

CHARLES UNIVERSITY IN PRAGUE,  
FACULTY OF PHYSICAL EDUCATION AND SPORT,  
DEPARTMENT OF SPORT GAMES

## **COMPETITIVE BALANCE IN THE GERMAN, DUTCH AND CZECH FOOTBALL LEAGUES**

JAN ŠÍMA

### SUMMARY

This project deals with measurement and evaluation of the static and dynamic competitive balance in selected three highest national football competitions. These are – the German Bundesliga, the Eredivisie in the Netherlands and the Czech Gambrinus Liga (formerly Czechoslovak First League). The static balance reveals the differences between positions of clubs in the tables between individual seasons. It has been established with the help of the calculation of the standard deviations of the percentage of wins. The dynamic balance is perceived as competitive balance in the course of a longer period – thus determining the ranking of clubs throughout several seasons. It has been obtained with the help of Spearman's and Kendall's coefficients of calculation of correlation of club's rankings. Results of this work are available in graphic illustrations of the development of competitive balance in the aforementioned leagues during the past four decades. They identify the trends of development of this phenomena, define its size, direction and present significance. Out of the three analyzed leagues, the relative and absolute highest level of competitive balance is presented in the Bundesliga; however, evidently all three leagues show in this respect a perceptible steady decline.

**Key words:** football league, competitive balance, static balance, dynamic balance

### INTRODUCTION

Competitive balance is generally defined as the balance between the sporting abilities of clubs, teams and individuals. The phenomena of competitive balance is very highly valued by the professional and expert public – sometimes even as “the highest treasure and asset of sport” (Caillois, 2001; Fort & Maxcy, 2003). Here, however, we discover a very remarkable paradox: while as the dominant character of human beings remains their resolution to eliminate all possible dangers and risks – in sporting events and contests, in mutual measuring of force and ability, individuals, teams and clubs voluntarily accept the obligation to comply with the rules of balanced opportunities and equality for all. The initial uncertainty

of outcome and the concentration by the participants to achieve the best possible effect save the interest in a given sport, stimulate tension, arouse emotions and enrich the sportsmen, fans and public with required satisfaction, entertainment as well as with significant economic support (Sanderson & Siegfried, 2003; Michie & Oughton, 2004; Kesenne, 2006). This all is about parity or approximate parity between the opponents and their psychological and physical outfit, material and immaterial potential, prospects to succeed in the match or in the competition (Fort & Maxcy, 2003; Michie & Oughton, 2004; Goosens, 2005; Groot, 2007) and, in aggregate – about testing the attractiveness and viability of the respective sport (Szymanski, 2003; Szymanski & Kesenne, 2004).

Over the course of more than fifty years the problematic of competitive balance in different sporting disciplines has deeply penetrated the minds and interests of numerous authors. (Rottenberg, 1956; El-Hodiri & Quirk, 1971, 1974; Fort & Quirk, 1995; Michie & Oughton, 2004; Goosens, 2005; Groot, 2007). Studies dealing with this topic may be divided into two main lines. The first one is represented by literature about what has happened to competitive balance over time or as a result of changes in the business practices of professional sport leagues (Scully, 1989; Quirk & Fort, 1992; Butler, 1995; Szymanski & Kuypers, 1999; Dobson & Goddard & Ramlogan, 2001; Eckhard, 2001; Fort, 2001; Schmidt, 2001, Maxcy, 2002). The second line is formed by literature which analyzes the effect of competitive balance on fans. These works test the longstanding uncertainty of outcome hypothesis measured during a season in relation to team chances in the play-offs (Hansen & Gauthier, 1989; Kahle & Kambara & Rose, 1996; Dobson & Goddard, 2001; Garcia & Rodriguez, 2002; Fort & Maxcy, 2003; Kesenne, 2006; Sanderson & Siegfried, 2003).

The competitive balance may be differentiated into kinds and branches of sports, then also according to specific features of continents, regions or individual countries and their social, cultural and economic conditions. The central theme of this study is the competitive balance, its measurements and comparisons with selected competitions in the most popular collective sport of the contemporary world – which is football.

What matters in football – are the aforementioned conditions of competitive balance, its measurements in respect of physical, psychological, technical and tactical potential and condition, approximate equality of the clubs and players on their teams' posts, impact of club's traditions, quality of its management, strength of the fan-basis, their symmetry or asymmetry in the expected match. The kind, accent and sequence of the criterias are diverse. Apart from the uncertainty of a match result or seasonal uncertainty, some theorists consider as substantial also the uncertainty to win or to successfully defend the championship (Szymanski & Kuypers, 1999; Szymanski, 2001; Groot, 2007). Other authors emphasize the multi-dimensional character of the competitive balance when making differences between short- and long term uncertainty of results; apart from the long term point of view some accentuate the domination of one or two clubs in the same competition – a national football league (Greer & Tollison, 2002; Sloan & Sandy & Rosentraub, 2003; Michie & Oughton, 2004). A perfectly balanced league anticipates a perfect uncertainty of results; it should be a maximally or ideally attractive and thrilling competition – which is very unusual. In contrast there stands a perfectly imbalanced competition where the winner is surely known in advance or is expected to win all league matches – which is an extreme – in some countries, however, not exceptional. This study

distinguishes – which will be explained, measured, compared and documented – the static and dynamic balance of three highest national football competitions.

## PURPOSE

The purpose of this study is to analyze the problem of competitive balance in the German, Dutch and Czech (Czechoslovak) top football leagues in the period between the years 1970 and 2010.

The aim is to consider the static balance, which means the balance among clubs in one league season, as well as the dynamic balance, which reflects the changes in teams' ranking between individual seasons.

The results gathered from all the three analyzed competitions were subsequently assembled and compared with research studies of other authors – all in the context with considerations of the future anticipated development of this phenomena.

## PROCEDURES

As objects of research in this Project, the author has examined top football competitions in Germany, the Netherlands and the Czech Republic. The German competition is known as the Bundesliga composed of 18 clubs (only shortly after 1990 were there 20 clubs) – each play home and away in a season from autumn to spring altogether 34 matches. The Dutch highest competition is called the Eredivisie and consists also of 18 clubs and is played under the same system. As well as the preceding First Czechoslovak League (until 1993), the present highest Czech competition – called the Gambrinus Liga – which now has 16 clubs and the same system; the programme includes 30 home and away matches for each club from autumn until late spring. The analysis copes with complete individual results. These three leagues, with their extensive documentation and archives have made it possible to elaborate on the uninterrupted period of forty years and seasons – despite of the occurrence of the huge political, organisational and legal changes as were the re-unification of Germany and the creation of separate Czech and Slovak Republics. The selection of these three competitions specially is strongly supported by a rich tradition, more than a century old history of football in those countries and due to significant achievements of their national teams and renowned clubs at the international level. At the present time, taken from the aspects of sporting effect and economic potential, each one of these leagues belong to specific groupings.

For the calculation of static competitive balance, i.e. balance in one league season, the author used the decisive deviation of win percentage at the end of the chosen season. An identical analytical approach has been adopted by a great number of authors (Humphrey, 2002; Zimbalist, 2002; Fort & Maxcy 2003; Michie & Oughton, 2004). The lower the standard deviation, the higher the level of the balance of the competition is indicated. For the calculation of the decisive deviation as a percentual level of success of all teams, the data on total wins, draws, number of matches in a given season and total participation of clubs in the competition were necessary. Also the introduced

amendment of the counting of points – three points for a win instead of two – had to be taken into consideration.

The dynamic competitive balance reflects the changes or motions in clubs' ranking in different periods. The index, reflecting these alterations, is based on the mobility of clubs in adjoining seasons. To calculate the dynamic balance, researchers use either Kendall's coefficient of co-relation "tau" (Kendall, 2003; Sanderson & Siegfried, 2003; Groot, 2007) or Spearman's coefficient of co-relation "rho" (Grier & Tollison, 1994; Richardson, 2000; Eckhard, 2001; Groot, 2007). Both these coefficients have been used in this study. To ascertain the mobility of changes in the ranking of clubs, the data of final positions in each of the seasons had to be applied. Those have been further compared with the rankings in the following seasons, while the relegated clubs had to be replaced by clubs promoted to the top competition. Principally, it would have been ideal when the index would be equal to the value of "–1". The mobility would be at maximal value, the ranking in one season would be entirely independent of the following season and the competition would indicate a significant degree of balance. In the case of value "1" then, on the contrary, the mobility of clubs would be minimal and the competition entirely unbalanced.

## RESULTS

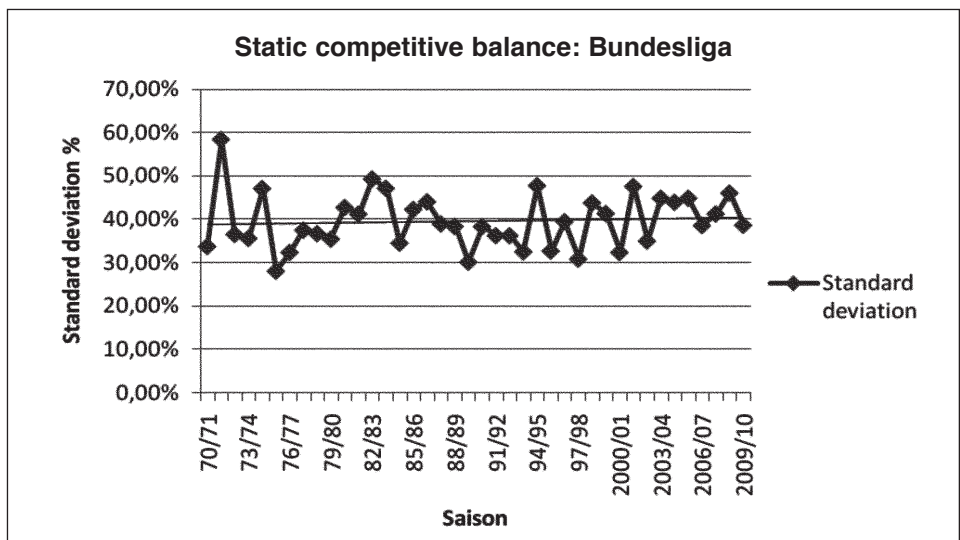
The statical balance – as mentioned in the methodological part – has been obtained with the help of the calculation of standard deviation of the percentage of wins in a given season. The following tables register the standard deviation of wins by clubs in individual seasons. The higher the standard deviation, the lower the balance of the competition. In the case when the standard deviation is valued as "0", the league would be perfectly balanced. In the situation of a perfectly imbalanced competition, the standard deviation of all competitions would reach the value of 0.31. Therefore, this point has been fixed as the point of 100% imbalance. With the subsequent calculation we reach the percentual imbalance in individual seasons. The figures register the trends of competitive balance of all the three analyzed leagues.

The dynamic balance of the three leagues has been analyzed from the point of view of forty years. Again, both the previously mentioned coefficients of co-relation – Kendalls' and Spearman's – were used to find out the dynamic balance across all reviewed seasons. The final results are not too different, however, with the use of Kendalls' coefficient, we obtain lower values. The following tables therefore use only Spearman's coefficient.

In the event that the correlation coefficients are between the intervals 0.5–0.8, the dependence of individual rankings show medium values and the competition tends to be more imbalanced. When the coefficient exceeds the value of 0.8, the dependence on rankings is very high, and consequently, the league is very imbalanced.

**Table 1.** Static Balance of Bundesliga from 1970/71 to 2009/10

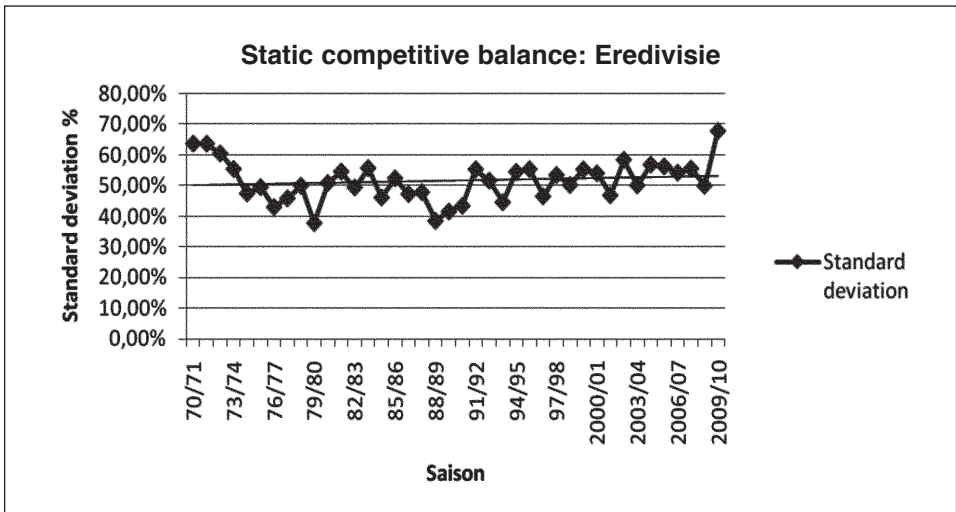
Bundesliga			Bundesliga		
Season	Std.	Percentage of imbalance	Season	Std.	Percentage of imbalance
1970/71	0,10	33.82%	1990/91	0.12	38.40%
1971/72	0,18	58.45%	1991/92	0.11	36.31%
1972/73	0,11	36.60%	1992/93	0.11	36.31%
1973/74	0,11	35.69%	1993/94	0.10	32.61%
1974/75	0,15	47.16%	1994/95	0.15	47.83%
1975/76	0,09	28.14%	1995/96	0.10	32.78%
1976/77	0,10	32.46%	1996/97	0.12	39.53%
1977/78	0,12	37.57%	1997/98	0.10	30.93%
1978/79	0.11	36.78%	1998/99	0.14	43.85%
1979/80	0.11	35.50%	1999/00	0.13	41.40%
1980/81	0.13	42.80%	2000/01	0.10	32.42%
1981/82	0.13	41.26%	2001/02	0.15	47.65%
1982/83	0.15	49.35%	2002/03	0.11	35.06%
1983/84	0.15	47.21%	2003/04	0.14	44.93%
1984/85	0.11	34.59%	2004/05	0.14	44.00%
1985/86	0.13	42.34%	2005/06	0.14	44.94%
1986/87	0.14	44.11%	2006/07	0.12	38.64%
1987/88	0.12	39.02%	2007/08	0.13	41.32%
1988/89	0.12	38.44%	2008/09	0.14	46.11%
1989/90	0.09	30.22%	2009/10	0.12	38.71%



**Figure 1.** Comparison of Static Balance of Bundesliga in the Period 1970/71–2009/10

**Table 2.** Static Balance of Eredivisie from 1970/71 to 2009/10

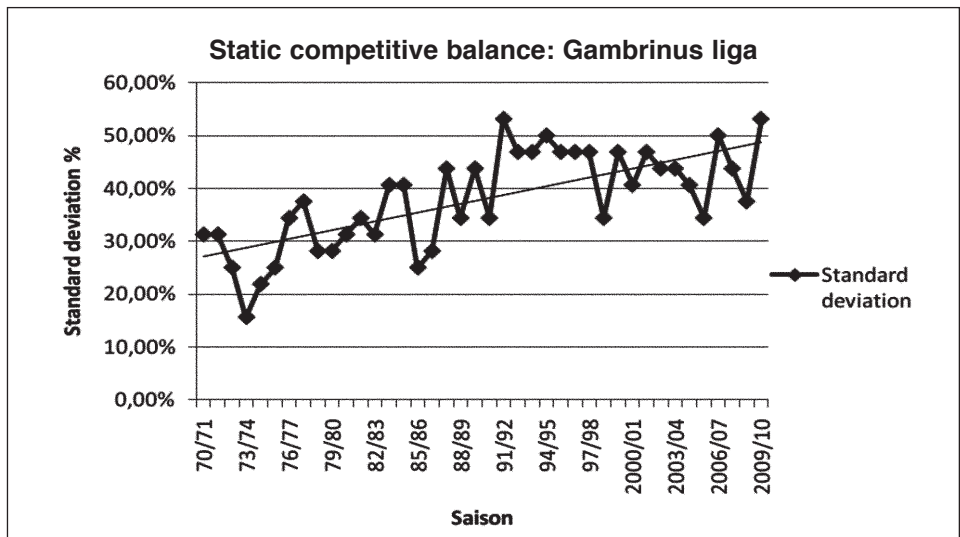
Eredivisie			Eredivisie		
Season	Std.	Percentage of imbalance	Season	Std.	Percentage of imbalance
1970/71	0.20	63.65%	1990/91	0.13	43.42%
1971/72	0.20	63.65%	1991/92	0.17	55.32%
1972/73	0.19	60.47%	1992/93	0.16	51.61%
1973/74	0.17	55.42%	1993/94	0.14	44.59%
1974/75	0.15	47.47%	1994/95	0.17	54.48%
1975/76	0.15	49.51%	1995/96	0.17	55.33%
1976/77	0.13	43.02%	1996/97	0.14	44.59%
1977/78	0.14	45.85%	1997/98	0.17	54.48%
1978/79	0.15	49.97%	1998/99	0.17	55.33%
1979/80	0.12	37.81%	1999/00	0.14	44.59%
1980/81	0.16	5.86%	2000/01	0.17	54.48%
1981/82	0.17	5.58%	2001/02	0.17	55.33%
1982/83	0.15	49.38%	2002/03	0.18	58.39%
1983/84	0.17	55.70%	2003/04	0.16	50.07%
1984/85	0.14	46.11%	2004/05	0.18	56.84%
1985/86	0.16	52.37%	2005/06	0.17	56.26%
1986/87	0.15	47.24%	2006/07	0.17	54.21%
1987/88	0.15	47.86%	2007/08	0.17	55.52%
1988/89	0.12	38.50%	2008/09	0.15	49.95%
1989/90	0.13	41.58%	2009/10	0.21	67.74%



**Figure 2.** Comparison of Static Balance of Eredivisie in the Period 1970/71–2009/10

**Table 3.** Static Balance of Gambrinus Liga 1970/71 to 2009/10

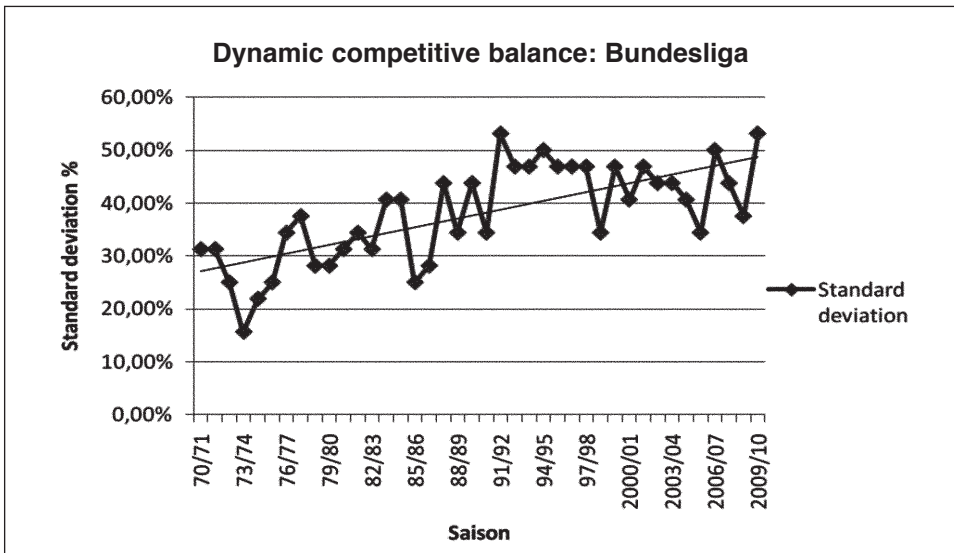
Gambrinus Liga			Gambrinus Liga		
Season	Std.	Percentage of imbalance	Season	Std.	Percentage of imbalance
1970/71	0.1	31.25%	1990/91	0.11	34.38%
1971/72	0.1	31.25%	1991/92	0.17	53.13%
1972/73	0.08	25.00%	1992/93	0.15	46.88%
1973/74	0.05	15.63%	1993/94	0.15	46.88%
1974/75	0.07	21.88%	1994/95	0.16	50.00%
1975/76	0.08	25.00%	1995/96	0.15	46.88%
1976/77	0.11	34.38%	1996/97	0.15	46.88%
1977/78	0.12	37.50%	1997/98	0.15	46.88%
1978/79	0.09	28.13%	1998/99	0.11	34.38%
1979/80	0.09	28.13%	1999/00	0.15	46.88%
1980/81	0.1	31.25%	2000/01	0.13	40.63%
1981/82	0.11	34.38%	2001/02	0.15	46.88%
1982/83	0.1	31.25%	2002/03	0.14	43.75%
1983/84	0.13	40.63%	2003/04	0.14	43.75%
1984/85	0.13	40.63%	2004/05	0.13	40.63%
1985/86	0.08	25.00%	2005/06	0.11	34.38%
1986/87	0.09	28.13%	2006/07	0.16	50.00%
1987/88	0.14	43.75%	2007/08	0.14	43.75%
1988/89	0.11	34.38%	2008/09	0.12	37.50%
1989/90	0.14	43.75%	2009/10	0.17	53.13%



**Figure 3.** Comparison of Static Balance of Gambrinus Liga in the Period 1970/71–2009/10

**Table 4.** Dynamic Balance of Bundesliga from 1970/71 to 2009/10

Bundesliga		Bundesliga	
Seasons	Corelation Coefficient	Seasons	Corelation Coefficient
70/71 × 71/72	0.506	90/91 × 91/92	0.373
71/72 × 72/73	0.517	91/92 × 92/93	0.524
72/73 × 73/74	0.562	92/93 × 93/94	0.805
73/74 × 74/75	0.585	93/94 × 94/95	0.390
74/75 × 75/76	0.349	94/95 × 95/96	0.228
75/76 × 76/77	0.698	95/96 × 96/97	0.338
76/77 × 77/78	0.396	96/97 × 97/98	0.373
77/78 × 78/79	0.025	97/98 × 98/99	0.402
78/79 × 79/80	0.648	98/99 × 99/00	0.651
79/80 × 80/81	0.836	99/00 × 00/01	0.261
80/81 × 81/82	0.782	00/01 × 01/02	0.638
81/82 × 82/83	0.711	01/02 × 02/03	0.544
82/83 × 83/84	0.598	02/03 × 03/04	0.444
83/84 × 84/85	0.503	03/04 × 04/05	0.536
84/85 × 85/86	0.648	04/05 × 05/06	0.715
85/86 × 86/87	0.504	05/06 × 06/07	0.725
86/87 × 87/88	0.523	06/07 × 07/08	0.475
87/88 × 88/89	0.600	07/08 × 08/09	0.650
88/89 × 89/90	0.451	08/09 × 09/10	0.402
89/90 × 90/91	0.507		

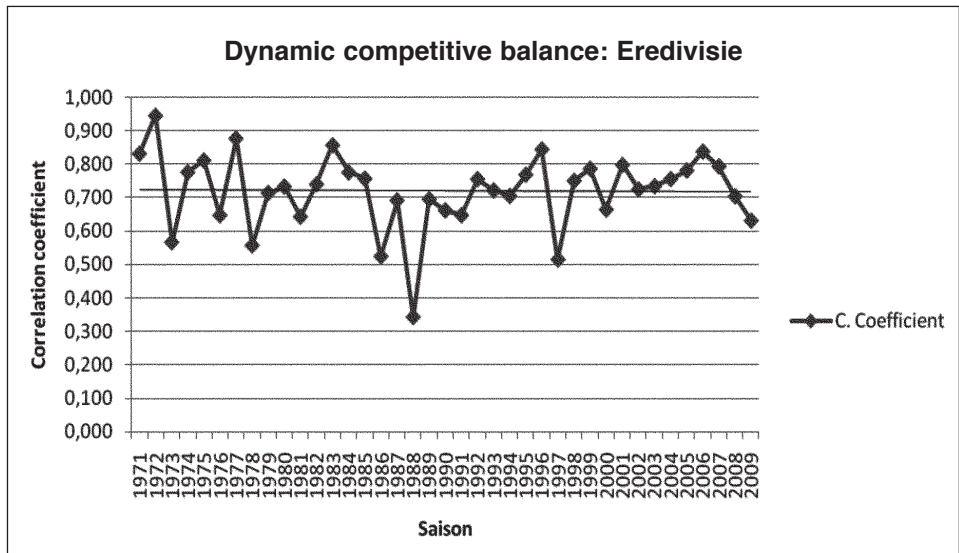


**Figure 4.** Comparison of Dynamic Balance of Bundesliga in the Period 1970/71 – 2009/10



**Table 5.** Dynamic Balance of Eredivisie from 1970/71 to 2009/10

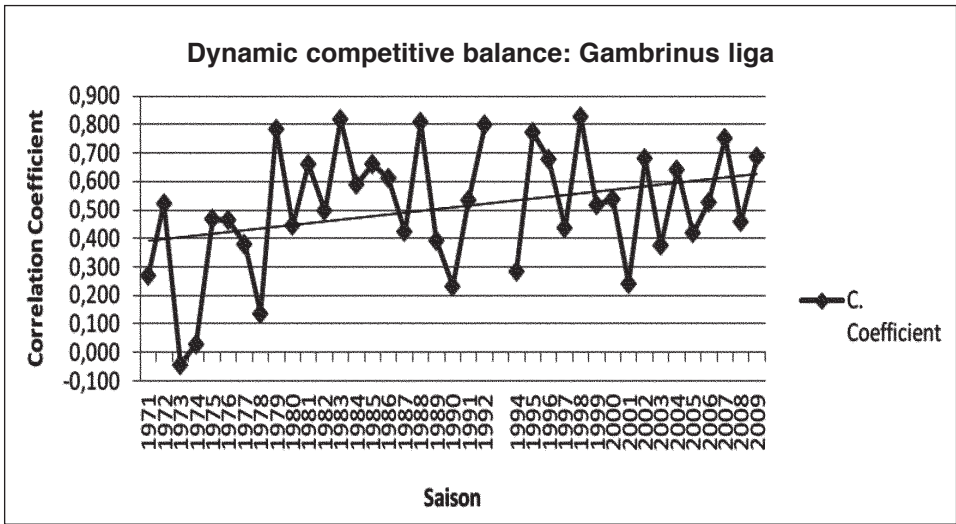
Eredivisie		Eredivisie	
Seasons	Corelation Coefficient	Seasons	Corelation Coefficient
70/71 × 71/72	0.832	90/91 × 91/92	0.647
71/72 × 72/73	0.945	91/92 × 92/93	0.756
72/73 × 73/74	0.566	92/93 × 93/94	0.722
73/74 × 74/75	0.776	93/94 × 94/95	0.705
74/75 × 75/76	0.811	94/95 × 95/96	0.769
75/76 × 76/77	0.647	95/96 × 96/97	0.845
76/77 × 77/78	0.877	96/97 × 97/98	0.515
77/78 × 78/79	0.557	97/98 × 98/99	0.750
78/79 × 79/80	0.714	98/99 × 99/00	0.787
79/80 × 80/81	0.733	99/00 × 00/01	0.664
80/81 × 81/82	0.643	00/01 × 01/02	0.798
81/82 × 82/83	0.740	01/02 × 02/03	0.725
82/83 × 83/84	0.857	02/03 × 03/04	0.734
83/84 × 84/85	0.775	03/04 × 04/05	0.756
84/85 × 85/86	0.757	04/05 × 05/06	0.781
85/86 × 86/87	0.524	05/06 × 06/07	0.838
86/87 × 87/88	0.692	06/07 × 07/08	0.794
87/88 × 88/89	0.342	07/08 × 08/09	0.704
88/89 × 89/90	0.695	08/09 × 09/10	0.631
89/90 × 90/91	0.662		



**Figure 5.** Comparison of Dynamic Balance of Eredivisie in the Period 1970/71 – 2009/10

**Table 6.** Dynamic Balance of Gambrinus Liga from 1970/71 to 2009/10

Gambrinus Liga		Gambrinus Liga	
Seasons	Corelation Coefficient	Seasons	Corelation Coefficient
70/71 × 71/72	0.270	90/91 × 91/92	0.535
71/72 × 72/73	0.523	91/92 × 92/93	0.799
72/73 × 73/74	-0.044	92/93 × 93/94	
73/74 × 74/75	0.029	93/94 × 94/95	0.284
74/75 × 75/76	0.469	94/95 × 95/96	0.773
75/76 × 76/77	0.465	95/96 × 96/97	0.679
76/77 × 77/78	0.380	96/97 × 97/98	0.437
77/78 × 78/79	0.136	97/98 × 98/99	0.828
78/79 × 79/80	0.784	98/99 × 99/00	0.518
79/80 × 80/81	0.446	99/00 × 00/01	0.538
80/81 × 81/82	0.661	00/01 × 01/02	0.241
81/82 × 82/83	0.498	01/02 × 02/03	0.682
82/83 × 83/84	0.819	02/03 × 03/04	0.376
83/84 × 84/85	0.589	03/04 × 04/05	0.641
84/85 × 85/86	0.661	04/05 × 05/06	0.419
85/86 × 86/87	0.612	05/06 × 06/07	0.527
86/87 × 87/88	0.424	06/07 × 07/08	0.752
87/88 × 88/89	0.809	07/08 × 08/09	0.459
88/89 × 89/90	0.393	08/09 × 09/10	0.687
89/90 × 90/91	0.232		



**Figure 6.** Comparison of Dynamic Balance of Gambrinus Liga in the Period 1970/71 – 2009/10

## DISCUSSION AND CONCLUSIONS

As far as the Bundesliga is concerned, the assessment of analyses of the statical balance shows that it's least balanced season was 1971/72. Paradoxically, it only happened during this season, that the answer, who would be the national champion, was not decided until the very last match between the Bundesliga first and the second ranked teams - Bayern München and FC Schalke 04. Bayern was stronger and won 5–1.

The most balanced season was 1975/76 with the deviation 0.09 (i.e. 28.14% of imbalance), which may be valued as the resulting positive mark of a balanced competition. When comparing the competitive balance before and after the unification of Germany (seasons adjoining 1989/1990), there are no significant changes – the valid deduction is that the act has had no substantial influence as far as the strength of the German clubs and the competitive balance is concerned.

There is a mild volatility in individual seasons of the Bundesliga, however due to maximal deviation in perfect balance at point 0.31, the balance of German clubs cannot be judged as entirely positive. From the linear trend it is evident that across the whole space of time the imbalance is growing mildly. The differences in figures before and after the season 1989/90 are negligible, nevertheless, the aforementioned trend is visible and not reversed.

As to the Eredivisie, in the period of time under review – most successful have been only four clubs – PSV Eindhoven with 17 championships, followed by Ajax Amsterdam with 15 titles, in third comes Feyenoord Rotterdam with 5 and AZ Alkmaar with 2 victories. It is remarkable that the championship has been mostly “distributed” between only first two clubs. Already these facts show that the balance of the Eredivisie is not positive. Relatively balanced were the seasons 1979/80 and 2008/9, when the deviation was at 0.12. The least balanced were the first two analyzed seasons 1970/72 with a very high deviation of 0.2 (i.e. 63.65% imbalance).

The table describing the trend of the Dutch top competition balance reveals the constantly repeated balance in individual seasons, however, none of them is balanced sufficiently. The term “sufficiently balanced competition” may be a matter of polemics, however, from the statistical view the Dutch league is the least balanced when compared to the remaining two. This discovery invites a serious consideration.

The Czech Gambrinus Liga is one of two ascendants of the First Czechoslovak League; the other one is the National League of Slovakia. The former Czechoslovak First League included, during the analyzed period a total of 31 clubs – out of them there 17 were from the Czech part of the state and 14 from Slovakia. In the beginnings, this competition was relatively balanced, however during the following years its balance is evidently in decline.

After 1993 – already in the First League of the Czech Republic (later with a new name as the Gambrinus Liga) – we count altogether 33 Czech clubs rotating. They participate in a competition that might be qualified as rather imbalanced.

The smallest standard deviation in the Czechoslovak First League was discovered in the season 1973/4; out of all analyzed seasons this one is classified as the most balanced. On the contrary, the least balanced was the season 1991/92 with a very high relative standard deviation of 0.17, which corresponds to 53.13% imbalance. An over-all view of all seasons shows that the trend of the deviation was volatile. Regressive analysis

discovers an evidently rising trend, which means that in the course of the following seasons the competitive balance took a direction of decline.

When analyzing the competitions before and after 1993 i.e. after the separation of the two countries, we find a mildly growing imbalance in former Czechoslovakia. Later in the Czech Republic, the imbalance shows an undesirably higher level.

Dynamic balance is a very important factor in all football competitions. In the situation of repeated wins of the championship title by the very same club, the league loses its attractiveness and tension, which altogether discourages the spectators, support from fan clubs and sponsors, as well as TV and radio stations (Szymanski, 2001; Sanderson & Siegfried, 2003).

From the historical tables, we can read about the most successful clubs and holders of the champions' titles. Not accidentally, in the top positions we always find the identical names of clubs. Those with long traditions and with mighty financial background dominate in national competitions – and in the case where teams other than the “traditional” club gains the title – then this super-club is unable to repeat the success. In this situation the rich clubs quickly recruit the talent and the best players from home and foreign competitions and in the following season do not fail to do everything in their power to reconquer the top positions and the lucrative re-entry to the European cups (Grier & Tollisson, 2002; Michie & Oughton, 2004).

In the Bundesliga, we face the supremacy of one sole club commonly appearing in the leading positions. From the historical tables we witness the fight of Bayern München against the other German clubs. Originally on the top used to be HSV Hamburg, several years later in the foreground have appeared clubs like VfB Stuttgart, Schalke 04, Werder Bremen or Borussia Mönchen-Gladbach. The table presenting the value of dynamic balance of the Bundesliga shows gradual development of competitive balance between two successive seasons. More than half of the coefficients indicate a value higher than 0.5. These values – really not flattering – prove that the competition within a period of several past years is not sufficient.

As already emphasized, the Eredivisie is a league with practically three teams in the dominant positions. From 1970 the front positions in the league table - are the prize of a permanent tough fight between Ajax Amsterdam, PSV Eindhoven and Feyenoord Rotterdam. This reveals itself that the dynamic balance of this league is on a very low level – undoubtedly the lowest of the three analyzed leagues.

Only once did the correlative coefficient drop below the value of 0.5; many of the indicators are in the neighbourhood of the value 0.9 – which what proves considerable immobility of individual ranking in two successive years – in other words – every year the clubs appear in same or very similar positions as in the past.

In the case of correlation between all seasons, almost exactly identical positions are found between seasons 1986/7 and 2002/3 with the value 0.983 – which means that the rankings in those two seasons were the same. More than 75% of the correlative coefficients exceed the value of 0.5 – thus confirming the dynamic imbalance of the Eredivisie. No signs of improvement are visible in the course of time. Even the mild continuing growth is worth considering.

From a look at the tables of the Gambrinus Liga, it is evident that neither in the Czech nor in the former Czechoslovak top competitions, the ranking of the champions has not frequently

changed. The initial period is characterized by the prevailing roles of clubs from Slovakia – namely Spartak Trnava and Slovan Bratislava; since 1983 the dominant position has been taken over by AC Sparta Praha. From the dynamic point of view, these facts do not support the qualification of the competition as a balanced one. In the table we discover that in nearly half of the instances the correlation coefficient exceeds the value 0.5 – i.e. relatively imbalanced competition. Over the course of the following seasons, the elevation of the imbalance of the former Czechoslovak and the Czech Liga becomes more evident, while simultaneously, the positions of the strong clubs continue to strengthen further. Generally – the present trend of the Gambrinus Liga shows a mildly growing imbalance.

To summarize – the research clearly proves the salient dynamic imbalance of the Eredivisie; while relatively the most positive results are attributed to the Bundesliga. Nevertheless, in this league, the results of the research are not satisfactory enough.

We have verified that in three European countries – where football is the number one sport – the state of competitive balance of their top competitions is unsatisfactory; naturally, the degree is country-wise differentiated. The decline of competitive balance in those countries is not an isolated occurrence. The research of many authors prove that with analogical problems with competitive balance suffer also the English top competition – the Premier League, the Spanish Primera Division as well as the Italian Serie A (Koning, 2000; Szymanski, 2001; Garcia & Rodriguez, 2002; Buzzacchi, Szymanski & Valletti, 2003; Sanderson & Siegfried, 2003; Szymanski & Kesenne, 2004). Numerous experts agree that this negative process or “infection” has already lasted more than a decade, obtains an All-European extent and shows mutual affinity and identical symptoms (Kesenne, 2002; Fort & Maxcy, 2003; Fort & Quirk, 2004; Michie & Oughton, 2004; Palomino & Sakovic, 2004). According to the aforementioned analysts, specialized in problems of competitive balance, one of the main causes of this negative development is the excessive, incessantly expanding commercialisation of this popular sport and its submission to the power of marketing and finances (Koning, 2000; Groot, 2007). Rich clubs tend to be richer and with their financial resources and backing they have achieved – practically on account of countless small and financially weak clubs – an unrivalled top sport quality and efficiency level. The less attention and means these superclubs exert in education and training of their own juniors, the more effectively they organize a man-hunt for talent from clubs of lower competitions. The gaps in quality and conditions are incessantly growing. This is the reality in national championships, where for many years the highest positions are occupied by the same clubs, as well as on the international level, where the real chances to win the All-European tournaments like the Champions League or the European Cup (earlier the UEFA Cup) go only to a narrow exclusive group of the economically most powerful clubs. According to their domicile, these clubs are seated in England, Germany, Italy, Spain, France – exceptionally in the Netherlands, Sweden or Portugal. Their legal and property position indicate that they are powerful commercial companies usually with multinational capital participation. (Kesenne, 2000; Szymanski, 2001; Groot, 2007). From England – the cradle of modern football – where the debates on competitive balance have been initiated (Szymanski, 2001; Sanderson & Siegfried, 2003; Fort & Quirk 2004; Michie & Oughton, 2004; Flores & Forest, 2010), there has surfaced analytical data from the last ten seasons documenting the sovereignty of clubs such as Manchester United, Arsenal and lately FC Liverpool or FC Chelsea; from the

Scottish League the news is only about the regularly, every year repeated duel for the championship, exclusively between the Glasgow clubs Rangers and Celtic.

For a direct visitor, fan or consumer of TV or radio broadcasting – there is less attractiveness for personal engagement and regular interest in matches of a lower-grade quality, which are only exhibitions of “the leader” and the result is easily foretold. The need and the possibilities for strengthening the competitive balance on the pitches should be at the centre of attention of all 208 national federations, club managers, coaches and theoreticians - not only in football but also in other collective sports as there are many identical factors. Clubs and teams should not exert their power unscrupulously. Fans prefer, and gain more pleasure from the match result 3:2 rather than 8:0. A club’s supremacy may be applauded after a line of victories in league matches; when during one season, however, the champion performs an uninterrupted series of wins over all the league clubs, then his own supporters also lose interest. Researchers engaged in the studies of motivation of spectators on sporting events (Hansen & Gauthies, 1989; Wall & Meyers, 1989; Slepčička, 1991; Wann, 1995, 2001; Kahle & Kambara & Rose, 1996, Trail & James, 2001) have come to the conclusion that it is the dramatic impact that gives the spectator the most important experience from a match. The absence of uncertainty of the result makes the league, and any other sporting matches, easy to anticipate and boring.

According to a number of authors, there are further high risks, among others numerous cases of financial bankruptcy, process of clubs falling behind with threats of new collapses or the emergence of rival competitions (Szymanski & Kuypers, 1999; Michie & Oughton, 2004; Goosens, 2005; Kesenne, 2006). Low competitive balance in the next years – according to several authors – might cause further growth of difference in revenues inside and between league competitions and further negative consequences such as the growth of economic imbalance with an impact on the players’ market (Fort & Maxcy, 2003; Sanderson & Siegfried, 2003; Sloane & Sandy & Rosentraub; Groot, 2007). In reality, exactly these are items are the topics for the agenda within the leagues, among the club owners, in public media and in economic circles engaged in sport.

Commercial companies make every possible effort to dominate in the business, simply – to beat the rival competitor. However, in the case of sport objectively – and adversely – the interest to preserve the existence and continuous running of the competition works. A super-perfect team itself does not earn money – in other words – the consequence of possessing an uncontestable monopoly is a disaster. Further, when just one sole team survives, then the entire branch of sport is doomed to disappear. Certainly, there is no immediate threat of this kind to the European football, but there is an open, very wide space for innovations to improve the situation (Fart & Maxcy, 2003; Sanderson & Siegfried, 2003; Michie & Oughton, 2004). The more attractive the competition, cup or championship, the higher attendance and sales of tickets, the more TV and broadcasting paid time, the more sponsors and finances benefiting sport in new, modern sporting facilities (Dobson & Goddard, 2001, Goosens, 2005).

Among the conclusions concerning competitive balance in European football, priority should be attached to bringing into practise numerous and ripening rational propositions for reform. First of all the phenomena of competitive balance – its preservation and growth – should enter the agenda of activities and ways of thinking of clubs and national federation managements.

As a vital interest of a League club – which is consistent with efforts to improve the competitive balance – there is a healthy clubs’s economy, i.e. the maximalisation of resources, creation of long term viability and comprehensive plans to realize or co-realize development and construction of modern sporting facilities, mainly for the benefit of youth, for higher comfort and security of spectators.

Technical, legal and financial conditions of the players may not be omitted in this context. This is the field, where for many years overdue obligations of the supreme federations like the FIFA and UEFA call for early, final consideration and rational decisions. Primarily, certain rules of the play have to be modernized – for example the inclusion of the video-arbiter. The authority of these supreme bodies is further needed – mainly on the international scene – to review the rules regarding the transfer of players, regulate the activities of various agencies, ensure the protection of young players and provide at least a frame for social, health and financial conditions (e.g. salary caps, revenue sharing, rewards) of all categories of players. The documents of the European Union issued in the form of the “Independent Sport Review” from 2006, “The future of Professional Football in Europe” or “White Paper on Sport”, both from 2007, should be highly valued as a precious advance initiative.

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## VYROVNANOST SOUTĚŽE V NĚMECKÝCH, HOLANDESKÝCH A ČESKÝCH FOTBALOVÝCH LIGÁCH

JAN ŠÍMA

SOUHRN

Projekt se zabývá měřením a hodnocením statické a dynamické vyrovnanosti soutěže ve třech vybraných národních nejvyšších fotbalových soutěžích. Těmi jsou německá Bundesliga, holandská Eredivisie a česká Gambrinus Liga. Statická vyrovnanost vypovídá o tom, jak se odlišovala postavení týmů v ligových tabulkách jednotlivých ročníků. Je stanovena pomocí výpočtu směrodatných odchylek v procentech výher. Dynamickou vyrovnaností je chápána vyrovnanost soutěže během delšího časového úseku; určuje pozice týmů během několika sezón. Byla určena pomocí Spearmanova a Kendallova koeficientu výpočtu korelace pořadí. Výsledky této práce poskytují grafická znázornění vývoje soutěžní vyrovnanosti ve zmíněných ligách za posledních čtyřicet let. Identifikují vývoj tohoto fenoménu, určují jeho velikost, směr a aktuální význam. Z analyzovaných soutěží vykazuje relativně i absolutně největší vyrovnanost Bundesliga; prokazatelně však u všech tří soutěží je patrný soustavný pokles soutěžní vyrovnanosti.

**Klíčová slova:** fotbalová liga, soutěžní vyrovnanost, statická vyrovnanost, dynamická vyrovnanost

Jan Šíma  
sima.jan@gmail.com