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Financial Stability of Football Clubs

Theoretical Background and Empirical Analysis of Selected European Clubs

Bachelor Thesis

By

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In
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0. Abstract

Professional football's economic attractiveness is enormous due to its popularity and broad anchoring in society. Consequently, the conditions for clubs have also changed. Today it is not only important to be successful in sports, but also to do business in a solid and sustainable way. Nevertheless, many clubs are still not able to do so. This is due on the one hand to a lack of experience and deficits in the management and control systems and on the other hand to the mindset to buy sporting success by all means. This frequently leads to clubs operating beyond their means and regularly posting high losses. Sustainable investments and future growth are often disregarded. That is why UEFA decided to introduce the Financial Fair play regulations in the year 2013. The rule is in place to avoid debt and to ensure healthy business operations over the long term. The analysis shows that in 2018 clubs will be more focused on using less debt to finance their activities and will be able to pay more debt than in 2012.

Keywords: Football Clubs, UEFA, Financial Fair play, Ratio analysis, Financing

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1. Introduction

The most popular sport in the world knows how to rake in money. The said money bubble does not appear to be full. In recent decades, more and more money has been flowing into European football. Clubs change their club structure - they sell their club to investors or take their club to the stock market. In other words, football clubs are no longer seen only as clubs, but as big companies with the same pressure to make a profit in order to play at the top of their leagues. Increasingly many clubs try to suggest money through financial alternatives to buy the best players. Dedicated to the motto money scores goals. This pressure has led to some clubs that many years ago were still at the top but have gone bankrupt due to the pressure they could not withstand. As a result, the UEFA decided to put an end to this. It introduced new regulations to protect the full indebtedness of European football clubs. The regulation, which officially came into force in 2013, presents new economic challenges for the clubs.

An earlier study from 2014 by Preuss et al. concluded that financial fair play does not restrict financial doping. It also concluded that clubs with higher profits do even more.[1] However, this research was analysed from an economic point of view with the help of game theory. From the financial analysis there is no evidence yet if and how much financial fair play helps clubs to be financial stable. It is a question at the end of this work whether this regulation is consistent or correct. Since financial fair play regulation should help to better think through financial decisions, it is helpful to look at the key figures and their ratios from the annual reports before and after the introduction of the rule. It is important to recognise early on whether financial fair play delivers what UEFA has promised itself. The survival of the different clubs and therefore a healthy European football.

This raises the research question for this thesis: How did the Financial Stability of Football Clubs develop after the implementation of the Financial Fair Play Regulation? This paper proposes the hypothesis that the Financial Fair Play Regulation has contributed to improving financial stability.

The focus of this work is on the influences that financial fair play regulation has had on the financial situation of European football. In addition, this study focuses on which key figures have been influenced by the regulation and what this means for European football clubs. It is also clear that this analysis does not apply to all European football clubs. As there are different football models with different legal forms, as there are in companies. This is based exclusively on listed European football clubs.

In the following section different financial sources are presented. The sections on financial sources are divided into internal and external financial sources.

In the second section it is about accounting. On the one hand it will be shown how clubs in the football world do their accounting and on the other hand what they are obliged to follow in accordance with the international accounting standards. It is about player accounts and player transactions and the related impairment test on players. Besides, this section also includes the Financial fair play rule established by UEFA and how this rule is enforced. Besides, the criticism the rule brings with it.

In the third section, the different ratios that are important for the analysis are described. In the fourth section the procedure of the analysis is outlined. This involves analysis of the asset and solvency position, liquidity analysis, profitability analysis and analysis of football shares.

In the fifth section the results are described. The presentation also includes a reflection on what the different ratios mean about the European football club. In the last section the results will be summarized.

2. Theoretical Analysis of Alternative Financing Sources

In European football, there are different ways and methods of generating money. This thesis distinguishes between internal and external financing alternatives. In this context, the internal financing possibilities include sponsor money, income from merchandising, match yield and transfer income from players. Nagy (2012) explains the concept of internal financing as the generation of money depending on the performance of the respective team. Which types of internal financing options are more appropriate depends on the country. In England, for example, they are now focusing on bigger and larger stadiums and hotels to generate more money. In Germany, besides building modern stadiums, clubs trust that if the club plays well, more fans will come to their games.

The trend in Italy is quite different. Their sponsors are vital.² External financing is explained here as money which is generated independently of the performance of the team.³ The focus of external financing is on borrowing money, selling the football club to a third party and equity capital such as the stock market. The reasons why some clubs choose this alternative is very complicated. Dr Quitzau (2017) argues that some teams are no longer sufficiently financed by internal alternatives alone. That is why there is only the alternative of working with external capital. ⁴

2.1 Internal Financing

In the following section, the four internal financing options are examined in detail. The focus here is on the respective explanations of the individual terms. It then describes how the financing option is achieved. It concludes with an explanation of the opportunities and risks associated with the respective financing options.

2.1.1 Income from Sponsoring

The type of sponsors has changed over the years. In the past, it was more local companies that acted as sponsors for the European football clubs.⁵ As the football industry continues to grow due to the high number of visitors in the stadiums and the TV coverage, more and more companies want to be a part of this success. Therefore, the companies are paying increasingly higher sums of money into their marketing.⁶ Sponsors in the case of European football are money lenders who want to use the market to advertise their own product. Thereby it does not matter if the amount of money of the sponsors is higher than the total football performance.⁷

¹ Cp. Nagy, Z. I. (2012), p.61.

² Cp. Dolles, H., & Söderman, S. (2005), p.21-22.

³ Cp. Vöpel, H. (2011), p.56.

⁴ Cp. Dr Quitzau J. (2017), p.1.

⁵ Cp. Bühler, A. W. (2006), p.32.

⁶ Cp. Bühler, M. (2014), p.35.

⁷ Cp. Schaefer, N. (2010), p.4.

According to Harald Dolles & Sten Söderman (2005), dependence on the sponsor increases with success. However, the sponsors have found out that by increasing the success and level of recognition of the respective football team, their own brand equity benefits them as a whole.8

2.1.2 Game Yield

Game yield covers two areas simultaneously in this thesis. On the one hand, the money that comes in through ticket sales and on the other hand the money that the clubs get from the corresponding leagues for TV broadcasts and prize money. Unlike the sponsoring model, the football performance is important when the goal is to generate game yield money. As studies have found out that the revenue in ticketing and broadcasting is increasing with several successes nationally and internationally.9

In order to be able to sell tickets, football clubs need the willing people or fans who want to go to the stadium for the 90 minutes of football. Researchers have found out that they are essential for two things: the sporting success of the club and also to fill the club's budget. 10

Therefore, to convince the people, the respective European football clubs need a good infrastructure as the type of fans is also divided. On the one hand, there is the kind of fans who live in the city of the club or in the radius of the club. On the other hand, there are fans from further away who usually stay overnight. According to studies, the demand for football tickets in Germany increased after the 2006 football world cup in Germany. The main reason for this was the high expenditure on infrastructure. ¹¹ However, football fans are not only important because they buy tickets, but also because of their presence in the stadium. Vöpel (2011) explains the phenomenon in such a way that the success of a team increases ticket sales and thus the interest of the sponsors by the masses in a stadium.12

Nevertheless, fans play the most important role in deciding how much a ticket should cost. The effort of increasing ticket prices, in different circumstances, is the least of all alternative ways of earning quick cash. Excessive ticket prices can also have very quick consequences. 13 This is why Dolles et al (2005) warn in their paper about clubs that do not listen to their fanbase. The clubs and the fans should cooperate in order to prevent or anticipate possible dangers. 14

⁸ Cp. Dolles, H., & Söderman, S. (2005), p.21ff.

⁹ Cp. Nagy, Z. I. (2012), p.544.

¹⁰ Cp. Dolles, H., & Söderman, S. (2005), p.22.
¹¹ Cp. Breuer, M. (2009), p.7.

¹² Cp. Vöpel, H. (2011), p.8.

¹³ Cp. Nufer, G., & Fischer, J. (2013), p.59.

¹⁴ Cp. Dolles, H., & Söderman, S. (2005), p.22.

Besides, television broadcasters decide which football match to broadcast based on the estimated number of spectators. Markus Breuer (2009) analysed in his paper the reasons when a European football match is broadcast on TV. Additionally, to the number of spectators in stadiums, the probability of winning by the smaller team and the number of star players in the participating teams are also important.¹⁵ The amount of TV money depends on the national demand for picture and sound rights in the respective football leagues. In Germany, every broadcaster has a precise specification of when and how it is allowed to show the respective football matches. Sky Sport has the right of way in Germany and is allowed to show the games live on their Pay-TV channels.¹⁶

There are different ways in which clubs can generate money from TV money. It is more or less up to the clubs how they want to distribute the money. This results in different models in the respective top 5 leagues (England, France, Germany, Italy, Spain).¹⁷ An important drawback of TV money is that clubs cannot plan in advance with this money as they can with other financial options. European clubs receive the money after the end of the season.¹⁸ Through their study, Michie et al. (2004) have found out that the money from TV rights has increased dramatically and with it the dependence for European football clubs.¹⁹ Another possibility for the clubs to acquire money through image rights is to develop their own TV program. This increases the chance of the clubs to market their TV program to the outside world, for countries which do not have the provider for the respective leagues. In this TV program, there are only pictures and sound rights of its own club. So far six clubs that already offer such a format.²⁰

2.1.3 Merchandising Income

In European football, merchandising refers to selling their own emblem and/or name to their fans. Up to 20% of the total profit is made by the football clubs from merchandising alone. ²¹ Richelieu et al. (2009) support this statement using the Olympique de Marseille example. Which uses the tactics of "think local, act global". ²² In order to earn a lot of revenue from merchandising, the European football clubs must be able to find out their own characteristics. These characteristics relate to the unique selling proposition of the club and the reasons why people support their club. ²³ This is because football fans want to show their affiliation through merchandising articles. Therefore, there is no limit to the choice of merchandising products.

¹⁵ Cp. Breuer, M. (2009), p.4.

¹⁶ Cp. Herold, N. (2013), p.15ff.

¹⁷ Cp. Andreff, W., & Bourg, J. F. (2006), p.6f.

¹⁸ Cp. Dolles, H., & Söderman, S. (2005), p.21.

¹⁹ Cp. Michie, J., & Oughton, C. (2004), p.36.

²⁰ Cp. Dolles, H., & Söderman, S. (2005), p.21.

²¹ Cp. Bühler, A. W. (2006), p.32.

²² Cp. Richelieu, A., & Desbordes, M. (2009), p.18.

²³ Cp. Blumrodt, J. (2014), p.1552.

The more products a club offers, the higher is the chance that you can make money out of it.²⁴ The English premier league is further ahead in terms of merchandising. Bühler (2006) confirms his statements with three key facts from his research.

Firstly, it was the English premier league that first adopted the American merchandising model. Means they are more experienced. Secondly, many expensive premier league clubs have strong connections to the strongest markets: the American and Asian markets. Last but not least, the English are different from the rest of Europe in their attitudes to carrying football merchandising.

Bühler (2006) points out that the English wear their club clothing not only on matchdays but all week long.²⁵ Another way to earn money through merchandising is to buy well-known players. Dolles et al. (2006) took the example from 2003 when the English national team player David Beckham transferred from Manchester United to Real Madrid. After the transfer was made, the star player flew to Asia for a week for many press appointments. According to reports, this one-week trip brought in so much money that Real Madrid was able to pay Davin Beckham's first year's salary only through this trip.²⁶

The problem is as well as with fashion, certain merchandising items are only profitable for a certain period. When this point is reached it reduces the demand of the fans, the number of sold products decreases and so does the profit. Preferences regarding fashion are in constant change, which is why Bühler (2006) claims that every club still has a chance to earn a lot of money through merchandising.²⁷

2.1.4 Transfer Revenue

A transfer describes the transfer of a player from one club to another. Payments are made when a player changes clubs before the end of its contract. The club must pay compensation to the club that has the player under contract. The compensation is also called the transfer fee.²⁸ The aim of a transfer is, on the one hand, to buy good players for less money and on the other hand to sell players for a lot of money to achieve a transfer surplus.²⁹

²⁴ Cp. Richelieu, A., & Desbordes, M. (2009), p.11&17.

²⁵ Cp. Bühler, A. W. (2006), p.38.

²⁶ Cp. Dolles, H., & Söderman, S. (2005), p.11.

²⁷ Cp. Bühler, A. W. (2006), p.39.

²⁸ Cp. Klare Regeln: Das Spieler- und Transferwesen | DFL Deutsche Fußball Liga GmbH - dfl.de ²⁹ Cp. Vöpel, H. (2011), p.35.

Football clubs choose the way of transferring players because it has been empirically proven that clubs that invest more in the team will also have higher national success.³⁰

Since the "Bosman rule" was introduced in 1995, studies show that it is easier for bigger teams to buy players from smaller clubs. The rule in force involved the removal of the obligatory transfer fee after a player's contract expired. This was due to the fact that large teams could attract players with more salary and thus outperform the smaller teams.³¹

Transfer money also offers smaller clubs the chance to develop new club philosophies, as demonstrated by Andreff et al. (2000) in their work with Nantes and Auxerre, which see themselves as professional development clubs. These clubs get talents for little money and then sell them to larger clubs for a lot of money.³² This is also due to the fact that studies have shown that transfer income can bring financial progress to a football club.³³

Nevertheless, the financial model must be critically reviewed. A business generally aims to maximize profits, while clubs focus primarily on sporting success. It is difficult to measure economically how much the purchase of a new player is beneficial to the club. Nonetheless, it is possible to trace back how these millions of euros are achieved. Some clubs do everything to have and keep the best players in their ranks. Thus, the transfer fees of 190 million or even 222 million euros have to be covered. Since Neymar Jr. switched from FC Barcelona to Paris Saint Germain in 2017 for a sum of 222 million euros, there are fears about the amount of money that will be paid for players. The press around the world has been critical of this transfer. Even from an ethical point of view the comparison was made how many nurses could be paid with the transfer sum.

³⁰ Cp. Rohde, M., & Breuer, C. (2016), p.16.

³¹ Cp. Dolles, H., & Söderman, S. (2005), p.12.

³² Cp. Andreff, W., & Staudohar, P. D. (2000), p.6.

³³ Cp. Poole, G., Fris, P., & Coriano, T. (2009), p.5.

³⁴ Cp. Transferwahnsinn im Weltfußball - Wie werden Spielertransfers finanziert? | Heimspiel Medien GmbH & Co. KG / RTL Interactive GmbH – sport.de

³⁵ Cp. "Neymar, ein Monster-Einkauf" | Der Tagesspiegel – tagesspiegel de

2.2 External Financing

After explaining the four internal financing options in detail in the above section, the next section deals with external financing sources. In this context, the external financial alternatives are again classified between the terms equity financing and debt financing.

2.2.1 Equity Financing

Equity financing is the procedure of acquiring new capital by selling shares. It is not important whether a company or in this case football clubs need to raise money quickly in a short time or whether it plans for the long term and therefore needs money. Through the sale of shares, they are selling the property in their business in exchange for money, as in the case of share financing.³⁶ A capital increase is effected by issuing new shares against contributions and is always associated with a change in the share capital figure and thus with an adjustment of the Articles of Association. Equity providers bear the risk of being satisfied last in the event of the company's insolvency.³⁷

In equity financing there are different methods of how to get money by selling shares. Tykvova´ (2018) distinguishes in her work between private equity and venture equity. Both types, private equity and venture equity, have limited maturities but are fundamentally different types of financing.³⁸ The two types of financing differ mainly between the lifetime of the company in which the money is received. Venture equity is financing for companies that are new to the business and need money to reach the point of production where they neither lose nor make a profit. In most cases this type of financing is for startups.³⁹ Venture capital organisations contribute to the realisation of these projects with high risk and potentially high return and buy shares while the companies are still in private ownership.⁴⁰

Private equity, by contrast, tends to refer to companies that are already well established. Private equity also usually leads to the stock listed company being privatized and taken off the stock markets.⁴¹ Accordingly, private equity is about companies which, as described in the work of Jung-Senssfelder (2007), are in that different buy-out phase.⁴²

³⁶ Cp. What Is Equity Financing? | Investopedia – investopedia.com

³⁷ Cp. Stein, P. (2016), p. 191.

³⁸ Cp. Tykvová, T. (2018), p. 328.

³⁹ Cp. Jung-Senssfelder, K. (2007), p. 8.

⁴⁰ Cp. Acs, Z., & Audretsch, D. (Eds.). (2006), p.183.

⁴¹ Cp. Tykvová, T. (2018). p.330f.

⁴² Cp. Jung-Senssfelder, K. (2007), p.9.

A new third form of equity financing is the so-called crowdfunding through the invention of the internet in the 90s. The World Bank expects crowdfunding to raise over 90 billion dollars by 2025. Crowdfunding, which was introduced in 2015, is a kind of call for donations through the internet. The call for donations can be versatile, whether for a machine or for a whole project. Unlike the other two types of financing, the donor may not get anything in return.⁴³

Empirically, Coleman et al. (2016) have found in their work that owners who have trust in their company always choose equity financing over debt financing.⁴⁴ It is not only the nature of the owners who are in favour of the equity financing method but also the financial situation of the banks. A study showed that an increasing number of stock listed companies are turning to equity financing because in their opinion the financial conditions of the banks are not profitable.⁴⁵

The benefit of equity financing is that as a company or a football club there is no need to pay back any money with this method. The other benefit is that with this method the business has no further charges on its bank account such as monthly interest or simple payments. Besides the advantages, there are also disadvantages of equity financing. One is the loss of control as sole owner. When deciding to use equity financing, the owner also makes a contribution to the decision-making process. The sharing of decisions for the company could also lead to more conflicts within the company. From a financial point of view, there is no monthly interest in this method, but investors still expect to receive a return from the profits the company makes.

In the following, the equity financing method is presented in the form of the football business.

2.2.1.1 Capital Increase by Private Investors

Just as with the model of borrowing money from banks or the state where the association needs money quickly to achieve its goals, so it is through the acquisition of money by investors.⁴⁸ In the 'sugar daddy' model, the money is transferred from the investor who bought the club.⁴⁹ Just as with the previous model, there are two ways of doing it. Either directly to the club or this club has to lend the money interest-free from the investor.⁵⁰

⁴³ Cp. Krupa, D., & Żołądkiewicz, A. (2017), p. 182ff.

⁴⁴ Cp. Coleman, S., Cotei, C., & Farhat, J. (2016), p. 106.

⁴⁵ Cp. Koziński, J., & Pastusiak, R. (2016), p. 79.

 $^{^{\}rm 46}$ Cp. Equity Financing vs. Debt Financing: What's the Difference? | Investopedia – investopedia.com

⁴⁷ Cp. Advantages vs. Disadvantages of Equity Financing | Business Owner Playbook - thehart-ford.com

⁴⁸ Cp. Franck, E. (2010), p.6.

⁴⁹ Cp. Franck, E. P. (2014), p.13f.

⁵⁰ Cp. Franck, E. (2010), p.5.

The money provided by the investor is used to attract talent on the transfer market.⁵¹ The advantage for the investor who has the majority advantage in the club can then determine the entire European football club.⁵²

In Schaefer's work (2010), the term club financier is divided into two terms. On the one hand, the classical investor who gives money to the football club intending to increase its wealth and on the other hand the patron. Patron inject money into the football club of its own choice without the intention of increasing its assets.⁵³

As in the case of Abramovich (owner of Chelsea F.C.), the investor takes over the entire debt of the club and the money is made available to the club by the investor without interest.⁵⁴ In addition to the football clubs from England, there are also clubs from other European countries that cultivate the model of the investor. It is not without reason the most known and used model in Europe.⁵⁵ Only in the highest German competition division, the German football Bundesliga, this is prohibited. The clubs are allowed to sell up to 50% of the club to companies or private persons, but not more. The aim is that at least 50% belongs to the football club and that every member of a football club has the right to vote. This rule is also called '50+1 rule'.⁵⁶ This regulation is intended to protect against such investors, as the investor model not only has advantages but also carries many dangerous risks for the respective football club.⁵⁷

The worst thing is that European clubs will go bankrupt as a result. According to studies, more and more European football clubs that have been financed by investors are going bankrupt. Egon Franck (2014) found out that clubs financed by investors tend to make more financial risk decisions in order to increase the value of the club. These risks, though, are becoming increasingly costly, so that the investor decides to quit, and the costs remain on the club alone.⁵⁸

⁵¹ Cp. Lang, M., Grossmann, M., & Theiler, P. (2011), p.2.

⁵² Cp. Rohde, M., & Breuer, C. (2016), p.7.

⁵³ Cp. Schaefer, N. (2010), p.3.

⁵⁴ Cp. Franck, E. P. (2014), p.13-14.

⁵⁵ Cp. Rohde, M., & Breuer, C. (2016), p.6.

⁵⁶ Cp. Franck, E. (2010), p.6.

⁵⁷ Cp. Bauers, S. B., & Hovemann, G. (2019), p. 26.

⁵⁸ Cp. Franck, E. P. (2014), p.431.

2.2.1.2 Capital Increase via the Stock Market

The British football club Tottenham Hotspurs was the first club to decide to go public. The reason for this was the growing pressure from the other British clubs.⁵⁹ The share performance of a club depends not only on its economic rating but also on its sporting performance. Thus, the share price rises when games and titles are won. It also falls in the event of losses or serious events that are not good for the club.⁶⁰ Furthermore, a study has shown that losing a football match is more cost-effective than winning. Scholtens et al.(2009) justify this by saying that the public is more aware of a lost game. In addition, it has found that shares are more profitable at the international level than at the national level when unexpected results are achieved. This is due to the fact that such football matches are more financially rewarding.⁶¹

As of January 2020, there are 13 European football clubs listed on the stock exchange (Ajax Amsterdam, AS Roma, Borussia Dortmund, Bröndby IF, Celtic Glasgow, FC Copenhagen, Futebol Club FC Porto, Juventus Turin, Machester United, OL Groupe, Società Sportiva Lazio Rome, Sporting Lisbon and SpVgg Unterhaching Football). The reason for the failure of the listing of the clubs in England is, besides the insufficient profit, the necessity to balance the interests of the investors and the owner of the club. Therefore, most clubs decided to put the club back in the hands of rich individual owners. However, the general reason for this is that it has been found that registering on the stock market and making money is a short-lived business.

The duration depends on the size of the club and its possibilities. In addition, a study found that nationally large clubs make little profit with their shares and are therefore not as interesting as smaller clubs. Through shares, small football clubs are able to raise their profile and thus make themselves better known to the public and sponsors.⁶⁵

2.2.2 Debt Financing

Debt financing is the type of financing where companies or in this case football clubs generate money through a third party. In this case the third party is an institution or individual. Unlike equity financing, the company or football club receives the amount of money immediately but has to pay it back in short or long term with interest.⁶⁶

⁵⁹ Cp. Scholtens, B., & Peenstra, W. (2009), p.3.

⁶⁰ Cp. Hasler, P. T. (2015), p.6.

⁶¹ Cp. Scholtens, B., & Peenstra, W. (2009), p.11.

⁶² Cp. Börsennotierte Fußball-Clubs | boerse.de

⁶³ Cp. Buraimo, B., Simmons, R., & Szymanski, S. (2006), p.34.

⁶⁴ Cp. Rohde, M., & Breuer, C. (2016), p.252.

⁶⁵ Cp. Kulikova, L. I., & Goshunova, A. V. (2013), p.253.

⁶⁶ Cp. What Is Debt Financing? | Investopedia – investopedia.com

Before the institution approves the debt financing, the company receiving the money must first present its financial forecasts to the institution approving the loan. In order to be able to prove that the company can refund this debt financing, with interest. ⁶⁷ Companies choose this method of financing if the payment cannot be made at the time of the payment but cannot be delayed. Also, the delay in payment results in more costs and more losses in the future. ⁶⁸ These rising costs and debts can even lead to companies not being able to pay and going bankrupt. Through the increase of these particular methods, the number of companies that go bankrupt is also increasing. ⁶⁹

Nevertheless, the method of debt financing also has advantages for the company. When borrowing money from an institution or individual, the company or football club still has full control over the decision of what to do with the money. It is only important to the borrower that the money is given back. In addition, the interest that is added to the borrowed money results in tax advantages for the company. Since the interest is not mentioned for tax purposes. In the loan agreement all details that are important for the repayment of the loan are already fixed by the company. This makes it easier for the company to plan early, unlike with equity financing. Because the company knows exactly when and how much the company has to set to the side to pay back the loan to the institution.⁷⁰

There is another difference between the bank and its shareholders on the money lender side. If the business enterprise goes bankrupt, creditors have a greater legal entitlement to the dissolved property than shareholders.⁷¹

Apart from the risk of going bankrupt as a business enterprise, there are also other disadvantages of debt financing. One of them is that not every business that needs a loan gets one straight away. The company that asks for a loan needs to have enough consistent criteria that have to be met to get a loan. Furthermore, as soon as a company or football club has received the loan, it needs to be sufficiently disciplined not to be too risky in its budgeting.

Meaning that it should always be possible to cover the debt financing. Which leads to the last important disadvantage of debt financing. The company must be aware that as soon as it takes out a loan, it puts its resources at risk.⁷²

⁶⁷ Cp. Schuldenfinanzierung Definition & Beispiel 2020 | Finanzwörterbuch – mfginvest.com

⁶⁸ Cp. Ardiyanto, F. (2020), p.55.

⁶⁹ Cp. Legesse, T. S., & Guo, H. (2020), p.108

⁷⁰ Cp. Advantages vs. Disadvantages of Debt Financing | Business Owner Playbook - thehartford.com

⁷¹ Cp. What Is Debt Financing? | Investopedia – investopedia.com

⁷² Cp. Advantages vs. Disadvantages of Debt Financing | Business Owner Playbook - thehart-ford.com

2.2.2.1 Bank Loans

There are two ways of borrowing money from the bank. Chadwick et al. (2010) distinguish in their book between direct and indirect. Directly describes the confirmation from the respective bank that the European football club may be indebted. For this purpose, the football club takes out either an overdraft facility or a loan. Clubs use this possibility to avoid possible relegation or to get players for money which is not available.⁷³

The reason why football clubs choose this path is that they miss the goal of maximizing profits through an imbalance between income and costs. Since, according to Preuss et al., they invest too much in talent, they lose instead of making a profit.⁷⁴

Indirect borrowing of money is used here in the cases of Barcelona and Real Madrid. These two Spanish associations are supported by the local government. It is impossible for these and many other Spanish clubs to go bankrupt.⁷⁵ The state supports the respective Spanish football clubs financially with tax money.⁷⁶

Borrowing money is regulated differently in each national league at European level. Clubs in the German Bundesliga are only allowed to borrow money up to a certain amount. This is handled differently in leagues such as Italy, England and Scotland. Clubs there are allowed to borrow as much money as they want.⁷⁷

2.2.2.2 Bonds

In the following work, the term bonds are divided into two categories. On the one hand it is about the promissory notes as bonds and on the other hand about fan bonds. The above-mentioned pressure to improve the infrastructure to attract more fans can be made affordable by bonds. This is hardly possible with internal financing alone. Even if statistically speaking, football clubs get increasingly more money.⁷⁸

Promissory notes as bonds are certificated securities that oblige the issuer to repay a certain amount of money and to make regular interest payments. Unlike traditional bank loans, bonds are not directed at a specific lender but on the capital market. However, the issuer is already obliged to pay by issuing a promissory note as a bond.⁷⁹

⁷³ Cp. Chadwick, S., & Hamil, S. (2010), p.142.

⁷⁴ Cp. Preuss, H., Haugen, K., & Schubert, M. (2014)

⁷⁵ Cp. Lago, U., Simmons, R., & Szymanski, S. (2006), p.8.

⁷⁶ Cp. Franck, E. P. (2014), p.9.

⁷⁷ Cp. Lago, U., Simmons, R., & Szymanski, S. (2006), p.8-9.

⁷⁸ Cp. Hasler, P. T. (2014), p.2.

⁷⁹ Cp. Dilberovic, D. (2011), p.39.

Fan bonds in Germany occur in two forms: The classic fan bond and the so-called "Mittelstandsanleihe" (described in the following as SME bond). This fan loan aims to motivate fans to donate money for their club. It is only the fan alone who is asked for something, not any companies or investors. It is difficult to predict how much the club will make through this bond methodology. Calculate the final amount based on the number of club members, average fans in the stadium and the reputation on the social-media platforms. In the past this kind of procurement of money was only carried out by two clubs that were playing in the first Bundesliga at that time. All other fundraising calls have been made in lower leagues. 80

The motivation for the fan to pay money into his club is that the person itself invests money in the future of its club. Therefore, there is no reason for the classic financial investor to pay money into this fan loan.81

In contrast to normal corporate loans, whose entire issue volume is securitized globally, a certain proportion of the issue volume of fan bonds is in the form of a certificate, the so-called association deed. This certificate usually contains club motifs in attractive colors and is usually supplied with a picture frame. This special form of fan loyalty thus also acquires an ideal emotional value that brings it close to collector's lens merchandising and sovereignty.82

In contrast to ordinary bonds, there is no rating agency for fan bonds that initially assesses the bonds according to risk. Conversely, this means that the individual must assess for themselves how risky their investment is.83

Nevertheless, many warn against being part of the fan bonds. The reason for this is that many fans are blinded by their clubs and don't know what risks fan bonds entail. So even the performance at the end of a season can determine whether the club makes a profit or a loss in the current financial year. The example of Alemannia Aachen from 2013 should also be a warning. At that time, the club had created "Tivoli Bonds" to advance the construction of the stadium. In the end the Alemannia Aachen club went bankrupt and the fans never saw their money again. Nauhauser from the Consumer advice centre Baden-Württenberg advises therefore to use exchange-traded securities or also called SME bond.84

⁸⁰ Cp. Hasler, P. T. (2014), p.15.⁸¹ Cp. Dilberovic, D. (2011), p.40f.

⁸² Cp. Bezold, T., & Lurk, T. (2016), p.68.

⁸³ Cp. Hasler, P. T. (2014), p.17.

⁸⁴ Cp. Fan-Liebe kann teuer werden | Rheinische Post - rp-online.de

In June 2012 FC Schalke 04 was the first club to go public with SME bond. The central feature of an SME bond is the assessment of the company's creditworthiness by an independent rating agency registered in the EU. The rating is intended to provide an opinion on the future ability and legal obligation of the rated company. Alos, the rating is intended to eliminate information deficits of the company towards potential investors or creditors.⁸⁵ The FC Schalke 04 was downgraded by the notified rating agency just one year later after entering the stock markets.⁸⁶ As a result of the corona pandemic, the FC Schalke 04 SME bond, which ends in 2021, has fallen from around 102% to 79%.⁸⁷

The benefit of SME bonds is that companies can be more independent of the bank, for instance. Additionally, SME Bonds offer higher volumes to apply for and lower costs. The downside is that the preparation time is longer than merely consulting a bank. In addition, the company that has chosen SME bonds is dependent on the capital market.⁸⁸

⁸⁵ Cp. Hasler, P. T., Launer, M. A., & Wilhelm, M. K. (2013), p.584.

⁸⁶ Cp. Hasler, P. T. (2014), p.30.

⁸⁷ Cp. Turbulenzen am Anleihemarkt | Anlageformen News – boerse.ARD.de

⁸⁸ Cp. Bösl, K., & Hasler, P. T. (2012), p.28f.

3. Regulatory Restrictions on Football Financing

Like everywhere else in the world, football companies have certain rules that clubs must follow. If they do not comply with these rules, there are different ways and means of sanctioning clubs or even exclusion from competitions. In the following chapters, the focus will be on what clubs have to comply with when dealing with accounting. It is about compliance with the International Financial Reporting Standards. In addition, the socalled rules of the game that football clubs must follow when dealing with league associations. This is primarily concerned with the Financial Fair play regulations.

3.1 International Financial Reporting Standards in the Football Industry

According to UEFA, European football clubs are free to choose the form of accounting system they use as long as it is accepted by the countries concerned. However, as the International Accounting standards are most widely used, almost all football clubs in Europe are obliged to use them.89

Further figures prove once again why European football clubs are not just football clubs but rather large companies. According to evidence, the revenues of the top five leagues (Premier League, Bundesliga, Serie A, La Liga and Ligue1) for the 2010/2011 season were estimated at almost nine billion euros. By comparison, in the 2016/2017 season, these revenues rose to more than 14 billion euros. These figures also show why European football clubs such as the big companies have to account for their activities according to IFRS.90

In general, the use of an annual report means that it can be used to communicate two things to the public as a whole. On the one hand, it shows how efficient and effective a company is based on its figures. At the same time, it helps them to deal with difficult economic decisions. 91 On the football level, the annual report once served as an aid for internal matters. As an informative source of communication. Instead, it became more than a source of external stakeholders who, through the annual report of a football club, had been able to decide whether it is the right decision to buy shares, sell them or do nothing. In other words, a business report helps a football club to attract stakeholders from outside.92

⁸⁹ Cp. Oprean, V. B., & Oprisor, T. (2014), p. 1651.

 ⁹⁰ Cp. Gazzola, P., Amelio, S., Papagiannis, F., & Vatamanescu, E. M. (2019), p.183.
 ⁹¹ Cp. Senaux, B., & Morrow, S. (2013), p.4.

⁹² Cp. Starita, D. (2019), p.11f.

3.1.1 Football Player as Intangible Assets

Intangible assets are generally assets without material substance. Which has been purchased or manufactured with the purpose of using it in any way so that the company can make a profit from it.⁹³

In case of a transfer where a club buys a player from another club, the other club not only buys the player but also the registration rights of this player for a self-defined period of time. He is player is then accounted for as an intangible asset according to International Accounting Standards. Morrow (2006) explains this transaction by stating that after the contract has been finalized, the player will be transferred to the new club as a resource that will be controlled by the club to increase the club's financial performance in the future. Since the 1970s, football clubs have debated how to handle player registration in the correct accounting form. Until an agreement was reached to follow the rules of the International Accounting Standards and therefore book player registration as an intangible asset. In the beginning, players in the United Kingdom were accounted for in revenues and expenses of the annuals report. This was due to the fact that it was not clear whether player registration would be economically beneficial to a club. In 1989 Tottenham Hotspurs became the first team to record players as intangible assets.

The sum of the debited intangible assets is made up of two cost points. Firstly, the specific transfer fee for this player to the other club. On the other hand, the costs that are on the player himself and pay its player advisor and allowances.⁹⁸ The agent of the footballer plays an important role, as it is the footballer's agent who wants to enforce the footballer's preferences and is also the one who negotiates the salary with the club.⁹⁹

Through the registration of a player as an intangible asset, the primary reason for recognizing the player as an intangible asset is that the club can reclaim the transfer costs through amortization over the term of the contract, as well as benefit economically. ¹⁰⁰ In addition to the amortization of an intangible asset, international accounting standards also require that an impairment test be carried out in every annual report. ¹⁰¹

⁹³ Cp. Akhlaque, S., & Flouti, E. (2017), p. 14.

⁹⁴ Cp. Rowbottom, N. (1999)

⁹⁵ Cp. Akhlaque, S., & Flouti, E. (2017), p. 14.

⁹⁶ Cp. Amelio, S., Gazzola, P., & Papagiannis, F. (2020), p. 183.

⁹⁷ Cp. Morrow, S. (2006), p. 9f.

⁹⁸ Cp. Starita, D. (2019), p. 35.

⁹⁹ Cp. Senaux, B., & Morrow, S. (2013), p.8.

¹⁰⁰ Cp. Amelio, S., Gazzola, P., & Papagiannis, F. (2020), p. 183.

¹⁰¹ Cp. Akhlaque, S., & Flouti, E. (2017), p.14.

3.1.2 Impairment Test

Intangible assets that can be accused of having a service life of more than 20 years must be subjected to an annual impairment test. UEFA requires all teams to be accounted for in accordance with International Accounting Standards. This includes article 38, which requires that intangible assets are subject to an impairment test within a yearly report. It is relatively irrespective to UEFA whether a club tests all players individually or as a total intangible asset. In addition, it is up to the individual teams to add the fair value of each individual player. That fair value is calculated from the offers made by other clubs to the player. 103

In this case, the purpose of the impairment test is to determine whether the intangible asset has a higher recoverable amount than its current carrying amount.¹⁰⁴ If this is not the case in annual balance sheet analysis, the respective football club must calculate the cost between the book value and the recoverable amount. This is subsequently recognized in the income statement as an impairment loss.¹⁰⁵

A study carried out in 2016 shows that Juventus Turin, compared to the other Serie A teams, is best at integrating and demonstrating the application of the impairment test in its balance sheet. Furthermore, the study shows that it makes sense to adapt to international accounting standards. As it leads to the fact that the control is easier for UEFA. This is because UEFA must be able to evaluate whether a club is operating well or not on the basis of the annual financial statements in accordance with financial fair play regulations.¹⁰⁶

However, over the years there has been criticism of the impairment test rules and the resulting unknowing outcomes that a player brings with them once signed up with a new team. Here the examples from the past are mentioned. Where on the one hand it is about a player who was seriously injured after signing the contract. As a result, this player could not perform for the football club. In both cases, the clubs still had to pay and undergo the impairment test. A concept that came up, in case of a serious injury is that of an insurance policy for the respective football club. ¹⁰⁷

¹⁰² Cp. Rowbottom, N. (1999)

¹⁰³ Cp. Maglio, R., & Rey, A. (2017), p. 4

¹⁰⁴ Cp. Akhlaque, S., & Flouti, E. (2017), p.14.

¹⁰⁵ Cp. Morrow, S. (2006), p.11.

¹⁰⁶ Cp. Gazzola, P., & Amelio, S. (2016), p.113.

¹⁰⁷ Cp. Pavlović, V., Milačić, S., & Ljumović, I. (2014), p.22.

3.1.3 Accounting for Transactions in the Football Industry

After having thoroughly explained which regulations according to the international accounting standards the football clubs have to observe, it is described next how this can be accounted for in the balance sheet. The main focus is on how football clubs record a transfer in accordance with international accounting standards.

In Accounting for Transactions in the Football Industry, there are three ways in which a football club can transfer a player. The first variant is that a club buys a player from another club. Secondly, the club transfers a player who is still in the youth academy of another club at that time. The last variant is that a club gets a player who does not have a contract at that time and is, therefore, a free agent.¹⁰⁸

Each individual variant is treated differently in the accounting process. In the first variant where it is about buying a player from another club. The transfer sum is booked in the income statement at the end of the year. In the other two variants, where there is no transfer amount, it will be accounted for in a different way. The club that wants the player pays the youth club a so-called training compensation. This is negotiated by both clubs. ¹⁰⁹ Subsequently, it depends entirely on the club how it records these players in its balance sheet. If the club records the player as an intangible asset, it must record the costs for the player under acquisition costs. If this is not the case and the player is not recorded as an intangible asset, the player must be recorded as an expense. ¹¹⁰

On the balance sheet of that club, all costs are listed that are involved in a transfer, i.e. the transfer fee, the contract fee and as mentioned above the costs for the advisor of the respective player.¹¹¹

The biggest problem a club has when buying player rights is the transfer market. Because it works differently than the perfect market. This is a market that cannot give much information about a player. Meaning the higher the transfer, the more likely this player guarantees the club better success in sports and therefore higher profit in the club, that does not work in this case. As an example, here is a football player who has cost a lot but behaves personally and harms its own club. Therefore, also sporting and financial performance.¹¹²

¹⁰⁸ Cp. Maglio, R., & Rey, A. (2017), p.2.

¹⁰⁹ Cp. Biancone, P., & Solazzi, A. (2012), p.158.

¹¹⁰ Cp. Pavlović, V., Milačić, S., & Ljumović, I. (2014), p.18.

¹¹¹ Cp. Akhlaque, S., & Flouti, E. (2017), p.15.

¹¹² Cp. Oprean, V. B., & Oprisor, T. (2014), p. 1651.

Another problem which the transfer market has is the media talking about it. The media weakens the negotiating power of the football club, as they reveal confidential information about internal financial matters or the salaries of the players. In other words, the media play a huge role in the negotiations and the amount of money they pay.¹¹³

3.2 UEFA Financial Fair play Regulation

Due to the new financing alternatives mentioned above, and the resulting debt of several football clubs, UEFA felt obliged to introduce a regulation that would prevent such situations in the future. The regulation has the general objectives of stabilizing the economy of football clubs. The regulation has the general objectives of stabilizing the economy of football clubs.

According to the standard rule, every club playing football at UEFA level must be able to present the above-mentioned internal finance alternatives in a transparent manner in the final report. They are also titled as relevant revenues. Also, fair sports conditions to ensure that every football club has the same opportunities to win the title. UEFA is the association that is at the forefront of European football. Among them are the individual associations of the respective countries. It is also the federation that organizes national tournaments. The Financial Fair play rule was introduced in the year 2013. Before this rule was introduced, there were two pilot phases. The first in 2011 and the second in the following year.

This work refers to only two laws in this Financial Fair play regulation. The rules must be accepted and applied by each European football club wishing to play in the UEFA's international tournaments. The most familiar rule interpretation in Financial Fair play publication is the 'break-even rule'. In article 58 this rule states that a football club is not permitted to spend more on football players than it has earned. In the statutes, it is described in such a way that relative earnings are in balance with relative spending. For this purpose, all financial figures from the last three years are added together. On the one hand, relative revenues are defined by UEFA as those that can be subsumed. For example, as above, the internal financing possibilities that have been clarified. According to UEFA, relative expenditure, on the other hand, is an investment that will help the football club in the future.

¹¹³ Cp. Rowbottom, N. (2002)

¹¹⁴ Cp. Vöpel, H. (2011), p.54.

¹¹⁵ Cp. Preuss, H., Haugen, K., & Schubert, M. (2014)

¹¹⁶ Cp. Wolfsberger, M. (2017), p.14.

¹¹⁷ Cp. Budzinski, O. (2014), p.7.

¹¹⁸ Cp. Peeters, T., & Szymanski, S. (2014), p.349ff.

¹¹⁹ Cp. Preuss, H., Haugen, K., & Schubert, M. (2014)

¹²⁰ Cp. Peeters, T., & Szymanski, S. (2014), p.352.

¹²¹ Cp. Vöpel, H. (2011), p.57.

¹²² Cp. Peeters, T., & Szymanski, S. (2014), p.352-353.

¹²³ Cp. Schuhmacher, F. (2019), p.133ff.

Article 61 of this law states that football clubs are allowed to have a deficit of 5 million euros in the first year after the introduction of this law. At the moment a European football club can be in the deficit from 30 to 45 million euros.¹²⁴

If the rules laid down by UEFA are not fulfilled, there will be consequences for the respective football club. On the one hand, UEFA can penalize the football club with a transfer ban.

This means that the club is not allowed to buy players for its team for the period chosen by UEFA. On the other hand, the most extreme punishment would be the disqualification from one of the tournaments for which the football club has qualified. UEFA itself observes and monitors the associations that accept and are regulated by Financial Fair play. UEFA employs high-ranking accounting and regulatory experts. It is also referred to as the UEFA financial control body. 126

3.2.1 UEFA Club Licensing Procedure

Besides the licensing procedure of the national licenses, which determine everything independently, there is also the UEFA licensing procedure to participate in the international competitions. As it has already been explained that only the European football clubs are obliged to increase the Financial Fair play regulation. However, in order to participate in the UEFA tournament, clubs must apply for the UEFA license one year in advance. In 2004, UEFA's licensing procedure was introduced, which is based on the licensing procedure of the German Bundesliga. On the one hand, the licensing criteria includes operational issues such as infrastructure, personnel, but also ideas for charity projects are listed there. On the other hand, there are legal aspects with the annual reports from the respective financial years. The annual reports are part of the licensing process as the UEFA wants to make sure that the football club which wants to participate in one of its tournaments is financially stable. UEFA's financial indicators are game yield, ownership, sponsorship, transfers, player referrals, revenue, wages, operating expenses, profitability and balance sheet.

¹²⁴ Cp. Vöpel, H. (2013), p.5.

¹²⁵ Cp. Long, C. R. (2012), p.82&90.

¹²⁶ Cp. Preuss, H., Haugen, K., & Schubert, M. (2014), p.3.

¹²⁷ Cp. Holt, M. (2006), p.161.

¹²⁸ Cp. Geey, D. (2011)

¹²⁹ Cp. Morrow, S. (2014), p.87.

¹³⁰ Cp. Sodemann, C. (2012), p.25.

¹³¹ Cp. James, M. D., & Miettinen, S. (2010), p.3.

¹³² Cp. Benchmarking-Bericht zur Klublizenzierung: Finanzjahr 2016| de.uefa.com

Altogether, the licensing procedure aims to have economically sustainable European clubs as participants and to prevent them from incurring more debts, as they are obliged to be more transparent.¹³³

3.2.2 UEFA Monitoring

The purpose of UEFA monitoring is to supervise the clubs in the long run. After the licensing process is completed, the club will be continued to be monitored by UEFA monitoring. Like the licenced operator, UEFA also conducts this process. This process allows UEFA to receive direct information from the respective football associations about their national clubs.¹³⁴

3.2.3 Views on the Regulation

After the introduction of the Financial Fair play rule, UEFA received criticism on the above legal points such as article 58 and article 61 - even though, thanks to a study of fans, it was found that the fans endorsed the rule. Nevertheless, they do not believe that UEFA is really going to enforce the rule against the clubs. Since the football clubs have become more complex. Because clubs have companies behind them that have even more complex structures internally. Therefore, the effort and the costs involved are too high for UEFA to investigate all football clubs in detail. ¹³⁵

Not only the high costs are part of the problem, but also the fact that the clubs do everything possible to submit income from areas not relevant to football as relevant income. The problem is that the term relevant income is too superficial. ¹³⁶ In the view of the football clubs, UEFA's regulation limits the transfer market and thus the purchase of players. By giving an overall ceiling to players' salaries without any football club being able to benefit from it. Furthermore, according to the football clubs, there is a danger of losing the longstanding hierarchy between the individual clubs, but also of making it harder for new clubs to enter this hierarchy through the licensing process. ¹³⁷

¹³³ Cp. Vasilyev, I. A. (2019), p.275.

¹³⁴ Cp. Schuhmacher, F. (2019), p. 39&130.

¹³⁵ Cp. Preuss, H., Haugen, K., & Schubert, M. (2014)

¹³⁶ Cp. Vöpel, H. (2011), p. 58.

¹³⁷ Cp. Franck, E. P. (2014), p.4.

4. Evaluation of Financial Stability with Ratio-Analysis

After the common accounting rules have been described in the football industry. It is now about the performance, based on various financial ratios, of the selected football clubs. Before going into the analysis, the history, application and meaning of financial ratios are explained. The financial ratios used are divided into three categories. The first category focuses on the asset side and the solvency of the football clubs. The second category focuses on the liquidity side of the football clubs and finally the third category, which is intended to show the profitability of the respective football clubs by applying the financial ratios. Finally, the shares of the respective football clubs are analyzed with the help of financial ratios. The main focus is on dividends, the shares and the profit margin per share of the analyzed football clubs.

4.1 Theoretical background of ratio analysis

Financial ratios analysis plays an important and major role in the field of financial accounting. There are different mathematical financial ratios which are interpreted in a different way with various approaches. This means that for each financial ratio there is also different thematic fields which are needed for the analysis. For example, there are different ratios for the thematic field income statement or for the entire balance sheet. ¹³⁸

The financial ratios serve to provide a better overview of the economic annual report.¹³⁹ In addition, to ensure that a company can pay its debts.¹⁴⁰ The advantage of financial ratio analysis is that it provides the most important information and relationships between different financial areas at a glance through a certain formula. Which can be compared in different tenses means past, present or future.¹⁴¹

Nevertheless, the analysis of the financial ratios has been limited. The most common indicators are mentioned below. As in mathematics, small mistakes in the application of formulas can lead to the entire ratio being wrong and therefore no analysis can be made. Furthermore, all companies handle their accounting methods differently and therefore it is more difficult to compare companies with each other. A further disadvantage is that there is hardly any inflation included in the accounting. This means that when calculating financial ratios, all certain figures are taken into account, even though it is possible that one figure had a different exchange rate than the other.

¹³⁸ Cp. Faello, J. (2015), p.75.

¹³⁹ Cp. Nuhu, M. (2014), p.106.

¹⁴⁰ Cp. Abdullah, A., & Ku Ismail, K. N. I. (2008), p.5.

¹⁴¹ Cp. Nuhu, M. (2014), p.106.

¹⁴² Cp. Faello, J. (2015), p.76.

The final limitation is that financial ratio analysis needs full information about the results to understand why, for example, the ratio is smaller than last year. Furthermore, the interpretations are only possible for people who are involved in this area.¹⁴³

In terms of the usage of these financial ratios, in 1987 Barnes divides them into two groups. He distinguishes between accountants and researchers. The two groups have different methodologies and targets with the financial ratios. In his opinion, accountants use financial ratios to plan financially for the future. The researcher, in Barnes opinion, uses ratios to make predictions or to confirm economic statements.¹⁴⁴

In 2014 it went a little further and made a distinction between internal and external. Internally, it referred to the two groups that work in a company as employees and owners. However, these two have different interests in financial ratios. While the employee looks at the analysis of the financial ratios to see how healthy the company is and how it is positioned for the future, the owner is also interested in the return on its investment.

On the external side, the people are outside the company which different interest as well. On the one hand, there are the investors and the bondholders. The investors look at the financial ratios of a company to see how profitable the company is and what the investor gets back from the investments. The bondholder in the other case looks at the financial ratios to see if a company could pay back its loan at all.¹⁴⁵

4.2 Ratios to evaluate the financial stability

In the following, the specific formula of the individual financial ratios is shown, and the associated interpretation explained. The ratios are divided into groups to make their importance recognizable. In total, there are four groups in this study, the first of these groups identify the assets and solvency position, the second identifies the liquidity, the third identifies the profitability and the fourth assesses the football clubs and their shares.

¹⁴³ Cp. Nuhu, M. (2014), p.114f.

¹⁴⁴ Cp. Abdullah, A., & Ku Ismail, K. N. I. (2008), p.5.

¹⁴⁵ Cp. Nuhu, M. (2014), p.107

4.2.1 Analysis of Asset and Solvency Position

The ratios in the asset position evaluate the realization efficiency of the company assets. Companies should pay attention to be efficient. If the analysis shows that a company is inefficient, this means that there is too much asset and therefore the storage costs increase. The solvency ratios are used to determine whether a company can pay the invoices on a long-term basis. This is especially interesting for people who are interested in working with this company. 147

4.2.1.1 Assets Coverage Ratio

This financial ratio shows how easily a company can pay off its debts by selling its assets. The higher the number, the more often the company can do this. Also, a higher number is associated with a company being less risk rich.

The formula is as follows:

((Assets - Intangible Assets) - (Current Liabilities - Short-term Debt)) / Total Debt148

4.2.1.2 Financial Leverage

The financial leverage ratio is there to show how high the debts of a company are in relation to its assets. It also shows what proportion of the assets are owned by the share-holders instead of the creditors. If leverage is low, it means that the assets belong to the shareholders. If leverage is high, it shows that the assets belong to the creditors and this means that the company is more willing to take risks.

The formula is as follows:

Leverage = total company debt / shareholder's equity¹⁴⁹

4.2.1.3 Leverage Ratio

Debt to EBITDA (earnings before interest, taxes, depreciation and amortisation) ratio indicates whether a company can pay its debts from its revenues alone, excluding interests, taxes, depreciation and amortization. A high output figure shows that the company has a high level of debt. It shows how healthy a company is.

The formula is the following:

Debt to EBITDA= Debt / EBITDA¹⁵⁰

¹⁴⁶ Cp. Rist, M., & Pizzica, A. J. (2014), p.3.

¹⁴⁷ Cp. Kajananthan, R., & Velnampy, T. (2018), p.164.

¹⁴⁸ Cp. What Is the Asset Coverage Ratio? | Investopedia – investopedia.com

¹⁴⁹ Cp. Financial Leverage Ratios | My Accounting Course - myaccountingcourse.com

¹⁵⁰ Cp. Debt-to-EBITDA Ratio (Debt/EBITDA Ratio) | Investopedia – investopedia.com

4.2.1.4 Interest Coverage Ratio

Interest coverage ratio is used to show how well a company can pay the outstanding interests of its debts. This formula is especially important for people who issue loans. The higher the output number the better, because this shows that a company can pay this interest relatively well. However, it is different from industry to industry which output number is desired.

The formula is the following:

Interest Coverage Ratio=EBIT (earnings before interest and taxes)/Interest Expense¹⁵¹

4.2.2 Analysis of Liquidity

In order to calculate the short-term debt field, liquidity ratios are required. These ratios show if a company can pay its debts and if a company can take on more debt for an investment. 152

4.2.2.1 Quick Ratio

The quick ratio is used to show whether a company can pay its debts. All this without selling its assets and/or getting more financial support. The difference between Quick ratio and Current Ratio is that Quick ratio takes all current assets as cover for their current debts. The initial ratio should be high because this indicates that a company has no problem with its debts and is therefore a healthy company.¹⁵³

The formula is as follows:

Quick Ratio= (Current Assets-Inventory) / Current Liabilities¹⁵⁴

4.2.2.2 Current Ratio

Current Ratio, on the contrary, indicates whether a company can pay its short-term debts or maturities which are due in one year with the help of its assets. Investors need to know how worthy the assets of a company are. Unlike other ratios, this approach looks at the industry and its average current ratio. If this value is below the average, it means that a company is taking a risk. If the value is still too high, this can also mean that a company is not using its assets properly.

The formula is as follows:

Current Ratio= Current Asset / Current Liabilities 155

¹⁵¹ Cp. Interest Coverage Ratio Definition Investopedia – investopedia.com

¹⁵² Cp. Rist, M., & Pizzica, A. J. (2014), p.3.

¹⁵³ Cp. What Is the Quick Ratio? | Investopedia – investopedia.com

¹⁵⁴ Cp. What is the Quick Ratio? | Double Entry Bookkeeping - double-entry-bookkeeping.com

¹⁵⁵ Cp. What Is the Current Ratio? | Investopedia – investopedia.com

4.2.3 Analysis of Profitability

Profitability ratios show more accurately whether a company is capable of making a profit. ¹⁵⁶ In addition, the financial ratios show whether it is worth investing in this company. Meanwhile the financial ratios are interesting for investors, stockholders and creditors who are looking for dividends. ¹⁵⁷

4.2.3.1 Equity Ratio

The equity ratio shows the extent to which a company is financed by debt. This means that the smaller the starting figure, the more it indicates that a company is financed with liabilities. The other way around, an output figure shows that the company is financed with its resources and is therefore not willing to take risks.

It is assumed that a company with an initial sum below .50 is more likely to be financed by outside capital and that a company with an initial sum above .50 is more likely to become self-financed.

The formula is as follows:

Equity Ratio= Total Equity / Total Assets¹⁵⁸

4.2.3.2 Debt-to-Equity Ratio

The debt-to-equity ratio shows the extent to which a company carries out financing with outside capital. It is especially important for people who want to see whether a company is willing to take risks or not. It is simply not possible to compare it to other companies outside the industry. If the initial ratio is high, it shows that the company is financing with debt capital, i.e. it is riskier.

The formula is as follows:

Debt-to-Equity= Total Liabilities / Total Shareholder Equity¹⁵⁹

4.2.3.3 Breakdown of sales

This is the percentage of business sold in the respective industry. It should show which product is the best-selling in comparison to the other products. In contrast to the other ratios, no formula is required to calculate this parameter.

¹⁵⁶ Cp. Rist, M., & Pizzica, A. J. (2014), p.4.

¹⁵⁷ Cp. Nuhu, M. (2014), p.110

¹⁵⁸ Cp. What is Equity Ratio? | Corporate Finance Institute – corporatefinanceinstitute.com

¹⁵⁹ Cp. What Is the Debt-To-Equity Ratio – D/E? | Investopedia – investopedia.com

4.3 Evaluation of Football shares

In most cases, the financial ratios under this heading can be found elsewhere. For the sake of simplicity, all of them are summarized as evaluation of football shares.

4.3.1 Dividend Yields

Dividend Yield shows how high a company's dividend is in relation to the share price. The higher the output number, the more attractive it is for the people interested in the share. However, it should not be overlooked that high initial figures are also due to a decline in the share price.

The formula is the following:

Dividend yield= Annual Dividend per share / Price per share 160

4.3.2 Price-Earnings-Ratio

Price-to-Earnings Ratio evaluates the company by its shares. With the help of the ratio, a company can be compared with its previous history. An output figure is based on the assumption that the company is either valued too highly or that the shareholders expect a lot from the company in the future. A small output figure, in turn, can mean that the company is undervalued or that it adapts to its past output figures. A negative ratio is not possible and is therefore marked "N/A".

The formula is the following:

Price-to-Earnings Ratio= Market Value per share / Earnings per share 161

4.3.3 Market-to-book Ratio

Market-to-book ratio is used to show whether the shares of a company are expensive or cheap in relation to its book value. If the respective output number is less than one, this means that the shares are cheap compared to the book value. Conversely, if the number is more than three, it is assumed that the shares are too expensive compared to the book value.

The formula is the following:

Market-to-book Ratio= Stock Price / Book Value per share 162

¹⁶⁰ Cp. What Is Dividend Yield? | Investopedia – investopedia.com

¹⁶¹ Cp. What Is Price-to-Earnings Ratio – P/E Ratio? | Investopedia – investopedia.com

¹⁶² Cp. Market to Book Ratio | Stock Analysis – stockanalysis.com

4.3.4 Market Capitalization

Market capitalization is especially interesting for investors who want to know how great a company is. Investors trust in it more than just looking at the revenues in the balance sheet. The higher the output figures, the larger the company in general. Vice versa, the lower the output, the smaller the company.

The formula is the following:

Market Capitalization = Outstanding Shares * Stock Price¹⁶³

¹⁶³ Cp. Market Capitalization (Market Cap) | Stock Analysis – stockanalysis.com

5. Empirical Analysis of Selected European Football Clubs

The ratios explained above are intended to answer the research question of whether the introduction of UEFA's Financial Fair Play regulation will help clubs to remain stable. This question will be answered with the help of a ratio analysis of three clubs. The three clubs selected for this analysis are Juventus Turin, Borussia Dortmund and Manchester United. For all three clubs it is possible to buy shares. ¹⁶⁴ Juventus Turin and Borussia Dortmund are even publicly available on the European stock market. ¹⁶⁵

Juventus Turin was founded in 1897 and has always been one of the most successful clubs in Italy. The club has won all the international cups at the UEFA stage. ¹⁶⁶ In the season 2011/2012 the team won the Serie A. For the season 2017/2018 they won the Serie A again. ¹⁶⁷

Borussia Dortmund is a German club that was founded in 1909. Which in the year 2018 was able to generate half a billion euros in turnover. Borussia Dortmund won the UEFA Champions League for the first time in 1997. In 2013 Borussia Dortmund lost in the Champions League final. Borussia Dortmund won the German Bundesliga in the 2011/2012 season. In the 2017/2018 season Borussia Dortmund finished second. 169

The English football club was founded in 1878, although under a different name. The club got its name in the year 1902.¹⁷⁰ Since time immemorial Manchester united has won many national cups. In 2017 the last National Cup was held.¹⁷¹ Manchester United became second in the completed 2012 season. Also, after the 2018 season Manchester United was second place.¹⁷²

5.1 Methodology

For this thesis, literature research was conducted, and report analysis was carried out. For instance, literature was used to find out how European clubs generate money. In addition, a ratio analysis was carried out based on the annual reports of the above-mentioned clubs. The focus was on the financial year 2012 and 2018. The financial year 2012 was chosen because it was the last before the implementation of the financial fair play regulation. Fiscal year 2018 was chosen because it is exactly 5 years after implementation. For the literature search on the topic of financing football clubs and their rules, various internet databases were used to find journals and reports on this topic.

¹⁶⁴ Cp. How to buy shares in football clubs | IG – ig.com

¹⁶⁵ Cp. Aglietta, M., Andreff, W., & Drut, B. (2010), p. 5.

¹⁶⁶ Cp. Spais, G. S., & Filis, G. N. (2008), p. 172.

¹⁶⁷ Cp. Historische Platzierung Juventus Turin | Transfermarkt – transfermarkt.de

¹⁶⁸ Cp. Borussen Chronik | BVB – bvb.de

¹⁶⁹ Cp. Historische Platzierung Borussia Dortmund | Transfermarkt – transfermarkt.de

¹⁷⁰ Cp. Manchester United: The story so far | Manchester United FC Ltd – manutd.com

¹⁷¹ Cp. United's major honours | Manchester United FC Ltd – manutd.com

¹⁷² Cp. Historische Platzierung Manchester United | Transfermarkt – transfermarkt.de

The ratio analysis for European football clubs, all the above-mentioned ratios are used. The variables required for this analysis are taken from the annual reports of the respective year and football club. Furthermore, the analysis was carried out in the same order and with the same level of specification as that discussed in the previous section.

The ratio analysis aims to show whether the introduction of the rule has led to changes in financing behaviour. For this purpose, the key figures are compared between 2012 and 2018. In addition to comparing the key figures, it is also emphasised whether the respective football clubs are financing at high risk according to their financial ratios. Following the analysis, the respective indicators will be compared with the national final ranking in the respective 2011/2012 and 2017/2018 seasons. Whether the implementation of this rule has led to some clubs that used to be in the forefront of the competition not being there anymore.

5.2 Results

The ratio analysis of the asset coverage showed that only the Italian football club improves in 2018 compared to 2012. An increase of around 0.14 compared to 2012 when it stood at 0.51. Borussia Dortmund, on the other hand, is down by 0.17 to 0.57. Manchester United is the club with the biggest decline in this analysis, with a decline of around 0.63 and even entered the negative range in 2018.

4.2.1.1 Asset Coverage ratio	Clubs	2012	2018	Change
	Juventus Turin	0,51	0,65	0,14
	Borussia Dortmund	0,75	0,57	-0,17
	Manchester United	0,33	-0,30	-0,63

Figure 1 Asset Coverage Ratio from the years 2012 and 2018

In the analysis of financial leverage, the key figures for Juventus Turin rose from 6.62 to 10.72. This represents a change of 4.10 in the last 6 years. the key figures for Borussia Dortmund and Manchester United have been decreased. Borussia Dortmund has a decline of around 1.25 and Manchester United even a decline of almost 3 (2.99 to be precise). Due to the decline, the English club has fallen below the value of 1 to 0.75.

4.2.1.2 Financial Leverage	Clubs	2012	2018	Change
	Juventus Turin	6,62	10,72	4,10
	Borussia Dortmund	2,67	1,42	-1,25
	Manchester United	3,74	0,75	-2,99

Figure 2 Financial Leverage from the years 2012 and 2018

There are no significant changes in the leverage ratio of Juventus Turin. Only an increase in 2018 of about 0.22 compared to 2012. Manchester United also increased its value from 2.25 to 4.96, resulting in an increase of 2.72. Only Borussia Dortmund experienced a decrease in 2012 and 2018, where the value fell from 2.50 to 0.65.

4.2.1.3 Leverage Ratio	Clubs	2012	2018	Change
	Juventus Turin	1,44	1,66	0,22
	Borussia Dortmund	2,50	0,65	-1,85
	Manchester United	2,25	4,96	2,72

Figure 3 Leverage Ratio from the years 2012 and 2018

In contrast to the leverage ratio, the interest coverage shows a significant change for Juventus Turin. This is a decline of around 9.82. While in 2012 the ratio was 10.04, it will be 0.22 in 2018. Borussia Dortmund shows a small increase of 0.52. While Manchester united will be 0.95 in 2012 and 2.34 in 2018, resulting in an increase of 1.38.

4.2.1.4 Interest Coverage Ration	Clubs	2012	2018	Change
	Juventus Turin	10,04	0,22	-9,82
	Borussia Dortmund	7,45	7,97	0,52
	Manchester United	0,95	2,34	1,38

Figure 4 Interest Coverage Ratio from the years 2012 and 2018

When evaluating the quick ratio, only Manchester United did not see an increase between 2012 and 2018. Only a decrease from 0.26 to 0.39. Borussia Dortmund and Juventus Turin recorded an increase. While Juventus Turin had a ratio of 0.29 in 2012, they achieved a ratio of 0.52 in 2018, an increase of 0.22. Borussia Dortmund as well. In 2012 they had a ratio of 0.38 and in 2018 0.96, an increase of 0.58.

4.2.2.1 Quick Ratio	Clubs	2012	2018	Change
	Juventus Turin	0,29	0,52	0,22
	Borussia Dortmund	0,38	0,96	0,58
	Manchester United	0,65	0,06	-0,59

Figure 5 Quick Ratio from the years 2012 and 2018

Just as with the Quick ratio, Manchester united shows a decline in the current ratio. In 2012 they had a ratio of 0.65. Meanwhile, the current ratio decreased from 0.26 to 0.39 in 2018. Juventus Turin shows an increase of 0.22. In 2012 still 0.31 and in 2018 0.53. At Borussia Dortmund the increase was greater. There the ratio in 2012 was still 0.47 and rose by 0.53 to 1.01.

4.2.2.2 Current Ratio	Clubs	2012	2018	Change
	Juventus Turin	0,31	0,53	0,22
	Borussia Dortmund	0,47	1,01	0,53
	Manchester United	0,65	0,39	-0,26

Figure 6 Current Ratio from the years 2012 and 2018

In the evaluation of the equity ratio, only Juventus Turin could not record an increase from 2012 and 2018. Meanwhile, there was a decrease from 2012 0.15 to 2018 0.09. Borussia Dortmund had a ratio of 0.37 in 2012 and increased by 0.33 to 0.70 in 2018. Manchester United also experienced an increase of around 1.06. In 2012 they still had a ratio of 0.27 and in 2018 1.33.

4.2.3.1 Equity Ratio	Clubs	2012	2018	Change
	Juventus Turin	0,15	0,09	-0,06
	Borussia Dortmund	0,37	0,70	0,33
	Manchester United	0,27	1,33	1,06

Figure 7 Equity Ratio from the years 2012 and 2018

In the evaluation of the debt-to-equity ratio, Juventus Turin recorded an increase of 4.10. Meanwhile, it still had a debt-to-equity ratio of 6.62 in 2012 and 10.72 in 2018. Borussia Dortmund, in contrast, recorded a ratio of 2.67 in 2012 and a decline of 1.25 in 2018, so that the ratio in 2018 was 1.42. Manchester United also experienced a decline of 2.99. In 2012 they recorded a ratio of 3.74 and in 2018 a ratio of 0.75.

4.2.3.2 Debt-to-Equity Ratio	Clubs	2012	2018	Change
	Juventus Turin	6,62	10,72	4,10
	Borussia Dortmund	2,67	1,42	-1,25
	Manchester United	3,74	0,75	-2,99

Figure 8 Debt-to-Equity Ratio from the years 2012 and 2018

In the breakdown of sales at Juventus Turin you can see that you got the most through TV compared to ticket sales and sponsor money. Also, in 2018 the TV funds are the highest income of Juventus Turin. For Borussia Dortmund in 2012 TV funds are the main source compared to ticket sales and sponsorship. Even though in 2012 there is only a difference of 1.36% between TV money and sponsorship. In 2018, TV funds will continue to be Borussia Dortmund's main source of income. Unlike the other two football clubs, in 2012 the sponsorship money is the main source of income for Manchester United compared to TV money and ticket sales. This will not change even six years later. In 2018 it will still be the sponsorship money that is Manchester United's main source of income.

4.2.3.3 Breakdown of sales	Clubs	TV	Tickets	Sponsorship
	Juventus Turin	42.4%	14,90%	25%
	Borussia Dortmund	31.59%	13.66%	30.23%
	Manchester United	32%	31%	37%,

Figure 9 Breakdown from sales for the year 2012

4.2.3.3 Breakdown of sales	Clubs	TV	Tickets	Sponsorship
	Juventus Turin	39.7%	11.2%	17.2%
	Borussia Dortmund	24.71%	8.55%	18.99%
	Manchester United	35%	19%	46%

Figure 10 Breakdown of sales for the year 2018

The Dividend Yields Analysis did not produce any result for Juventus Turin as they did not provide a dividend in the two years. Therefore, it was labelled N/A. Borussia Dortmund again paid dividends. This resulted in a dividend yield of 2.56 in 2012. In 2018, it fell by around 1.55 to 1.01. Manchester United also saw a decline of 0.30. While it was still 1.12 in 2012, the value in 2018 amounted to 0.82.

4.3.1 Dividend Yields	Clubs	2012	2018	Change
	Juventus Turin	N/A	N/A	N/A
	Borussia Dortmund	2,56	1,01	-1,55
	Manchester United	1,12	0,82	-0,30

Figure 11 Dividend Yield from the years 2012 and 2018

Similarly, to the evaluation of the dividend yield, Juventus Turin did not achieve a result for the price-earnings ratio. Borussia Dortmund, in turn, recorded an increase from 5.20 in 2012 to 17.35 in 2018. This represents an increase of 12.15. Manchester United, on the other hand, could not calculate an increase as they could not show a value in 2018.

4.3.2 Price-Earnings-Ratio	Clubs	2012	2018	Change
	Juventus Turin	N/A	N/A	N/A
	Borussia Dortmund	5,20	17,35	12,15
	Manchester United	98,67	N/A	N/A

Figure 12 Price-Earnings-Ratio from the years 2012 and 2018

In the market-to-book ratio analysis, Juventus Turin achieved a significant increase of 19.77. In 2012 Juventus Turin still had a ratio of 1.91 and six years later 21.68. These are the only ones that showed an increase. Borussia Dortmund still had a ratio of 1.54 in 2012, but then declined by 0.07 to 1.47 in 2018. The same is true for Manchester United, who declined by 0.63 to 8.45 in 2018, although their ratio was still 9.08 in 2012.

4.3.3 Market-to-book Ratio	Clubs	2012	2018	Change
	Juventus Turin	1,91	21,68	19,77
	Borussia Dortmund	1,54	1,47	-0,07
	Manchester United	9,08	8,45	-0,63

Figure 13 Market-to-book Ratio from the years 2012 and 2018

In contrast to previous results, market capitalization rose in all three European clubs. The Italian football club Juventus Turin saw an increase of 1.438.472.344€ between 2012 and 2018. The increase was also recorded by Manchester United. From 2012 where they had a market capitalisation of £2,299,215,017, this increased by £1,295,686,604.70 to £3,594,901,621.50 in 2018. Borussia Dortmund's market capitalization increased from €143,734,500.00 in 2012 to €494,857,780.00. Which represents an increasing amount of 351.123.280,00€.

4.3.4 Market Capitalization	Clubs	2012	2018	Change
	Juventus Turin	123.565.979€	1.562.038.323,0€	1438472344,0
	Borussia Dortmund	143.734.500€	494.857.780,00€	351123280,00
	Manchester United	£ 2.299.215.017	£ 3.594.901.621,5	1295686604,7

Figure 14 Market Capitalization from the years 2012 and 2018

6. Discussion

The analysis shows that in the comparative years 2012 and 2018 there are a positive ratio change of 20 between the respective football clubs.

In the analysis of the assets and solvency of football clubs, Borussia Dortmund stands out. Since three out of four ratios have undergone only positive changes in the comparative years 2012 and 2018. Only in the asset coverage ratio there was a decrease of 0.17, which means that less assets were available for sale to pay off debts. This means that they were more risk averse this year than in 2012 (see Figure 1). Borussia Dortmund had the greatest change in the asset and solvency analysis in the leverage ratio and was therefore the only one of the three respondents. There was a decrease of 1.85. Thus, it can be seen that there was a decrease in debt and therefore also a healthy football association. (compare figure 2)

Juventus Turin, meanwhile, is the club with the most negative change between 2012 and 2018. Only the asset coverage ratio showed a positive change, which shows that assets are being generated to pay off debts. (see Figure 1) The financial leverage of the Juventus Turin shows on the other hand that it is financed by external funds and thus manages with even more risk. This can be seen from the fact that the ratio rose from 6.62 to 10.72. (see Figure 2) Another indication of why Juventus Turin is riskier compared to the situation before the introduction of the financial fair play rule is that the interest coverage ratio fell by 9.82. As a result, Juventus Turin could have problems paying its debts. (see figure 4)

The third respondent, Manchester United, had two positive and two negative changes in the analysis of its asset and solvency position. The most significant positive change is that the financial leverage has shown that the club is more self-financing than in 2012 before the financial fair play regulation. (see figure 2) But still have generated more debt over the years, which is more repayable than in 2012 (see figure 3&4).

When analyzing the Liquidity of football clubs, Manchester United is the only club that has negative changes in both ratios. Consequently, Manchester United has problems paying its debts quickly. In the current ratio, Manchester United is also the club with the smallest final total with 0.39. (see figure 6).

The situation is different at Borussia Dortmund, which has the greatest positive change in both profitability ratios. The quick ratio changed by 0.58 and thus shows that Borussia Dortmund is able to pay its debts even more firmly. (see Figure 5) Borussia Dortmund is also able to use its assets efficiently, as shown by the current ratio, which is 1.01. (compare figure 6)

In contrast to the analysis of the asset and solvency position, Juventus Turin was able to make positive changes in both ratios, showing that it could pay its debts promptly and efficiently use its assets. (see Figure 5&6)

The profitability analysis shows how the investigated football clubs are financed. Juventus Turin has shown that in 2018 they finance themselves even more with the help of loans. This is shown by the debt-to-equity increase from 4.10 to 10.72. (see Figure 8) This is further underlined by the equity ratio, which has fallen from 0.15 to 0.09. These 0.09 show, as they are below 0.5, that Juventus Turin does a lot of external finance. (see figure 7)

Manchester United shows a substantial change between 2012 and 2018. in the six years Manchester United has established itself as a self-financing association, as shown by the equity ratio. Manchester United ratio is at 1.33 and thus above the 0.5 mark. (see figure 7) In addition, the profitability analysis of Manchester United shows that after the introduction of the UEFA regulations, the club has taken steps to reduce its financing through debt. The debt-to-equity ratio fell by almost three to below one. (see figure 8)

In addition to Manchester United, Borussia Dortmund is also self-financed in 2018 based on the equity ratio 0.5 rule. Since they have adjusted by 0.33 over the six years. (see Figure 7) There is also a change in the way Borussia Dortmund finances itself through debt. Between the two comparative years, there was a decline from 1.25 to 1.42. The football club is therefore attempting to reduce its method of financing after the introduction of the scheme.

When breaking down revenues, Juventus Turin and Borussia Dortmund in particular consider that most of the money is generated from TV revenues. In 2012, before the Financial Fair Play rule, Borussia Dortmund experienced an essentially head-to-head race between TV income and sponsor income. In 2012, before the Financial Fair Play rule, Borussia Dortmund was still in an almost neck-and-neck race between TV income and sponsor income. In the year 2018, TV money is a winner. (see figure 9&10) Another significant aspect is the fact that Borussia Dortmund is not dependent on ticket sales in 2018, where ticket sales reached 8.55%. In none of the three analyzed clubs does ticketing play a major role. At Juventus Turin the full focus is on TV revenues. So that even in 2018 the percentage of sponsorship income will decrease. Only Manchester United, which despite a high percentage of TV revenues, will receive more money from sponsors. In both comparative years Manchester United makes more money through their sponsors. Even more after six years. (compare figure 9&10)

In the analysis of the shares of football clubs, some ratios could not be calculated. Since Juventus Turin has not paid out any dividends in both years. In terms of dividend yield, no clubs were able to improve. Borussia Dortmund even lost 1.55 to 2012, which may be because they became Bundesliga champions and cup winners in 2012. In the years 2018 it was not the case. Manchester United also experienced a decline, which can be explained by the fact that Manchester United were closer to the top in 2012 than in 2018 (see Figure 11). Manchester United did not see any change in their price-earning-ratio due to a negative number. In 2012, however, due to the high number of shares, it is clear that the shares are too expensive compared to the book value. (see Figure 12) Despite several new regulations, Manchester United was still able to increase its market capitalization by more than 1 billion pounds. (see Figure 14) Only Juventus Turin was able to increase its market-to-book ratio, which may be due to the fact that the stock price has gone up as a result of the successful national wins of recent years. (see figure 13) Like Manchester United, they also raised their market capitalization by around one billion euros. (see figure 14)

In sum, the equity ratio and the dent-to-equity ratio in particular show that the clubs are trying to work towards financial independence. Only Juventus Turin seemed to be an outlier from the overall picture. In a further analysis it might be possible to repeat the analysis with more clubs. Another aspect that could emerge from the comparison is that the clubs can pay their debts when it matters. This can be seen by analyzing the financial and solvency situation. Furthermore, as mentioned at the beginning, the analysis shows that football has tremendous companies. This is shown above all by the figures on market capitalization and how it has risen in just six years. This ratio analysis shows that none of the three European football clubs has deteriorated financially in 2018 after the introduction of the rule. Thus, it was possible to see if the financial fair play rule brings financial stability. It would be interesting to see once again what the situation is like for less successful football teams. Here we were talking about three football clubs that either became first or second in the season 2011/2012 and 2017/2018.

The only worrying thing is that the clubs are very dependent on TV money. With the shutdown of the game in March 2020, it could be seen that many European clubs were struggling with it.173

¹⁷³ Leere Ränge oder Saisonabbruch: So planen Europas Fußball-Ligen | Sportschau – sportschau.de

7. Limitation

In the following section, the potential limitations of the analysis will be mentioned. In the course of this bachelor thesis, some points like whether more money really makes a football club more successful were not specified. Their answer, however, would have been the scope of another bachelor's arbitration. In addition, it was decided not to use more European football clubs for ratio analyses. This would have been beyond the scope of an analysis of more football clubs. A further limitation of this work is that some publications on the topic of football management are encrypted and only available by payment. In addition, UEFA's financial fair play regulations have not been anchored in football for very long. For this reason, a further ratio analysis should be carried out in the coming years so that the initial hypothesis can be answered in even more concrete terms.

8. Conclusion

On the basis of the strong change in market capitalization, the bubble mentioned at the beginning is getting bigger and bigger. The analysis shows how the development of the European associations in 2012 was before the introduction of the financial fair play rule and once in 2018 five years after its introduction. The positive changes in the ratios outweigh the positive changes in the ratios and thus confirm the thesis that the rule leads to more stable financing for football clubs.

In summary, the results of the ratio analyses show that the introduction of the Financial Fair Play regulation in 2013 will lead to football clubs working to become self-financing and less likely to use debt. This is particularly demonstrated by the analysis of the asset and liquidity position and the profitability analysis. As explained in the beginning, there are two financial alternatives for football clubs. On the one hand, the internal financial alternatives in conjunction with TV money, match operations, sponsors and merchandising. On the other hand, external financial alternatives. Those are once again classified into equity financing and debt financing. However, due to the many methods of generating money, there are nevertheless rules which the clubs have to follow under the supervision of UEFA. Therefore, accounting according to International Accounting Standards is essential.

A further analysis based on this study might be necessary to see how the financial situation looks like 10 years after the introduction of the regulation and in addition what the financial situation is like for other non-stock listed football clubs. It is also important to observe how European football develops with the money received. Despite this, it is questionable how professional football is developing in Europe. Does the question naturally arise as to how much dependence on a financial alternative is healthy and not harmful to a football club?

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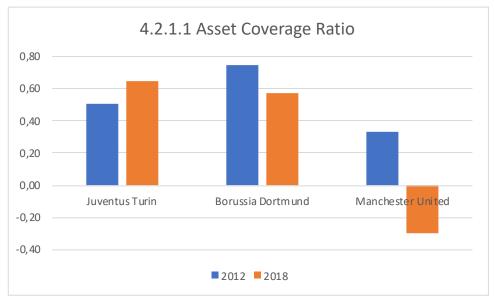
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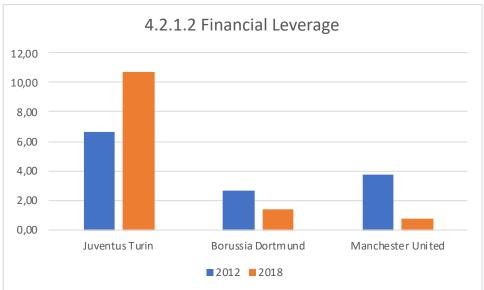
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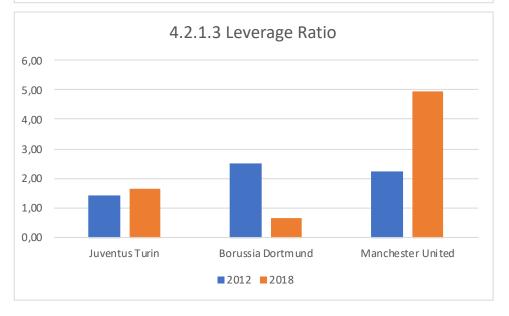
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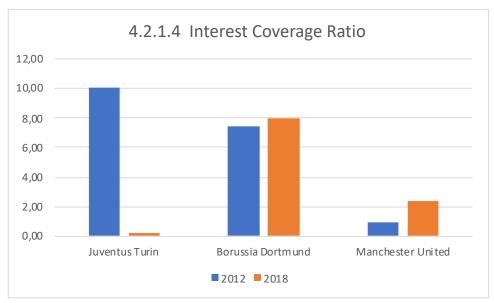
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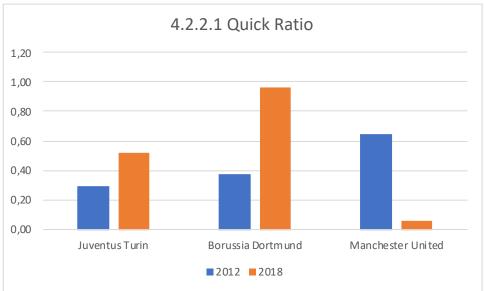
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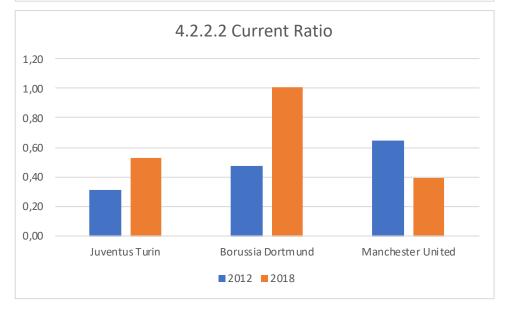


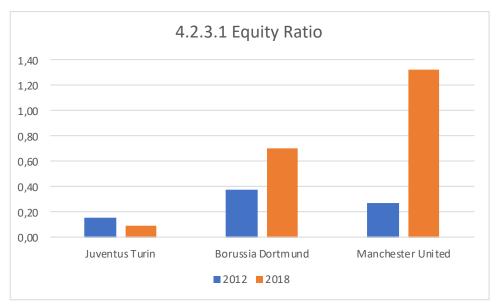


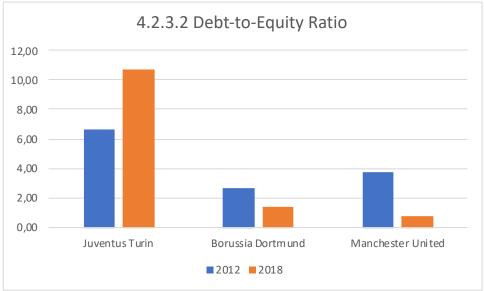


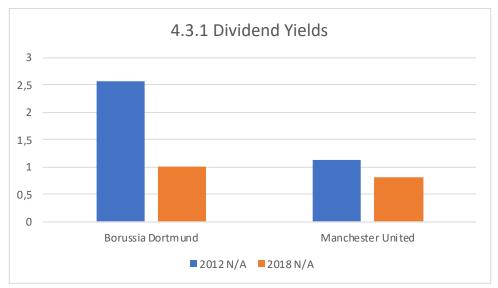


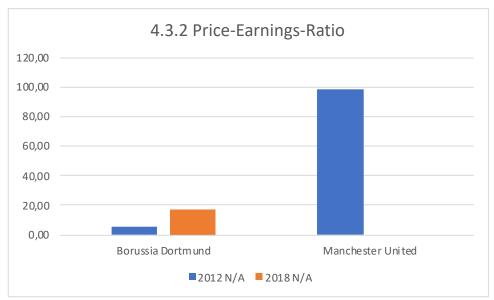




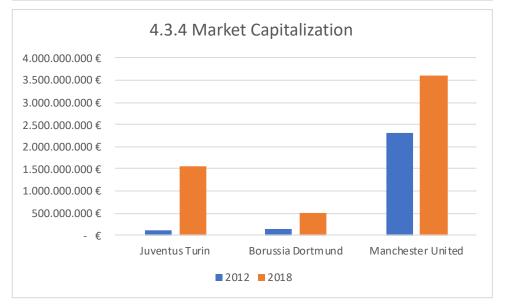












2012	Juventus Turin	Borussia Dortmund	Manchester United
Equity Ratio	0,15	0,37	0,27
Financial Leverage	6,62	2,67	3,74
Interest Coverage Ratio	10,04	7,45	0,95
Leverage Ratio	1,44	2,50	2,25
Assets Coverage Ratio	0,51	0,75	0,33
Breakdown of sales	TV 42.4% Tickets 14.9% Sponsorship 25%	TV 31,59% Tickets 13.66% Sponsorship 30.23%	TV 32% Tickets 31% Sponsorship 37%
Quick Ratio	0,29	0,38	0,65
Current Ratio	0,31	0,47	0,65
Market Capitalisation	123.565.979,02 €	143.734.500,00 €	£ 2.299.215.016,80
Price-Earnings-Ratio	-2,44	5,20	98,67
Market-to-Book Ratio	1,91	1,54	9,08
Dividend yiels	N/A	2,56	1,01
Debt-tp-equity ratio	6,62	2,67	3,74
Finished league place	1.	1.	1.

2018	Juventus Turin	Borussia Dortmund	Manchester United
Equity Ratio	0,09	0,70	1,33
Financial Leverage	10,72	1,42	0,75
Interest Coverage Ratio	0,22	7,97	2,34
Leverage Ratio (Net Finar	1,66	0,65	4,96
Assets Coverage Ratio	0,65	0,57	-0,30
Breakdown of sales	39.7% Tickets 11.2% Sponsorship 17.2%	TV 24.71% Tickets 8.55% Sponsorship 18.99%	TV 35% Tickets 19% 46%
Quick Ratio	0,52	0,96	0,06
Current Ratio	0,53	1,01	0,39
Market Capitalisation	1.562.038.323,00 €	494.857.780,00 €	£ 3.594.901.621,50
Price-Earnings-Ratio	-77,50	17,35	-0,96
Market-to-Book Ratio	21,68	1,47	8,45
Dividend yiels	N/A	1,12	0,82
Debt-tp-equity ratio	10,72	1,42	0,75
Finished league place	1.	2.	2.

Declaration of Authenticity

I, Marvin Zerwas, hereby declare that the work presented herein is my own work completed without the use of any aids other than those listed. Any material from other sources or works done by others has been given due acknowledgement and listed in the reference section. Sentences or parts of sentences quoted literally are marked as quotations; identification of other references with regard to the statement and scope of the work is quoted. The work presented herein has not been published or submitted elsewhere for assessment in the same or a similar form. I will retain a copy of this assignment until after the Board of Examiners has published the results, which I will make available on request.

Moers, 12.08.2020

MZenuas