Static Competitive Balance of Three Chosen Central European Football Leagues

Jan Šíma*1 - Jan Procházka**2

ABSTRACT

The study deals with measuring and evaluating the static competitive balance in the Czech, Austrian and Hungarian leagues. Static balance measures how much the teams’ position in the league tables differs in the tables of each year. It is calculated with the use of standard deviations in the percentage of wins.

With the help of graphic representation, the results of this study show the static competitive balance evolution of the chosen leagues in the latest 43 seasons and they help to find the trends. In the long term, the highest static balance is in the Czechoslovak-Czech league. However, the Austrian and Hungarian leagues are more balanced in the latest years. All three studied leagues experience visible decreases of their relative levels of competitive balance.

Key words: Competitive balance; Static competitive balance; Football; Austrian league; Czech league; Hungarian league.

JEL classification: L83

Introduction

Competitive balance can be defined as a balance between the sports abilities of individuals or teams. Hence, we can say that it means a similar sportive quality, uniform physical and psychical endowment, equal chances to success or uncertainty of result. Szymanski (2001) sees match uncertainty as the main criterion of competitive balance; it can mean seasonal uncertainty (during one season) or championship uncertainty (the champion is not certain) – we speak of dominance (or not) of a few teams between seasons. Sloane (2003) stresses the many facets of competitive balance. He also differentiates between short-term and long-term result uncertainty. From the long-term viewpoint, the dominance of a few teams is crucial. Cairns, Jennett and Sloane (1986) have another interpretation of competitive balance – uncertainty of the match, of the season, absence of long-term dominance. Other authors speak of continuity of performances between the seasons or the dominance of one team.

Competitive balance in different sports has been studied for over 50 years (Rottenberg, 1956; El-Hodiri & Quirk, 1971, 1974; Fort & Quirk, 1995; Michie & Oughton, 2004; Goosens, 2005; Groot, 2008). The studies can be divided in two directions. The first one is literature dealing with the past competitive balance evolution in time or after changes in

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marketing practice of the professional leagues (Scully, 1989; Quirk & Fort, 1992; Butler, 1995; Szymanski & Kuypers, 1999; Dobson & Goddard & Ramlogan, 2001; Eckard, 2001; Maxcy, 2002). The second type includes studies of the competitive balance effects on fans. These studies analyze the result uncertainty from the long-term; it is measured during the season and with regard to the chances to participate in the play-off part. (Hansen & Gauthier, 1989; Kahle & Kambara & Rose, 1996; Dobson & Goddard, 2001; Garcia & Rodriguez, 2002; Fort & Maxcy 2003; Kesenne, 2000, 2006; Sanderson & Siegfried, 2003).

In the latest time, mostly European football experiences the problem of a lower competitive balance of the national leagues. As we can see from Tab. 1, practically the same teams become champions in many top leagues. Very often, these teams are big companies, usually with some international capital. The huge and increasing commercialization of this sport seems to be one of the main causes of this negative evolution. Rich clubs become richer and much stronger in sports quality than smaller and poorer teams.

Tab. 1: Most Frequent National Football Leagues Champions in the 1970/71 to 2011/13 Seasons

<table>
<thead>
<tr>
<th>Country</th>
<th>Champions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>Real Madrid 18, FC Barcelona 14</td>
</tr>
<tr>
<td>England</td>
<td>Manchester United 13, Liverpool 11, Arsenal 6</td>
</tr>
<tr>
<td>Scotland</td>
<td>Glasgow Rangers 20, Celtic Glasgow 19</td>
</tr>
<tr>
<td>Germany</td>
<td>Bayern München 21</td>
</tr>
<tr>
<td>Italy</td>
<td>Juventus 18, AC Milan 9, Inter Milan 8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Ajax 18, PSV Eindhoven 17, Feyenoord 5</td>
</tr>
<tr>
<td>Portugal</td>
<td>Porto 22, Benfica 15, Sporting 5</td>
</tr>
<tr>
<td>Greece</td>
<td>Olympiakos 23, Panathinaikos 10, AEK 7</td>
</tr>
<tr>
<td>Belgium</td>
<td>RSC Anderlecht 18, Club Brugge 12, Standard Liege 5</td>
</tr>
<tr>
<td>Norway</td>
<td>Rosenborg Trondheim 20</td>
</tr>
</tbody>
</table>

Source: Authors with data from www.rsssf.com

From the table, it is clear that for instance the Scottish league was ruled by two teams in the long-term – Rangers and Celtic. Last time, another team won in the season 1984/85 (Aberdeen). After the Rangers’ elimination for financial reasons, the champion is thus obvious in advance. The Portuguese league is dominated by three teams – Porto, Benfica and Sporting. In the studied period of 43 seasons, they reached 42 titles. This was interrupted only in the season 2000/01 by Boavista FC. In the Netherlands, 40 titles from the 43 possible ones were won by three teams as well: By Ajax, PSV Eindhoven and Feyenoord. Only three times, another team reached the championship (AZ Alkmaar in the seasons 1980/81, 2008/09 and FC Twente in 2009/10). Similarly in Greece, 40 titles were won by Olympiakos, Panathinaikos, and AEK. The other three titles were shared by PAOK (in the seasons 1975/76 a 1984/85) and Larissa (in 1987/88). The Greek league is interesting also by the fact that since its start in 1927, only six clubs from four cities won the title. These numbers show of low long-term competitive balance.

Many studies using various methods were done regarding competitive balance in football. Usually, they were examining the big developed football leagues. This study is to contribute
to this discussion by offering information about the competitive balance of less economically developed football leagues.

Methods

Football leagues in the Czech Republic, Austria and Hungary are the subjects of our study. These competitions were studied through 43 seasons, starting from the season 1970/1971 till the 2012/2013 season. Many changes occurred during this time: In the names of the leagues, their organization, the rules, or even a geographical change (division of Czechoslovakia). All of these changes partially modified the respective competitive balances. However, we only included the change from two to three points for a win.

Static competitive balance of any competition (i.e. in one season) was calculated with the standard deviation of the percentual wins in the league at the end of the season. This was inspired by other researches, such as (Humphreys, 2002; Zimbalist, 2002; Fort & Maxcy, 2003; Mitchie & Oughton, 2004). The lower is the standard deviation, the higher is the respective competitive balance. On the basis of such an indicator, we can say if there was one or more teams much better than the rest.

For calculating the standard deviation of the percentual success of the team, we needed data on the overall number of wins, draws, and on the number of matches played by the individual teams in the given season. The percentual success of each team in the league, combined with the number of teams in the league, helped us to quantify the standard deviation for the respective season.

We also calculated the maximal standard deviation in each season. That would be the case of a situation of complete imbalance: In that case, the first team would win all the played matches, the second one all the matches except those with the champion, and so on till the last team that would be without any point. The maximal standard deviation was considered as the 100 % value to which we compared our results, in order to have the result of the percentual competitive (im)balance. A graph illustrating the evolution was done for each league.

Results

The Czech Republic

Historically, we can divide the period in two main parts: The one of Czechoslovakia and the one of the Czech Republic – since 1993, the division of Czechoslovakia. Between 1970 and 1993, there were 16 teams in the Czechoslovak league. Altogether, 31 teams played it: 17 Czech ones and 14 Slovak ones. The share of Slovak teams was slowly decreasing.

When the Czech league was created, teams from lower leagues joined it to make the number of 16 again. Nowadays, the Czech league is played by 16 teams in 30 rounds. Therefore, the maximal static imbalance would correspond to a standard deviation of 0.32 (100 % imbalance). To get the percentage value, the resulting standard deviation for each year was divided by 0.32.
In general, we can consider the Czechoslovak and Czech leagues quite statically balanced, but with a worsening trend. It hardly gets above 50\% of imbalance. A worsening trend could be seen already in the times of Czechoslovakia, when it seldom got above 40\% of imbalance. The evolution seems cyclical.

In the 1990’s, the competitive imbalance was for some time quite stable close to 50\% except the season 1998/99, when it was lower. In the following years, the cyclical evolution came back, with a worsening trend towards 50\% of competitive imbalance.

**Austria**

The Austrian Bundesliga is the smallest one from the studied leagues, seen up to the number of participating teams. These are only ten. They used to be sixteen or fifteen till 1973, between 1982 and 1985 and for some years afterwards till 1993 twelve. Nowadays, each two teams meet four times instead of usual two times, so there are 36 rounds.
As we can see from the Fig. 2, the static competitive balance of the Austrian league slightly worsened, but this trend is not strong. We can even say that the static competitive balance remains quite stable in the long term.

We can see a few time periods in this evolution. The first one finishes by the season 1981/1982, when the static imbalance is the lowest one from the whole studied period of time. In the following season, it doubled, and a new period started. This period is less stable than the former one and we can consider static balance to be improving. In the season 2002/03, the second lowest static imbalance is reached. This season can be considered as a border between the second and the third periods. Afterwards, static balance tends to worsen in a trend and with a certain cyclical evolution.

As we can see from the overall trend, the competitive balance keeps slightly worsening in the long term, but it remains below 50% in average. It hardly got over 60%, seldom even over the 50% level.

**Hungary**

Also the Hungarian OTP Liga has now sixteen teams. Also here, the number of participating teams changed: Since 1970, different numbers of teams between twelve and eighteen participated. Of course, it means that the maximum standard deviation varies between 0.31 and 0.33. Therefore, the resulting standard deviation of each season had to be divided by the correct number.
After the first five years of the studied period of time, the competitive balance tended to improve till the season 1991/92, till close to 30\% imbalance. In the last years of this period, we can see some cyclicity upwards.

Since then, the competitive balance varied a lot, with some cyclical evolution. The highest level of imbalance was reached in the season 2007/08, when it culminated at the level 60.68\%.

As we can see from the Fig. 3, the overall trend is increasing, which means worsening of competitive balance in average through the whole studied period of time.

**Discussion and Conclusion**

Historically, the Czechoslovak/Czech league has the best competitive balance of the three studied ones. However, Austria and Hungary have a better static competitive balance in the latest years, at a similar level. The Austrian league is a bit more balanced lately. Both Hungary and Austria have a slightly more stable evolution.

In the times of Czechoslovakia, the league used to be very balanced, mainly in the communist times. It used to be the most balanced one from the studied leagues. Thanks to the overall evolution, the Czech league became the second least balanced of the three leagues.

In general, we can say that the competitive balance in all of these smaller leagues tends to worsen. However, we can divide them into two subgroups: The Austrian and Hungarian leagues remain quite balanced and stable; the Czech one used to be the most balanced one, but it worsened and became relatively less balanced.
Bibliography


