The Impact of Slavia Praha's Takeover on Czech Football

Selçuk Özaydın

MEF University, Istanbul, Turkey

Abstract

Foreign ownership in European football has been rapidly increasing especially in the last two decades. Although the main interest for the foreign investors are the teams of major leagues such as English Premier League, Spanish La Liga or Italian Serie A, there are some occasional surprises. One of the surprises is the oldest football team in Czech football, SK Slavia Praha This study investigates the impact of Slavia's takeover on Czech First Division. First, a stochastic frontier analysis is conducted and efficiency scores are estimated. The results indicate that Slavia's athletic efficiency has improved significantly after the takeover. Later, the transfer activity in the league is investigated and concluded that it has increased greatly thanks to Slavia's additional funds allocated to transfers. Finally, the overall competitive balance in the league improved after the takeover despite Slavia's dominance in the league after the takeover.

Keywords: Foreign Ownership, Czech First Division, Competitive Balance, Stochastic Frontier Analysis

JEL CODE: Z20

INTRODUCTION

The latest rumors about the acquisition of Newcastle United by a group of investors led by the Saudi Public Investment Fund have stirred up the discussion regarding foreign ownership in European football. Foreigners have always been interested in the Premier League clubs which started with Fulham FC's takeover in 1997 with Mohamed Al Fayed (Fulham FC, n.d.). Although the Egyptian billionaire acquired Fulham FC and brought them memorable success, Abramovic's Chelsea was the first to go on a spending spree and transfer major stars. KPMG (2020) underlines that acquiring football clubs might provide the owners; political, economic, cultural and social power. Football clubs have become something more than extravagant toys for the rich in the last two decades due to the increasing revenues and worldwide recognition.

The first rich, to spend large sums on football clubs, were the Russian oligarchs however in the recent years, funds from the Middle and Far East have been rapidly flowing to European football due its ability to generate power in numerous ways. In the cases of Big 5, England, France, Germany, Italy and Spain, achieving success is costly for a foreign owner since clubs have more disposable income due to their high revenues and there are multiple teams owned by foreign investors hence the competition is fierce. In the case of smaller leagues such as the Czech First Division where revenues are lower, a foreign investor is more likely to succeed. In September, 2015, China Energy Company Ltd. (CEFC) bought the majority share of SK Slavia Praha which is the oldest football team in Czechia. Slavia was struggling with financial problems since their last title in 2009 (Xinhua, 2017). Despite the opposing views against the acquisition among fans, Slavia won two titles and 2nd place in the three seasons after the takeover.

This study investigates the impact of SK Slavia Praha's takeover on Czech First Division in a few critical angles. A period of 6-years is investigated between 13/14 and 18/19 seasons. Since the takeover was completed in the 15/16 season, the six-year period provides three year -pre and -post acquisition periods. First, using a stochastic production frontier, the athletic efficiency

STUDIA SPORTIVA 2021/1

scores of Czech First Division clubs are estimated. Later the competitive balance in the league is investigated using the measures from the literature and finally the transfer activity in the Czech First Division is examined thoroughly to observe how the takeover affected the transfer market.

Next section provides a theoretical background for the study which is followed by the methodology section. Forth section provides the results of the study whereas the fifth and sixth sections discuss the results and conclude the study.

1. LITERATURE SURVEY

Over the past couple of decades European football clubs have evolved into a corporate governance structure (Michie, 2000; Michie and Oughton, 2005). In Czech football, most of the clubs are owned by either wealthy Czechs or Czechs corporations with three exceptions. The first is FK Mladá Boleslav where a minority share of the club is owned city of Mladá Boleslav and the second is FC Opava where the 99% of the shares are owned by the city of Opava. The third and the newest is SK Slavia Praha after its takeover by CEFC in 2015 which is the first team to be acquired by foreign investors in Czechia (Bureš, 2019a; 2019b; 2019c).

Although foreign ownership is a new phenomenon for the Czech football, the impact of foreign ownership on football clubs have been subject to a number of studies. Wilson, Plumley and Ramchandani (2013) examine how different models of club ownership affect the financial and athletic performance of Premier League clubs and concluded that clubs owned by foreign investors perform better athletically. Rohde and Breuer (2016) investigate the financial impact of foreign acquisitions on English Premier League teams. Authors conclude that foreign investors increase team investment which results in a decrease in profits which coincide with Wilson and his colleagues' results. In another study, Rohde and Breuer (2018) investigate financial and athletic efficiencies of the English Premier League and French Ligue 1 clubs and revealed that teams owned by foreign investors have lower financial and athletic efficiency scores.

Stochastic production and cost frontiers have been used numerous times in the sports economics literature (Dawson, et al., 2000; Kern & Süssmuth, 2005; Frick & Simmons, 2008; Barros & Rossi, 2014) in efficiency estimation. Another popular approach for estimating efficiency is data envelopment analysis (DEA). Both approaches require inputs and outputs for estimating efficiency. The main focus of the literature has been the Big 5 however there are a few studies investigating the leagues outside the Big 5 such as Russian Premier League or Portuguese First League (Zelenkov & Solntsey, 2017; Ribeiro & Lima, 2012).

The literature on Czech football is not as comprehensive as the literature on the Big 5 and furthermore the research on the economics of Czech football is very limited. Šíma (2011) investigates how competitive balance has changed in Czech first division between the years 1970 and 2010 and conclude that there is a steady decline over the years. Procházka (2012) examines the financial structure and health of Czech football clubs and their compatibility with UEFA's Club Licensing and Financial Fair Play Regulations. He argues that Czech clubs are under the risk of bankruptcy. Racek and his colleagues (2015) conduct a survey to reveal Czech football fans' demand for football. There are also a number of studies investigating fan behavior and hooliganism in Czech football (Smolík, 2012; Scholz, 2016a; 2016b). There no studies investigating the efficiency of Czech football clubs or the impact of foreign ownership in Czech football.

2. METHODS

Data regarding the Czech First Division's transfer activity, squad market values and league tables are all gathered from the well-known German website Transfermarkt.com. Transfermarkt.com is often used in academic studies (Kern et al., 2012; Herm et al., 2014; Kirschstein & Liebscher, 2019) and has no credibility issues. First the methodology and the data used in the stochastic production frontier is introduced. Later the tools used in the investigation of competitive balance and the data regarding transfer activity are presented.

2.1 Stochastic Production Frontier

For estimating a stochastic production frontier, there is need for at least one input and one output. Aggregate market value of a team's players is used as the input. Market value is used as a proxy for talent and furthermore since market values are frequently updated based of factors like; age and performance, it captures multiple angles that are influential on team potential. As the output, points collected is used to measure the athletic performance.

Following Battese and Coelli (1995) a stochastic production frontier for panel data is:

$$Y_{it} = x_{it}\beta + V_{it} - U_{it} \tag{1}$$

where Y_{it} is the produced output, at time t for team i, x_{it} is a vector for input variables, β is a vector of unknown coefficients which are estimated, V_{it} is the error term and U_{it} the technical inefficiency in production.

The estimation of Equation 1 provides the technical inefficiency which can be specified as:

$$U_{it} = z_{it}\delta + W_{it} \tag{2}$$

where z_{ii} is vector of variables causing inefficiency, δ is a vector of unknown parameters which are estimated and W_{ii} is an error term.

The technical efficiency can be acquired by:

$$TE_{..} = \exp(-U_{..}) \tag{3}$$

For the case of Czech football teams, the production frontier is:

$$\ln Pts_{it} = \ln MV_{it}\beta + V_{it} - U_{it} \tag{4}$$

where Pts_{it} is the points collected in the end of the season and MV_{it} is the aggregate market value of a team's players.

Table 1 presents the summary statistics for the data used in the production frontier.

Table 1. Descriptive Statistics for Output and Input

	Obs	Mean	Std. Dev.	Min	Max	
ln <i>Pts</i>	96	2.35	0.57	1.34	2.64	
$\ln\!MV$	96	3.67	0.33	3.92	4.37	

2.2 Competitive Balance

Competitive balance is a fundamental area of research in the sports economics literature and numerous studies have been conducted. A comprehensive analysis of competitive balance measurement tools can be found in Özaydın and Donduran's study (2019). Out of the numerous options, the following three are chosen due to their ease of interpretability, popularity and explanatory power:

- 1) Range and Standard Deviation of Winning Percentage
- 2) Coefficient of Variation (CV) of Points
- 3) Gini Coefficient of Points

The winning percentage for a team is easy to compute and draws are counted as half wins. The range and the standard deviation of winning percentage enables the comparison of competitive balance between seasons. CV of points is simply the ratio of standard deviation of points to the mean of points in the end of a season therefore it's a value between 0 and 1. A higher CV indicates more competitive imbalance and vice versa. CV enables the investigation of competitive balance in a season and enables the comparison of different. Lastly, Gini Coefficient of points is used to evaluate the level of competition in the Czech First Division.

2.3 Transfer Activity

The transfer activity is relatively low in the Czech league when compared to the Big 5 or the other major leagues in Europe such as Netherlands, Portugal, Russia or Turkey. The lower revenues generated by the Czech teams reflect on their transfer activity. Table 2 provides the descriptive statics for Czech teams' transfer activity.

Table 2. Descriptive Statistics for Transfer Activity (million euros)

	Obs	Mean	Std. Dev.	Min	Max
T. Expenditure	96	0.68	2.22	0	16
T. Income	96	1.11	2.81	0	20.75
T. Balance	96	0.43	2.58	-10.95	15.8

3. RESULTS

Table 3 presents the estimation results of Equation 4 and as the results suggest market value is highly significant as expected and a 1% increase in market value increases the number of collected points by about 0.4%.

Table 3. Estimated Stochastic Production Frontier

Output lnPts	
lnMV	0.41*** (0.00)
Constant	2.86*** (0.00)

Notes: Numbers in the parentheses are the standard errors, *** p<0.01, ** p<0.05, * p<0.1

There are 16 teams in the Czech top flight and nine of these have competed in all the six seasons in the investigated period. Using the results from the estimation of Equation 4, efficiency scores are predicted and presented for these nine teams in Table 4. For each team, athletic efficiency score and the league position in the end of each is season is presented. SK Slavia Praha and other two regular title contenders in the league, AC Sparta Praha and FC Viktoria Plzeň, are presented in the first three rows of the table.

Table 4. Efficiency Scores for Czech Teams – 13/14 – 18/19 Seasons

	13/	14	14/	15	15/	16	16/	17	17/	18	18/	19
Team	TE	Pos										
SK Slavia Praha	0.696	13	0.839	11	0.926	5	0.943	1	0.865	2	0.907	1
AC Sparta Praha	0.934	1	0.907	2	0.901	2	0.858	3	0.754	5	0.827	3
FC Viktoria Plzeň	0.917	2	0.936	1	0.936	1	0.921	2	0.929	1	0.914	2
FC Slovan Liberec	0.926	4	0.808	12	0.943	3	0.872	9	0.916	6	0.896	6
FC Bohemians Praha 1905	0.857	14	0.926	8	0.915	9	0.834	13	0.916	7	0.849	11
FK Teplice	0.925	5	0.893	7	0.813	12	0.940	5	0.842	8	0.888	10
1.FC Slovácko	0.924	6	0.929	9	0.940	8	0.888	11	0.889	13	0.883	12
FK Dukla Praha	0.894	7	0.920	6	0.874	10	0.921	7	0.867	11	0.618	16
FK Mladá Boleslav	0.924	3	0.914	4	0.938	4	0.928	4	0.746	9	0.863	7

In the first three years the average efficiency scores for Slavia Praha, Sparta Praha and Viktoria Plzeň are 0.820, 0.914 and 0.930 respectively. Slavia was the least efficient of the three by far and they failed to win any titles. In the second three-year period, Slavia's average efficiency score increased to 0.905 whereas both Sparta and Plzeň's efficiency scores diminished. From period 1 to period 2 Slavia have managed to improve their efficiency significantly as well as winning two titles and a $2^{\rm nd}$ place.

Table 5 presents the competitive balance measured which were presented at Section 3.2.

Table 5. Measures of Competitive Balance

Season	Range of W%	Std Dev of W%	CV of Pts	Gini
18/19	0.567	0.153	0.332	0.174
17/18	0.517	0.144	0.318	0.168
16/17	0.550	0.159	0.346	0.184
15/16	0.650	0.171	0.377	0.205
14/15	0.617	0.154	0.348	0.176
13/14	0.550	0.153	0.342	0.167

The average scores in all measures are higher prior to SK Slavia Praha's takeover which indicates that competitive balance improved after the 15/16 season. The minimum of all measures other than the Gini coefficient are in the post takeover period. The lowest Gini was in the 13/14 season however it is just 0.001 lower than the 17/18 season.

Table 6. Transfer Activity in the Czech League

Team	Perio	d 1	Period 2		
	Expenditure	Income	Expenditure	Income	
League Total	10.36	28.61	55.23	78.26	
AC Sparta Praha	2.93	11.2	24.64	44.41	
FC Viktoria Plzeň	2.7	4.15	3.85	5.6	
SK Slavia Praha	3.85	1.55	22.22	4.51	

Table 6 presents the transfer expenditure and income figures for AC Sparta Praha, FC Viktoria Plzeň and SK Slavia Praha as well as the league total. The growing revenues in European football have affected the Czech first division as well and both expenditure and income have increased significantly in total. However, it should be noted that 90 % of the increase in expenditure from Period 1 to Period 2 belongs to AC Sparta Praha and SK Slavia Praha. In Period 2, 85 % of the total transfer expenditure belong to just two teams which are AC Sparta Praha and SK Slavia Praha. As a final note it should be mentioned that 86 % of SK Slavia Praha's expenditure in the first period was conducted in the winter transfer window in the 15/16 season which is right after the takeover. As mentioned earlier, the takeover was completed in September 2015.

4. DISCUSSION

In leagues such as the English Premier League or Spanish La Liga, multiple teams have been acquired by foreign investors in the recent past however Slavia is the only team in the Czech First Division with a foreign owner. As mentioned earlier, due to the lower revenues of the leagues outside the Big 5, a team is more likely to succeed with additional funds. Even though club owners are not allowed to inject funds into clubs anymore after the Financial Fair-Play regulations, owners are able to help their clubs' finances through sponsorships and commercial deals.

Among the nine teams presented in Table 4, FC Viktoria Plzeň has the highest average efficiency followed by 1.FC Slovácko and FC Slovan Liberec. Despite failing even to get in the top five in any of the seasons, 1.FC Slovácko is the second most efficient team in the investigated period. They have managed outperform themselves with a modest squad and avoided relegation. The impact of SK Slavia Praha's takeover on the team's performance is clearly visible on the efficiency scores which resulted two titles and a second place in three seasons. Slavia has definitely benefited from the takeover despite the initial opposition from the fans against the Chinese takeover. The new owners handled the opposition smoothly by making sure that supports were active in management and also by buying Slavia's stadium back from unknown agents in the Cayman Islands (Gosling, 2017).

Slavia's increasing competitive power improved the overall competitive balance in the league significantly as the results in Table 5 suggests. Before the 15/16 season, there were only two title contenders and the rest of the teams were competing for the other positions. As in all leagues the Czech league has its own giants however after the takeover a third giant has emerged. Although Slavia is the oldest football club in the Czech league and they have a number of championships, they have been struggling with financial troubles and their last title was in the 08/09 season. After the takeover, Slavia's attendance has also increased significantly. The average attendance for the three years before the takeover was about 7200 whereas the average after the takeover is about 12400 which is an increase more than 70 %. It should be noted the average attendance for

the league as a whole has increased only about 6 % so the increase in Slavia's average attendance is not a general trend in the league. The decrease in range and standard deviation of winning percentages, CV of points and Gini coefficient indicates the gap between the stronger and weaker teams in the league is also decreasing. Not only the title race but the whole league has become fiercer in Czech football in the recent years.

As Table 6 suggests, Slavia's expenditure has increased substantially after the takeover as expected. Although Sparta's expenditure increased more than Slavia's expenditure, it should be noted that Slavia has a negative transfer balance whereas both Sparta and Plzeň have positive transfer balances. Sparta has been financing their transfer spending through their transfer income. Perhaps an explanation for the improving competitive balance in the league can be made through the transfer activity. Major teams of the Czech league such as Sparta, Slavia and Plze are sources of players for teams from major leagues. Especially in the last decade, the transfer competition among the teams of Big 5 has become very fierce. They have been harvesting players from the smaller leagues of Europe. The major teams of smaller leagues are the first places to look for new talent for the Big 5. The giants of the Czech league have been losing their players to the major leagues therefore their competitive power increased hence the competitive balance in the league improved. Slavia has spent about 26 million Euros on transfer after the takeover and 60 % of the expenditure was spent on domestic transfers. Slavia generated more than 15 million euros of disposable income for the other teams in the league through their transfer expenditure. Thanks to their increasing transfer income, other clubs were able to conduct more transfer as well as improving their financial statuses. It can be concluded that Slavia's takeover was not only beneficial for Slavia but also beneficial for the whole league.

5. CONCLUSION

It is quite common in major leagues for a foreign investor to take over a team. Due to the increasing popularity and globalization of football, major teams have millions of supporters from all over the world. Although the profitability of investing in football is debatable in some cases, football brings popularity, reputation and respect. However, for the case of Slavia what the Chinese owners expect to gain is a matter of question. The rumors regarding a secret agenda have not been proven right or wrong so far.

Nevertheless, the takeover has significantly contributed to the Czech football. Firstly, the oldest and deep-rooted club of Czech football is salvaged from their debts and they are back at their glorious days. The fans showed their appreciation by filling the stands almost twice as much after the takeover and they witnessed Slavia winning titles. The impact of the foreign acquisition was extremely positive for Slavia. They have become much more efficient on the field and managed to win two titles.

Slavia was not the only one who benefited from the takeover. The overall competitive balance in the league improved and the number of teams competing for the title increased. How this improvement in the competitive balance affects the Czech football is yet to be investigated. Last but not least, the takeover did not just improved Slavia's finances. Through Slavia's transfer expenditure, other teams have earned significant transfer incomes.

The case of SK Slavia Praha sets and example that the road to the Champions' League might be shorter from the Czech or Danish leagues compared to the English or Spanish leagues. Taking over a major club of a smaller league could be a better way if the target is the Champions' League since competition is milder in smaller leagues when compared to the Big 5 or the other major leagues. Champions' League is watched by millions of fans every season and provides a huge

STUDIA SPORTIVA 2021/1

prize pool for the clubs. Chinese owners managed to achieve international recognition as well as acquiring several million euros as prize money.

References

- Barros, C. P., & Rossi, G. (2014). A Bayesian stochastic frontier of Italian football. Applied Economics, 46(20), 2398–2407.
- Battese, G., & Coelli, T. J. (1995). A Model For Technical Inefficiency Effects in a Stochastic Frontier Production Function for Panel Data. *Empirical Economics*, 20(2), 325–332.
- Bureš, M. (2019a, February 4). Who owns Czech football clubs? Retrieved April 2020, from FINANCE.cz: https://www.finance.cz/519177-vlastnici-fotbalovych-klubu-sparta/ (In Czech)
- Bureš, M. (2019b, February 5). Who owns Czech football clubs? II. Retrieved April 2020, from FINANCE.cz: https://www.finance.cz/519323-kdo-vlastni-ceske-fotbalove-kluby-ii/ (In Czech)
- Bureš, M. (2019c, February 8). Who owns Czech football clubs? -III. Retrieved April 2020, from FINANCE.cz: https://www.finance.cz/519358-vlastnici-fotbalovych-klubu-iii/ (In Czech)
- Dawson, P., Dobson, S., & Gerrard, B. (200). Stochastic Frontiers and the Temporal Structure of Managerial Efficiency in English Soccer. *Journal of Sports Economics*, 1(4), 341–362.
- Frick, B., & Simmons, R. (2008). The Impact of Managerial Quality on Organizational Performance: Evidence from German Soccer. *Managerial and Decision Economics*, 29(7), 593–600.
- Fulham FC. (n.d.). Mohamed Al Fayed. Retrieved April 2020, from Fulham FC History: https://www.fulhamfc.com/history/mohamed-al-fayed
- Gosling, T. (2017, June 6). 'Communist money' saves anti-communist Prague football club. Retrieved May 2020, from Deutsche Welle(DW): https://www.dw.com/en/communist-money-saves-anti-communist-prague-football-club/a-39128129
- Herm, S., Callsen-Brecker, H.-M., & Kreis, H. (2014). When the crowd evaluates soccer players' market values: Accuracy and evaluation attributes of an online community. *Sport Management Review, 17*(4), 484–492.
- Kern, A., Schwarzmann, M., & Wiedenegger, A. (2012). Measuring the efficiency of English Premier League football: A two-stage data envelopment analysis approach. Sport, Business and Management: An International Journal, 2(3), 177–195.
- Kern, M., & Süssmuth, B. (2005). Managerial Efficiency in German Top League Soccer: An Econometric Analysis of Club Performances On and Off the Pitch. *German Economic Review*, 6(4), 485–506.
- Kirschstein, T., & Liebscher, S. (2019). Assessing the market values of soccer players a robust analysis of data from German 1. and 2. Bundesliga. *Journal of Applied Statistics*, 46(7), 1336–1349.
- KPMG. (2020, January 28). Key motivations behind buying a professional football club. Retrieved April 2020, from Football Benchmark: https://www.footballbenchmark.com/library/key_motivations_behind_buying_a_professional_football_clubs
- Michie, J. (2000). The Governance and Regulation of Professional Football. The Political Quarterly, 71(2), 184–191.
- Michie, J., & Oughton, C. (2005). The corporate governance of professional football clubs in England. *Corporate Governance: An International Review, 13*(4), 517–531.
- Özaydın, S., & Donduran, M. (2019). An Empirical Study of Revenue Generation and Competitive Balance Relationship in European Football. *Eurasian Journal of Business and Economics*, 12(24), 17–44.
- Procházka, D. (2012). Financial Conditions and Transparency of the Czech Professional Football Clubs. *Prague Economic Papers*, *4*, 504–521.
- Racek, O., Zeman, T., Pruša, V., & Semerád, P. (2015). Consumer Decision-Making of Football Fans in the Czech Republic. Studia Sportiva, 9(1), 237–247.
- Ribeiro, A. S., & Lima, F. (2012). Portuguese football league efficiency and players' wages. *Applied Economic Letters*, 19(6), 599–602.
- Rohde, M., & Breuer, C. (2016). The Financial Impact of (Foreign) Private Investors on Team Investments and Profits in Professional Football: Empirical Evidence from the Premier League. *Applied Economics and Finance*, *3*(2), 243–255.
- Scholz, P. (2016a). Czech football hooligans' behavior. Journal of Physical Education and Sport, 16(2), 1089–1094.
- Scholz, P. (2016b). Football fan behavior of the oldest club in the Czech Republic. *Journal of Physical Education and Sport,* 16(1), 694–698.
- Smolík, J. (2012). Football Hooligans in the Czech Republic: Selected Topics. Kultura-Społeczeństwo-Edukacja, 2, 75–95.
- Wilson, R., Plumley, D., & Ramchandani, G. (2013). he relationship between ownership structure and club performance in the English Premier League. *Sport, Business and Management: An International Journal, 3*(1), 19–36.
- Xinhua. (2017, November 25). Xinhuanet. Retrieved April 2020, from Chinese investment leads oldest Czech football team to championship: http://www.xinhuanet.com/english/2017-11/25/c_136778624.htm
- Zelenkov, Y., & Solntsev, I. (2017). Measuring the efficiency of Russian Football Premier League clubs. *Electronic Journal of Applied Statistical Analysis*, 10(3), 773–789.