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Social inequality in German football. Does money score goals?

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Abstract

The aim of this study is to empirically address the following research questions using 2001-2015 data from the German League Bundesliga: Is there a relationship between players' salary and league table ranking? How distinct is the social inequality of the German League Bundesliga? How strong is the influence of the UEFA's premiums on this social inequality? To answer these questions, the distinctiveness and self-organization of the German League Bundesliga are explained, and the league's potential as a solution to the problem of social inequality is explored. The data record is also described. The results confirm that players' salaries and their ranking in the league tables are correlated: money scores goals. Recently, however, the social inequality of the German League Bundesliga has increased. One reason for this increase is the strong influence of the money the UEFA has transferred and still transfers to the clubs.

Keywords: players' salary and league table ranking, social inequality, UEFA Champions League, Europa League

1. Introduction

Football fans take a special interest in the question of whether money scores goals. Anecdotal evidence for this relationship abounds. This article will explore this relationship through a quantitative analysis of data from the German League Bundesliga. From a social science perspective, this research actually explores social inequality. Inequalities, or an unequal 'football society', are apparent in all European Leagues: there are a few 'big clubs' with ample financial resources and many 'small clubs' with smaller budgets. In contrast to 'real society', it is obvious that 'football society', with its institutions and rules, is an artificial product that is self-governed by actors within the system. For this reason, football leagues are an interesting social science research topic. In the first chapter, the theoretical basis of this study will be discussed in depth. The question 'Does money score goals?' can be translated into a more measurable and therefore answerable research question: Is there a relationship between players' salaries and the league tables rankings? This question is related to a broader one: How distinct is the social inequality of the Bundesliga (Wilkesmann, 2014, 109)? Additionally, we will investigate the following related question: How strong is the influence of the UEFA's premiums on social inequality?

All of these questions will be answered using data from the German League Bundesliga from the seasons between 2001/2 and 2014/15.

2. Theoretical characteristics of football

Football is a team sport that exhibits the typical associations between performance and salary (Frank & Nüesch, 2011, 3037). Research on football leagues typically focuses on phenomena related to the self-governance of a social subsystem; such phenomena may explain the self-governance of other subsystems (Wilkesmann, Blutner & Müller 2011, 138). We will briefly discuss five characteristics that make football such an interesting and distinctive phenomenon.

- (1) From a sociological perspective, football exemplifies the recursive relationship between structure and agency in which the social structure is both the medium and the outcome of social action (Giddens, 1984). The German Football League acts according to common rules and structures that are self-imposed. In the 2001/02

season, the “Bundesliga” and “2. Bundesliga” were removed from the German Football Association’s jurisdiction. Since that time, 36 professional football clubs have become members of the German professional football League Association ‘Deutsche Fußball Liga’ (DFL) (hereafter the German League), which became one of the 27 independent member associations of the federal and self-governed German Football Association. The other 26 members of the German Football Association are regional associations comprising approximately 27,000 football clubs. The German League is a democratic association with a “one member, one vote” rule. The board of the German League consists of seven club representatives elected by the general assembly comprising the 36 professional clubs from the Bundesliga and 2. Bundesliga (Wilkesmann, Blutner & Müller, 2011). The board and the general assembly of the German League collaborate to establish all rules and structures, such as how money from broadcasting rights is distributed. The most important rule that generates the greatest portion of the clubs’ income is a result of a collective action process within the German League. According to the new institutionalism approach, this recursive process can be interpreted as ‘institutional work’: “If one thinks of institutions and action as existing in a recursive relationship ..., in which institutions provide templates for action, as well as a regulative mechanism that enforce those templates, and action affects those templates and regulative mechanism ..., then we are centrally concerned in the study of institutional work” (Lawrence, Suddaby & Leca, 2009, 6-7). One example of this recursive process is the rule that determines, at the end of the season, how many clubs are relegated from the first to the second division. This process is the result of a collective decision made with reference to a general rule. However, this structure determines whether a club continues to exist. Another example is the regulation that allows registered clubs to depart from the traditional club structure and to become joint stock companies by demanding that the club retain 50 per cent plus one voting right (§ 8 No. 2 in the Constitution of the League (DFL 2014) and § 16 c Constitution of the German FA). The consequence is that clubs can become public limited companies (“AG”), limited liability companies (“GmbH”), or limited partnerships with share capital (“KGaA”) (Wilkesmann & Blutner, 2002, 19), but only if the club owns the majority (with two exceptions) (Wilkesmann & Blutner, 2007). The reason for this rule is to prevent a

private investor majority or a hostile takeover. In sum, football competition takes place in an environment that is the result of a self-selected, self-governed, self-imposed structure developed through a democratic decision-making process involving all participating actors.

- (2) A second particularity of football is the phenomenon of produced good in a league. This public good or club good (Buchanan, 1965) is a 'joint production' (Hassan & Hamil, 2010). The relevant product is not a single match but the whole championship, with its promotions and relegations. The members of the German League produce this good on a mutual basis. If the championship is decided after the fifth match day and it is obvious which clubs will be relegated to the second division, the competition becomes boring and viewership of future matches will drop. Under conventional market arrangements, businesses seek to eliminate strong competitors to increase their market share. In football, however, there is a need for strong competitors to promote healthy league competition and to achieve competitive balance. Ultimately, therefore, sports competitions require the presence of effective governance mechanisms to ensure that an adequate level of competitive balance is maintained" (Hassan & Hamil, 2010, 345).
- (3) To build healthy league competition, common rules and institutions are necessary. In the German League, the Champions League, and the Europa League, the most important revenue stream is the money generated from selling broadcasting rights. For all three leagues, the broadcasting rights are sold jointly and the revenue is allocated to the clubs. The broadcasting revenue is also a club good, with the peculiarity that the good is divisible (Wilkesmann & Blutner, 2007, 59). The money can be allocated in discretionary, separable allotments. Therefore, a strict rule is necessary for distribution. In the German League, this distribution of broadcasting money is governed by the so-called allocation formula. Theoretically, such rules can oscillate between the poles of equal distribution and distribution by performance. The allocation formula is the result of a (at least theoretically) democratic collective action process within the German League at the national level or the UEFA at the European level.
- (4) The distribution of the broadcasting money is a zero-sum game: One club can only

earn higher revenues if another club receives less. The revenues from the Champions League and the Europa League are not part of this zero-sum game but represent separate, additional income. This extra revenue can mislead the club president or CEO to invest more money in players. If all clubs based their actions on such calculations, all would invest more money without changing the rankings at the end of the season. Akerlof calls this behaviour a rat race: “In the rat race the chances of getting the cheese increase with the speed of the rat, although no additional cheese is produced“ (Akerlof, 1976, 603). The rat race may explain why the English Premier League has never yielded profits after taxes. “However, it is an ‘inconvenient truth’ that English football remains, as it always has been, chronically unprofitable; and the scale of the losses ... would not be sustainable in any other industry” (Hamil & Walters, 2010, 369).

- (5) The last point is not about a unique characteristic of football but about an issue that is clearly manifested within the football leagues: social inequality. Social inequality is present when people have more permanent ‘valuable goods’ than others because of their status in the social structure of relationships (Hradil, 2001, 30). ‘Valuable goods’ are defined as the goods one needs to achieve high-value goals in a given society. Goldthorpe calls this phenomenon social stratification: “Social stratification then refers to inequality that is of a structured kind or, that is, to inequality insofar as it is not merely a matter of individual fortune but rather inherent in prevailing forms of social relationships that have in some degree an institutional basis” (Goldthorpe, 2009, 733). In football, these ‘valuable goods’ are the monetary resources needed to buy expensive players, enabling the club to reach a top position in the league table or collect the maximum number of points by the end of the season. This inequality appears to be structured because, over many years, the same club can become the champion several times. As mentioned above, there are large and small groups, as measured by their financial power, in the German League, as in most European leagues. In Germany, this has been observed in the past and in the present, most notably with the FC Bayern Munich club.

The theoretical particularities of football provide a new perspective on the question of social inequality. The joint production of the league championship is only an exciting product for the audience if the inequality is not too large. If the players’ salaries are too inequitably

distributed among the clubs, then the order of the league tables at the end of the season is easily predictable and the championship is an uninteresting competition that will not yield profits in the long-term. This potential development depends primarily on the institutions and rules, which are self-governed and self-imposed. In summary, social inequality in the German League depends on its own structures and self-governance, which can be influenced by the participating actors through institutional work.

Before we investigate the relationship between the players' salaries and the order of the league tables, we explain the data records and the methods of the empirical investigation.

3. Methods and data

Data from the 2001/2002 through 2014/2015 seasons were used. The dataset contains the incomes of the players in all of the clubs in the German League Bundesliga. Salaries were estimated by the German football magazine *Kicker* (Kicker, Annual Special Issue). The former manager of the German League who was responsible for club licensing indicated that the estimates are good appraisals and can be used as a database, because the numbers are very close to the secret 'real numbers' (personal call). *Kicker* published the entire budget of the clubs for the 2001/2002 through 2005/2006 seasons. They also published the player's salaries for the 2006/2007 through the 2011/2012 seasons. Unfortunately, *Kicker* does not provide estimates after the 2011/2012 season. Therefore, the data for the players' salaries for the 2012/2013 season and 2013/2014 season were retrieved from the "Fußball-Geld.de" (Fussball-Geld, 2016) website, and the data for the 2014/2015 season were collected from the *Handelsblatt* magazine (Reich & Fritzen, 2014). The estimates reported in *Kicker*, *Handelsblatt* and Fußball-Geld.de differ for the FC Bayern Munich and VfL Wolfsburg clubs. The estimates for both clubs in the latter two resources are much lower than in *Kicker* magazine. In all other cases, the estimations from all three sources are comparable. *Kicker* estimates that the FC Bayern Munich players' salaries for the 2011/2012 season were 165 million Euros; the VfL Wolfsburg salaries were 65 million Euros. Fußball-Geld.de estimates that the FC Bayern Munich players' salaries for the 2012/2013 season were 125 million Euros; the salary estimate was 50 million Euros for VfL Wolfsburg. However, these are the only two inconsistencies. Second, the dataset includes all managerial dismissals that occurred during the season. Those that occurred between the seasons were omitted. The source for this data was Transfermarkt.de (Transfermarkt, 2016). Third, the money

transferred from the UEFA per season for participation in the Champions League and the Europa League was part of the dataset. This money is generated by the UEFA from the revenue of the broadcasting rights for both competitions. The numbers are published in the annual “UEFA Revenue Financial Report”. The recent issues are published on the UEFA website (UEFA, 2015), and the older ones are available in the UEFA’s archive.¹

4. The relationship between players’ salaries and the league table rankings

To determine the association between players’ salaries and the order of the league table, we analysed the relationship between players’ salaries and the points scored at the end of the season. Previous studies give empirical evidence for a strong positive relationship between the financial resources of the club and the order of the league table at the end of the season. Frick (2015; Simmons & Frick, 2008) and Wilkesmann (2014) confirm this relationship with longitudinal data for the German League and of Gerrard (2008) for the English Premier League. Gerhards, Mutz and Wagner (2014) compare 12 football leagues in the season 2012/2013. They used the market value of the teams as an indicator and test, additionally, inequality within the team, the cultural diversity of the team, and the degree of turnover among team members. The regression model shows a very high R^2 value ($R^2 .73$) but 68% of the variance of the league tables is explained only by the market value of the team. All studies confirm: money scores goals! Therefore, our first hypothesis is: The higher the players’ average salary of a team, the more points the team scored at the end of the season.

Figure 1 indicates an almost perfect linear correlation in the 2002/2003 season: the higher the budget, the more points were scored. This is especially true for the top and the bottom of the table. At mid-table, there were several small-budget clubs that scored a large number of points, including the VfL Bochum (BO). Apparently, good management of a club allows a club with a small budget to achieve a top position in the table. This could indicate that it is possible for innovative management to generate efficiency, enabling small clubs to perform surprisingly well. Figure 1 reveals the distance between FC Bayern Munich (FCB) and the majority of the league.

¹. Many thanks to the UEFA archivist, Nicolas Bouchet.

The linear correlation also exists in the 2013/2014 season (Figure 2). In the 2002/2003 season, only FC Bayern Munich (FCB) performed significantly better than the majority of the clubs in the league, but in the 2013/2014 season, the FC Schalke 04 (S04), Borussia Dortmund (BVB), and VfL Wolfsburg (WOLF) are also separated from the mass. These four clubs monopolize 50% of players' salaries for the German League. During this same period, the gap between FC Bayern Munich and the other clubs grew significantly.

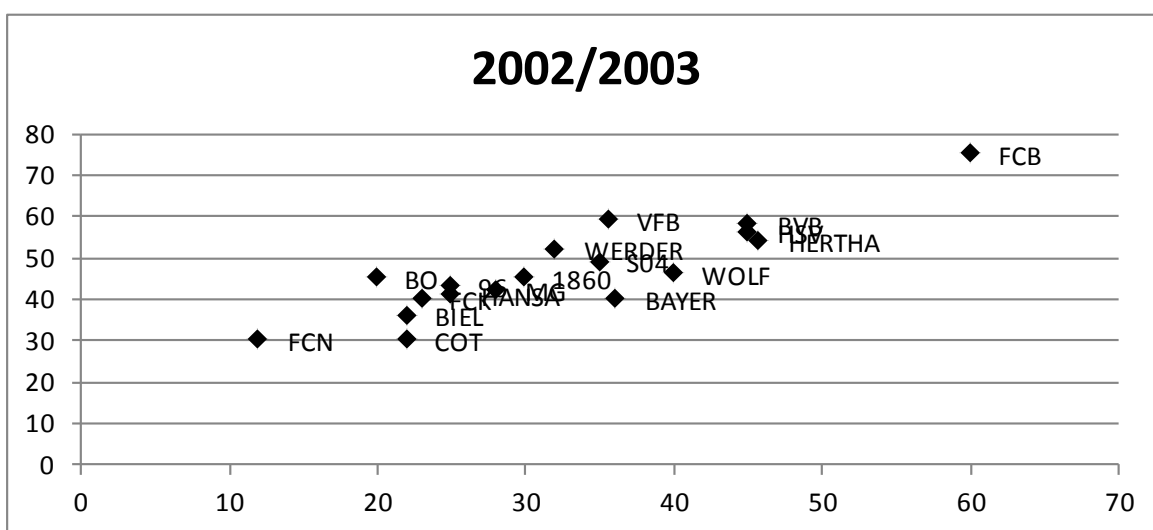


Fig. 1: Relationship between budget and scored points per club in the 2002/2003 season (x-axis €; y-axis points)

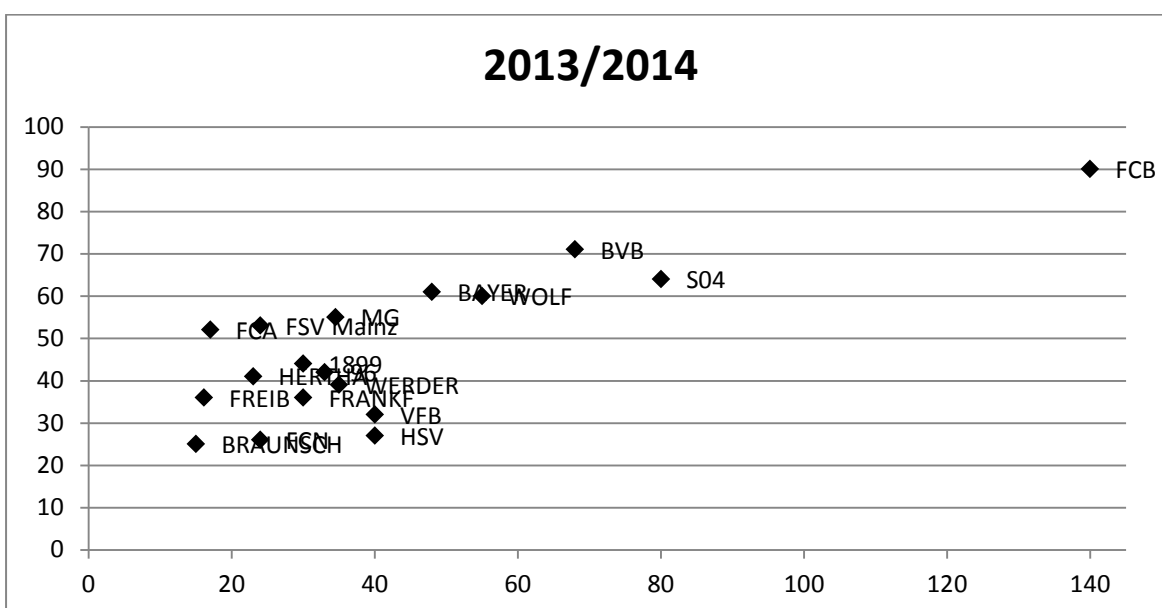


Fig. 2: Relationship between players' salaries and scored points per club in the 2013/2014 season (x-axis €; y-axis points)

The figures above show only one season. Therefore, to determine whether there is a linear correlation over all seasons, we estimated a robust OLS regression for all seasons (Table 1). The dependent variable was the number of points scored per season. Four independent variables were integrated into the four different models:

- (1) The first independent variable is the ratio of players' salaries per club to the grand total of all players' salaries per season. Because we used a variety of sources to obtain the estimations and because for some seasons we used the budget and for others the players' salary, we did not use the absolute sum. This approach is logical because the target of our analysis is the relationship between the amount of money one club pays for its players in relation to all of the other clubs in the German League.
- (2) The second independent variable is at least one managerial dismissal during the season. This variable is used as a proxy for negative managerial achievements and is therefore the reverse of what we actually want to measure. Because of poor data conditions, this is the only way to operationalize management performance, and it represents frantic activity and populist decision-making. If a senior manager dismisses the coach during the season, long-term strategic goals are not being prioritized, only short-term success. We assume that the dismissal of a coach will reduce the points scored during the season over the long-term.
- (3) Another independent variable is the money transferred from the UEFA to the clubs to reward their success in the Champions League and Europa League (see rule below) and is generated through the joint revenue of the broadcasting rights.
- (4) The last independent variable is the square sum of the proportion of players' salaries per season. The square sum estimates, as a u-shaped nexus, the diminishing marginal utility of the players' salaries and shows whether clubs with increasingly higher players' salaries score an increasing number of points or whether there is a u-shaped decline after a peak.

	Scored points per season			
	1	2	3	4
	Beta	Beta	Beta	Beta
Ratio of players' salaries per club to the grand total of all players' salaries per season	.877**	.482**	.623**	.630**
At least one managerial dismissal during the season	-.297**	-.283**	-.287**	
Money transferred from the UEFA	.233**	.202**		
Square sum of the proportion of players' salaries per season	-.443**			
Number of observations	252	252	252	252
R ²	.522	.501	.480	.397
Significance level 1% (**); 5% (*)				

Tab. 1: Robust OLS regression with scored points per season as dependent variable

Notably, models 1 and 2 show a high R² value. A regression model that explains more than 50% of the variance is rare. Only three independent variables predict more than 50% of the variance of the league table. All three hypotheses are confirmed.

The ratio of players' salaries per club to the grand total of all players' salaries per season has the greatest impact on the points scored per season (H 1). That the economic factor has the greatest impact is in line with the findings of Gerhards, Mutz and Wagner (2014). As expected, the dismissal of a coach has a negative impact on the dependent variable. This management decision has no positive results and can cost the club large amounts of money. Therefore, the influence of management on club performance is shown ex negative (H 2). Additionally, as expected, the transferred UEFA premiums have an influence on the dependent variable because extra money can be invested in players (H 3). The square sum of the proportion of players' salaries per season has a negative effect. A diminishing marginal utility was found: a striker will not score more goals if he earns 15 million Euros a year instead of 10 million Euros.

There is also empirical evidence that monetary resources predict league table rankings. These results lead to the next research question: How distinct is the social inequality of the German League Bundesliga?

5. How distinct is the social inequality of the German League?

Football is an achievement-oriented sport. It is a competition with clear rules and institutions and a simple ranking system. The only outcome that matters is victory, and at the end of the season, two teams enter the championship with the same overall objective: to win it all. However, how strong is the inequality produced by the achievement orientation in German football?

The common method for measuring social inequality in the social sciences is the Lorenz curve and the Gini coefficient (Milanovic, 1997). Max Lorenz developed a graphical representation of the (un-)equal society. The diagonal line represents perfect equality; the Lorenz curve beneath the diagonal line represents the reality of inequality. The difference between the diagonal and curved lines is the amount of inequality, which is described by the Gini coefficient. This coefficient can range from zero to one. Zero represents a completely equal distribution of wealth; one indicates that only one actor possesses all of the relevant resources. In the following table, the Lorenz curve from the 2001/2002 season is compared with that of the 2013/2014 season (Figures 4 and 5).

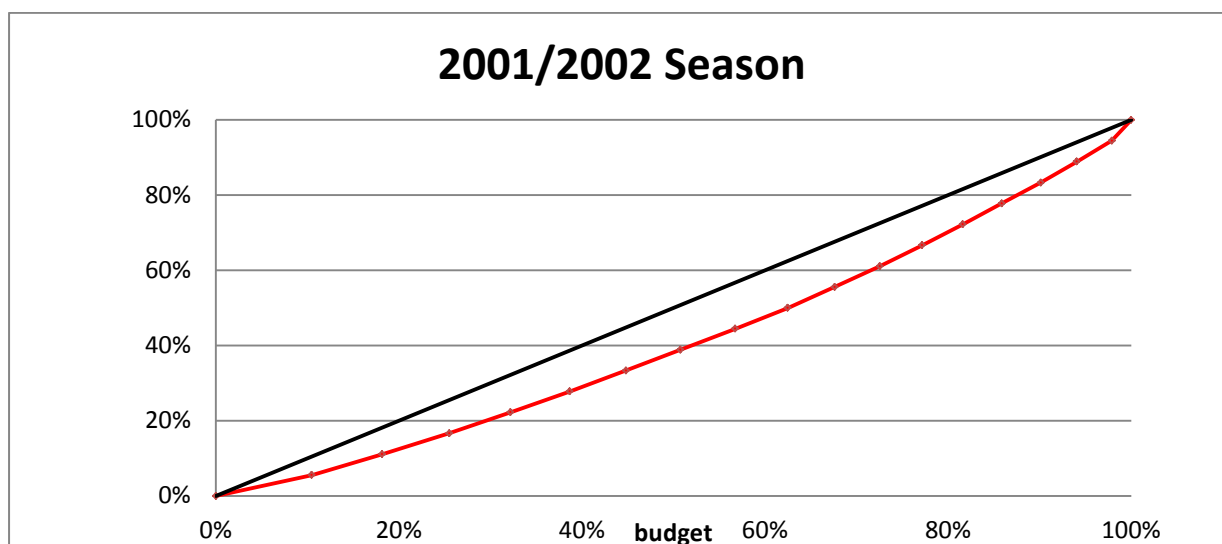


Fig. 4: Lorenz curve for the 2001/2002 season (x-axis budget; y-axis clubs)

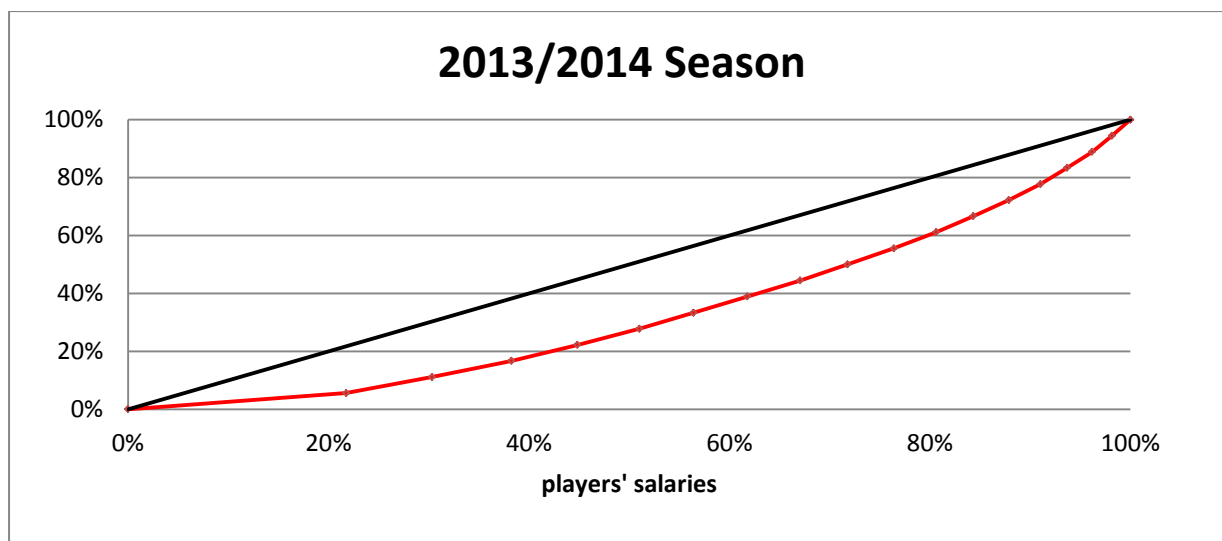


Fig. 5: Lorenz curve for the 2013/2014 season (x-axis players' salaries; y-axis clubs)

These figures show that social inequality has increased over the last twelve years. The Gini coefficient increased from 0.17, which indicates an essentially equal society, to 0.54, which indicates a comparatively unequal society (Figure 6). To interpret the Gini coefficient, these measures were compared with those of other European leagues. For the 2007/2008 through 2012/2013 seasons, the website of the Italian magazine *La Gazzetta dello Sport* published information regarding players' salaries in Italy that is comparable to the *Kicker* data. In figure 6, the German and Italian Gini coefficients are compared. During the observed period, the Italian League Serie A showed significantly more inequality than the German League Bundesliga. After the 2011/2012 season, the Gini coefficient decreased in the Italian League Serie A.

What caused the difference between the leagues? In the Italian League Serie A, 65% of all club revenue came from broadcasting rights (Baroncelli & Caruso, 2011). This is the highest rate in Europe. The huge difference between the leagues is caused by different rules: in Germany, the rights are sold jointly, whereas in Italy, each club sold their broadcasting rights individually between the years 1999 and 2011. The result was that clubs at the bottom of the table, for example, generated only 1/10 of the income of clubs like AC Milan or Juventus Turin in the 2002/2003 season (Baroncelli & Caruso, 2011). To overcome this inequality, the Italian League reintroduced the joint division of broadcasting rights revenues in 2011.

Another comparison with German society also illustrates the level of the Gini coefficient. In the observed period, the German Gini coefficient held constant at 0.27 until 2014, after

which it increased to 0.3 (Eurostat, 2015). In other words, the Gini coefficient of the German League was equivalent to that of its social context until 2013. After 2013, the Gini coefficient of the German League increased to the level of countries like Thailand or Guatemala.

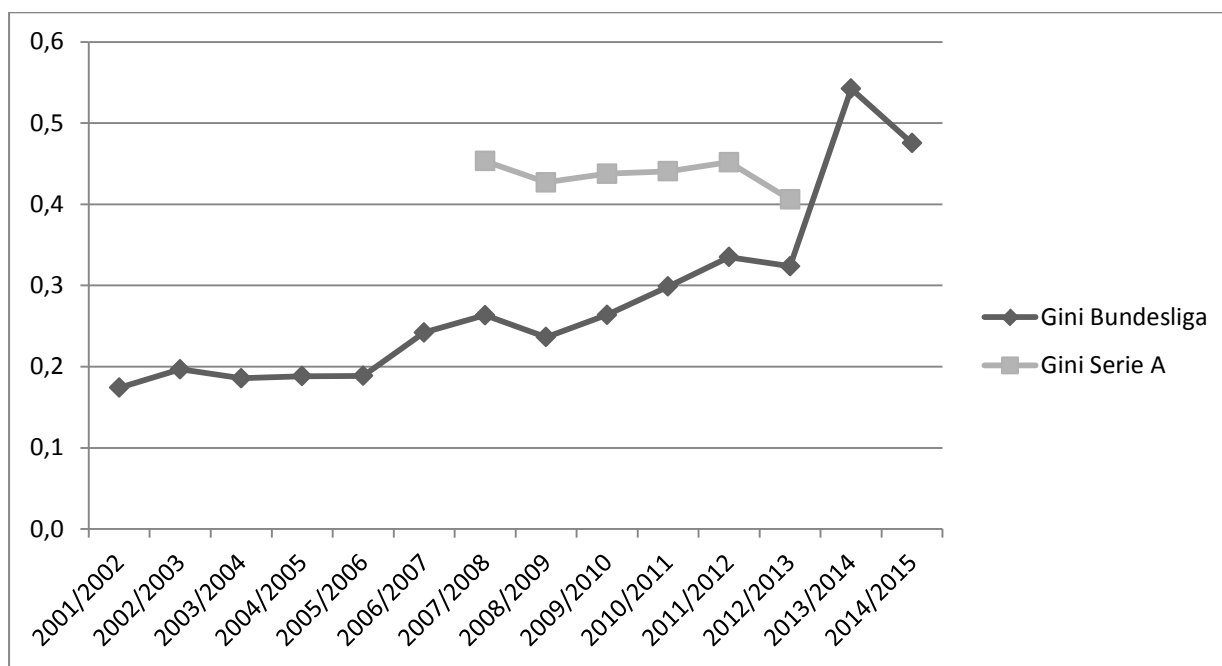


Fig. 6: Comparison of the Gini coefficients of Bundesliga and Serie A (x-axis seasons; y-axis Gini)

It is clear that until 2012/2013, the German league was an equal ‘football society’. Thereafter, the inequality increased rapidly. This empirical fact is not easy to interpret. What caused this increase? To narrow the possible answers, we analysed the influence of the UEFA’s money. As mentioned above, if the yield revenue from the Champions League and the Europa League is large, this additional income will increase inequality within the league. Therefore, we investigated the following question: How strong is the influence of the UEFA’s money on the social inequality in the German League Bundesliga?

6. How strong is the influence of the UEFA’s money on social inequality?

To answer this question, we performed a thought experiment. If a club is not playing in the Champions League or the Europa League, the club must invest less money over time in the players and their salaries or risk losing its club license. Ownership of the club by a private investor who distributes the money is forbidden in the German League by the self-decided

rule mentioned above. We simulated the budget of a club not playing in one of the European championships and subtracted the UEFA money that the clubs invested in the players' salaries. FC Bayern Munich, for example, distributed approximately 20% of all players' salaries in the 2014/2015 season, spending 160 million Euros on players. In the same season, the UEFA transferred 50 million Euros to FC Bayern Munich. If FC Bayern Munich had not been playing in the Champions League, they could have invested only 110 million Euros in players. The difference between the Gini coefficient with the UEFA's money and the Gini without the UEFA's money reveals the social inequality created by participation in the Champions League or the Europa League (Figure 7).

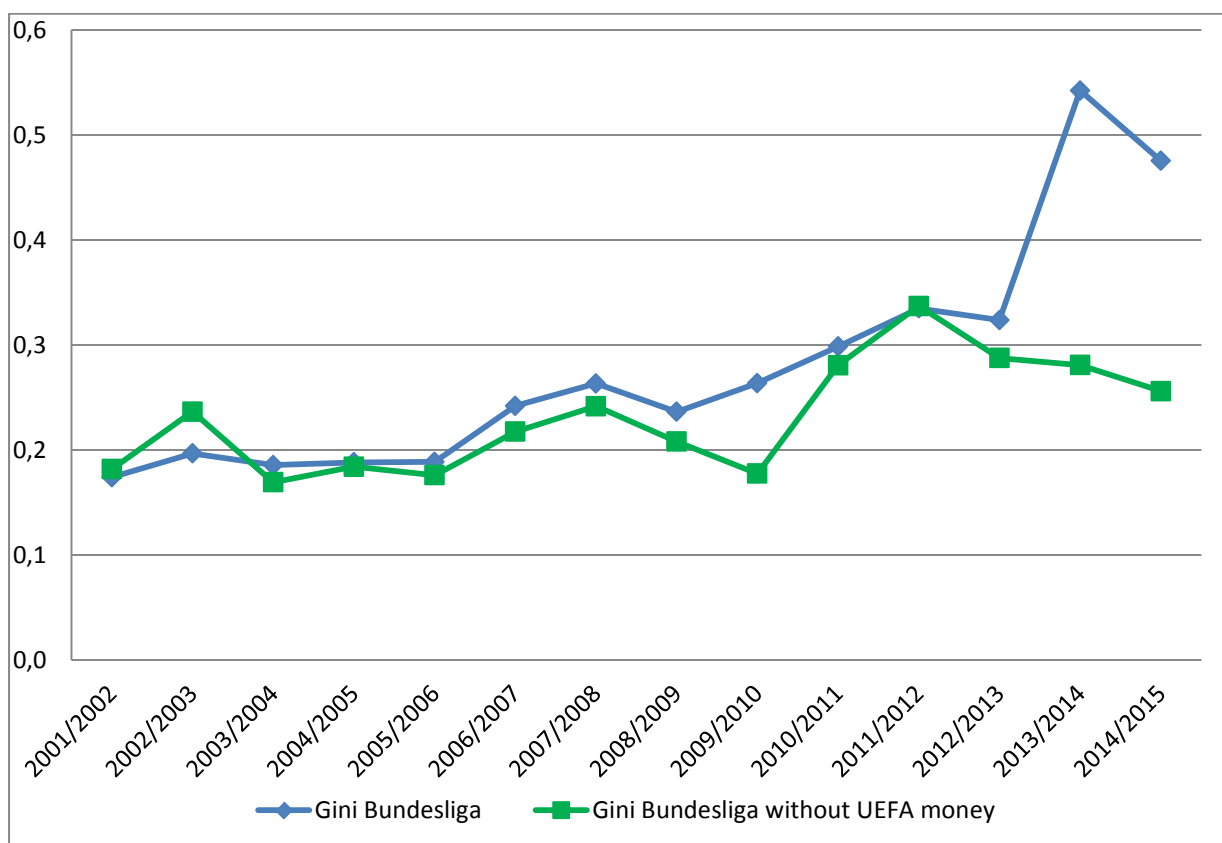


Fig. 7: Comparison of the Bundesliga Gini coefficients with and without UEFA money (x-axis seasons; y-axis Gini)

Until the 2012/2013 season, the differences between the Gini coefficients were minimal. Thereafter, however, the social gap increased. We conclude that the social inequality of the German League is caused by the European championships. Without championship money, the Gini coefficient remains lower than 0.3, which indicates a relatively equal 'football society'.

However, the revenue that the clubs generate through the sale of home match tickets is not included in the analysis. When this real income is added, the gap between the Gini coefficients widens further. This is especially true for FC Bayern Munich and Borussia Dortmund, which have capacious stadiums, with Borussia Dortmund attracting the highest average number of spectators in Europe. Figure 7 indicates a bias toward these two clubs. In reality, the gap between the Gini coefficients is much larger than that shown in Figure 7.

Nevertheless, there are valid reasons to focus on the premiums transferred by the UEFA: the revenue the clubs generate through the sale of home match tickets is unknown, and the earnings from broadcasting rights represent the largest portion of clubs' budgets. In the 2014/2015 season, the budget share was approximately 30% (Figure 8). Overall, in the last ten years, the revenue from broadcasting rights doubled. In recent years, international broadcasting revenues have grown more quickly than national broadcasting revenues (Figure 9).

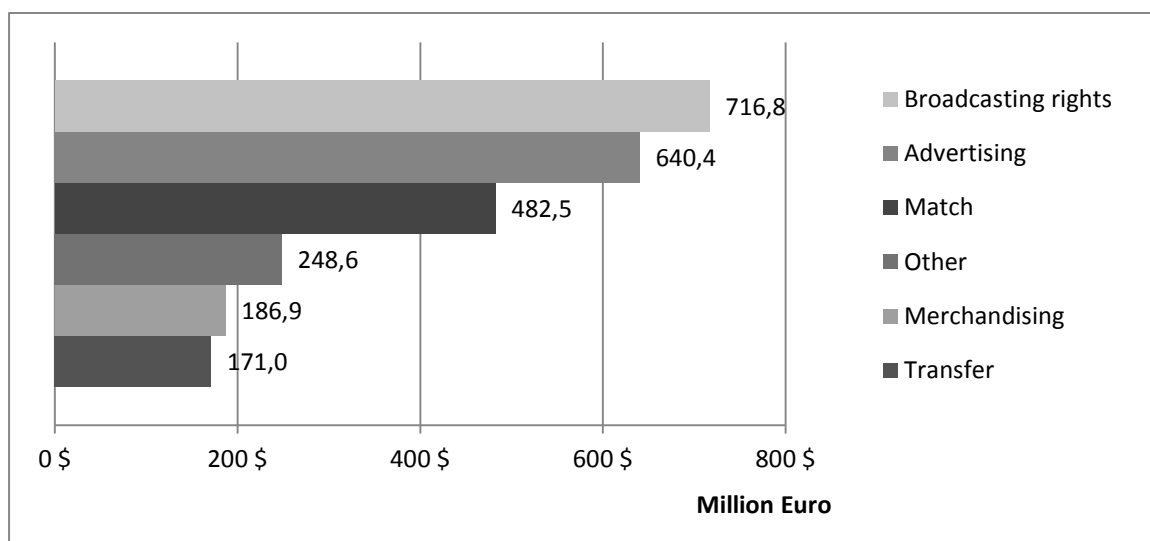


Fig. 8: Distribution of income in the Bundesliga clubs (DFL Jahresbilanz, 2015, 9)

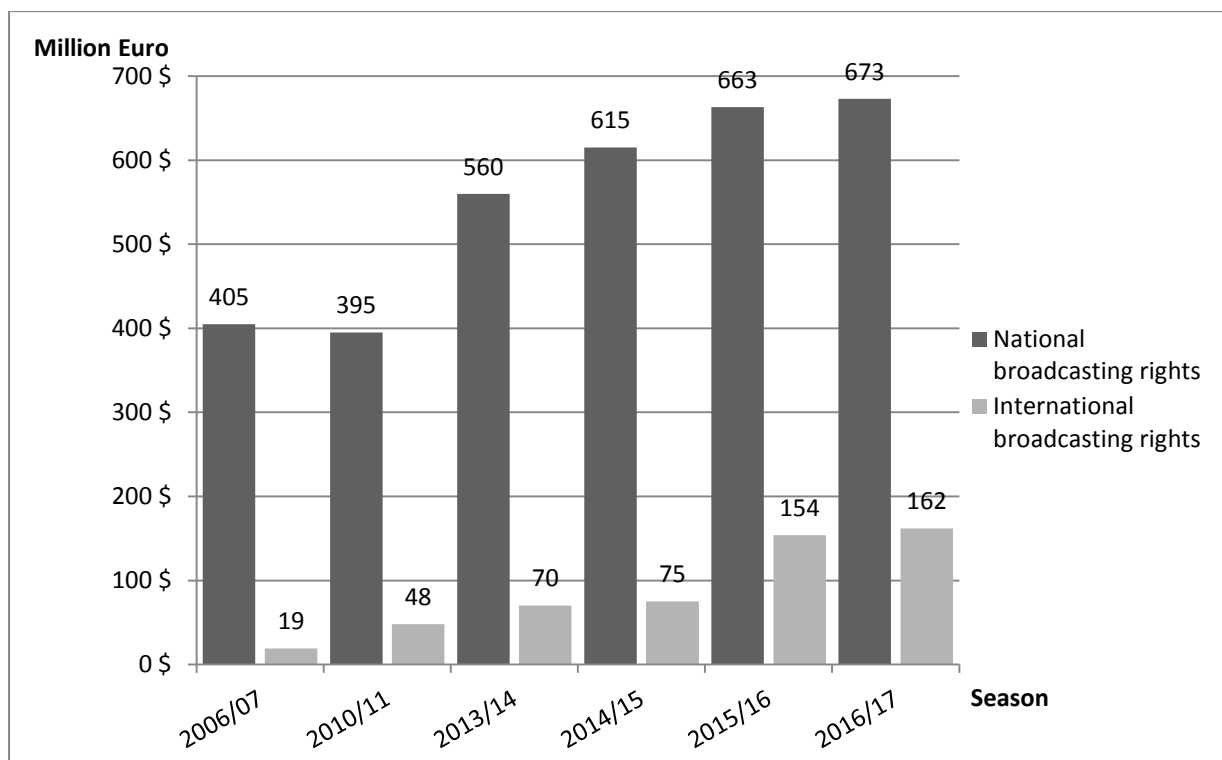


Fig. 9: Increase of revenue from national and international broadcasting rights (DFL Jahresbilanz, 2015, 19)

Figures 8 and 9 show the money generated by the German League Bundesliga by selling German League broadcasting rights, not the premiums transferred to the clubs by the UEFA. Below, we examine, in greater detail, the money transferred by the UEFA. To illustrate the effects of UEFA money, we take as a case study two of the most successful German clubs in recent years: FC Bayern Munich and Borussia Dortmund. Table 2 shows the UEFA's distributions for both clubs.

The money transferred from the UEFA is divided into two components: the performance bonus and the market pool (Wilkesmann, 2016).

For the performance bonus, a distribution formula is used. In 2013/2014, the performance bonus in the Champions League was 1 million Euros for a win and 0.5 million Euros for a draw. The fixed amount for all clubs in the group matches was 8.6 million Euros. The members of the quarterfinals received 3.9 million Euros, the semi-finalists received 4.9 million Euros and the Champions League winner earned 10.5 million Euros. All amounts are added to the transferred sum (UEFA, Revenue Financial Report, 2013/2014, 20). By comparison, a club in the Champions League in the 2001/2002 season earned 0.25 million

Euros for a win, the winner of the Champions League received 6.8 million Euros and the loser of the final match earned 4.1 million Euros (UEFA, Revenue Financial Report, 2001/2002). Since 2004/2005, the UEFA Cup, now called the Europa League, has sponsored a group match phase and therefore a fixed income for all participating clubs. In the 2013/2014 season, all participating clubs earned 0.2 million Euros for a win and 0.1 million Euros for a draw. The finale winner received 5 million and the finale loser received 2.5 million Euros (UEFA, Revenue Financial Report, 2013/2014, 24). All of the incomes generated are summed. In the 2007/2008 season, 0.04 million Euros was given for a victory and 0.02 million Euros was given for a draw. The winner of the UEFA Cup earned 2.5 million and the runner-up earned 1.5 million Euros (UEFA, Revenue Financial Report, 2007/2008, 53). Additional money for the quarter- and semi-finals is also included in the sum.

	UEFA's distributions in million Euros (in parentheses: per cent of the market pool at the total pay-out)	
Season	Bayern Munich	BVB Borussia Dortmund
2014/15	49.9	33.5
2013/14	47.0 (45%)	36.6 (45%)
2012/13	56.6 (36%)	55.7 (42%)
2011/12	43.8 (38%)	26.6 (68%)
2010/11	34.0 (58%)	4.7
2009/10	45.3 (43%)	--
2008/09	34.6 (62%)	--

2003/04	19.2 (67%)	--
2002/03	17.7 (70%)	35.4 (74%)
2001/02	31.7 (62%)	12.9 (60%)

Tab. 2: The money distributed by the UEFA to FC Bayern Munich and Borussia Dortmund in millions of Euros. The per cent of the market pool at the total pay-out is shown in parentheses (UEFA Revenue Financial Report of the year in question).

The market pool is defined by the UEFA as follows: "Market pool shares in favour of UEFA Champions League clubs are in proportion to the value of the broadcasting rights revenue

within the territory of their respective national associations” (UEFA, Revenue Financial Report, 2013/2014, 20). Clubs from countries with high broadcasting rights revenue, such as England, earn significantly more than clubs from ‘small countries’, such as Portugal and all of the Eastern European countries, which tend to have low revenues. “Obviously, this type of distribution system with variable parameters has a significant impact on the individual amounts received by the clubs, even among clubs that achieve similar results in the competition. Consequently, it is not necessarily the club which lifts the trophy that receives the biggest total amount” (UEFA, Revenue Financial Report, 2013/2014, 20). The same is true in the Europa League, though the revenue is lower. As a result, there is evidence of the Matthew effect in the Champions League and the Europa League: the rich get richer and the poor get poorer. Because the UEFA has an impact on social inequality in the German League, it is necessary to determine whether this is a random effect or a strategic policy.

Table 2 indicates that the share of the market pool decreased in recent years and the share of the performance bonus increased in the last decade. The tendency in Table 2 is not random but intentional: the reduction of the market pool is part of the official policy of the UEFA designed to strengthen performance (UEFA, Revenue Financial Report 2013/2014, 20). However, this reduction only applies to the allocation formula. The history of the Champions League and the Europa League can be reconstructed as ventures to optimize revenue. The predecessor to the Champions League was the European Champion Clubs’ Cup, launched in 1955. In 1992, the Champions League was founded and included group matches in addition to knockout matches (UEFA, 2015a). Because of the additional group matches and the common broadcasting rights, all participating clubs yielded higher revenues than in seasons with only knockout tournaments. Additionally, the group of participating clubs increased from eight original clubs to 32 clubs. All of these new self-governed, self-imposed rules and institutions were introduced with a single goal: to increase the profit for participating clubs.

The same principle is used in the Europa League. The forerunner of the former UEFA Cup, the Inter-Cities Fairs Cup, was founded in 1955 and included teams from trade fairs cities. The matches were held during such fairs. In 1972, the UEFA organized the competition and renamed it the UEFA Cup. The reason for the new name was a reorganization process. Since the reorganization, clubs from different countries have engaged in competition with each other. Additionally, since 1999/2000, winners of the national cup qualify for the UEFA Cup. The most important change was made in 2004/2005, when group matches were established

to generate higher and more secure revenue for the clubs (UEFA, 2015b). In 2009, the championship was renamed the Europa League and the number of participating clubs was expanded to 48.

In both championships, the UEFA's aim was to increase distributions to the clubs by launching a group phase and jointly selling broadcasting rights. Taking the whole development into account, we conclude that this target has been successfully achieved.

7. Discussion

The results confirm the relationship between players' salaries and their position in the league tables ranking (H 1). However, the social inequality of the German League Bundesliga has recently increased. One reason for this increase is the strong influence of the money the UEFA transferred and still transfers to the clubs.

Although the league table can generally be predicted based on the clubs' budget, there is opportunity in the middle rankings of the table for innovative, creative management that can leverage efficiency potential. The continued excitement generated by the German League is a result of good management practices among the clubs at the bottom and middle of the table (H 2).

The results emphasise the constant and considerable influence of broadcasting rights and the money distributed by the UEFA as vital income sources for clubs (H 3). The democratic organization of the German League, with its self-imposed rules and institutions, could come to play an important role in decreasing or regulating social inequality. However, this will only occur if the 'smaller' clubs can organize their democratic power and overrule the 'bigger' clubs when they negotiate a new allocation formula for the collective distribution of the broadcasting money. Empirical findings from a previous study (Wilkesmann, Blutner & Müller, 2011; Wilkesmann & Blutner, 2007) indicate that the smaller clubs sometimes demonstrate a 'false consciousness' and perceive themselves as Champions League starters even if they are playing in the second division. These perceptions are harmful to their ability to collectively organise.

This study had several limitations. First, our data contain a bias towards equality because we did not include the income generated by home matches in the Champions and Europa Leagues; we have no reliable source for this income. In future research, we may be able to

include the number of spectators as a proxy. Second, the comparison should be extended to other European football leagues. Currently, there is a lack of comparable data from other leagues. Further research is needed to overcome these two gaps.

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