TRANSFER ACTIVITY IN FOOTBALL: WHO IS THE MOST ACTIVE ON THE TRANSFER MARKET?

Master Thesis Strategy Economics

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Abstract

This study investigates the effect of different ownership types on transfer activity in club football. It tries to answer the question whether and how changes of ownership affect the transfer strategies of football clubs. The sample used in this study consists of 1344 observations on the team-season level and besides, an OLS regression with country, division and time fixed effects is performed. For the change in ownership a difference-in-difference approach is used. The main results show significant evidence that foreign investors are found to spend more on the transfer market compared to domestic investors. Also, a change in ownership positively affects transfer expenditures. No evidence was found for an effect on transfer income. Overall, the difference in ownership can be observed in the transfer expenditures of a football club.

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1. Introduction

There are football club competitions all over the world. Each country has their own leagues, with a division between one major professional league, followed by multiple minor professional leagues. Football clubs can play for promotion and relegation between those leagues, which depends on their performance. Better results in the league will eventually lead to higher financial returns. However, because of the competitive nature of both sports and business, football clubs compete not only for sporting success, but also for economic success. The tradeoff is whether a football club, or more importantly their owner, wants to maximize their profits or sporting success, as one will most likely come at the cost of the other. This could impact their decisions on the transfer market. The transfer market is the place where football players are being sold and bought between different clubs. The selling club receives a transfer fee from the buying club in order to buy out the contract of the player. Transfer activity is the buying and selling of players of a football club, both buying and selling players are part of the transfer activity. The aim of this study is to investigate the effect of different owners on the transfer activity of their clubs.

The win maximizing part of the tradeoff cannot be seen apart from spending on the transfer market. Over the years, transfer expenditures have increased massively, examples are the transfers of Neymar and Kylian Mbappé to Paris Saint Germain, for prices of €222 million euros and €145 million euros, respectively (Transfermarkt.com, 2021b). Although new regulations as the Financial Fair Play (FFP) regulations have been introduced to bring discipline to the transfer activity of football clubs, the transfer prices after this implementation kept on rising. The transfer activity of football clubs can be determined by multiple factors. One important determinant is the owner of a club, as some owners are willing to spend more money to invest in team performance compared to others, which is the main point of interest in this paper. In the past few years, multiple European football clubs have been taken over by foreign investors, who are able to invest heavily in the first team. A good example is the owner of Chelsea FC, Roman Abramovich, who is a Russian businessman and became owner of Chelsea FC in 2003, since then the transfer expenditures of Chelsea FC increased massively (Transfermarkt.com, 2021a).

The second part of the tradeoff, the profit maximizing part, is concerned with earning money. An example of earning money through football clubs is that clubs can be used as brands, in order to gain commercial revenues. The ownership of a football club plays a role in this part of the tradeoff as well. As stated before, there are owners that are more willing to invest in their first teams. However, club owners are also able to earn money by selling their players on the transfer market, next to other revenue streams as matchday receipts, commercial receipts and broadcasting rights (Wilson, Plumley & Ramchandani, 2013). The question is whether there is a difference between different types of owners with respect to their transfer income.

Research question: *How does the ownership of a football club affect transfer activity?*

In order to answer this, the research provides empirical evidence by estimating Ordinary Least Squares (OLS) regression analysis with fixed effects. Multiple hypotheses have been analyzed in the following order. First, the relationships between different types of ownership and transfer expenditures are analyzed. Secondly, the relationship between a change in ownership, from different types of owners, and transfer expenditures is analyzed. Thirdly, the effect of different ownership types on transfer income is estimated. Finally, this study analyzes how a change in ownership, by different types of owners, affects transfer income.

This research contributes to existing literature on football club transfer activity as it takes a deeper dive into the tradeoff between profit– and win maximization. With this research, the effect of different types of owners on transfer activity is highlighted. The analysis makes a clear distinction between foreign and domestic investors, but also the specific origin of the owners, as European investors are considered to be more win-maximizing, compared to non-European investors (Garcia-del-Barrio & Szymanksi, 2009; Sloane, 1971). Furthermore, the research looks at what a change in ownership does to a football club, which is something that has not been done in prior studies. Furthermore, the research provides more understanding of how club ownership affects the transfer strategy of football clubs. It also contains an extension on previous literature by using a larger sample of football clubs, as previous literature especially highlighted the English Premier League (EPL) and other top teams around Europe (Richau, Follert, Frenger & Emrich, 2021; Rohde & Breuer, 2016a, 2016b). In their paper, Richau et al. (2021) investigated the impact of

ownership concentration and investor origin on transfer fees in the EPL. In their future research suggestions, they suggested to take transfer income into account. Following the future research ideas of Richau et al. (2021), this study extends on their paper by analyzing whether there is an effect of foreign investors on transfer income as well as transfer expenditures.

The remainder of the paper is as follows. First, relevant literature on the topics of regulations, transfer activity and football club ownership are described. Within this part the hypotheses of the research are developed. Secondly, the data and methodology section explain the different variables and mathematical models. After this, the results of the regressions are displayed and explained. The discussion section describes the findings of the research, the limitations of the paper and suggestions for future research. Finally, the conclusion covers the main outcome of this research.

2. Literature Review

2.1 Ownership and Transfer Activity

2.1.1 Ownership and Transfer Expenditures

This section provides an overview of the relationship between ownership and transfer activity, which is the main subject of the paper. The first part focuses on the relationship between ownership and transfer expenditures. There are football clubs that behave in a win-maximizing way. These clubs are willing to spend a lot of money on new players, in order to sustain or improve their league performance (Leach & Szymanski, 2015). In this case it is not about the financial picture behind football, it is about what happens on the field.

The entry of private investors in world of club football is becoming more and more common over the past few years. These investors can acquire majority or minority stakes in a club. The importance of majority ownership of a club is based on property rights theory as described by Franck (2010). The investor can use the club as a tool to promote his other businesses, gain access to club resources and enjoy the decision autonomy of a club, by having the residual decision rights that come with being the majority owner.

Rohde & Breuer (2016a) found evidence that club ownership affects the transfer investments of clubs using a sample of 30 clubs out of the "Big Five" leagues in Europe. In their paper, it was found that clubs with private majority investors spend more on the transfer market, mainly when these private majority investors are from a foreign country. This is in line with other theoretical papers which argued the positive influence of private majority investors on transfer investments (Franck, 2010; Grossman, 2015).

In another paper, Rhode & Breuer (2016b) studied the relationship between the presence of private investors at a football club and team investments, using data from 2005/06 till 2011/12 in the EPL. The research concluded that the presence of private investors increases transfer investments, while it decreased the profits of the football club compared to clubs with shared ownership. In addition, the research found similar effects when the private investor was from a foreign country. This shows that there is a "sugar daddy" effect present in the EPL, meaning that money-injecting private investors contribute to the rising activity on the transfer market, especially when these investors are from foreign countries.

In addition to Rhode & Breuer (2016b), Richau et al. (2021) provided a research in which they analyze the effects of ownership concentration and origin of investors on individual transfer fees. By using more recent data, focusing on individual transfer fees, but especially by including single investors as a category for ownership concentration, they extend on the research of Rohde and Breuer (2016b). They find fairly consistent results that the willingness to pay by foreign investors is higher, especially if they are majority investors.

Building further upon this existing literature, this paper contributes to this existing literature by studying the effect of foreign ownership on team transfer expenditures. As previous literature mainly focused on the impact of foreign majority owners in the EPL or a small European sample, this paper will extend this research by using a large sample covering 9 European countries and its professional leagues. This sample includes countries as France, Italy and Spain in which clubs are known to be taken over by foreign investors (Richau et al., 2021; Rohde & Breuer, 2016b).

The prediction is that, also in this bigger sample, clubs owned by foreign investors spend more on the transfer market compared to the domestic club owners. Therefore, the following hypothesis is developed:

Hypothesis 1a: *Football clubs owned by foreign investors spend more on the transfer market compared to clubs owned by domestic investors.*

Private investors from the United States (US) are considered to be profit maximizers (Dobson & Goddard, 2011; Wilson et al., 2013), whereas European private investors are more concerned with win-maximization (Garcia-del-Barrio & Szymanksi, 2009; Sloane, 1971). Asian investors are believed to turn to European football clubs because the domestic leagues are not competitive enough. Also, they want to acquire knowledge about organization and training, and gaining reputation from owning an established European football club (Rohde & Breuer, 2016). Investors from the Middle East are assumed to follow geo-political interests (Rohde & Breuer, 2016). As European foreign investors are considered to be mostly concerned with win-maximization, for example Abramovich at Chelsea FC, they are willing to invest in their teams in order to maximize success on the field. This means that investors from North America, Asia and the Middle East are on average less concerned with win-

maximization and are spending less on the transfer market, compared to European investors. Therefore, the following hypothesis is developed:

Hypothesis 1b: *Football clubs owned by European investors spend more on the transfer market compared to clubs owned by investors not from Europe.*

Past literature mainly focused on the effect between different ownership structures on transfer activity in club football. However, there is not a lot of research investigating the effect of a change in ownership on the transfer activity. When a football club changes ownership, what is the impact on their transfer activity? Is there a direct impact? Does it take time to see an effect? Does the origin of the new owner matter? These questions have not been answered in previous literature. Therefore, there is an opportunity for this study to investigate these questions.

As most European clubs are assumed to be win maximizers (Rohde & Breuer, 2016a), and the sample of this study consists of European football clubs, a change in ownership will most likely increase transfer expenditures within the sample of clubs used in the paper, because European clubs are more willing to sell to investors that are prepared to invest in team performance. In their local environment, football clubs are considered to be at the heart of smaller communities, undertaking socially responsible initiatives and providing employment. Therefore, domestic, mostly local, wealthy investors see acquiring a football club as a way of taking on a bigger role and "give back" to the community (KPMG, 2020). Franck (2010) showed theoretically that clubs under both domestic and foreign private investors, the type of investors taking over football clubs, are adding financial resources into the club which are used to reinvest in the first team. Therefore, it could be argued that both a change from foreign to domestic as from domestic-to-domestic owners, increases transfer expenditures. However, it could take a while before the transfer policy of a club changes, the impact of a new owner is not necessarily directly visible. Nonetheless, it is expected that an ownership change eventually positively influences a clubs' transfer expenditures.

Hypothesis 1c: *A change in ownership increases transfer expenditures of a football club.*

In previous literature, it is stated that foreign investors, compared to domestic investors, positively influence transfer expenditures in the EPL and another small sample of

European football clubs (Rohde & Breuer, 2016a; Rohde & Breuer, 2016b; Richau et al., 2021). As a change in ownership is expected to increase transfer expenditures, no matter the origin of the owner, it is also expected that an ownership change by foreign investors increases transfer expenditures more compared to an ownership change by domestic investors.

Hypothesis 1d: *Irrespective of the previous owner, a change in ownership to foreign investors increases transfer expenditures more compared to a change in ownership to domestic investors.*

2.1.2 Ownership and Transfer Income

Previous literature mainly focuses on transfer investments and is less concerned with the effect of different types of ownership on transfer income. However, as not all club owners are win maximizers, it is also interesting to analyze the effect of different owners on transfer income. There are club owners that are profit maximizers, which means that the impact of these owners could be seen in the transfer strategy of football clubs. Leach and Szymanski (2015) stated that profit-maximizing football clubs that do not want to spend their money on new players but would rather increase the payments to their shareholders. Here, the financial side of football outweighs the competitive side. What is the difference between win maximizers and profit maximizers with respect to transfer income?

Clubs with profit-maximizing owners are selling players on the transfer market to earn profits (Rossetti & Caproni, 2016). Smaller clubs are able to sell their star players with a profit so large that they prefer to sell, instead of attempting to challenge the bigger clubs the competition, which clearly shows the tradeoff between win and profit maximization (Norbäck, Olsson & Persson, 2016).

Hoey, Peeters and Szymanski (2021) stated that large clubs are net spenders on the transfer market. This indicates that their transfer budget is funded by other factors than just transfer income. As previous literature already confirmed for the EPL and Top 30 clubs in Europe, foreign investors are willing to spend more on the transfer market. This indicates that foreign owners are more focused on win maximization and less focused on earning money compared to their domestic colleagues (Richau et al., 2021; Rohde & Breuer, 2016b). Therefore, it could be argued that, holding all else equal, foreign owners have lower transfer

income compared to domestic owners as they are more concerned with win maximization, which leads to the following hypothesis:

Hypothesis 2a: *Football clubs owned by foreign investors have a lower transfer income compared to clubs owned by domestic investors.*

One reason for taking over a football club is to invest heavily in the first team and challenge the top football clubs in Europe. For example, it can be seen that this strategy has been done by the owners of Paris Saint-Germain and Manchester City. Both owners invested heavily in their first teams and are nowadays among the top teams in Europe. This indicates that they are more focused on win maximization than profit maximization. Therefore, taking over a football club for the reason of challenging other teams, is also expected to decrease transfer income as the owners do not really care about earning money from transfers. Therefore, the following hypothesis is developed:

Hypothesis 2b: *A change in ownership decreases transfer income of a football club.*

As it is expected that foreign football club owners have lower transfer income compared to domestic owners, it could be argued that an ownership change by foreign investors also lead to lower transfer income compared to an ownership change by domestic investors. Therefore, hypothesis 2c is developed as follows:

Hypothesis 2c: *Irrespective of the previous owner, a change in ownership to foreign investors leads to a lower transfer income compared to a change in ownership to domestic investors***.**

2.2 Determinants of transfer activity

2.2.1 Determinants of transfer activity: Overall transfer revenue

Although the impact of different types of ownership is the main focus of this paper, it is also interesting to see what existing literature states about transfer activity and its other determinants over the past years. In this way, a clear overview of factors affecting transfer activity is created. Aggregate transfer expenditures are mainly affected by team performance in domestic and international leagues and the revenues gained from these performances (Matesanz, Holzmayer, Torgler, Schmidt, & Ortega, 2018; Pawloski, Breuer and Hovemann, 2010; Rohde & Breuer, 2016a).

Rohde & Breuer (2016a) found empirical evidence that aggregate transfer investments positively influence sporting performance, both internationally and domestically. Incentivizing top clubs to invest in transfers may help the league by performing better internationally, leading to more qualifying slots for the European competition. In more recent research, it is stated that overall transfer spending is identified as a key factor for success in international and domestic leagues (Matesanz et al., 2018).

Mainly, the conducted research focuses on the effect of aggregate transfer expenditures on sporting performance, but it is also the other way around. Rohde & Breuer (2016a) stated that better performing clubs have more resources to invest in transfers, meaning that these clubs are able to spend more on the transfer market, which increases their transfer expenditures, and this could lead to competitive imbalance. Pawloski et al. (2010) mentioned that domestic competitive balance decreased because of the CL payout system. These CL payouts make it easier for team to invest in transfers, leading to higher transfer expenditures. This shows that the relationship between transfer expenditures and sporting performance is a two-way street. Clubs that are more successful are able to spend more on the transfer market, while clubs that spend more on the transfer market are usually more successful on the pitch, both in their domestic leagues as in the international competitions.

Furthermore, Hoey et al. (2021) showed the impact of market size on aggregate transfer revenues in order to investigate the revenue redistribution in European football. Small market sized clubs only obtain substantial transfer revenues in rare situations, while middle market sized clubs are the clubs that benefit the most.

2.2.2 Determinants of transfer activity: Individual transfer fees

Even though the main interest of the paper is aggregate transfer fees, it is interesting to take a look at the different determinants of individual transfer fees. Overall, individual transfer fees are mainly determined by player characteristics; selling and buying club characteristics, including the team rankings and number of points, whether the team is playing internationally, but also attendance and stadium capacity of the teams (Dobson, Gerrard, & Howe, 2000; Frick, 2007). In his paper, Frick (2007) reviewed these club characteristics, and the most impactful characteristics were the attendance and the rankings of the teams. The attendance of the buying club has a positive impact on the individual transfer fees, and so has the league position of the selling club. Whereas the league position of the buying club has a negative impact on the individual transfer fee, according to multiple papers (Carmichael & Thomas, 1993; Dobson et al., 2000; Speight & Thomas, 1997). Feess, Frick and Muehlheusser (2004) also mentioned that the qualification of the buying club for a European cup influenced the transfer fee positively.

Individual transfer fees in world football are also determined by player characteristics. These player characteristics include age, position, goals scored, and minutes played for their current team, and are most likely measured in the season before the transfer (Ruijg & van Ophem, 2015). In their paper, Ruijg & van Ophem (2015), stated that age, average number of minutes played and not being a goalkeeper are the most impactful characteristics of a player which increase the likelihood of a good transfer. However, it should be mentioned that the relationship between age and the transfer fee paid is inverse U-shaped, meaning that it has a positive effect until the age of 26 till 28, and a negative effect after this “peak”. In other research, Frick (2007) reviews the available evidence on individual transfer fees, showing a clear overview of evidence up to that period. In this review it is stated that multiple researchers also found an inverse U-shaped relationship between age and the transfer fee. In addition to this, the most impactful player characteristics influencing the transfer fee positively were not being a keeper, goals scored (both in in the players’ entire career as in previous season), and games played in previous season (Carmichael, Forrest, & Simmons, 1999; Dobson et al., 2000; Dobson & Gerrard, 1999 Feess et al., 2004; Speight & Thomas, 1997).

2.3 Financial Fair Play Regulations

The most recent regulations in transfer activity are the Financial Fair Play (FFP) regulations. In 2010, the Union of European Football Association (UEFA) announced a set of regulations known as Financial Fair Play, which is intended to bring discipline and rationality to European football club finances. The FFP regulations have two key criteria, which are that clubs have no overdue payables and the break-even rule. Peeters & Szymanski (2014) stated that the most controversial aspect of the FFP regulations is the break-even rule, which limits team spending on player wages and transfers to their revenues obtained from football related activities. With this rule, the transfer investments could not be financed directly by team owners anymore, which is a major source of funding for a lot of high-profile football clubs with wealthy owners. The break-even rule is likely to increase the profitability of clubs by reducing wage spending. Also, the FFP regulations do not lead to competitive balance, as it rules out challenges to the position of top clubs by clubs which are bought by wealthy investors (Peeters & Szymanski, 2014). As the FFP regulations are the most recent regulations in European football, it is useful to study the period after the implementation of these regulations. The results of this study could possibly indicate a direction for additional regulations, if necessary.

3. Data & Methodology

3.1 Data

The dataset used in this research has been made available by the Erasmus University Rotterdam data repository. The data was collected by Hoey et al. (2021), the data was digitalized from the audited financial statements of all football clubs playing in the top divisions of England, Spain, Germany, France, Italy, the Netherlands, Portugal, Belgium and Scotland. Financial statements from the respective national firm registers or regulatory agencies of these countries were obtained. The data consists of both financial data and season performance data. The sample used for this research includes the seasons 2011-2012 till 2018-2019. This period is chosen because it begins after the implementation of FFP regulations and runs till the most recent data available. The sample consists of 9 countries with the most observations from England, France, Spain, Italy and the Netherlands, which can be seen in Table 1. Both the major and minor divisions of the countries are included in the sample. The lack of observations in some countries is mainly due to data unavailability for either transfer costs or transfer income. In addition to the existing dataset, data about the ownership of all clubs in the sample between the seasons 2011-2012 and 2018-2019 has been added. This contains the origin of football club owners, whether they were domestic or foreign and the change in ownership. This data was found on official club websites, news channels and on the widely used website Transfermarkt.com. The data is added to give an insight about the different owners around European football clubs. Note, that for the models concerning changes in ownership, some clubs had to be excluded from the sample as they changed ownership multiple times over the years in the sample, which could bias the results.

Country/Year	2012	2013	2014	2015	2016	2017	2018	2019	Total
Belgium	3	3	4	2	2	2	2	2	20
England	40	40	38	43	43	43	42	31	320
France	37	34	37	37	39	38	39	40	301
Germany	9	7	9	9	10	10	11	8	73
Italy	19	21	26	27	29	29	26	0	177
Netherlands	16	16	21	21	21	20	21	18	154
Portugal	4	4	9	7	9	10	10	0	53
Scotland	9	7	9	10	10	10	9	0	64
Spain	9	17	23	25	27	26	27	28	182
Total	146	149	176	181	190	188	187	127	1344

Table 1: Overview of sample countries and observations.

3.2 Variable Description

3.2.1 Dependent variable

The dependent variable in the first part of the research is “transfer costs”, which are the transfer costs made by an individual football club. It consists of the amortization of player registrations plus the costs of player transfers measured in euros. Following Hoey et al. (2021), the transfer costs booked by a football club are the transfer fees paid, and all other costs associated with acquiring player registrations as intangible assets. The football club then amortizes the assets linearly over the length of the acquired player his contract. This means that every year the value of player his contract decreases in line with the contract length. The valuations of the assets cannot be updated, unless the club sells the player or extends or renews his contract. The transfer costs are these amortized player registrations plus the costs of player transfers for every player in the team. By using this variable as the estimator for transfer expenditures, it is possible to see an influence of other factors, the independent variables in the following section, on the transfer activity of football clubs.

In the second part of the paper, the dependent variable that is used is “transfer income”, which is the profit on disposal of player registrations, the income related to outgoing transfers and is measured in euros. Note that it concerns the cash revenue from player sales minus the book value of players sold in season *t*. This variable is used to estimate the counterpart of transfer costs of a football club, which is the income from transfers.

3.2.2 Independent variables

The first independent variable used in this research is whether the football club is owned by a foreign investor. This is a dummy variable which indicates 1 when the football club is owned by a foreign investor and 0 otherwise. In this way, the difference between foreign and domestic owners can be shown. Note that in this study publicly traded clubs are assumed to be domestic.

Another independent variable used for this research is whether or not the club changed ownership in the past seasons. This variable, called “Ownership change”, is another dummy variable and takes value 1 in the first full season after the club was overtaken by another investor. In this way, the influence of ownership changes on the transfer market can be measured. In the past years we have seen that wealthy investors influences the transfer

activity of football clubs, for example Chelsea FC with Roman Abramovich and Paris Saint Germain with Nasser Al-Khelaifi. As the influence of those ownership changes are not necessarily noticed directly, the variable ownership change will remain value 1 after the club changed ownership.

Lastly, the origin of owners of football clubs can be of some importance as different owners pursue different objective functions. For example, European investors are more concerned with win maximization, while US investors are considered to be more concerned with profit maximization. Therefore, a dummy variable is created for each continent where the owners originate from. The variable takes value 1 when the owner of the club during that season is from that continent, and 0 otherwise. For example, Roman Abramovich of Chelsea FC is from Russia in Europe, therefore the dummy "Europe" will be value 1 and all other dummies are value 0, indicating that Abramovich is from Europe. In this study, the focus is on Europe versus non-Europe, as European owners are considered to be win maximizing compared to owners from other continents.

3.2.3 Control variables

As the purpose of the study is to investigate the sole effect of the dependent variables on transfer expenditures and transfer income, some control variables are included in the models that could possibly affect transfer activity at the same time.

The first control variables used are in line with the performance of football clubs. Winning teams are more attractive to players who want achieve championships and other successes in their career. Also, teams that perform well receive more payouts and bonuses than teams that do not perform well. Therefore, it is likely that teams that perform better in their competition will spend more on the transfer market. On the other hand, teams that are performing well are likely to sell their players for a higher price, indicating the link between field performance and transfer income. The variable used to measure this will be "total points earned in the season before". The total points earned in a season is based on the domestic competition, where the team earns 3 points with a win, 1 point with a draw and 0 points with a loss. The variable is a lagged variable in the models, as the performance of the season before increases spending power in the current season as well as the popularity for players.

In line with Hoey et al. (2021), both financial as sports-related control variables are added. First of all, “pre-transfer revenues” are included in the regressions, as this could be used for investing in players on the transfer market. Pre-transfer revenues consists mainly of revenue from media, TV rights, sponsorships and merchandize, but also revenues from the European competitions, the Champions and Europa League. The pre-transfer revenues from the year before, the “lagged pre-transfer revenues”, will be used as control in the regressions, because the revenues are measured at the end of the season. Football clubs mostly act on the transfer market before the start of the season; therefore, revenues of the previous season are more relevant to transfer expenditures in the current season.

Another control variable included in this research is the “tangible fixed assets” variable. As stated by Hoey et al. (2021), the accounting value of player contracts is similar to the tangible fixed assets of a football club. So, a relationship can be found between the tangible fixed assets and transfer activity of a football club. These tangible fixed assets are the combined value of the training grounds, stadium, etc.

There is also a sports-related control variable included, which is the promotion and relegation of teams. These dummy variables indicate value 0 if the club is not promoted (or relegated) in season *t-1* but are indicated with value 1 if the club is promoted (or relegated) in season *t-1*. These are included because the promotion to a higher division will give some payouts to the promoted club, which could lead to an instant increase in transfer costs. Also, teams in higher leagues will earn more money by TV rights and will have more attention from media as they play in higher leagues. While relegated teams have less room to make investments and are less interesting for players on the transfer market. In addition, star players from promoted teams could be more interesting to be sold, due to good performance. While star players from relegated teams are also likely to be sold, so they can perform on the highest level.

3.2.4 Descriptive statistics

Table 2 displays the descriptive statistics of the main variables used in the research. Firstly, the transfer costs, which consists of the amortization of player registrations plus the costs of player transfers measured in euros in season *t* has a mean of €15,15 million euros. The minimum amount in the sample is zero and the maximum is €186,9 million euros. There are 1344 observations after the data collection. Transfer income is the income generated from outgoing transfers in season *t* and has a mean of €13,59 million euros. The maximum amount earned by a single club in season *t* is €315,51 million euros, while the minimum is zero.

Pre-transfer revenues are the total revenues exclusive net transfer earnings in season *t*. The mean is €74,91 million euros, the minimum is €389.613 euros and the maximum €852,17 million euros. The mean of points obtained during a season is 54,39 points, with a minimum of 14 and a maximum of 106 points in a season. Between 2011-2012 and 2018-2019, 148 teams have been promoted to the highest division of their respective country, and 100 teams have been relegated to a lower division. Lastly, it is shown that the mean of tangible assets is €40,25 million euros, with a minimum of zero and a maximum of €1,58 billion euros.

Variable	Obs	Mean	Std. Dev.	Min	Max
Transfer costs	1344	15,14936	25,52117	0	186,9153
Transfer Income	1344	13,59022	22,61219	0	315,513
Pre-Transfer Revenue	1344	74,91405	114,2973	0,389613	852,171
Ownership change	1344	0,0498512	0,2177184	0	1
Foreign owner	1344	0,2016369	0,4013718	0	1
Points in season t	1342	54,38823	16,98323	14	106
Tangible Assets	1343	40,24734	95,56409	0	1576,612
Relegation	1344	0,0744048	0,2625261	0	1
Promotion	1343	0,110201	0,3132568	0	1

Table 2: Descriptive Statistics: (In)dependent and control variables. Note: the financial variables are in millions (€).

In the sample there have been 246 observations with either an ownership change or the seasons after an ownership change. 152 of these observations were by foreign investors, and 94 observations by domestic investors. Overall, in 271 observations, the football club was owned by a foreign investor and in 1073 observations the club owner was domestic.

	Foreign Ownership		
Ownership change	0	1	Total
0	979	119	1098
1	94	152	246
Total	1073	271	1344

Table 3: Overview ownership changes and foreign ownership.

For the difference in difference regression the sample has been split into two groups, a treatment group and a control group. The control group is the group of clubs without any ownership change during the sample period and consists of 905 observations. The treatment group consists of 439 observations and is the group of clubs with an ownership change at some point during the sample period.

Treatment	Frequence	Percentage
0	905	67,34%
1	439	32,66%
Total	1344	100%

Table 4: Overview treatment and control groups for Difference in Difference regression.

3.3 Model Estimation Strategy: OLS with Fixed Effects and Difference in Difference models

The estimation models used in the paper are OLS models with time, country and division fixed effects (FE) to control for different time trends, and the different leagues the clubs in the sample are playing in. This model controls for endogeneity, time-invariant unobserved heterogeneity and selection bias (Park, 2011). As the main variables of interest in this study are club-season dummy variables, an OLS regression with country, division and year FE will be used instead of the standard FE model.

The effect of an ownership on transfer activity will be measured using the difference in difference (DID) method. With this method, two groups are formed, the control group and the treatment group. The treatment group is the group of clubs that changed ownership, the "treatment", at some point in the sample period. The control group is the group of clubs that did not change ownership during the sample period. The DID estimator is used to estimate treatment effects comparing post – and pre-treatment differences in outcome of a treatment and a control group. A simple DID method consists of two periods, however as the ownership changes of the different clubs happen at different moments in time, year dummies will be included. The DID approach removes biases in the period after an ownership change comparison between the treatment and control group that could be the result from permanent differences between the two groups (Woolridge, 2007). For the effect of foreign ownership changes, a difference-in-difference-in-differences (DDD) estimator is used.

In order to be able to perform a DID regression, the Parallel Trend Assumption should hold. This assumption requires that in the absence of the treatment, the difference between the control and treatment group is constant over time. Otherwise, it could lead to a biased estimation of the causal effect (Columbia Public Health, 2013). However, in most cases the treatment happens at one time for all affected groups. In this specific case, the treatment, which is a change in ownership, happens at different moments over time for different clubs. Therefore, the following part will provide some insights which are meant to show the similarity between the control and treatment groups before the clubs within the treatment groups have been taken over by a new owner.

In figure 1, the relationship between transfer expenditures and the control and treatment group is shown. In this graph, the control group, the blue line, consist of all clubs within the control group. The treatment group, the red line, consists of clubs within the treatment group, but excludes the clubs that already changed to a new owner. So, when the club changes ownership, the club will be removed from that point on in the graph. With this, the similarity between the two groups can be shown. In the first years of the sample, between 2012 and 2014, it can be seen that the trend in transfer costs was more or less similar in both groups. After this period, a change in the trends can be seen, showing that the two groups had different trends over the years. An explanation is that the number of clubs in the treatment group becomes smaller, so the trends are more sensitive for outliers, which could lead to the difference in trends for between both groups. This explains the difference in trends between both groups over the years.

Figure 2 shows the relationship between transfer expenditures and the control and treatment group as well. However, in this graph the clubs remain in the treatment group after an ownership change. In the graph it can be seen that, overall, the more clubs in the treatment group have been taken over by new owners, the larger the difference between the control and treatment groups with respect to transfer expenditures. At first, the transfer expenditures of the treatment groups were on average lower. Over the years, in which more clubs in the treatment group have been taken over by new owners, the transfer expenditures became higher compared to the control group. In the later years, the difference between the two groups became larger, which indicates the impact of ownership changes on transfer costs.

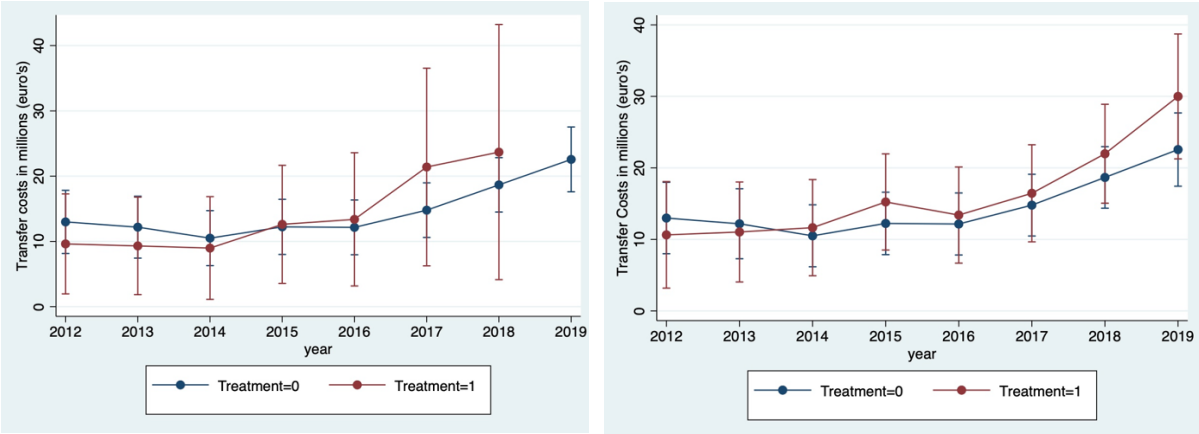
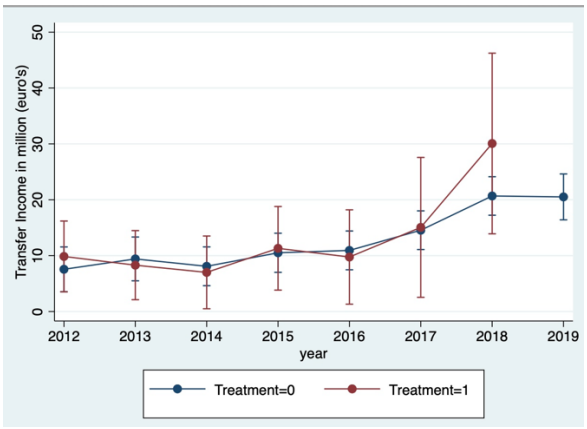


Figure 1 & 2: The relationship between transfer expenditures and the treatment and control group over the years. In both graphs, the blue line indicates the control group and the red line the treatment group. In figure 1 (left), the treatment group consists of clubs in the treatment group that are not yet taken over. When a club changes ownership, it will be excluded from that point onwards. In figure 2 (right), the treatment group consists of all clubs in the treatment group, both before and after an ownership change.

In figure 3, the relationship between the treatment and control group and their transfer income can be seen. In this figure, the treatment group consists only of the clubs within the treatment group which have not changed ownership yet. This means that when the club changes ownership, the club will be excluded from that point on in the graph. In the first years, it can be seen that both groups are very similar. The groups switch over the years with who has the higher transfer income, but the difference is always small. Except for 2018, where the difference is large, which can be explained by the fact that the treatment group became smaller over the years, as clubs that have been taken over were excluded. The result became more sensitive for outliers which can be seen in 2018. In this case, the outlier was Arsenal, which had a transfer income of over €135 million euros, this increased the average of the six remaining clubs massively.

The relationship between transfer income and the control and treatment group is shown in figure 4. In this graph, the clubs remain in the treatment group after an ownership change. This graph shows a trend that transfer income for the treatment groups increases over the years, and the difference between the control and treatment group is larger. In these years, more clubs within the treatment group have been taken over, which could indicate the effect of ownership change on transfer income. Note that in 2019 there were multiple missing values for transfer income, therefore the elaboration is based on the data until 2018.



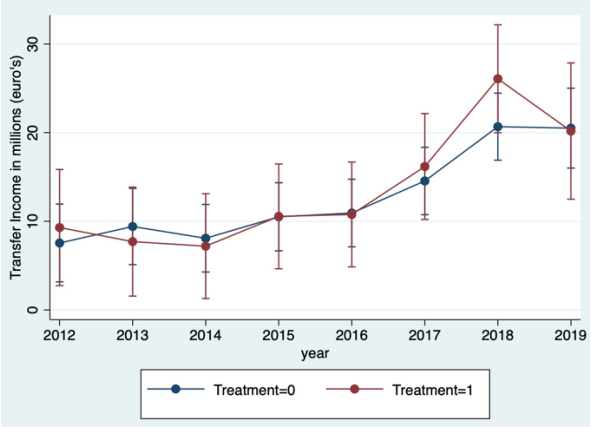


Figure 3 & 4: The relationship between transfer income and the treatment and control group over the years. In both graphs, the blue line indicates the control group and the red line the treatment group. In figure 3 (left), the treatment group consists of clubs in the treatment group that are not yet taken over. When a club changes ownership, it will be excluded from that point onwards. In figure 4 (right), the treatment group consists of all clubs in the treatment group, both before and after an ownership change.

In the first year of the sample, only a few clubs in the treatment group changed their ownership. By showing the characteristics of both groups in 2012, the similarity between the two groups comes forward. First of all, it can be seen from Table 5 that the clubs in both groups mainly come from France and England, followed by Italy in 2012. These countries account for over 60% of the observations for both groups. This shows that the sample of clubs in both groups consist of similar distribution of countries.

Country	Control Group Obs	Treatment Group Obs	Control Group in %	Treatment Group in %
Belgium	1	1	1,1%	2,4%
England	22	14	23,2%	33,3%
France	25	12	26,3%	28,6%
Germany	8	1	8,4%	2,4%
Italy	11	5	11,6%	11,9%
Netherlands	13	2	13,7%	4,8%
Portugal	3	1	3,2%	2,4%
Scotland	5	4	5,3%	9,5%
Spain	7	2	7,4%	4,8%
Total	95	42	100,0%	100,0%

Table 5: Distribution of clubs over countries in both the control and treatment group in 2012.

3.4 Methodology

In this research several models are estimated to explain the impact of foreign owners and ownership changes on transfer expenditures and transfer income. The regression models relating to the hypotheses are as follows:

The first model is for hypotheses 1a and 1b and shows the effect of foreign owners on transfer expenditures. The difference between hypothesis 1a and 1b is that the former investigates the effect of foreign owners on transfer expenditures, while the latter investigates the effect of European owners. Therefore, the model for 1a includes "foreign owner" as an independent variable, while the model for 1b includes "Europe" as an independent variable.

H1a/b: $\textit{Transfer Expenditures}_{it} = \beta_0 + \beta_1 \text{Foreign Owner}_{it} + \beta_2 \text{Europe}_{it} + \beta_3 \text{Lagged Points}_{it} + \beta_4 \text{Lagged Pre-transfer Revenue}_{it} + \beta_5 \text{Tangible Assets}_{it} + \beta_6 \text{Promotion}_{it} + \beta_7 \text{Relegation}_{it} + \text{Country Fixed Effects}_{it} + \text{Time Fixed Effects}_{it} + \text{Division Fixed Effects}_{it} + u_{it}$

Hypotheses 1c and 1d are concerned with the effect of an ownership change on transfer expenditures. For hypothesis 1c, the model is a DID model which uses an interaction term between ownership change and being in the treatment group to indicate the treatment effect. The model for 1d is a DDD model and uses multiple interaction terms to indicate the effect of an ownership change by foreign investors. Therefore, there is a difference between the two models as the last model has an additional triple interaction term for an ownership change by foreign investors. Also, the model for hypothesis 1d controls for having a foreign owner, while the model for hypothesis 1c does not.

H1c $\textit{Transfer Expenditures}_{it} = \beta_0 + \beta_1 \text{Treatment}_{it} + \beta_2 \text{Ownership Change} * \text{Treatment}_{it} + \beta_3 \text{Lagged Points}_{it} + \beta_4 \text{Lagged Pre-transfer Revenue}_{it} + \beta_5 \text{Tangible Assets}_{it} + \beta_6 \text{Promotion}_{it} + \beta_7 \text{Relegation}_{it} + \text{Country Fixed Effects}_{it} + \text{Time Fixed Effects}_{it} + \text{Division Fixed Effects}_{it} + u_{it}$

H1d: $\textit{Transfer Expenditures}_{it} = \beta_0 + \beta_1 \text{Foreign}_{it} + \beta_2 \text{Treatment}_{it} + \beta_3 \text{Ownership Change} * \text{Treatment}_{it} + \beta_4 \text{Ownership Change} * \text{Foreign} * \text{Treatment}_{it} + \beta_5 \text{Lagged Points}_{it} + \beta_6 \text{Lagged Pre-transfer Revenue}_{it} + \beta_7 \text{Tangible Assets}_{it} + \beta_8 \text{Promotion}_{it} + \beta_9 \text{Relegation}_{it} + \text{Country Fixed Effects}_{it} + \text{Time Fixed Effects}_{it} + \text{Division Fixed Effects}_{it} + u_{it}$

Hypothesis 2a is concerned with the effect of foreign owners on transfer income instead of transfer expenditures, which makes the model similar to the model of hypothesis 1a. Furthermore, hypothesis 2b and 2c are similar to hypotheses 1c and 1d, respectively. The model for 2b is a DID model which uses an interaction term for the treatment effect of an ownership change on transfer income. The model for 2c is the same as for 1d, a DDD model with an additional triple interaction term for a foreign ownership change, however, the independent variable in this model is transfer income.

H2a: $\textit{Transfer Income}_{it} = \beta_0 + \beta_1 \text{Foreign Owner}_{it} + \beta_2 \text{Lagged Points}_{it} + \beta_3 \text{Lagged Pre-transfer Revenue}_{it} + \beta_4 \text{Tangible Assets}_{it} + \beta_5 \text{Promotion}_{it} + \beta_6 \text{Relegation}_{it} + \text{Country Fixed Effects}_{it} + \text{Time Fixed Effects}_{it} + \text{Division Fixed Effects}_{it} + u_{it}$

H2b: $\textit{Transfer Income}_{it} = \beta_0 + \beta_1 \text{Treatment}_{it} + \beta_2 \text{Ownership Change} * \text{Treatment}_{it} + \beta_3 \text{Lagged Points}_{it} + \beta_4 \text{Lagged Pre-transfer Revenue}_{it} + \beta_5 \text{Tangible Assets}_{it} + \beta_6 \text{Promotion}_{it} + \beta_7 \text{Relegation}_{it} + \text{Country Fixed Effects}_{it} + \text{Time Fixed Effects}_{it} + \text{Division Fixed Effects}_{it} + u_{it}$

H2c: $\textit{Transfer Income}_{it} = \beta_0 + \beta_1 \text{Foreign}_{it} + \beta_2 \text{Treatment}_{it} + \beta_3 \text{Ownership Change} * \text{Treatment}_{it} + \beta_4 \text{Ownership Change} * \text{Foreign} * \text{Treatment}_{it} + \beta_5 \text{Lagged Points}_{it} + \beta_6 \text{Lagged Pre-transfer Revenue}_{it} + \beta_7 \text{Tangible Assets}_{it} + \beta_8 \text{Promotion}_{it} + \beta_9 \text{Relegation}_{it} + \text{Country Fixed Effects}_{it} + \text{Time Fixed Effects}_{it} + \text{Division Fixed Effects}_{it} + u_{it}$

4. Results

4.1 Results Hypothesis 1

The regression of the first hypothesis is performed, and the results are displayed in model 1 of Table 6. First of all, hypothesis 1a stated that football clubs owned by foreign investors spend more on the transfer market compared to clubs owned by domestic investors. In the table, it can be seen that this hypothesis can be confirmed. The coefficient is positive and has a value of 7,01; indicating that foreign owners spend €7,01 million euros more on the transfer market compared to domestic owners, holding all other factors constant. This finding is significant at the 1%-significance level.

Hypothesis 1b stated that football clubs owned by European foreign investors spend more on the transfer market compared to clubs owned by investors not from Europe. In Table 2 we can see in the second model, that the coefficient of having a European owner is positive as well. However, the coefficient is not statistically significant, therefore hypothesis 1b is rejected.

In model 3 of Table 6 the results of the DID regression with a change in ownership are displayed. Hypothesis 1c stated that a change in ownership increases transfer expenditures of a football club. First, holding other factors constant, it can be observed that being in the treatment group has a negative impact on transfer expenditures compared to being a club in the control group. This is statistically significant at the 10% significance level. Furthermore, Table 6 displays the interaction term between the treatment group and ownership change. The coefficient is positive and statistically significant at the 1% significance level. This means that the treatment effect is positive, which is in line with the hypothesis which stated that a change in ownership increases transfer expenditures of a football club.

The final model in Table 6 shows the regression results of hypothesis 1d, which stated that irrespective of the previous owners, a change in ownership by foreign investors increases transfer expenditures more than a change in ownership by domestic investors. The results show again being in the treatment group has a negative impact on transfer expenditures compared to being a club in the control group, and this is significant at the 5% significance level. However, the interaction term between the treatment group and ownership change did

not show any significant results in this model. Furthermore, the triple interaction between the treatment group, ownership change and having a foreign owner does not show a significant result. Therefore, hypothesis 1d is rejected.

VARIABLES	Transfer Costs	Transfer Costs	Transfer Costs	Transfer Costs
Foreign Owner	7.014***	9.005***		5.171***
	(1.181)	(1.989)		(1.844)
Europe		2.875		
		(2.448)		
Treatment Group			-1.387*	-2.215**
			(0.761)	(0.869)
Ownership change * Treatment Group			5.973***	1.759
			(1.293)	(1.120)
Foreign Owner * Ownership Change * Treatment Group				3.599
				(2.503)
Points in season t-1	0.106***	0.105***	0.109***	0.100***
	(0.0347)	(0.0346)	(0.0376)	(0.0356)
Pre-Transfer Revenue in season t-1	0.197***	0.198***	0.201***	0.197***
	(0.0112)	(0.0113)	(0.0120)	(0.0117)
Tangible Assets	-0.0103	-0.00951	-0.00996	-0.00915
	(0.00845)	(0.00860)	(0.00943)	(0.00887)
Promotion	-2.117	-2.105	-2.484	-1.941
	(1.458)	(1.456)	(1.564)	(1.463)
Relegation	1.444	1.367	1.714	1.603
	(1.344)	(1.348)	(1.388)	(1.359)
Constant	-5.186***	-7.971***	-4.212**	-3.734**
	(1.693)	(2.966)	(1.718)	(1.695)
Observations	1,174	1,174	1,117	1,117
R-squared	0.835	0.836	0.833	0.838
Country Fixed Effects	YES	YES	YES	YES
Division Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES

*Table 6: OLS with FE regression results, dependent variable transfer costs (Hypotheses 1). Robust standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1.*

4.2 Results Hypothesis 2

Table 7 displays the results of the regression with transfer income of a football club as dependent variable. The first model shows the results from hypothesis 2a, which stated that football clubs owned by foreign investors have a lower transfer income compared to domestically owned football clubs. The coefficient is positive, and it is not statistically significant. Therefore, hypothesis 2a is rejected.

The second model of Table 7 shows the results for hypothesis 2b, which stated that a change in ownership decreases transfer income of a football club. Firstly, it can be seen that the treatment group coefficient is positive, but insignificant. Furthermore, the interaction between ownership change and the treatment group, the treatment effect, is also insignificant. Therefore, hypothesis 2b is rejected.

The third model in Table 7 displays the results from the regression estimating the effect of a foreign ownership change on transfer income. Hypothesis 3c stated that a change in ownership by foreign investors increases transfer income more than a change in ownership by domestic investors, irrespective of the previous owners. First of all, in this model there is no significant effect of having a foreign owner on transfer income. Furthermore, being in treatment group compared to being in the control group does not show a significant effect on transfer income. In this model, the results do show a significant negative effect of the interaction term between ownership change and being in the treatment group on transfer income, at the 10% significance level. This indicates that changing ownership negatively affects transfer income. However, the effect of a foreign ownership change on transfer income, the triple interaction between the treatment group, foreign owner and ownership change, is statistically insignificant. Therefore, also hypothesis 2c is rejected.

VARIABLES	Transfer Income	Transfer Income	Transfer Income
Foreign Owner	2.698		0.0777
	(1.893)		(2.535)
Treatment Group		1.045	1.092
		(1.355)	(1.380)
Ownership change * Treatment Group		0.970	-3.099*
		(2.195)	(1.791)
Foreign Owner * Ownership Change * Treatment Group			6.305
			(3.831)
Points in season t-1	0.384***	0.401***	0.393***
	(0.0856)	(0.0912)	(0.0887)
Pre-Transfer Revenue in season t-1	0.0621***	0.0658***	0.0651***
	(0.0182)	(0.0185)	(0.0190)
Tangible Assets	-0.00157	-0.00345	-0.00218
	(0.0146)	(0.0148)	(0.0147)
Promotion	-19.36***	-19.85***	-19.33***
	(2.965)	(3.193)	(3.049)
Relegation	11.72***	11.52***	11.33***
	(2.817)	(2.937)	(2.880)
Constant	-12.79***	-14.95***	-14.76***
	(4.054)	(3.592)	(3.520)
Observations	1,174	1,117	1,117
R-squared	0.396	0.398	0.400
Country Fixed Effects	YES	YES	YES
Division Fixed Effects	YES	YES	YES
Year Fixed Effects	YES	YES	YES

*Table 7: OLS with FE regression results, dependent variable transfer income (Hypotheses 2). Robust standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1.*

Table 8 shows the results of the last two models of both Table 6 and 7, in order to show the clear difference between the impact of ownership changes on transfer expenditures and transfer income. This table shows even more clearly that the effect of an ownership change positively influences transfer expenditures, indicating higher transfer costs. While it does not or negatively influence the transfer income of a football club. In addition, it shows that a foreign ownership change does not affect both transfer costs and transfer income significantly. This indicates that an ownership change affects transfer expenditures, while it does not really affect the transfer income of the football club. The change in strategy is mainly based on the spending part, indicating that new owners are more win maximizing.

VARIABLES	Transfer Costs	Transfer Costs	Transfer Income	Transfer Income
Foreign Owner		5.171***		0.0777
		(1.844)		(2.535)
Treatment Group	-1.387*	-2.215**	1.045	1.092
	(0.761)	(0.869)	(1.355)	(1.380)
Ownership change * Treatment Group	5.973***	1.759	0.970	-3.099*
	(1.293)	(1.120)	(2.195)	(1.791)
Foreign Owner * Ownership Change * Treatment Group		3.599		6.305
		(2.503)		(3.831)
Points in season t-1	0.109***	0.100***	0.401***	0.393***
	(0.0376)	(0.0356)	(0.0912)	(0.0887)
Pre-Transfer Revenue in season t-1	0.201***	0.197***	0.0658***	0.0651***
	(0.0120)	(0.0117)	(0.0185)	(0.0190)
Tangible Assets	-0.00996	-0.00915	-0.00345	-0.00218
	(0.00943)	(0.00887)	(0.0148)	(0.0147)
Promotion	-2.484	-1.941	-19.85***	-19.33***
	(1.564)	(1.463)	(3.193)	(3.049)
Relegation	1.714	1.603	11.52***	11.33***
	(1.388)	(1.359)	(2.937)	(2.880)
Constant	-4.212**	-3.734**	-14.95***	-14.76***
	(1.718)	(1.695)	(3.592)	(3.520)
Observations	1,117	1,117	1,117	1,117
R-squared	0.833	0.838	0.398	0.400
Country Fixed Effects	YES	YES	YES	YES
Division Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES

*Table 8: Difference in Difference models: Transfer Expenditures versus Transfer Income, a clear difference between the two. Robust standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1.*

4.5 Control Variables

Most of the relationships between the control variables and the dependent variables were as expected in the models in Table 6. In the models with transfer costs as dependent variable it can be seen that lagged points per season and lagged pre-transfer expenditures significantly positively affects transfer expenditures, both at the 1% significance level. However, there is no significant impact from tangible assets, relegation and promotion on transfer expenditures.

The second part analyses the effect of the control variables on transfer income and are displayed in the models of Table 7. Here, points obtained in the season before, lagged pre-transfer revenues and relegation show a significant positive impact on transfer income at the 1% significance level, as expected. It is also shown in all models that promotion negatively impacts transfer income as expected, this is significant at the 1% significance level. Lastly, tangible assets do not show any significant effects on the transfer income.

5. Discussion

The objective of this study was to investigate whether and how different owners affect transfer strategies and the effect of an ownership change on transfer strategies. The following discussion chapter will give an overview of the findings and some implications. Furthermore, the limitations of the study will be discussed and suggestions for future research will be given.

5.1 Research Findings

First of all, the relationship between foreign club owners and their transfer expenditures is analyzed. It was found that foreign owners, on average, invested more on the transfer market compared to domestic football club owners. Previous literature already found the same relationship between the two, however, they used samples that consisted of either EPL clubs or the "bigger" clubs in Europe (Rohde & Breuer, 2016a, 2016b; Richau et al., 2021). This study extends on the former literature as it includes clubs from other leagues, most importantly from France, Italy and Spain which are known to have increasing entrance from foreign investors.

In addition to the relationship between foreign owners and their transfer expenditures, this study also looks into the relationship between European owners compared to non-European owners. European private investors are considered to be more concerned with win-maximization, and this study tries to answer whether this can be seen in their transfer expenditures. However, there is no evidence found that European owners are more willing to invest on the transfer market compared to non-European owners.

Furthermore, the study investigated the impact of an ownership change on transfer expenditures, which is something that has not been done before. There is evidence for a positive relationship between an ownership change and transfer expenditures, as was hypothesized. However, there is no evidence found that new foreign owners increase their transfer expenditures more compared to new domestic owners. There is only evidence for an impact of an ownership change on transfer expenditures, either by foreign or domestic investors.

As transfer income is the counterpart of transfer expenditures, the relationship between foreign owners and transfer income has been investigated. In their paper, Richau et al. (2021) indicated this as a direction for future research, this study followed their suggestion. However, no evidence was found that foreign owners gained more revenue from the transfer market compared to domestic owners. This could indicate that the main difference between foreign and domestic investors can be mainly observed through their transfer expenditures, not their transfer income. The impact of an ownership change on transfer income is also investigated. However, no evidence was found that a change in ownership impacted transfer income in the first model, while the second model showed a negative effect of an ownership change on transfer income. In addition, there is no evidence found for a difference in transfer income between a foreign ownership change compared to a domestic one.

It can be concluded that the difference in ownership is mainly visible through the transfer expenditures of football clubs. Different owners and changes in ownership affect the transfer expenditures, but there is little evidence for changes in transfer income. Therefore, it can be concluded that new transfer strategies are mainly affecting their transfer expenditures while the selling part of the equation remains similar. The reason for this could be that new owners are more concerned with win maximization compared to the previous owners.

5.2 Research Implications

With this study, the impact of foreign investors and ownership changes on transfer activity has been clarified. This section provides some research implications, explaining possible actions for the UEFA if they want to reduce transfer spending or for football clubs if they want to attract investors to gain financial spending power, based on the findings of this study.

With the FFP regulations, the UEFA already try to limit transfer spending which shows the intention to reduce transfer spending on the market. Therefore, if the UEFA want to further reduce the transfer expenditures in Europe, a step towards that goal could be to address the foreign investors who, on average, seems to spend more on the transfer market compared to domestic investors as shown by this study. This study also showed that transfer expenditures increase when a football club changes ownership. Accordingly, if the UEFA

want to reduce transfer spending, they could pay attention to these new owners and address to them what they want to accomplish.

On the other hand, there is the perspective from the football clubs itself. Football clubs that want to compete in the league, by increasing their transfer expenditures, should consider attracting wealthy investors or at least signal that they are interested in an ownership change, both domestic and foreign. This will most likely be the case for football clubs in need for capital, as their value is more accessible for new investors. An example could be to make a statement that the club is available for a takeover, in order to attract these investors and to gain the financial resources to be able to compete again.

5.3 Limitations & Future Research

First of all, the main limitation of the study is that ownership changes in football are not likely to be randomly assigned to clubs. As it makes sense that a football club changes owner when the club is not doing so well. To recover, the club will be in need of more capital. Therefore, the expectation is that transfer spending increases when a new club owner arrives, and that the owner makes the club financially healthy again.

Furthermore, although this study has a bigger and more various sample compared to previous literature, the sample is not as extensive as it could be due to data unavailability for the dependent variables. Several clubs from Germany, Belgium, Portugal and Scotland were excluded from the sample due to missing data in their transfer activity. Therefore, clubs from France, England, Spain, Italy and the Netherlands account for over 80% of the sample used. Hence, the results are not necessarily representative for all football clubs.

As ownership changes for different football clubs happen in different time periods, the parallel trend assumption for the difference in difference regression is more difficult to test. Although this study shows the similarity between the control and the treatment group in the data section and the clear impact of ownership change, it cannot be stated with complete certainty that this assumption holds. Consequently, there is a possibility for biased results.

The ownership change dummy remains 1 in the seasons after an ownership change, which possibly leads to another limitation in this study. It does not take into account the clubs that have been changing ownership multiple times during the sample period. Therefore, these clubs are not represented in the sample as it could lead to biased results. As this group of clubs mainly consists of teams taken over by foreign investors, it is unfortunate that these clubs have been excluded from the sample.

This study mainly focuses on the different origins from football club owners and their effect on transfer activity. However, it could be interesting for future research to investigate the different types of owners. First of all, it could be interesting to investigate the difference between ownership changes by investment companies and sole persons. For example, one could argue that investment companies are more concerned with profit maximization, and therefore less active on the transfer market. Whereas sole owners, private investors, like Roman Abramovich at Chelsea FC, are more concerned with win maximization which leads to higher transfer expenditures. Another interesting point of view could be the private wealth of the owners. Whether an owner with higher private wealth is more willing to spend on the transfer market or not. This is another area of different owners that can be exploited in future research, in order to provide a more complete overview of different ownership types. Furthermore, as the COVID-19 pandemic is still among us, it will be interesting in the future to investigate how this will affect the transfer activity for football clubs and whether it differs between different types of club owners.

6. Conclusion

The aim of this study was to investigate whether and how different ownership types affect the transfer activity of football clubs. Previous literature already investigated the effect of foreign owners on transfer expenditures. This study extended on this previous literature by using a larger and more distributed sample and also by investigating the effect on transfer income. In addition, the study investigated the effect of an ownership change on transfer activity, and whether there is a difference between an ownership change to foreign investors and an ownership change to domestic investors, irrespective of the previous owners.

This study showed that, in line with previous literature, foreign owners on average spend more on the transfer market compared to domestic owners. However, the transfer income of football clubs with foreign owners is not necessarily higher compared to their domestic colleagues. Furthermore, the study shows that an ownership change positively influences the transfer expenditures of a football club. However, there is no evidence that the effect of a change in ownership to a foreign investor differs from an ownership change to a domestic investor, irrespective of the previous owner, on transfer expenditures. An ownership change does not affect the transfer income of football clubs in any way.

In conclusion, the main finding of the study is that it found positive effects of foreign owners and ownership changes, either domestic or foreign, on transfer expenditures. These findings are useful for the UEFA, if they want to regulate the transfer market more specifically, it could be relevant to address the higher transfer expenditures of foreign investors and new club owners. While for football clubs it could be interesting if they want to attract or maintain the right investors to be able to be more competitive on the transfer market. The study has given a more complete insight on the effect of different owners and provided useful suggestions for further research.

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