Master's degree thesis

BØK950 Economics and Business Administration

Financial Fair Play and the Competitive Balance in the English Premier League

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Abstract:

In the 2011/2012 season, UEFA the governing body of European football, started assessing a set of financial restrictions known as the financial fair play regulations. These regulations were introduced to counter the worsening financial conditions throughout European club football. Although there has been made considerable progress when addressing the financial aspect, there is still a massive problem in regard to the negative effects of general competitiveness. Given UEFA's lack of clarity when it came to addressing the potential issues that came with these regulations, it prompted me to write this paper. Hence, I will be analyzing the potential effects these regulations have on the competitive balance in the English Premier League.

The analysis will be conducted using two primary measurements. One being the Herfindahl-Hirschman index and the second being the concentration ratio which will address top five placements since the 1995/1996 season and onwards. These along with secondary measurements, such as point differentials, will allow me to address the potential trends on the competitive balance both before and after the introduction of these regulations.

Given the results, a general understanding is that these regulations may have had a negative effect on the competitive balance in the Premier League. With limitations for smaller clubs to reach their potentials, there is also protection in place towards already well-established clubs. Which results in clubs developing into a natural hierarchy, resulting into more predictable outcomes in the world of football.

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1.0 Introduction:

The last decades within European club football have been filled with a lot of difficult challenges. Most noteworthy being the challenges surrounding the financial aspects, which have been a massive obstacle as the popularity of the sport is ever increasing. Although one might assume that this increase in popularity would lead to profitability and stability as clubs increase their revenues, this however has not been the case. Instead, we see a common practice among smaller clubs, where they feel the need to invest built up financial resources to catch the clubs ahead. These smaller clubs are at a disadvantage, because they are not backed by rich investors or so-called "sugar daddies". Investors that prior to the introduction of the financial fair play regulations, have been pumping what seems to be unlimited funds into their respective clubs. Resulting into to the development of elite clubs, who have a massive gap to the remaining clubs within different leagues and competitions.

Luckily some concerns started brewing within the governing body of European football called UEFA. UEFA feared that sport would develop into a horse race between the wealthiest owner-backed clubs when it came to leagues and competitions within Europe. As a result, this would lead to smaller clubs overspending in fear of falling too far behind the rest of the competition. To develop somewhat financial control and to avoid clubs accumulating massive amounts of debt, UEFA introduced the financial fair play regulations which were first assessed in the 2011/2012 season. These regulations have received a lot of justified criticism as the regulations have had a negative impact on the overall competitiveness.

1.1 Competitive Balance & Financial Fair Play:

The question is, how could these financial regulations potentially affect the competitive balance in the English Premier League? The definition of competitive balance refers to how evenly matched clubs are within their respective league or competition. To fully grasp how the financial fair play regulations might affect the competitive balance, I had to address the potential advantages that comes with financial resources. This includes effects on competitiveness both before and after the introduction of these financial regulations.

The financial fair play regulations are listed by UEFA on their official website (UEFA 2019) and are updated with regularity to reflect changes in the general environment within European club football. These regulations were put in motion in order to bring both discipline and rationality to the financial aspects of European football, where UEFA highlights the importance of responsibility, sustainability, and credibility. These regulations are applicable to all clubs that partake in UEFA's competitions, such as the Champions- and Europa League, as well as the recent UEFA Conference League. It is given that all clubs are financially stable, meaning no overdue payments to other clubs, own players, and social/tax authorities.

In terms of the restrictions and limitations that comes with these financial regulations, most of them are covered by the break-even requirement. This requirement was implemented back in 2013 (UEFA 2015) and is considered quite controversial. What this requirement ensures is essentially that the clubs have balanced their spending with revenues, and it also restricts clubs from going bankrupt by accumulating severe debt. To assess this requirement, a governing control body called the Club Financial Control Body (CFCB) was established (UEFA 2022). Their job is to analyze financial figures of clubs over a three-season period. Throughout this period the club can spend $\mathfrak{E}5$ million more than their revenue if it's not covered directly by the owner(s). However, if it is directly covered by the owner(s) the limitations were $\mathfrak{E}45$ million for assessment period 2013/2014 and 2014/2015, and $\mathfrak{E}30$ million for assessment period 2015/2016, 2016/2017 and 2017/2018. There is yet to come an official confirmation of what the limitations will be for the next period, but there are rumors that the amount is the same as the previous period. UEFA also clarifies that certain investments are excluded from this requirement such as investment in stadiums, training facilities, youth development and women's football.

Since the introduction, UEFA states that these regulations have had a great impact and have contributed to the improvement of European club finances in a positive manner. The regulations have restricted clubs that operate on excessive losses, where agreements were struck between UEFA and the respective clubs to bring the clubs back to a stable state. This was accomplished by limitations on transfers as well as restrictions when it came to wages. If the club in question are not able to agree settlements with their respective league officials as well as UEFA, they are punished through sanctions such as exclusion from UEFA's competitions. UEFA also state that the coverage given by media and the attention

from the public, has increased the accountability of club directors' owners to run their respective clubs in a sustainable way (UEFA 2015).

2.0 Literature Review:

One can with a lot of certainty say that financial resources are one of the main determinants as to why clubs are successful, and how competitive the league are throughout a season. This is especially clear in the Premier League which is considered the European league with most financial strength. This is the reason why finishing in the top five positions is such a big deal, as you are guaranteed additional funds from participating in UEFA's competitions. This is especially important for smaller clubs as they can finally finance investments to further decrease the gaps between the clubs ahead. The question is, how often do these smaller clubs finish in these top positions?

Next on the agenda was to find any literature that address which clubs finish in these spots that guarantee qualification to European competitions. An article was found written by Penn and Berridge (2019), which examined the top-four finishes in the top level of the English football league system. This was interesting as it also covered the placements prior to the introduction of the Premier League in 1992. Throughout their study two measurements were used for the competitive balance, which were the concentration ratio and the coefficient of variation. As one would expect their results indicated that a small number of teams usually dominated at the top (Penn and Berridge, 7). Obviously, this was not a shocking discovery, however they noticed that there was a shift of the clubs that were dominant. We no longer see teams such as Aston Villa, Newcastle United and Leeds United among the top four, instead there is now clubs backed by rich investors such as Chelsea and Manchester City. Another good example is Blackburn Rovers who won the Premier League title in the 1994/1995 season, who are currently struggling in the Championship. From the 2003/2004 season and onwards the shift becomes quite clear, as shown by the table in Appendix A, where five to six clubs now dominate. Four of these clubs were already somewhat well-established in the league and was considered the biggest competitors, namely Manchester United and Liverpool. Whereas Chelsea and Manchester City were not usually up there fighting for the title, prior to their change of ownership.

The reason as to why I mention Chelsea and Manchester City is that they are known for success in a short time period. These clubs are seeking so-called "quick fixes" which is something that UEFA specified being against when they introduced the financial fair play regulations. This is quite obvious as these types of investment don't exactly scream sustainability, and this is the main reason as to why the break-even requirement was introduced in the first place. I wanted to find literature that addressed the financial fair play regulations impact on European football, and I found a well-known article written by Peeters and Szymanski (2014). Here, they discuss the effect of the controversial break-even requirement in four different leagues (England, Spain, Italy, and France). They use a self-constructed model which accounted for different leagues, divisions, and variables such as points, salaries, and revenues. Based on their results they concluded that the break-even requirement is a powerful tool to decrease wage spending without reducing their revenues (Peeters and Szymanski, 347). In addition, this requirement also protects success of the traditional top clubs as it reduces the chance for smaller clubs to even compete.

This is one if not the biggest criticism towards the financial fair play regulations, as this has resulted in a few clubs establishing themselves and completely dominating the rest of the competition. These are the clubs known as the "big six" a term created by the English media, which ironically also includes Chelsea and Manchester City. Two clubs that prior to the introduction of these financial regulations, took advantage of the system and built themselves into European powerhouses. From an outsider's perspective, this surely gives clubs temptations to further bypass these regulations in order to achieve success. These clubs are in what we call a prisoner's dilemma (Preuss et al. 2014). This from a football perspective is a dilemma where you feel like you don't necessarily have a choice, because if you don't invest you might fall further behind the competition. Manchester United is a great example of this, especially after Sir Alex Ferguson left following the 2012/2013 season. They have invested heavily, close to €1 billion in the decade prior, buying players from every major league. Although what we see from Manchester United is a failed project, where the investments haven't paid off. They haven't achieved much success, and the transfers along with the destroyed wage structure, have left the club in shambles. But can you blame them? This a major European club, that usually competes with the biggest clubs around the world. A club that is now competing with teams that had no success prior to their change in ownership, which was backed by enormous investments.

The final paper that I would like to mention is one written by Sass (2014), he analyzes the long-term effects of these regulations on the competitive balance. Using two models, one model that calculates the season winning percentages of clubs and the second is the first model more adapted with a size function for revenue and how it relates to historic success. He found that a club's revenue potential or market size is positively dependent on the historical success (Sass, 153). This is quite obvious and highlights the glory-hunter phenomenon which Manchester United strives for once again. This phenomenon showcases that once a club is successful, they can attract more spectators and further increase revenues and market size. This gives clubs incentives to bypass the financial fair play regulations in order to grow as a club, to expand their market size. Obviously, this discussion does not only include a big club like Manchester United, as one would assume that this is the goal of every football club.

3.0 Data:

The data I will use throughout this paper will be based on the different league tables since the creation of the Premier League back in 1992. These tables are easily accessible on the official website of the Premier League¹. The decision was made to focus mainly on clubs' overall position and points at the end of each season, as it gives a thorough indication of a club's overall performance. In addition, these will be supplied with goals scored, conceded and goal difference in discussions where it may be needed. The rationale as to why I decided to include these, is because as standalone indicators they may be a bit misrepresentative and I avoid potential challenges where teams end up on the same number of points. This is exactly what happened in the 2011/2012 season, which is showcased in table 1 below. If two teams end up in such a situation, the league position is determined by goal difference, then number of goals scored. If, however they still can't be separated both are awarded the same position (Premier League 2022).

To avoid any potential problems that might occur during the calculations I will be using the tables from the 1995/1996 season and onwards. This decision is justified because from this season the Premier League went from 22 clubs to 20. Keeping the number of clubs, the same throughout all the calculations is necessary as it might skew the results. To add further to this decision, it also make it easier to compare the results from before and after the introduction of the financial fair play regulations in the 2011/2012 season.

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¹ See https://www.premierleague.com/tables

Position	Club	Won	Drawn	Lost	GF	GA	GD	Points
1	Manchester City	28	5	5	93	29	+64	89
2	Manchester United	28	5	5	89	33	+56	89
3	Arsenal	21	7	10	74	49	+25	70
4	Tottenham Hotspur	20	9	9	66	41	+25	69
5	Newcastle United	19	8	11	56	51	+5	65
6	Chelsea	18	10	10	65	46	+19	64
7	Everton	15	11	12	50	40	+10	56
8	Liverpool	14	10	14	47	40	+7	52
9	Fulham	14	10	14	48	51	-3	52
10	West Bromwich Albion	13	8	17	45	52	-7	47
11	Swansea City	12	11	15	44	51	-7	47
12	Norwich City	12	11	15	52	66	-14	47
13	Sunderland	11	12	15	45	46	-1	45
14	Stoke City	11	12	15	36	53	-17	45
15	Wigan Athletic	11	10	17	42	62	-20	43
16	Aston Villa	7	17	14	37	53	-16	38
17	Queens Park Rangers	10	7	21	43	66	-23	37
18	Bolton Wanderers	10	6	22	46	77	-31	36
19	Blackburn Rovers	8	7	23	48	78	-30	31
20	Wolverhampton Wanderers	5	10	23	40	82	-42	25

Table 1: Premier League Table For the 2011/2012 Season

4.0 Empirical Results:

4.1 Methodology:

Finding a single way to measure the competitive balance in the Premier League was not a simple task, as there is no single measure for the competitive balance. However, I will be using two primary measurements, the first one being the Herfindahl-Hirschman index. This index was originally developed to assess differences between firms in industries but has later been adapted to analyze competitiveness within sports leagues (Michie and Oughton 2004). The measurement was also frequently used in other studies that had been conducted on different topics surrounding football, such as the impact of revenues from Champions League and broadcasting rights (Anderson 2013). The formula is given as follows:

$$H = \sum_{i=1}^{N} s_i^2$$

where s_i is each club's share of points at the end of the season, and N is the number of clubs².

The topic of revenues from prize money, especially from the Champions League, is a quite relevant topic when discussing the competitive balance. This is considered as one, if not the main reason as to why there has been a development of elite clubs prior to the introduction of the financial fair play regulations. Hence, why I decided to include a measurement that studies the inequality between the top five clubs and the remaining clubs in the Premier League. This is interesting to address, as these clubs get additional funds both from participating and going further into the respective competition. The measurement that will be used is the so-called concentration ratio (CR_5). Where the formula is given as:

$$CR_5 = \frac{Total\ number\ of\ points\ won\ by\ the\ top\ five\ clubs}{Total\ number\ of\ points\ won\ by\ the\ remaining\ clubs}$$

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² Given that the Herfindahl-Hirschman index was not originally developed to address topics concerning football, I decided to include multiple other measurements. This decision was made to ensure that the results I end up with actually are legitimate. Because as you can see in Appendix B i. Club's Share of Points, there are no negative values hence there is no need to square the values. But for the sake of my calculations and my results I decided to include it regardless.

To highlight the unpredictability of the Premier League, the decision was also made to include graphs that showcase maximum, minimum and the overall mean of points throughout each respective season. This will further showcase how the competitiveness has changed both before and after the introduction of the financial regulations. Which address the potential scenario where teams would eventually develop into a natural hierarchy. Comparing seasons individually might give a bit skewed result, hence why I will also look at different long-term trends such as point differentials between winning-and losing margin. This along with the primary measurements will hopefully highlight the impact of these regulations on the overall competitiveness, compared to seasons prior.

4.2 Results:

4.2.1 Herfindahl-Hirschman Index:

I started off by collecting data from the different seasons starting from the 1995/1996 season, and onwards as shown by the table in Appendix A. Then calculations were conducted so I could calculate each club's share of the total points, which are used to calculate the Herfindahl-Hirschman index values. Based on these values (see Appendix B), I can visualize how the competitive balance is affected through different seasons which is showcased in figure 1 below.



Figure 1: Herfindahl-Hirschman Index

The Herfindahl-Hirschman index showcase a range of values between 0.05 and 0.07. Where a 0.05 and below is considered a balanced league, and a 0.07 and above is considered an unbalanced league. From the figure we see a general decline in the overall competitiveness since the 1997/1998 season as is suggested by the trend line. In the earliest seasons and onwards to the 2009/2010 season, the trend can mainly be described as a result of the vast increase in prize money. In focus is especially the Champions League, which by many is considered the main factor for the general decline. This is quite understandable if you look at how much a club could potentially earn from European success which is showcased for different seasons in table 2 below.

Qualifications:	2006/2007:	2011/2012	2015/2016:	2021/2022:		
Group Stage	€5.4 million	€7.2 million	€12 million	€15.6 million		
Round of 16	€2.2 million	€3 million	€5.5 million	€9.6 million		
Quarterfinals	€2.5 million	€3.3 million	€6 million	€10.6 million		
Semifinals	€3 million	€4.2 million	€7 million	€12.5 million		
Final	€4 million	€5.6 million	€10.5 million	€15.5 million		
Winning the Final	€3 million	€3.4 million	€4.5 million	€4.5 million		
Total:	€20.1 million	€26.7 million	€45.5 million	€68.3 million		

Table 2: Changes in Prize Money Champions League³

From a club perspective it is easy to understand why qualifying for the Champions League is so important, especially when you consider that these numbers do not include bonuses. In the 2021/2022 season it estimated that clubs will earn a total of €15.6 million just from qualifying for the Champions League (UEFA 2021). If we compare these numbers to the 2006/2007 season, we see an increase of about €10 million. Whereas if the club end up winning the whole competition it will earn a total of £68.3 million, a number that has more than tripled since the 2006/2007 season. However, it does not stop here as the club also qualify for the UEFA Super Cup. If the club end up winning this competition it will receive a total of £4.5 million (UEFA 2021), which is more than you will earn from winning the prestigious FA Cup in England (TheFA 2022). Based on these numbers we can with a lot of certainty say that the prize money will continue increasing on an upward trajectory. The same goes for the money from broadcasting rights as well as the constant influx of new sponsors that are interested in entering the world of football.

As you can tell by the graph in figure 1, there is a couple of seasons that stand out. The most obvious being the 2018/2019 season where the Herfindahl-Hirschman index hit the peak with 0.057, which were followed by two seasons where it eventually dropped. This decline is a result of the pandemic, as financial fair play regulations was more or less set aside so clubs could finance losses. The 2010/2011 season also stand out as it has a massive decline from the previous season. This season was characterized by fierce

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³ The numbers for the 2021/2022 season are estimates, that were briefed by UEFA to clubs and other associates.

competition among other reasons. The team at the top of the table had a total of 80 points, whereas the team at the bottom had a total of 33 points. In terms of the average number of points, it was close to 54. Where a total of eight clubs were within six points of the average (7th to 14th place), and they were all separated by just eight points. In addition, if we look at the clubs at the bottom (15th to 19th) they were only separated by four points. The decline might also be caused by the fear from clubs that the financial fair play regulations could affect the competition. Which resulted in most clubs putting in a "good boy" behavior.

4.2.2 Concentration Ratio (CR5):

The second primary measurement as I mentioned earlier is the concentration ratio. This measure highlights the inequality between the top clubs (in this case the top five clubs), compared to the remaining clubs in that respective league. Based on the values calculated, showcased in Appendix C, we see a clear upward trend as visualized in figure 2 below. Essentially highlighting that there is a reduction in the competitive balance and there's a clear gap between the top five clubs compared to the rest. Given a league with a total 20 clubs, the ratio would normally be between 0.25 and 0.55 (Michie and Oughton, 9). We see by the figure that the peak was hit in the 2017/18 season with a total of 0.63, and it had gradually increased prior to that season.

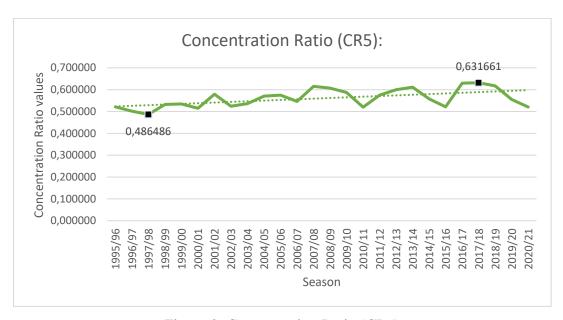


Figure 2: Concentration Ratio (CR5)

4.2.3 Maximum, Minimum and Mean Points:

To highlight the unpredictability within football in general, I included maximum, minimum and mean points at the of the season⁴. In the last five to six years following the 2015/2016 season we see a steady increase in terms of the maximum points. It eventually hits the peak in the 2018/2019 season with a total of 100 points, which were followed by two seasons with 98 and 99 points respectfully. Based on the graph, we can also conclude that you don't really see winning margins below 80, and the mean number of points is pretty much stable at around 52 points. The minimum point totals are always below 35, where it hit the lowest point in the 2007/2008 season where Derby County ended with a total of just 11 points. Derby County is currently on the brink of administration and are also now confirmed going down to the third tier of the English football league system (Derby County Football Club 2022). They were pretty much doomed prior to the season, as they were punished both by the FA and UEFA with point deductions which amounted to a total of 21 points.

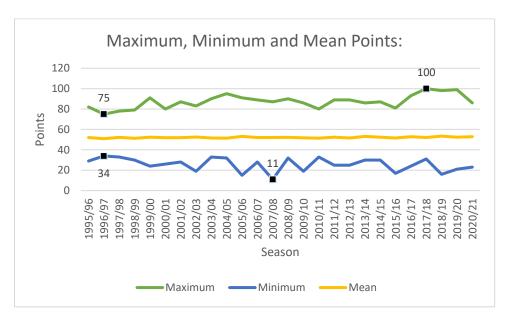


Figure 3: Maximum, Minimum, and Mean Points

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⁴ If necessary Appendix D showcase all values.

4.2.4 Long Term Trends (Point Margins and Point Differentials):

To give a more representative result I also decided to include long-term trends which are showcased in figure 4 and 5 below. Figure 4 showcases the point differentials between the first- and second placed clubs and the 19th and the last placed clubs. I will start by addressing the winning margins, where the 2011/2012 season stands out. This season was quite special as two clubs ended on equal number of points. The battle for the title between Manchester City and Manchester United were one for the history books and is considered iconic in many ways. Both ended with a total of 89 points, where up until extra time Manchester City was down 1-2 at home against Queens Park Rangers. A total of five minutes were added as extra time, where Manchester City equalized in the 91st minute. The match between Sunderland and Manchester United ended 1 minute later, where Manchester United came out victorious and at this point was winning the title. In the 93rd minute Aguero scored one of the Premier League's most iconic goals, resulting in Manchester City winning their first title since the 1967/1968 season. Whereas as if we address the latest seasons there has been pretty much a battle between Manchester City and Liverpool. The 2018/2019 season separated them by just one point, and currently they are separated with just 3 points with 2 matches to go as of May 12th, 2022. In terms of the losing margins the season with Derby County's 11-point total is the one that stands out the most.



Figure 4: Winning- and Losing Point Margins

The second figure highlights the point differentials between first and last place and is quite interesting to look at. This somewhat give you an idea of how competitive all the teams were within the league that respective season. We see by looking at the graph that the lowest point difference was 41 points which was all the way back in the 1996/1997 season. Since then, we see a clear upward trend, before we hit the peak in the 2018/2019 season with a total of 82-point difference⁵. This differential was larger than the winning point totals on six different occasions, and it is larger point tally than the second placed clubs in 16 different occasions.

During this season Huddersfield Town had a market value of just €137 million, whereas the winners Manchester City had a market of value of around €1.2 billion (Transfermarkt 2022). Which highlights the disparity between the top and bottom in the Premier League and it is a common occurrence pretty much every year. In the 2008/2009 season, much like what is happening currently at Chelsea, the assets of the owners were completely frozen. Since then, the Abu Dhabi Group have taken control over the ownership of Manchester City in 2008. After enormous owner-backed investments, Manchester City have won the title 5 times in the last 10 years. They are currently battling it with Liverpool, and can potentially win their 6th Premier League title this season. Prior to the change of ownership, Manchester City were nowhere to be seen among the top clubs in the league. Just 10 years prior to them winning their first title in 50 odd years, Manchester City were relegated to the Championship.



Figure 5: First and Last Place Point Differentials

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⁵ Values for both graphs are showcased in Appendix E.

4.2.5 The Cinderella Story of Leicester City:

Up until the 2015/2016 season only one team outside the "big six" had won the Premier League title. This was all the way back in the 1990s, more specifically the 1994/1995 season where Blackburn Rovers won the title. Since then, Blackburn Rovers have been relegated to the Championship where they are now considered a mid-table club. But during the 2015/2016 season we noticed once again quite a miracle. First as showcased by the Herfindahl-Hirschman index, the values were very distorted upwards by large differentials between the top and bottom of the table. If we somehow could see past these distortions, this season would have been the most competitive season since the late 1990s. In addition, this was the season were Leicester City shocked everybody and somehow managed to win the Premier League title. Sadly, much like the made-up stories we were told as kids, the consistency of Leicester City did not hold up. The following season Leicester City ended their season on 14th place with a total of 41 points. Although since that season they have managed to grab a couple more titles such as the FA Cup in the 2020/2021 season. Given that they won the title in the 2015/2016 season they also qualified for the Champions League the following season, where they managed to reach the quarterfinals. I am addressing this season, because miracles like this can happen and one might assume that the Premier League is more competitive than what it really is. You can pretty much with certainty guarantee that a club labeled within the "big six" will go on and win the title prior the season starting, as there is such a big disparity between top and bottom.

5.0 Conclusion:

Prior to the introduction of the financial fair play regulations, the Premier League was arguably considered very unbalanced when it came to competitiveness. Many argue that the competitions hosted by UEFA, such as the Champions- and Europa League, is a main factor as to why we see wealthy elite clubs. Since then, the financial fair play regulations have been introduced following internal discussions within UEFA throughout 2009 to 2011. UEFA stated that they were left with no choice given the serious and worsening financial conditions throughout European club football (UEFA 2015). The first assessments were carried out in the 2011/2012 season and since then there is reports that multiple clubs have had club losses and overdue debt slashed. This has decreased the number of clubs operating on losses and with debt to less than 20% of the level prior to the release of these financial regulations.

UEFA specifies that the financial fair play regulations are not there to make clubs equal or address other challenges that European club football might face. As they mentioned above, they have made considerable progress when addressing the financial aspects of European club football. Although, we are still left with an unanswered question in regard to these regulations effect on general competitiveness. These regulations leave very little room for smaller clubs to operate in a manner where they could potentially challenge the biggest European clubs. What each club determine as success may differ from club to club, but what we generally see, is that clubs are developing into a natural hierarchy. This ruins the point of football from a fan perspective, as you can already prior to the season somewhat predict with a given certainty where most clubs will end up. The teams that just got promoted usually go down following that season, the clubs in the middle are there as always grabbing a win against the top clubs now and then. Then at top you have the "big six" as labeled by the media, clubs who had always been among the best along with teams who took advantage of being backed by rich investors.

UEFA states that no clubs should continually seek a "quick fix", instead they should be encouraged to invest with sustainability and credibility in mind (UEFA 2015). No club however is built like a business, and rarely clubs end up with a profit at the end of the season which is the case for most sports. I would argue that these fixes are the norm within the biggest European leagues. The clubs are left in a prisoner's dilemma, where they have

no choice other than to invest or they fall behind the rest of the competition (Preuss et al. 2014). In the last decades especially Chelsea and Manchester City are good examples of what clubs might achieve from huge investments. They are still to this date splashing cash on whatever player they want, in order to fill the smallest gaps in their squad. This results in smaller clubs losing out on a player in 9 out of 10 occasions as they simply can't offer the same wages and transfer fees. One can argue that in certain situations it is proven that money doesn't always guarantee success, such as with Manchester United. Sometimes there is more emphasis by clubs on efficiency, innovation, and good management to differentiate themselves from the rest of the competition. This itself promotes natural growth, which levels the playing field so clubs can have access to equal number of financial resources. However, this is more like dream rather than reality as this is not the situation that most clubs are currently in.

Aleksander Čeferin, the UEFA president, stated earlier this year that the financial fair play regulations have worked miraculously. Stating that the regulations have once again served its primary purpose helping European club finances back from the brink, and at the same time have revolutionized how clubs operate on a daily basis (Slater and Bosher, 2022). He states further that there is still a need for a change, which is why further financial sustainability regulations will be added as of June 2022 (UEFA 2022). This will be achieved through three key pillars, solvency, stability, and cost control.

If we take a closer look at what this reform of the financial fair play regulations implies, we can conclude that there isn't really much change. Starting with the first of the three key pillars, solvency simply means no overdue payments to employees, other clubs, and social/tax authorities. Iterating that controls will be performed every quarter and there will be less tolerance for those clubs that can't cough up the money on time. Whereas stability simply refers to the break-even requirement, where the acceptable deviation has increased to €60 million over a three-season period. Which Čeferin states will ensure the fair value of transactions and will improve the club's balance sheet and additionally reduce the amount of debt (UEFA, 2022). Now the biggest innovation with this "reform" of the financial fair play regulations is the introduction of the squad cost rule. This according to UEFA will bring better cost control in relation to both player wages and transfer costs. Clubs will be limited by their revenue, when it comes wages, transfers and agent fees which can't surpass 70 per cent. There will be gradual implementation over a three-season

period where clubs are allowed necessary time to adapt. Stating that the punishments for breaching these regulations will be more severe than ever, which I guess time will tell.

The purpose of this paper was to highlight the decline in the overall competitiveness. This has been the case both before and after the introduction of the financial fair play regulations. Whether these regulations directly have impacted the overall competitiveness is hard to tell, given that there are multiple factors that potentially could affect general competitiveness. These includes factors that I account for such as increased prize money and owner financing, and factors I don't account for such as injuries and turmoil within the player group. This is why there is evidence that further research is needed on the overall effect of the financial fair play regulations within the world of football. Throughout this paper I have expressed my criticism towards these regulations that are justified, in the sense that they facilitate for the wealthy elite clubs. Paving the path for these clubs to further distance themselves from the remaining clubs and eventually developing into a natural hierarchy.

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Appendix:

A. League Tables 1995/1996 to 2020/2021

		_	_	_	_	_	_	_	_	_		_	_	_			_		_	_	_
1042	29	33	38	38	38	40	41	43	43	50	51	58	61	61	61	63	63	71	78	82	1995/96
1018	34	39	40	41	41	42	42	42	46	46	46	47	56	57	59	61	68	68	68	75	1996/97
1045	33	35	40	40	44	44	44	44	48	52	53	55	56	57	58	59	63	65	77	78	1997/98
1025	30	35	36	41	42	42	43	46	46	47	49	51	52	54	55	57	67	75	78	79	1998/99
1048	24	31	33	36	3 8	44	4	50	52	52	53	55	55	5	5	83	67	69	73	91	1999/00
1039	26	34	34	42	42	42	42	48	49	51	52	52	54	57	61	66	68	69	70	80	2000/01
1039	28	30	36	40	40	43	44	44	45	45	46	50	50	53	64	66	71	77	80	87	2001/02
1050	19	26	42	44	45	47	48	48	49	49	50	51	52	59	8	2	67	69	78	88	2002/03
1032	33	33	33	39	41	44	45	45	47	48	50	52	53	53	56	56	60	75	79	90	3 2003/04
1030	32	33	33	34	39	42	44	44	45	46	47	52	52	55	58	58	61	77	83	95	1 2004/05
1063	15	30	34	38	42	43	45	47	48	50	51	55	26	<u>%</u>	ස	83	67	82	88	91	2005/06
1042	28	34	38	38	39	41	42	43	46	50	52	54	55	56	58	60	68	68	83	89	2006/07
1040	11	35	36	36	37	39	40	42	43	46	49	55	57	58	60	65	76	83	85	87	7 2007/08
1043	32	32	34	35	36	41	41	41	45	45	50	51	51	53	න	ස	72	83	88	90	2008/09
1035	19	30	30	35	36	38	39	44	46	47	50	50	61	63	64	67	70	75	85	86	2009/10
1029	33	39	39	40	42	43	46	46	46	47	47	48	49	54	58	62	68	71	71	80	2010/11
1047	25	31	36	37	38	43	45	45	47	47	47	52	52	56	2	83	69	70	89	89	2011/12
1032	25	28	36	39	41	41	41	42	43	44	46	46	49	61	63	72	73	75	78	89	2012/13
1062	30	32	33	36	37	38	38	40	42	45	49	50	56	64	69	72	79	82	84	86	2013/14
1047	30	83	35	38	3 8	39	41	44	47	47	48	22	56	60	62	22	70	75	79	87	2014/15
1033	17	34	37	39	42	42	43	45	47	47	50	51	60	62	63	66	66	70	71	81	2015/16
1056	24	28	34	40	40	41	41	44	44	45	45	46	46	61	69	75	76	78	86	93	2016/17
1041	31	83	33	36	37	40	41	42	44	44	42	47	49	22	ස	70	75	77	82	100	2017/18
1069	16	26	34	36	39	40	45	45	49	50	52	52	54	57	66	70	71	72	97	98	2018/19
1048	21	34	34	35	39	41	43	44	49	52	54	54	56	59	59	62	66	66	81	99	2018/19 2019/20
1057	23	26	28	39	41	43	4	45	45	55	59	59	61	62	83	86	67	69	74	88	2020/21

B. Herfindahl-Hirschman Index

i. Club's Share of Points

0,027831	0,031670	0,036468	0,036468	0,036468	0,038388	0,039347	0,041267	0,041267	0,047985	0,048944	0,055662	0,058541	0,058541	0,058541	0,060461	0,060461	0,068138	0,074856	0,078695	1995/96
0,033399		0,039293	0,040275	0,040275	0,041257	0,041257	0,041257	0,045187	0,045187	0,045187	0,046169	0,05501	0,055992	0,057957	0,059921	0,066798	0,066798	0,066798	0,073674	1996/97
0,031579	0,033493	0,038278	0,038278	0,040275 0,042105	0,042105	0,042105	0,041257 0,042105 0,044878	0,045933	0,049761	0,050718	0,052632	0,053589	0,054545	0,055502	0,056459	0,060287	0,062201	0,073684	0,074641	1997/98
0,029268	0,034146	0,035122		0,040976	0,040976	0,041951	0,044878	0,044878	0,045854	0,047805	0,049756	0,050732	0,052683	0,053659		0,065366	0,073171	0,076098	0,077073	1998/99
0,022901	0,02958	0,031489	0,034351		0,041985	0,041985	0,04771	0,049618	0,049618	0,050573	0,052481	0,052481	0,055344	0,057957 0,055502 0,053659 0,055344	0,062023	0,063931	0,06584	0,069656	0,086832	1999/00
0,033399 0,031579 0,029268 0,022901 0,025024 0,026949 0,018095 0,031977 0,031068 0,014111 0,026871 0,010577 0,030681 0,018357	0,03831 0,033493 0,034146 0,02958 0,032724 0,028874 0,024762 0,031977 0,032039 0,032822 0,03263 0,03564 0,030681 0,028986 0,037901 0,029608 0,027132 0,0306810,030681 0,030681 0,0306810	0,039293 0,038278 0,035122 0,031489 0,032724 0,034649	0,04 0,034351 0,040423 0,038499	0,03626 0,040423 0,038499 0,042857 0,039729 0,037864 0,039511 0,037428 0,035577 0,034516 0,034783 0,040816 0,036294 0,039729	0,041257 0,042105 0,040976 0,041985 0,040423 0,041386 0,044762 0,042636 0,040777 0,040452 0,039347	0,041257 0,042105 0,041951 0,041985 0,040423 0,042348 0,045714 0,043605 0,042718 0,042333 0,040307 0,038462	0,04771 0,046198 0,042348 0,045714 0,043605 0,042718 0,044214 0,041267 0,040385	0,045187 0,045933 0,044878 0,049618 0,047161 0,043311 0,046667 0,045543 0,043689 0,045155 0,044146 0,041346 0,043345 0,043145 0,044444 0,044704	0,045187 0,049761 0,045854 0,049618 0,049686 0,043311 0,046667 0,046512 0,04666 0,047037 0,047985 0,044231 0,043145 0,045411 0,045675	0,045187 0,050718 0,047805 0,050573 0,050048 0,044273 0,047619	0,052632 0,049756 0,052481 0,050048 0,048123 0,048571 0,050388 0,050485	0,05501 0,053589 0,050732 0,052481 0,051973 0,048123 0,049524 0,051357 0,050485 0,052681 0,052783 0,054808 0,048897 0,058937 0,047619 0,049666 0,047481 0,051050 0,051	0,055992 0,054545 0,052683 0,055344 0,05486 0,051011		0,05561 0,062023 0,063523 0,063523 0,060952 0,054264 0,056311 0,061148 0,057582	0,066798 0,060287 0,065366 0,063931 0,065448 0,068335 0,06381 0,05814 0,059223 0,063029 0,065259 0,073077 0,069032 0,067633 0,066084 0,065903 0,0770736 0,0	0,066798 0,062201 0,073171 0,06584 0,06641 0,07411 0,065714 0,072674 0,074757 0,07714 0,065259 0,079808 0,079578 0,072464 0,068999 0,066858 0,072674 0,072674	0,073684 0,076098 0,069656 0,067372 0,076997 0,074286 0,07655 0,080583 0,078081 0,079655 0,081731 0,082454 0,082126 0,068999 0,085005 0,075581 0,08100000000000000000000000000000000	0,074641 0,077073 0,086832 0,076997 0,083734 0,079048 0,087209 0,092233 0,085607 0,085413 0,083654	1999/00 2000/01 2001/02 2002/03 2003/04 2004/05 2005/06
0,026949	0,028874	0,034649	0,038499	0,038499	0,041386	0,042348	0,042348	0,043311	0,043311	0,044273	0,048123	0,048123	0,051011	0,061598	0,063523	0,068335	0,07411	0,076997	0,083734	2001/02
0,018095	0,024762		0,041905	0,042857	0,044762	0,045714	0,045714	0,046667	0,046667	0,047619	0,048571	0,049524	0,05619	0,057143	0,060952	0,06381	0,065714	0,074286	0,079048	2002/03
0,031977	0,031977	0,031977	0,037791	0,039729	0,042636	0,043605	0,043605	0,045543	0,046512	0,04845	0,050388	0,051357	0,051357	0,054264	0,054264	0,05814	0,072674	0,07655	0,087209	2003/04
0,031068	0,032039	0,04 0,031977 0,032039 0,031985 0,036468 0,034615 0,032598 0,028986 0,037901 0,034384 0,034884 0,0	0,041905 0,037791 0,03301 0,035748 0,036468 0,034615 0,033557 0,033816 0,038873 0,035339 0,037791 0,037791	0,037864	0,040777	0,042718	0,042718	0,043689	0,04466	0,04845 0,045631 0,047977 0,049904 0,047115 0,047939 0,048309 0,045675	0,050485	0,050485	0,05619 0,051357 0,053398 0,054563 0,053743 0,055769 0,050815	0,05871 0,061598 0,057143 0,054264 0,056311 0,059266 0,055662 0,057692 0,059444 0,061836 0,056365 0,061127 0,061047 0,061	0,056311	0,059223	0,074757	0,080583	0,092233	2004/05
0,014111	0,028222	0,031985	0,035748	0,039511	0,040452	0,042333	0,044214	0,045155	0,047037	0,047977	0,05174	0,052681	0,054563	0,059266	0,061148	0,063029	0,07714	0,078081	0,085607	2005/06
0,026871	0,03263	0,036468	0,036468	0,037428	0,039347	0,040307	0,041267	0,044146	0,047985	0,049904	0,051823	0,052783	0,053743	0,055662	0,057582	0,065259	0,065259	0,079655	0,085413	2006/07
0,010577	0,033654	0,034615	0,034615	0,035577	0,0375	0,038462	0,040385	0,041346	0,044231	0,047115	0,052885	0,054808	0,055769	0,057692		0,073077	0,079808	0,081731	0,083654	2007/08
0,030681	0,030681	0,032598	0,033557	0,034516			l	0,043145	0,043145	0,047939	0,048897	0,048897	0,050815	0,059444	0,060403	0,069032	0,079578	0,082454		2008/09
0,018357	0,028986	0,028986	0,033816	0,034783	0,03931 0,036715 0,041788	0,03931 0,037681 0,044704	0,03931 0,042512 0,044704	0,044444	0,045411	0,048309	0,05174 0,051823 0,052885 0,048897 0,048309 0,046647 0,049666 0,044574 0,	0,058937		0,061836	0,0625 0,060403 0,064734 0,060253 0,062082 0,069767 0,1	0,067633	0,072464	0,082126	0,08629 0,083092 0,077745 0,085005	2009/10
	0,037901	0,037901	0,038873	0,040816	0,041788	0,044704	0,044704	0,044704	0,045675	0,045675	0,046647	0,047619	0,06087 0,052478 0,053486 0,059109 0,	0,056365	0,060253	0,066084	0,068999	0,068999	0,077745	2010/11
0,023878	0,029608	0,034384	0,035339	0,036294	l	0,04298		0,04489		ı	0,049666	0,049666	0,053486	0,061127	0,062082	0,065903	0,066858	0,085005	0,085005	2011/12
0,03207 0,023878 0,024225 0,	0,027132	0,034884	0,037791	0,039729	0,04107 0,039729	0,04298 0,039729 0,1	0,04298 0,040698 0,	0,04489 0,041667 0,1	0,04489 0,042636 0,1	0,04489 0,044574 0,1	0,044574	0,047481	0,059109	0,061047	0,069767	0,070736	0,072674	0,075581	0,08624 0,1	2012/13
	0,030132	0,031073	0,033898	0,03484	Q,	0,035782	0,037665		0,042373	0,046139	0,047081		0,060264	0,064972	0,067797	0,074388	0,077213		0,080979	2013/14
0,028653	0,031519	0,033429	0,036294	0,036294	0,037249	0,03916	0,042025	0,04489	0,04489	0,045845	0,051576	0,053486	0,057307	0,059217	0,061127	0,066858	0,071633	0,075454	0,083095	2014/15
0,016457	0,032914	0,035818	0,037754	0,040658	0,040658	0,041626	0,043562	0,045499	0,045499	0,048403	0,049371	0,058083	0,060019	0,060987	0,063892	0,063892	0,067764	0,068732	0,078412	2015/16
)28249 0,028653 0,016457 0,022727 0,029779 0,014967 0,020038 0,02176	0,031519 0,032914 0,026515 0,0317 0,024322 0,032443 0,024598	031073 0,033429 0,035818 0,032197	033898 0,036294 0,037754 0,037879 0,034582 0,033676 0,033397 0,036897	,03484 0,036294 0,040658 0,037879 0,035543 0,036483 0,037214 0,038789	035782 0,037249 0,040658 0,038826 0,038425 0,037418 0,039122 0,040681	035782 0,03916 0,041626 0,038826 0,039385 0,042095 0,041031 0,041627	037665 0,042025 0,043562 0,041667 0,040346 0,042095 0,041985 0,042573	39548 0,04489 0,045499 0,041667 0,042267 0,045837 0,046756 0,042573	042373	046139 0,045845 0,048403 0,042614 0,042267 0,048644 0,051527 0,055818	047081 0,051576 0,049371 0,043561 0,045149 0,048644 0,051527 0,055818	0,053486 0,058083 0,043561 0,04707 0,050514 0,053435 0,057711	060264 0,057307 0,060019 0,057765 0,051873 0,053321 0,056298 0,058657	064972 0,059217 0,060987 0,065341 0,060519 0,06174 0,056298 0,061495	067797 0,061127 0,063892 0,071023 0,067243 0,065482 0,05916 0,062441	074388 0,066858 0,063892 0,07197 0,072046 0,066417 0,062977 0,063387	077213 0,071633 0,067764 0,073864 0,073967 0,067353 0,062977 0,065279	0,075454 0,068732 0,081439 0,07781 0,090739 0,07729 0,070009	080979 0,083095 0,078412 0,088068 0,096061 0,091674 0,094466 0,081362	2009/10 2010/11 2011/12 2012/13 2013/14 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21
0,029779	0,0317	0,0317	0,034582	0,035543	0,038425	0,039385	0,040346	0,042267	0,042267	0,042267	0,045149	0,04707	0,051873	0,060519	0,067243	0,072046	0,073967	0,07781	0,096061	2017/18
0,014967	0,024322	0,031805	0,033676	0,036483	0,037418	0,042095	0,042095	0,045837	0,046773	0,048644	0,048644	0,050514	0,053321	0,06174	0,065482	0,066417	0,067353	0,090739	0,091674	2018/19
0,020038	0,032443	0,032443	0,033397	0,037214	0,039122	0,041031	0,041985	0,046756	0,049618	0,051527	0,051527	0,053435	0,056298	0,056298	0,05916	0,062977	0,062977	0,07729	0,094466	2019/20
0,02176	0,024598	0,02649	0,036897	0,038789	0,040681	0,041627	0,042573	0,042573	0,052034	0,055818	0,055818	0,057711	0,058657	0,061495	0,062441	0,063387	0,065279	0,070009	0,081362	2020/21

ii. Herfindahl-Hirschman Index Values

Season:	Herfindahl-Hirschman Index:
1995/96	0,054023
1996/97	0,052659
1997/98	0,052688
1998/99	0,053544
1999/00	0,054464
2000/01	0,053436
2001/02	0,054901
2002/03	0,054046
2003/04	0,054110
2004/05	0,055227
2005/06	0,055824
2006/07	0,054397
2007/08	0,056842
2008/09	0,055808
2009/10	0,056318
2010/11	0,052931
2011/12	0,055271
2012/13	0,055664
2013/14	0,056258
2014/15	0,054633
2015/16	0,054244
2016/17	0,056714
2017/18	0,056444
2018/19	0,057337
2019/20	0,055466
2020/21	0,054850

C. Concentration Ratios

Season:	Concentration Ratio (CR5):
1995/96	0,521168
1996/97	0,501475
1997/98	0,486486
1998/99	0,532138
1999/00	0,534407
2000/01	0,514577
2001/02	0,579027
2002/03	0,523948
2003/04	0,535714
2004/05	0,570122
2005/06	0,574815
2006/07	0,545994
2007/08	0,614907
2008/09	0,607088
2009/10	0,587423
2010/11	0,519941
2011/12	0,574436
2012/13	0,600000
2013/14	0,611533
2014/15	0,558036
2015/16	0,521355
2016/17	0,629630
2017/18	0,631661
2018/19	0,617247
2019/20	0,554896
2020/21	0,520863

D. Maximum, Minimum, and Mean Points

Season:	Maximum:	Minimum:	Mean:
1995/96	82	29	52,1
1996/97	75	34	50,9
1997/98	78	33	52,25
1998/99	79	30	51,25
1999/00	91	24	52,4
2000/01	80	26	51,95
2001/02	87	28	51,95
2002/03	83	19	52,5
2003/04	90	33	51,6
2004/05	95	32	51,5
2005/06	91	15	53,15
2006/07	89	28	52,1
2007/08	87	11	52
2008/09	90	32	52,15
2009/10	86	19	51,75
2010/11	80	33	51,45
2011/12	89	25	52,35
2012/13	89	25	51,6
2013/14	86	30	53,1
2014/15	87	30	52,35
2015/16	81	17	51,65
2016/17	93	24	52,8
2017/18	100	31	52,05
2018/19	98	16	53,45
2019/20	99	21	52,4
2020/21	86	23	52,85

E. Point Differentials

i. Winning- and Losing Margins

Season:	Winning Margin:	Losing Margin:
1995/96	4	4
1996/97	7	5
1997/98	1	2
1998/99	1	5
1999/00	18	7
2000/01	10	8
2001/02	7	2
2002/03	5	7
2003/04	11	0
2004/05	12	1
2005/06	8	15
2006/07	6	6
2007/08	2	24
2008/09	4	0
2009/10	1	11
2010/11	9	6
2011/12	0	6
2012/13	11	3
2013/14	2	2
2014/15	8	3
2015/16	10	17
2016/17	7	4
2017/18	19	2
2018/19	1	10
2019/20	18	13
2020/21	12	3

ii. First and Last Place Gaps:

Season:	First and Last Place:
1995/96	53
1996/97	41
1997/98	45
1998/99	49
1999/00	67
2000/01	54
2001/02	59
2002/03	64
2003/04	57
2004/05	63
2005/06	76
2006/07	61
2007/08	76
2008/09	58
2009/10	67
2010/11	47
2011/12	64
2012/13	64
2013/14	56
2014/15	57
2015/16	64
2016/17	69
2017/18	69
2018/19	82
2019/20	78
2020/21	63