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The Effect of Investing in Buying Players (signing and salary expenses) on Sport Companies' Sport and Financial Performance¹

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The aim of the paper is to interpret and examine the importance of players' development in professional football. The paper defines professional sport, transfer market, superstar effect and main business operation of football. Professional football teams mostly prefer sport aims instead of financial aims. They invest huge part of their revenues to wages transfers of players, in order to improve their sport competitiveness. Reviewing international papers, this study seeks to answer the following question: how investments in human capital influence the sport and financial competitiveness of sport companies. In the examined major European championships (German, Italian, English and Spanish) positive correlation is justified between the wages, the individual performance, the team performance and the revenues of sport companies by many researchers. Increasing the amount invested to transfers and wages implies higher revenues, however it does not imply the increasing of profit due to the elevated personnel costs. According to the UEFA's studies European clubs are characterized by increasing debt. The greatest part of expenses consists of signing and paying players, which sheds light on the most important points of the business operation of international football. This has been proved in several international studies, the findings of which the paper is going to summarize in this exploratory study. Sport companies should define both their main strategy aims and their sport aims in accordance with their limited financial capacities. A conscious and well-planned management of human capital could lead to a long-term presence in leading championships and to the realization of both financial and sport aims of the club.

¹ This paper is in essence the modified and completed version of the author's study (Havran, 2016) that appeared in the Hungarian journal *Vezetéstudomány*.

Introduction, background of the paper

Companies running professional football teams often place their sport professional goals above financial ones, they spend a significant proportion of their budget on signing players, paying them and to increase their competitiveness in a sport professional sense. The paper, by summarizing international literature, demonstrates what effect resources spent on developing human resources have on the sport professional and financial efficiency of sport companies.

Professional football clubs' most important resources are the players themselves, the main part of clubs' budgets mostly consist of money spent on them, so it can be considered a strategy question, how much is at a club's disposal when forming its players squad. In this paper I present what connection can empirical studies identify between players' performance and salary and clubs' sport professional and financial results (András, 2004).

Football clubs based on the tendencies of the past decade are much more interested in sport success than financial results. According to the UEFA's studies European clubs are characterized by increasing debt. Although, in the last years the loss of clubs decreased, the amount of losses are still very significant (UEFA 2015:84). The UEFA in its study examining clubs' 2014 financial year (UEFA, 2014) – when studying the 20 clubs with the largest salary expenditure – found that on average, clubs spend 57% of their overall revenue on salary expenses, which means a 9% growth compared to the previous year. Their average salary expenditure was million 172 EUR, and the total amount spent on salaries by these 20 clubs was million 3,446 EUR. These data means the relevance and actuality of the paper.

In this paper I made a structured literature review about empirical studies from the major European football leagues and I found correlation between HR costs, sport success and financial results of football clubs.

Method

The greatest part of expenses consists of signing and paying players, which sheds light on the most important points of the business operation of international football. This has been proved in several international studies, the findings of which I am going to summarize in the following. Table one presents a summary of the papers about the topic, grouped according to a logical framework and emphasized points experienced in them. The aim of the present paper is to examine the returns of investments into youth training.

Table 1. Summary of empirical research in the four significant championships

| <i>Relationship/ Championship</i> | <i>Individual performance and wage of players</i> | <i>Team sport success and players related costs</i> | <i>Team sport success and club revenue, financial result</i> |
|---------------------------------------|---|---|---|
| <i>Germany</i> | Lehmann & Schulze (2007) Franck & Nüesch (2010) | | Stadtman (2006) |
| <i>England</i> | Preston, T. (2011) Gerrard & Dobson (2000) | Carmichael et al. (2011) Szymanski & Kuypers (1999) Szymanski (2014) Hall et al. (2002) Brady et. al. (2008) | Carmichael et al. (2011) Benkraiem et al. (2011) Drawer & Fuller (2002) Fotaki et al. (2009) Dobson & Goddard (1998) |
| <i>Spain</i> | Garcia-del-Barrio & Pujol (2008) | | |
| <i>Italy</i> | Lucifora & Simmons (2003) | | |

Source: edited by the author

A club's strategy is greatly determined by the quality of available player squad, as well as decisions and financial possibilities of the owners, which eventually determine the amount of money spent on players. In order to understand the background of a club's leaders and owner, we need to get familiar with the different influencing factors and the correlations behind them. According to the starting point of the train of thoughts, sport companies spend more on buying and paying players, which affects the performance of the players and the team both in a sport professional and a financial sense. In the following I demonstrate the strength of these correlations and the evidence for international studies.

Interpreting the superstar effect in professional football

Rosen and Adler can be considered the pioneers of studies connected to superstars and their special position on the market, although their terminology is different. Rosen (1981) was the first to write down that in certain markets (especially in entertainment, such as film art and sport) even small differences between the talents of people can mean a great difference in salaries. Audiences appreciate high quality and they are willing to pay significantly more for better quality. Besides talent, Adler (1985) considered the level of celebrity and fame essential as well, according to him, in order to be able to appreciate the performance of artists or athletes,

people need to know them, must build an image of them and talk about them as much as possible.

Good connections help the fame of stars and these influencing factors strengthen each other as well, which is called superstar-effect by Adler. Media has a special role in making stars because it possesses a great network and can make somebody well-known quickly. According to Adler not only the level of celebrity and fame but the media can also be a cause of the excessive salary of superstars. Lehmann and Schulze (2007) studied this superstar effect in the German Bundesliga. They analysed footballers' individual performance and media appearances in order to find out how popularity and performance affects salaries and fame of players. According to their findings the best-paid five percent of the 1998/1999 German championship earned more than five times the median. They tried to find out whether differences in salary arise from differences in performance or (according to Rosen's theory) the popularity generated by the media has a greater effect on salary differences. With their findings they were unable to prove either theory, but they found that performance and fame do have an effect on salaries, and this effect is proportionate: those who give a better performance, earn more, those who are more popular, can get more sponsors, merchandising income, and spectators for the club, so they need to be rewarded, but it is not disproportionate. In German football the factor influencing salaries the most is the success of the team. They found that performance and popularity were proportionately rewarded by the sport companies in case of different players.

As opposed to the German league, in Spanish and Italian championships different authors have confirmed the presence of the superstar effect but in those championships the best clubs are significantly richer than others (especially due to the unequal distribution of television broadcasting revenue). The authors remark that in case of the other two leagues the researchers have used different methods for their analysis and the reliability of salary data is questionable. A further finding of Lehmann and Schulze (2007) is that in case of players there is a turning point in salaries at the age of 25.4 (it starts to decrease after it), and among foreign legionaries South American player are paid more than what can be considered proportionate, although the higher salary did not necessarily mean a higher level of performance.

Besides talent, popularity also plays a great role in players' market value, as confirmed by Franck and Nüesch (2010) based on data from the German championship. In case of more comparable and individual sports of course athletes are more comparable, too, however, in football this is difficult. Besides the team's performance, they followed individual performance as well and this way they tried to quantify success. According to their findings individual performance and the media contributes significantly to determining the different market values.

Analysing data not only from German but also from Italian football Rosen's superstar theory has been proven (Lucifora & Simmons, 2003), but in Italy significant results occurred only in case of midfielders and strikers. According to the findings of the authors playing in the national team meant

a higher salary for players. Regarding the Spanish championship Garcia-del-Barrio and Pujol (2008) proved that superstars earn above the expected amount according to their evaluation, Google hits, and the usual control variables.

Connection between players' salaries and their individual sport performance

Franck and Nüesch (2010) studied the effect of talents' and superstars' performance on team performance using data from German first division. According to their findings, there is verifiable connection between outstanding players' performance and the rank of the team. In another article Franck and Nüesch (2012) analysed the effects of salary differences within a team on the team's performance. In their opinion, interpretation of salary differences is two-fold, as on the one hand, the chance to achieve a higher salary can motivate players to work harder (they can see that it is worth investing work), on the other hand, it can lead to conflict within the team and thus to a drop in the performance level. Based on their analysis of the data from German first division championship there seems to be a U-shaped connection between salary differences and results, according to which teams with extreme salary differences, and teams with minimal salary differences have achieved the best results, while salary differences that can be considered medium caused the weakest team performances. According to the authors, much depends on inside team culture (whether individualism, cooperation, team work is typical) and on the actions of the coach, but if team hierarchy is clear (there are 1-2 well-paid talents that the others look up to), it is more fortunate than many individualistic players.

Big differences on the one hand can be explained by a few outstanding players being acknowledged by their peers (professionally as well, as good team performance is beneficial to all), on the other hand, teams that render the best performance have some of the best players with top salaries, their team-mates can receive a much lower salary (but not low) than theirs.

However, a player's payment does not only depend on his own performance. According to a paper by Ruijg and Ophem (2014) clubs primarily buy players because with them the team can become stronger and sport performance can improve, and players are rewarded in the form of premiums based on their contribution to team performance. This is logical, as sport success has an effect on financial success as more tickets can be sold and merchandising and sponsorship incomes will also grow. At the same time they remark that borrowing or buying a player is risky. Efficiency of a player is changeable depending on time, on other team members and also on the strength of opponents. Financial success can also depend on economic environment, the performance of the national team and the popularity of other sports, among others. Among the expenses related to players, salary and a possible signing fee has to be considered (in case he has a valid contract). The latter can mean two kinds of compensation in an

economic sense for the selling club: on the one hand the lost productivity for the time of the player's contract, on the other hand the invested capital for the purchase or the youth training of the player. Earlier studies (Lehmann & Schulze, 2007; or Franck & Nüesch, 2010) have found a strong, positive correlation between salaries, signing fees and productivity (performance), but there is very little trustworthy data on salaries, and access to data on signings is also limited.

Extra appreciation of especially skilled footballers' extra performances by clubs can be justified. According to a study (Bryson et al., 2009) that examined players who can play outstandingly with both feet and the differences between their salaries and others, demand for players who can play with both feet outstandingly can be higher, as the vast majority of players is mostly right-footed. The authors examined the five big European championships and the German league separately and according to their findings players who are equally good with both feet get a significant premium on their salary (the difference also depends on the player's position). Why can the salaries of "two-footed" players be higher? On the one hand, they are capable of better performance, on the other hand, they mean an extra opportunity for the coach when putting the team together. There is no evidence for the significant effect of "two-footed" players on team performance, performance improvement could only be proven in case of midfielders, yet all of them receive a higher salary. In case of left-footed players, salary difference occurs for midfielders but not as significant as for "two-footed" players. In the study that examined Germany only, performance was in proportion to salary. It is more likely to depend on whether the "two-footed" player can find himself a team where he is considered unique and they can use him better in teamwork. This is more important than the simple fact that he is two-footed.

All in all, there seems to be a strong, positive correlation between players' performance and salary, studies made in all four leagues support this correlation (see the first column of the table 4). However, superstars rise above others because they are considered hardly replaceable resources, therefore their price is also exponentially higher than that of their peers (not proportionate with their performance increase) (Franck & Nüesch, 2012).

Time left of his contract and media attention connected to his signing can also have an effect on a player's price and motivation. Feess and Muehlheusser (2003) examined behaviour connected to contracts in study on their game theory, and they write that when signing the contract both the player and the club sets the greater profit as goal. The less time there is left of his contract, the more it is the player's interest to give a good performance, so that afterwards he can sign a new contract. Besides, the new club might also prefer a short contract time left, because after it has expired they can get the player for free, or it is cheaper if there is not much time left of the contract in case the club takes the player before the contract expires. The more time left of a player's contract, the less likely he is to sign over to a new team. According to the study that examined the signing contracts of the German championship between 1994-2000 (Feess et al.,

2010), a year longer contract time significantly increases the average transfer fee. Players' salaries mostly increase in a new team compared to their previous ones. After the introduction of the Bosman-ruling an increase in established contract time could be noticed, instead of the previous 2.8-2.9 years on average earlier it has grown to 3.2-3.3 years.

Correlation between expenses on players and the sport performance of the team

Football is a team sport so besides individual skills and abilities there are several other factors influencing the sport performance of the team (performance of peers, level of professional staff's preparation, infrastructure, strength of opponents etc.), because of this it is important to examine the effect of money spent on players on the performance of the team. In English football a strong, positive correlation was confirmed between sport success and salary expenses (Szymanski & Kuypers, 1999), as well as between rankings in the league and salary expenses (Hall et al., 2002). According to the interpretation of these authors, clubs have the appropriate information about their players' abilities, and they pay them to compensate for their productivity and efforts made in order to achieve the club's sport goals. Clubs strive to conduct this compensation with acceptable accuracy, so that players would receive as much as they deserve. Their results are consistent with the circularity of success (or the lack thereof), so more successful clubs will have more capacity to invest even more in human capital. It is a very important statement that a steep rise in salaries produces only a small-scale increase concerning league scores gained, so there must be excessive sacrifices made to buy and pay players in order to achieve better results. The reason for this is that club-specific influences and the level of success of international cups also affects incomes which are not independent of the league. There is also a significant, positive correlation between average salaries and sport success in the first two divisions of English football (Szymanski, 2014).

The sum of players' individual performances, however, does not directly show the team performance because other factors also enhance a better team performance, among others the personality and knowledge of the coach (Brady et. al., 2008). Besides, it is also important that buying talents and superstars is not enough, their continuous training and development is also essential, which on the one hand means their sport professional development, on the other hand building their brand.

According to Brady et al. (2008) incomes are in a positive correlation with (earlier and current) sport success, and sport companies spend more than 60 percent of their income on the salaries of their players. As salaries are based on players' sport skills, investment into players results in success on the pitch (in their research in the English championship and in international cups). Successful clubs will become even richer and will be able to further build up their success by spending more on players than less well-to-do

clubs. Big clubs have an interest in keeping the difference between themselves and smaller clubs great and thus keeping up the imbalance. This leads to a national dominance in each championship. This could be changed by rulings, for example by introducing a salary cap, maximizing the number of players, reducing the mobility of players. But these possible rulings have been refused by all big championships, and leading clubs for the time being view them as a "curse".

Sport success, clubs' incomes and financial results

Determining the value of a player is very difficult because a sudden loss of value can occur for example in case of injury, but other physical and psychological reasons can also cause a serious change in performance. Future performance of players is hard to predict, and thus determining intangible assets' future income generating capacity is also difficult. Referee decisions influencing matches should also be considered. Clubs take commercial and financial risks, which are in connection with the fact that income depends greatly on sport performance. Sport performance directly influences the number of spectators watching on site, income from consumers market, and indirectly it influences incomes from other markets, from sponsors and from TV and merchandising products.

Some football companies operate as joint stock companies for whom it is necessary to disclose financial performance transparently. Benkraiem et al. (2011) analysed the correlation between the sport performance of English clubs on the stock market and the fluctuation of share prices. In their opinion, the rate of intangible assets is growing in football, and they are very difficult to evaluate (to determine their actual value). According to their findings, sport results have a significant influence on share prices, the intensity of stock market reactions greatly depends on outcome (victory, draw, defeat) and on the venue (home, away). According to them, defeat on home ground has the greatest negative consequence. They examined the results of seventeen British clubs on the stock market between 1995 and 1998 and they found that on the day after a victory there was a one percent growth, after a draw a 0.6 percent drop and after a defeat a 1.4 percent drop.

Findings by Allouche and Solez (2005) were similar, as well as those of Renneboog and Vanbrabant (2000). effect on exchange rate is positive in case of victory, international qualification and cup success, but negative in case of defeat and drop-out from any competition announcements. Stadtmann (2006) also provided evidence for this through the example of the German Borussia Dortmund GmbH & Co. Fotaki et al. (2009) analysed corporate finances and resource based theory in the field of acquisition, marketing and development of corporate resources. They studied the effects of buying, selling and borrowing players on shareholders' property by analysing fifteen English clubs on the stock market. They pointed out that selling and lending players produced an abnormal volatility around the

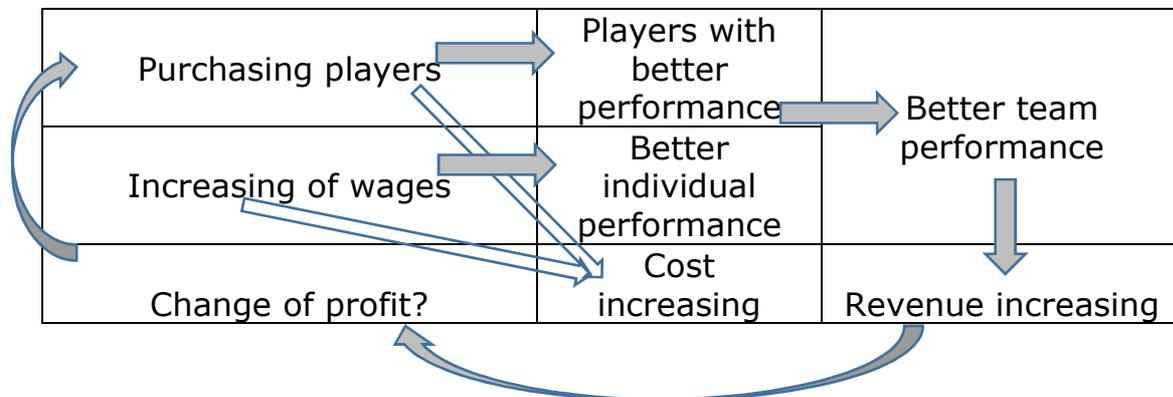
time of the event, in their opinion investors do not judge the players market as effective. The authors consider a sport company's capability to appropriately manage its intangible assets key to a permanent competitive advantage. Companies (and sport companies even more so) must regularly evaluate their human resources, its performance and effect on the organization. Analysing why a sport company changes its human resources from time to time and whether this has added value regarding the company is a possible subject of further research.

Drawer and Fuller (2002) through a risk analysis of injuries connected the above correlations and summarized the significance of them. In their opinion the aim of leadership (and human resource management) is to estimate, evaluate and control arising risks regarding the most important resource as well, which is players. In professional football injuries mean a much greater danger than in other fields. The biggest problem is when a professional clubs' players are not available, therefore, they cannot contribute to sport and financial performance. The article presents a statistically based risk analysis method which examines the team's quality and performance and the club's income and salary expenses between 1993 and 1997 in the English championship. The model found a positive correlation between the four factors mentioned above, and found a clear link between injuries and the clubs' sport and financial performance. The model is essentially the following: if the value and quality of the team is increased by an action (successful youth training, or player purchase), this shows in the team's sport performance as well. In many cases (Dobson & Goddard, 1998), however, the expected professional success does not show in the first years as increase in income, while salary expenses are growing, which need to be followed by further investments if the quality of the team is to be maintained. This is where many clubs fall behind because they lack the capital to make improvements year by year and they cannot increase their income so quickly. For instance, the local audience (income on the day of the match is important) cannot spend more because there are no more seats in the stadium or consumers are not solvent enough. Missing out on these further contributions by consumers prevents signing the appropriate replacement players. If an injury occurs, the quality of the team can decrease which reduces team sport performance which in turn leads to a drop in income (because of missing out on money paid for sport success and paid by spectators etc.). Richer clubs possess a greater and higher-quality framework, so they can easily replace injured players. However, if key players of smaller clubs get injured, team performance can decline greatly (this contributes to the great imbalance between clubs). All in all, the risk of injury needs to be considered also when determining the size and quality of the framework.

Conclusion

Figure 1 helps to summarize the findings of the paper.

Figure 1. Connections between the expenditure related to players, individual performances, team performance, and business returns



Source: edited by the author, based on Szabados (2003)

The basis of figure 1 is the success strategy described by Szabados (2003), according to which a prior investment into sport professional work results in better sport results and higher income (András & Havran, 2015). However, in the same competition more clubs might choose this strategy, so there will always be clubs who cannot win the competition and so they cannot realise the income necessary for profitable functioning. This is called the Szymanski-catch (Szymanski, 1998). Clubs can basically achieve a better team performance by signing new players and providing higher salaries, and better sport results provide the basis of an increased sales return. The question is whether they can increase their sales return at an appropriate pace to follow the increase of their expenses related to players. Increasing sales return in international markets is the key part of increasing income (more consumers, global sponsors, further television broadcasts), so the club needs to finish among the top teams in local championships so that they can get into international competitions. It is important for business companies running the clubs to think in terms of long-term returns and profitability and not to let a few years lack of success make achieving strategic goals impossible.

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