Clubs from 1983 to 2009 (Aglietta, Andreff et al., 2010)

As the presence of foreign investors grew in English football, club after club was taken off the stock exchange. As of September 2019, Manchester United is the only English club that is still listed. 23 European clubs from twelve different nations are currently stock listed.

Football Clubs as Investment Objects

Financial investment 101 tells us that, in general, shareholders want the company they invest in to maximize profits. Shareholders want the highest possible return on their investment. For football shareholders, the desired behavior of the club may be different. Cheffins (1999) found that many of those who bought shares in football clubs did so in affection for the club. Supporters wanted to own part of their club as a sentimental gesture or to influence the club through their voting rights. (Duque & Ferreira, 2005) later found similar reasons why football shareholders had invested in Portuguese football clubs.

Sloane (1971), as well as Szymanski & Hall (2003), argued that a majority of the clubs' shareholders had a behavior closer to win maximisation rather than profit-maximizing. For these shareholders, sporting success, in terms of titles and glory, is far more important than the club's profits. As opposed to investors in general, this suggests that many football shareholders are not expecting financial returns on their investment.

The competition for money, spectators and trophies has helped to influence stock prices and kept the historical return on investment on football shares low and the risk high. Investing in football clubs has thus been more of a supporters' childhood dream than a targeted investment for professional investors. As pointed out in the introduction, this negative trend has in recent years been reversed, and several of the clubs have had consecutive years of positive returns. It is, therefore, possible to argue that investing in football shares these days might be more attractive to non-football investors than previously.

As displayed in the introduction of this paper, the average return on the stock listed football clubs has been three times as high as the FTSE 100 index over these last 6 years. Further investigation shows that Juventus, Dortmund, Porto, Benfica and Celtic are the clubs which have had relatively high stock price growth during this period, all with a return higher than 100 percent. Juventus' stock price has increased by 483 percent during this period (as

of September 2019). The positive trend on the return of stock listed football clubs was already highlighted by Finansavisen in 2018. The numbers presented for 2017 showed a combined average weighted annual return of 51 percent for all European football clubs listed on the stock exchange. Juventus topped Finansavisen's list with a return of 157 percent this year (Pedersen-Bjergaard, 2018).

The attractiveness of football was something the Government Pension Fund of Norway⁷ spotted already in 2015. Since then the fund has invested close to 14 million euros in Juventus and Dortmund, meaning the Norwegian government curiously enough hold 0.52 and 1.04 percent ownership, respectively, in the two clubs.

Literature Review

Profit and Win Maximizing Behavior

Historically, we distinguish between profit-maximizing and win-maximizing behavior for professional sports teams and their shareholders (Garcia-del-Barrio & Szymanski, 2009).

Club Behavior

Késenne (2014) argues that most North American sports teams have a profit-maximizing behavior. The theory is based on the fact that a player investment not only increases the club's costs but also its revenues. To maximise profits, the club will sign talents up to the point where the player's marginal revenue equals the player's marginal cost to the club. The player's transfer and salary costs should, therefore, be less or equal to the revenue he brings to the club. The goal of profit-maximising clubs is therefore to recruit players who maximise the club's annual profit, not its winning chances (Clopton, 2013). However, few empirical studies have managed to confirm or disprove the hypothesis of profit-maximising sports teams (Késenne, 2014).

Clubs with win-maximizing behaviour aim to maximise the number of wins rather than generate profits. This theory is based on the fact that the most effective way to

⁷ Often referred to as the Norwegian Oil Fund, the largest sovereign wealth fund in the world, owned by the Norwegian government, whose purpose is to invest the surplus generated by the Norwegian petroleum sector.

maximise the club's winning chances is to maximise the quality of the club's assets, mainly the players (Clopton, 2013). There has previously been a consensus that such a behavior largely drives European football clubs. An empirical study conducted by Garcia-del-Barrio & Szymanski (2009) concludes that English and Spanish clubs are win-maximizing rather than profit-maximising. By looking at the club's best response function to rival clubs' choices and decisions over 10 years, it was found that the teams were approaching a win-maximizing behavior.

Win-maximizing clubs will spend as much money as national and international associations allow to maximise the team's winning chances. Although Clopton (2013) emphasises that clubs driven by win-maximizing behavior can operate with positive annual results, these clubs are always willing to sacrifice profits for victories. As presented in the industry presentation, the annual financial results of European football clubs are characterised by this. The win-maximizing behavior may be an explanation for why profit-maximising investors have been reluctant to get involved with stock listed football clubs in the past.

Talent Investment and Sporting Success

For clubs to be win-maximizing, there must be a correlation between investment in the club's player squad and its sporting success. Even before the turn of the millennium, Szymanski & Kuypers (1999) concluded that the English teams that spend the most money on players, both in terms of salary and net transfer costs, also experienced the most success on the field. Later studies also show the same, for both football and North American sports. Forrest & Simmons (2002) found that clubs' salary expenses are a statistically significant explanatory variable for team performance in American football, basketball, baseball and ice hockey. They found the same for English and Italian football. For German football, salary expenses as an explanatory variable for team performance were less apparent.

A regression analysis based on the English clubs league rankings from 2001 to 2006 and associated salary costs compared to the league average showed that the club's salary expenses could explain 78 percent of the club's average league rankings during the analyzed period (Brady, Bolchover et al., 2008).

Recent empirical studies show the same tendency. Rohde & Breuer (2016) found that for the 30 richest clubs in Europe, investment in the player squad have a positive effect on the team's domestic point(s)-per-game and the club's UEFA coefficient.

Effect of Financial Fair Play

One of the many consequences of the European clubs' win-maximizing behavior is that the football industry as a whole has operated at a loss for many years. As we presented earlier in this paper, in football, financial losses are closer to the rule than the exception. It has not been uncommon for clubs to report losses and/or operate with negative equity for several consecutive accounting periods. Prior to the introduction of Financial Fair Play, Insolvency was the only realistic threat the clubs faced by operating with such poor financial management. However, the risk of bankruptcy, especially of the largest clubs, is relatively slim.

Szymanski (2016) argues that football clubs, opposed to normal businesses, are community assets. Local, and sometimes national, government, fans and wealthy investors are often willing to save the clubs from bankruptcy. This means that the clubs can operate with losses and negative equity without risking the life of the club.

Financial Fair Play has been criticized for increasing differences between the best and second best clubs, on and off the field. Franck (2018) argues that the absolute operating revenues of the largest clubs have grown stronger than their slightly smaller competitors and that these powerhouses have also increased their dominance on the field. Wealthy owners can no longer help the smaller clubs financially in order to compete with the biggest clubs. Sass (2012) presented an empirical model that showed that a football club's revenue or market potential depends on its historical success. Sass therefore argues that by refusing smaller clubs to grow larger with external capital, Financial Fair Play will reduce competitiveness between the largest and second-largest clubs. The powerhouses will remain the largest clubs as the smaller clubs will not be benefiting from the positive effects of having rich and generous owners.

In the industry presentation, we also argued that the economic development in football have increased the sporting differences, but it is difficult to conclude that

Financial Fair Play in itself is behind this growth in on-pitch differences.

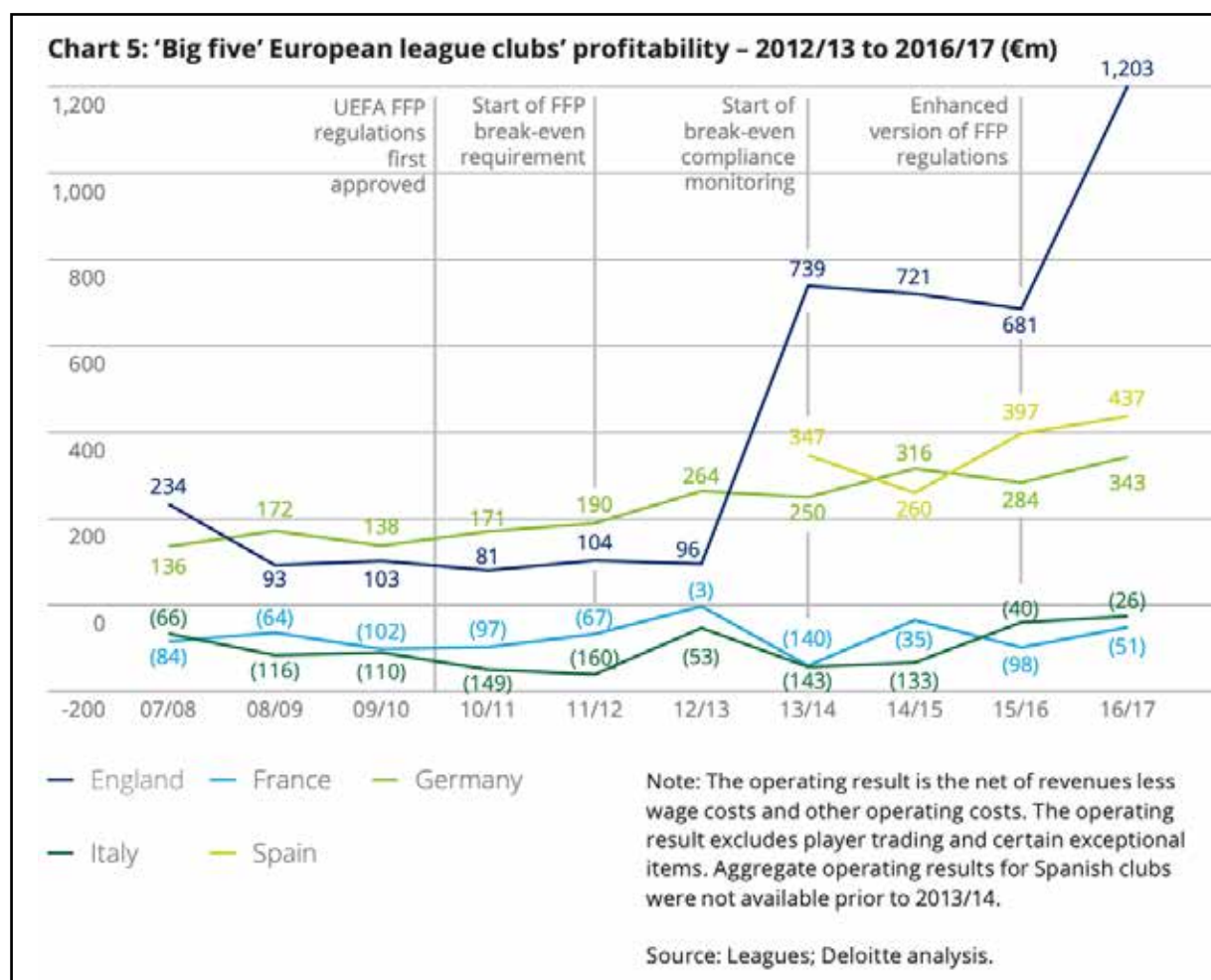


Fig. 3: Combined Development in Net Operating Results for Europe's Top Five Leagues, Before and After the Introduction of Financial Fair Play (Deloitte, 2018)

Fig. 3 shows the effect of the introduction of Financial Fair Play on the operating results of the five major leagues. The figure illustrates, for all leagues, an improvement in the clubs' overall financial performance.

The overall effect of Financial Fair Play is clearly demonstrated by the cumulative annual results of the European top division clubs. The clubs have gone from 1.7 billion in cumulative losses in 2011 to 615 million euro profit in 2017. The clubs are still win-maximizing, but can no longer spend more money than they earn through their football-relevant financial activities. The new regulations ensure the club's long-term financial stability and minimize the risk of insolvency and can thus

make the clubs more interesting for profit-maximizing investors.

Factors Affecting Stock Price of Football Clubs

Previous studies on factors affecting the stock price of football clubs have in general investigated how on-pitch performance influence the clubs' stock price. Event studies on how share prices reacts to match results have been especially common when studying this connection.

Renneboog & Vanbrabant (2000) were among the first to investigate on-pitch performance and stock price. They studied 17 British clubs over three seasons, from 1995/96

to 1997/98, and to which extent the clubs' match results during this period affected their share price. Their findings showed that victory gave a positive abnormal return close to 1 percent, while a draw and loss gave a negative abnormal losses of 0.6 and 1.4 percent, respectively. Furthermore, their study showed that the importance of the game also affected the outcome. The effect on the stock price was greater for relegation/promotion decisive matches and games in the European tournaments.

A similar study was conducted 9 years later covering the seasons from 2000/2001 to 2007/2008. The study found that the importance of a game affects the market's reaction to a victory or loss (Bell, Brooks et al., 2012), and thus backed up the findings of Renneboog & Vanbrabant (2000)

Whereas Renneboog & Vanbrabant (2000) analyzed British clubs, Benkraiem, Louhichi & Marques (2009) investigated European clubs. This study also came to the conclusion that losses and draws had a negative impact on the share price. They also found that losses at home had a greater effect on the clubs' share prices than an away game losses. However, Benkraiem, Louhichi & Marques (2009) found no significant return on the clubs' share price after a win. They explained this finding with the fact that the club's shareholders, who are largely supporters, normally expect victory. Therefore, the share price would not be greatly affected by a club's win, while the fans would react negatively after a draw or loss and thus penalize club by selling their shares. This study also took into account the clubs' trading volume. This showed abnormal trading volumes in the days before a game, with the most trades happening the day before the game.

Scholtens & Peenstra (2009) analyzed over 1200 domestic and international games for 42 European clubs. Like Renneboog & Vanbrabant, they found that the match result of the club led to abnormal returns or losses. Scholtens & Peenstra's study also showed that the effect on the share price is greater at a loss than for victories. The study also indicated that the market is more sensitive to international than domestic games.

More recently, betting odds have been used to investigate to which extent "expected" and "unexpected" match results affect the share price. Castellani, Pattitoni & Patuelli (2015) analyzed 23 listed clubs over a 3-year period from 2007 to 2009. The general findings correspond to those of

Renneboog & Vanbrabant (2000) & Scholtens & Peenstra (2009); match results, regardless of outcome, result in abnormal returns or losses on the clubs' share price. Furthermore, they also found that unexpected results lead to greater price changes than expected results.

Apart from match results, few studies have been performed on which factors affect the stock price of listed football clubs. Allouche & Soulez (2008) are among the few who have examined player transfers and the effect of clubs' financial statements on the corresponding share price. The two studied 23 English clubs over three seasons from 1998/99 to 2000/01.

Allouche & Soulez discovered no significant effect in the situations where the clubs announced positive annual results. However, in the case of negative annual results, the stock market also reacted negatively to the clubs' share price. Reported financial losses produced a negative abnormal return of 4.1 percent. Player sales gave the selling club an abnormal positive return of 0.6 percent on the following trading day. For player purchases, the effect on the buying club's share price showed an abnormal loss equal to 0.4 percent the following trading day.

Hagen & Skatter (2019) did also investigate several off-field factors and the corresponding effect on clubs' stock prices by studying 13 European clubs from seven different nations over a 10-year period from 2009 to 2019. Some of the factors they investigated were club finances, player transfers, managerial changes and financial fair play.

Their study showed that a growth in annual revenue and book value of equity had a positive effect on the club's stock price, while profit does not impact the stock value. From a sample size of over 500 player transfers, they found, by using event studies, that only player purchases with the lower transfer fees had an abnormal positive effect on the stock price of the buying clubs, while the transfers had an abnormal negative effect on the buying club's stock price. For player sales, the largest transfers gave a positive abnormal impact on the selling club's stock price. The study showed no immediate effect on the club's stock price when changing manager.

The impact of the Financial Fair Play regulations has also investigated. The findings showed that the total average return of the stock listed clubs after the implementation of Financial Fair Play was statistically significantly higher than the returns before FFP.

Conclusion

The return on football stocks has been notable over the last few years, making it potentially more interesting for professional investors to get involved. The clubs are still very much driven by a win-maximizing behavior, but thanks to the implementation of Financial Fair Play the biggest clubs are less likely to report losses and operate with negative equity, which subsequently could make it more attractive to invest in these football clubs. It has been difficult to predict which off-field factors and to what extent these affect the stock prices. There are some indications that revenue and book value of equity growth positively affect the stock price. Also, player transfers have in the past led to abnormal returns and losses to the clubs' stock values.

The best factor to explain the stock price is match results, but these are also hard to foresee as football is an unpredictable sport. It would essentially require great football knowledge and profound analysis to spot good form, trends and results to be ahead of the market.

References

- Aglietta, M., Andreff, W., & Drut, B. (2010). Floating European football clubs in the stock market. *EconomiX Working Papers 2010-24*, University of Paris Nanterre, EconomiX.
- Allouche, J., & Soulez, S. (2008). Determinants of share price variations of listed football clubs: Empirical evidence from English football leagues.
- BBC. (1999). Man Utd 'richest club in the world'. *BBC News*. Retrieved from <http://news.bbc.co.uk/2/hi/sport/football/543805.stm>
- Bell, A. R., Brooks, C., Matthews, D., & Sutcliffe, C. (2012). Over the moon or sick as a parrot? The effects of football results on a club's share price. *Taylor & Francis Journals*, 44(26), 3435-3452.
- Benkraiem, R., Louhichi, W., & Marques, P. (2009). Market reaction to sporting results: The case of European listed football clubs. *Management Decision*, 47(1), 100-109.
- Brady, C., Bolchover, D., & Sturgess, B. (2008). Managing in the talent economy: The football model for business. *California Management Review*. doi:<https://doi.org/10.2307/41166456>
- Castellani, M., Pattitoni, P., & Patuelli, R. (2015). Abnormal returns of soccer teams: Reassessing the informational value of betting odds. *Journal of Sports Economics*, 16(7), 735-759.
- Cheffins, B. R. (1999). Playing the stock market: 'Going Public' and professional sports teams. *Journal of Corporation Law*, 24, 641-680.
- Clopton, A. (2013). Profit-maximizing and win-maximizing in the national football league. *Journal of Contemporary Athletics*, 7(4).
- Collignon, H., Sultan, N., & Santander, C. (2011). The sports market: Major trends and challenges in an industry full of passion. A.T. Kearney. Retrieved from <https://www.atkearney.com/documents/10192/6f46b880-f8d1-4909-9960-cc605bb1ff34>
- Cooper, B., & McHattie, A. (1997). *How to invest in Sports Shares*. BT Batsford.
- Deloitte. (2018). Annual review of football finance 2018. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/sports-business-group/deloitte-uk-sbg-annual-review-of-football-finance-2018.PDF>
- Deloitte. (2019). Deloitte football money league 2019. Retrieved from <https://www2.deloitte.com/uk/en/pages/sports-business-group/articles/deloitte-football-money-league.html>
- Duque, J., & Ferreira, N. A. (2005). Explaining share price performance of football clubs listed on the Euronext Lisbon. Retrieved from https://www.efmaefm.org/0EFMAMEETINGS/EFMA%20ANNUAL%20MEETINGS/2005-Milan/papers/73-duque_paper.pdf
- Finch, J. (1999). Wages warning on boom at the top. *The Guardian*.
- Forrest, D., & Simmons, R. (2002). Team salaries and playing success in sports: A comparative perspective. *Sportökonomie*, 4, 221-238.
- Franck, E. (2018). European club football after "Five Treatments" with financial fair play—time for an assessment. *International Journal of Financial Studies*, 6(4).
- Garcia-del-Barrio, P., & Szymanski, S. (2009). Goal! Profit maximization versus win maximization in soccer. *Review of Industrial Organization*, 34(1), 45-68.
- Hagen, J. F., & Skatter, O. J. (2019). *Hvilke faktorer påvirker aksjeprisingen i fotball? En økonomisk tilnærming til børsnoterte fotballklubber*. (Master's degree), Norwegian University of Life Sciences. Retrieved from <https://nmbu.brage.unit.no/nmbu-xmlui/handle/11250/2624197?locale-attribute=no>.

- Késenne, S. (2014). *The economic theory of professional team sports: An analytical treatment*. E-Elgar: University of Antwerp and KU Leuven.
- McGeehan, N. (2018). De usynlige rytterne.
- Pedersen-Bjergaard, A. (2018). Fotballklær til himmels. *Finansavisen*.
- Renneboog, L. D. R., & Vanbrabant, P. (2000). *Share price reactions to sporty performances of soccer clubs listed on the London stock exchange and the AIM*. Tilburg University, Center Discussion Paper.
- Rohde, M., & Breuer, C. (2016). Europe's elite football: Financial growth, sporting success, transfer investment, and private majority investors. *International Journal of Financial Studies*, 4(2). doi:<https://doi.org/10.3390/ijfs4020012>
- Sass, M. (2012). Long-term competitive balance under UEFA financial fair play regulations.
- Scholtens, B., & Peenstra, W. (2009). Scoring on the stock exchange? The effect of football matches on stock market returns: An event study. *Applied Economics*, 41(25), 3231-3237. Taylor & Francis: Routledge.
- Sloane, P. J. (1971). The economics of professional football: The football club as a utility maximiser. *Scottish Journal of Political Economy*, 18, 121-146. doi:10.1111/j.1467-9485.1971.tb00979.x
- Szymanski, S. (2016). Stefan Szymanski in the business of football.
- Szymanski, S., & Hall, S. (2003). *Making money out of football*. The Business School, Imperial College, London.
- Szymanski, S., & Kuypers, T. (1999). *Winners and losers: The business strategy of football*. Viking.
- UEFA. (2019). The European club footballing landscape 2017. Retrieved from https://www.uefa.com/MultimediaFiles/Download/OfficialDocument/uefaorg/Clublicensing/02/59/40/27/2594027_DOWNLOAD.pdf