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## The rainmaker?! The impact of investors on transfer fees in the English Premier League

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THE RAINMAKER?!  
THE IMPACT OF INVESTORS ON  
TRANSFER FEES IN THE  
ENGLISH PREMIER LEAGUE

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# The Rainmaker?! The impact of investors on transfer fees in the English Premier League

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## Zusammenfassung / Abstract

Transfer fees in European football have experienced a rapid increase in the past years. Simultaneously, an increasing number of domestic and recently foreign investors – who are assumed to further increase team spending in European football – have entered the football market by becoming club owners. In light of these developments, fears associated with an increasing influence of foreign (majority) investors from the financial as well as the emotional fan perspective have increased. Given the rather limited number of empirical studies focusing on the impact of investors on transfer fees, we shed further light on this topic. Based on a data sample from 2012/13 to 2018/19 for the English Premier League, we estimate OLS regressions and quantile regressions to analyze the effects of ownership concentration and investor origin on the amount of individual transfer fees. While we do not find strong evidence that ownership concentration increases the willingness to pay, we find fairly consistent results that foreign investors are willing to pay a premium compared to domestic investors. Our results also indicate that especially foreign investors who own a majority share of a club have a positive effect on transfer fees for the upper quantiles.

**Schlagworte / Keywords:** Sports finance, property rights, club ownership, investors, football transfer market

**JEL-Klassifikation / JEL-Classification:** D23, G32, Z22, Z23

## 1. Introduction

In recent years, European football has experienced a considerable economic step-up that is made most evident by numerous revenue and transfer fee records. Some crucial determinants for this development are higher broadcasting revenues and an ongoing globalization of Europe's top leagues (Rohde and Breuer 2017), which have increased the global sales potential for clubs. Another driver that has gained regularly considerable attention in the sports-economics literature and the general public is the entry of (foreign) investors with high spending power (Lang, Grossmann, and Theiler 2011; Wilson, Plumley, and Ramchandani 2013; Madden 2015; Sims 2018).

Foreign (majority) investors first appeared in England at the end of the 1990s (Rohde and Breuer 2016b); however, over the past decade the number of investors has also increased in other European leagues (especially France and Italy). Even Germany, despite its strict "50+1"-rule (for more on the "50+1"-rule, see Dietl and Franck 2007)<sup>1</sup>, shows an increasing number of investors who own stakes in football clubs. Due to the increasing importance of club-ownership structures and investors' origins, even the highly-scrutinized annual football reports by Deloitte and Europe's football governing body, UEFA, contain a dedicated section on club ownership (Deloitte 2019; UEFA 2020).

Building on property-rights theory as well as theoretical and empirical findings from foreign (direct) investments, this study sheds further light on the impact of ownership concentration and foreign investors on the transfer-market behavior of football clubs. In doing so, we focus on the English Premier League as the forerunner and most illustrative example for the presence of (foreign) investors.

Despite the ongoing public and academic discussions concerning the impact of investors on team investments, the predominant part of earlier studies is of a theoretical nature (e.g., Franck 2010a; Lang et al. 2011; Sass 2016). As one of few exceptions, Rohde and Breuer (2016b) empirically study the effect of (foreign) majority owners on team wages in the English Premier League. Furthermore, Rohde and Breuer (2016a) analyze the influence of (foreign) private majority owners on the aggregated net transfer investments among Europe's top 30 clubs.

Our research contributes to the earlier literature in multiple ways. First, we use recent data to provide further empirical evidence of the impact of investors on transfer fees. Second, we

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<sup>1</sup> Investors are only permitted to own up to 49.9% of the club shares.

analyze the transfer spending by focusing on individual player transfer fees rather than analyzing the team's overall transfer investments. This allows individual player characteristics (e.g., sporting performance, remaining contract duration) to be controlled for when analyzing an individual player's transfer fee. Third, including single investors as a third category for the ownership concentration extends Rohde and Breuer's studies (2016a, 2016b), who only differentiate between minority and majority investors.

In particular, we address the following research questions:

- What impact does ownership concentration have on the amount of player transfer fees?
- What impact do foreign investors have on the amount of player transfer fees?

The remainder of the paper is structured as follows: Section 2 outlines the transfer-market characteristics in football, followed by the theoretical background on ownership structures and financial investors in football in Section 3. The empirical analysis including the results is presented in Section 4. The paper closes with a discussion and conclusion in Section 5.

## **2. Labor-market characteristics and transfer fees in European football**

Similar to other markets on which goods and services are being traded, the transfer market in football allows player registrations to be traded between football clubs (Franck 1995; Frick 2007; Morrow 1996). Player registrations guarantee a club exclusive rights of a player's services over the duration of a contract. Reasons for transfers are manifold. Clubs might be interested in selling in case a player does not fulfill the expectations regarding sports performance, or when the negotiated transfer fee exceeds the expected utility a club derives from owning a player. Also, clubs might be interested in buying player registrations to improve the quality of a team or to benefit from a player's popularity. Before finalizing a transfer, both contracting parties have to negotiate a transfer fee, with club and player characteristics determining the amount of compensation (Carmichael and Thomas 1993; Speight and Thomas 1997). Player characteristics determining salaries, transfer fees, and market values<sup>2</sup> can mainly be categorized into the following dimensions: human capital, performance, popularity (Müller, Simons, and Weinmann 2017), and effort as a fourth category (Weimar and Wicker 2017). Furthermore, compensation will equal the marginal revenue product a player can generate for the buying club (Frick 2011, Lucifora and Simmons 2003). An exception occurs when players

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<sup>2</sup> Herm, Callsen-Bracker, and Kreis (2014) show a high correlation between actual transfer fees and market values; similarly, Prockl and Frick (2018) find a high correlation between salaries and market values.

have expired contracts. Following the “Bosman”-ruling (EuGH, 15.12.1995 - C-415/93), such players can freely move to a new club without the need of a transfer fee (on the “Bosman”-ruling, see especially Büch 1998; Frick 2009; Frick and Simmons 2014).

As compared to other markets, some peculiarities are characteristic of the labor market for football players (see Frick 2007 for an overview and a literature review). For example, transfers can only take place within two pre-defined periods (one after the season and a second in the middle of the season). Another regulation forbids players to play in official matches for more than two different clubs per season (FIFA 2020, p. 12).

Driven by higher revenues (e.g., due to commercialization<sup>3</sup> and higher broadcasting income) the aggregated transfer fees in all major European leagues have increased considerably in the past decade. Moreover, money injections by private investors provided additional financial means to clubs (Franck 2010b). As a result, the transfer-fee spending of the English Premier League in 2018, for example, was more than three times the amount spent in 2009 – even when accounting for inflation. The other major leagues demonstrate a comparable trend, although to a lesser extent (Transfermarkt.de 2019).

In this context, previous literature describes the tendency to overinvest as characteristic for the football labor market (Dietl and Franck 2000; Franck 2010a), which does not only refer to transfer spending but also to team wages as another part of team investments. Frequently, the metaphor of a “rat race” (Akerlof 1976) is used to describe the investment behavior of football clubs (e.g., Franck 2010b; Szymanski and Weimar 2019). A stronger correlation between financial investments and sporting success, as well as an uneven revenue allocation, increases the tendency to overinvest (Dietl, Franck, and Lang 2008). Stereotypical symptoms of this “rat race” are, for example, high debt levels and a low profitability at the club level (Rohde and Breuer 2016b). In order to regulate extraordinary club investments and to ensure the financial stability of European football, UEFA has introduced the so-called “Financial Fair Play” regulations (Müller, Lammert, and Hovemann 2012; Franck 2014; Schubert and Lopez Frias 2019).

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<sup>3</sup> Defined as a shift towards a more business-oriented behavior by clubs and leagues.

### **3. Club ownership and investors: Theoretical background and prior literature**

#### **3.1. Club ownership models in European football**

Over the decades, the legal forms and the corresponding ownership structures of European football clubs have been subject to recurring changes (Dietl and Franck 2007; Leach and Szymanski 2015). Generally, researchers differentiate between three main types of ownership models in European football (Franck 2010a; Dietl and Weingärtner 2011):

- (1) members' associations,
- (2) public companies listed on stock exchanges, and
- (3) private companies similar to classic capitalistic firms.

Rohde and Breuer (2017, p. 268) identify “professionalization, commercialization, and internationalization” as three trends associated with the structural changes of ownership models. Crucial for the professionalization of football was the permission for football clubs to change their legal structure from members' associations to corporations. While the English league was the first to allow clubs to convert into corporations, the other major European leagues followed at a later point.<sup>4</sup> The incorporation of football clubs provided the basis for the commercialization of professional football as it rendered it possible that private investors buy club shares. The internationalization of club ownership, in turn, refers to an increasing number of foreign investors buying shares of football clubs – again with the English Premier League as the forerunner (Rohde and Breuer 2017). The increasing number of foreign club owners has also affected the business practices in European football. For example, Nauright and Ramfjord (2010) argue that marketing activities experienced an “Americanization” following the entry of multiple US investors.

The end of the 20<sup>th</sup> century also brought a short phase of club listings on stock exchanges. However, as the clubs' objectives associated with the clubs' listings could not be met, the great majority of clubs were de-listed again after a couple of years (Wilson et al. 2013). Nowadays, private ownership has become the dominant model in many European leagues. Based on the UEFA benchmarking report for the financial year 2018, all clubs in the top-divisions in England, France and Italy are under private ownership. In Spain, private ownership dominates

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<sup>4</sup> England started at the end of the 19<sup>th</sup> century (Leach and Szymanski 2015), followed by Italy and France in the second part of the 20<sup>th</sup> century and Germany in 1998 (Dietl and Franck 2007; Rohde and Breuer 2017).



with 70% of the clubs operating under this model. Among the five major European leagues, only Germany has a low share of 28% of private owners (UEFA 2020, p. 52) due to its restrictive “50+1” rule. Across all European leagues (not only the five largest leagues), 80% of the private owners are domestic. However, especially in the English Premier League, foreign ownership plays an important role with 12 out of 20 clubs under foreign private ownership (UEFA 2020, p. 53).

Due to the increasing variety and importance of ownership structures in professional football, the topic has been the subject of several earlier studies. Comparing the different ownership models, Franck (2010a) theoretically shows that clubs under private ownership are superior in generating additional funding and reinvesting these financial resources into the team. Dietl and Weingärtner (2011) show that members’ associations facilitate the generation of revenues from sponsorships. In another study, Wilson et al. (2013) empirically evaluate the impacts of the stock model, as well as domestic and foreign private ownership, on clubs financial and sporting performance. Their main findings include a better financial performance of the stock-market model and inferior sporting performance of clubs with domestic ownership. Acero, Serrano, and Dimitropoulos (2017) evaluate the effect of ownership concentration on the financial performance of football clubs and find a positive effect of an increasing ownership concentration in case of distributed ownership. At the same time, they identify a negative effect of increasing concentration when the ownership concentration is already high.

### **3.2. Definition, financial impact and financing concept of investors**

Due to its increasing prevalence, our research focuses particularly on the private ownership model. Previous research often refers to private investors as so-called “sugar daddies” that inject money into a club (e.g., Franck 2010b; Lang et al. 2011; Rohde and Breuer 2016b). Different studies analyze the impact of “sugar daddies” on clubs’ investment strategies and a league’s competitive balance. Franck and Lang (2014) theoretically show that money injections by such investors lead to riskier investment strategies of the clubs. Furthermore, Rohde and Breuer (2018) argue that private majority investors in the French league are less efficient in transferring team investments into sporting success and converting team quality into profits. They find similar results for foreign majority investors in the English Premier League.

Using a theoretical model, Lang et al. (2011) describe a contest model of a sports league under the presence of “sugar daddies” and demonstrate that such investors affect the competitive balance – the direction of the effect depends on the club’s market size, on the one hand, and

the investors' win preference, on the other hand. Taking into account UEFA's "Financial Fair Play" regulations (FFP), which aim at preventing overspending of football clubs, Sass (2016) points out that FFP can limit the financial spending of investors but can also prevent their investments in smaller clubs, which could increase the competitive balance. Furthermore, the absence of external financial (majority) investors can result in a competitive disadvantage and, thus, lead to negative effects on the international competitive balance (e.g., for German clubs) (Franck 2010b).

As compared to the "sugar-daddy" literature, we use a broader definition of investors: We not only define investors as natural persons ("sugar daddies") but also include legal entities (i.e., corporations such as media companies and sport-investment firms) that own equity shares of a football club.

The entry of external investors is often associated with the promise to provide additional financial resources to improve the player roster and to bring further sporting success to a club. Based on this promise, investors are considered an additional driver in the "rat race" described in Section 2 (Andreff 2007; Franck 2010b).

From a financial perspective, the monetary support provided by investors beyond the acquisition investment is comparable to soft debt. Investors provide interest-free loans for player transfers or other expenses, which the club is supposed to pay back at a later point. In reality, however, investors mostly do not expect the club to repay a loan (Beech, Horsman, and Magraw 2010). Therefore, clubs can operate under a soft budget constraint (Storm and Nielsen 2012; for more details on soft budgets, see Kornai 1979). A prominent example is Roman Abramovich, who reportedly provided Chelsea London with an interest-free loan of £1.1 billion until 2018 without any repayments up to this point (Fifield 2018).

### **3.3. Typical objectives of investors in football**

Usually investments in conventional asset classes such as shares are seen as a vehicle to maximize the investor's welfare by promising financial returns (Brealey, Myers, and Allen 2019; Copeland, Weston, and Shastri 2013). Investors in football clubs, however, generally follow a more diverse set of objectives. Hence, the idea often found in finance-related literature (e.g., Damodaran 2012) that a focus on financial objectives leads to utility maximization on the side of investors is often not applicable to football clubs. Evaluating the objective function of clubs in sports, several studies discuss whether clubs act in terms of either (expected) win or profit maximizers (e.g., Madden and Robinson 2012; Sloane 1971). The predominant view

is that clubs in North American sports act as (expected) profit maximizers, while clubs in European sports rather act as (expected) win maximizers (Garcia-del-Barrio and Szymanski 2009; Sloane 2015). In terms of this idea, previous literature follows the assumption that European football clubs try to maximize the club's sporting success subject to a financial break-even constraint as first stated by Sloane (1971).

By the same token, when categorizing the objectives of investors in football, a distinction between financial and non-financial objectives can be made. As one of the core economic objectives, some investors might be interested in direct monetary benefits from ownership of a football club. One way to achieve such benefits is to demand yearly payments from a club as a form of dividend. Another way is to increase the value of a club by, for example, developing a strong brand with a high marketing and sporting potential. This makes it possible that an investor earns a profit by negotiating a selling price that is above the price he or she initially paid (Millward 2011, p. 57). Club ownership can also have a positive indirect economic effect for investors in the form of synergies and spillover effects by promoting other business activities, which is already a well-established business practice in American sports (Franck 2010a). Club ownership can thereby help investors to push forward an internationalization strategy, as the example of Al-Jazeera and Paris St.-Germain shows (Conn 2011b).

However, in line with the view that clubs in European football are win maximizers, many investors presumably do not expect any monetary benefit from their investment in a club. This investor type rather follows an alternative set of non-financial objectives. One of the traditional non-financial motives, especially for domestic investors, is the financial support of a club they already have an emotional relation with. Dietmar Hopp's (co-founder of SAP) support for the German club TSG Hoffenheim is a prominent example for this motive, as he did not only grow up in Hoffenheim but also played for TSG in his youth (Humphreys 2016). Another positive effect of club ownership is the opportunity to achieve some kind of "social and political acceptance" (Franck 2010a, p. 115). For instance, critics accuse the owners of Premier League club Manchester City of using their sport investment to whitewash medial accusations against their country concerning human rights and the treatment of migrant workers (Watson 2018). A third non-financial motive of investors refers to the concept of "conspicuous consumption" (Veblen 1973; for an application to football, see Franck 2010b). While, in the past, wealthy people showed their spending power by buying a yacht or private jet, club ownership has become a new luxury good for billionaires (Hooper 2008). By sinking significant money into

a club, an investor can increase the public attention and gain personal glory, especially in case of sporting success of the club (for details on the economics of attention, see Franck 1998). In case an investor is simply aiming for personal glory, ownership of a particular club has only limited priority. Multiple examples (e.g., Queens Park Ranger's owner Tony Fernandes; FC Reading's owners Dai Yongge and Xiu Li<sup>5</sup>) illustrate that investors sometimes make offers for multiple clubs just for the sake of owning a football club and benefiting from the rewards.

### **3.4. Investor categorization and hypotheses development**

Building on previous literature on corporate governance and investors in football, we use two dimensions to differentiate investors: *ownership concentration* and *investor origin*.

We follow the approach proposed by Rohde and Breuer (2016b) and address ownership concentration by building on property-rights theory. As for the investor's origin, in turn, we adapt theoretical and empirical insights from research on foreign direct investments (FDI) to the football industry and, thus, provide a complementing angle on this topic.

#### **3.4.1. Ownership concentration: Property-rights theory**

Property-rights theory (e.g., Coase 1960; Demsetz 1967; Furubotn and Richter 2005; Picot 1991; Picot and Dietl 1993) claims that ownership over any resources consists of three different elements (Furubotn and Richter 2005; Milgrom and Roberts 1992): residual control, residual claim, and the right to transfer the asset. Residual control describes the right to use the asset and to exclude others from using the asset; residual claim refers to the right over the rewards related to the asset, while the third right allows the owner to transfer the asset (Libecap 1989, p. 1). The different rights do not have to reside within the same person or legal entity but can belong to different parties. Inherent to the theory is the assumption that all owners of property rights try to maximize their utility (Alchian and Demsetz 1973). Applying property-rights theory to the different legal forms of football clubs, Dietl and Weingärtner (2011) show that all property rights belong to the club owners in case of private ownership, whereas for listed clubs and members' associations, the property rights belong to two different parties or do effectively not exist (see further Franck 2000).

Building on property-rights theory, an increasing number of shareholders ultimately results in higher costs, including negotiation costs (Buchanan and Tullock 1962), and can lead to contradicting objectives (Kieser and Walgenbach 2010; Preisendörfer 2016). Furthermore,

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<sup>5</sup>See Conn (2011a) and Parkes (2011).

based on Berle and Means (1968) the separation of property and management can also lead to classical agency problems (Jensen and Meckling 1976; Ross 1973). Therefore, a high level of ownership concentration increases investment incentives and results in a more efficient allocation of resources based on the utility function of the owner (Demsetz 1967). Adapted to football, higher ownership concentration leads to higher autonomy (Franck 2010b), reduces negotiation costs (Buchanan and Tullock 1962; for an application to FIFA, see Follert et al. 2020) with other owners, reduces minority costs (Grossman and Hart 1988), and allows an investor to maximize his or her (expected) utility in the most efficient way<sup>6</sup>. Assuming that European football clubs try to maximize sporting success under a financial break-even constraint, investors with a higher share have *a priori* stronger incentives to invest in team quality, as they can also claim a higher share of the respective rewards associated with sporting success, and they can collect the full utility stream. Thereby, sporting success also has positive effects on the economic as well as reputational objectives discussed in Section 3.3 (e.g., higher brand value or spillover effects, higher international recognition, political or social influence). Rohde and Breuer (2016b) confirm this hypothesis by showing that majority owners have a significant positive effect on team wages<sup>7</sup>. Applying these findings to individual player transfer fees, we hypothesize that a higher ownership concentration has a positive effect on individual transfer fees in the sense that investors with a higher share are presumably more likely to provide the financial means to sign the players that promise the highest sporting success for their team. Hence, they are willing to pay a premium compared to owners with lower ownership shares in order to outbid other teams in transfer negotiations.

**H1:** Investors with a higher ownership share pay higher fees for individual player transfers.

### **3.4.2. Investor origin: Foreign (direct) investments**

Several studies have compared different investment options for foreign investors including foreign direct investments, portfolio equity securities, portfolio debt securities, and loans (e.g., Daude and Fratzscher 2008; Razin, Sadka, and Yuen 1998). In addition, the effect of foreign investments on target firms has been studied (e.g., Wang and Wang 2015). One of the main differentiations of FDIs compared to the other investment options is, thereby, that foreign investors do not only provide capital but are also in control of a firm, which allows an investor to influence management decisions (Mankiw and Taylor 2008, p. 618).

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<sup>6</sup> Although there might also be external stakeholders such as fan initiatives that can prevent the owner from implementing his or her strategy in the most efficient way.

<sup>7</sup> Without including a variable differentiating between foreign and domestic majority owners.

Of particular relevance is the question which factors influence the pecking order of international cash flows (Razin et al. 1998). The findings include that one disadvantage for foreign investors when investing abroad are information asymmetries compared to domestic investors. In light of such information asymmetries between domestic and foreign investors, earlier studies argue that the control associated with FDIs helps to overcome such information asymmetries and allows managing an investment more efficiently (Goldstein and Razin 2006; Razin et al. 1998).

In football, there exist several investment options for investors ranging from different sponsorship agreements (e.g., minor sponsor/stadium sponsor/jersey sponsor) to different degrees of ownership (minor/major). Adapting the foreign investment literature to football, foreign club ownership in football is comparable to a FDI because club owners control their investment and can influence business operations (e.g., through seats in the supervisory board or in the operative management). Thus, when a foreign investor decides to buy a club instead of pursuing one of the other investment options, this suggests a high degree of commitment to his or her objectives because he or she prefers control and decision power to looser forms of investments with higher information asymmetries.

One of the early conceptual approaches on FDIs was conducted by Hymer (1976)<sup>8</sup> who argues that firms pursuing FDIs need some kind of competitive advantage in order to be successful when competing with domestic firms because of the above-mentioned information advantages of domestic competitors<sup>9</sup>. Sources for this competitive advantage can include technology, market power, and financial means. The argument of some competitive advantage of foreign companies when investing abroad was picked up and expanded in later studies (e.g., Dunning 1980). In football, the major source of competitive advantage of foreign investors lies in the financial means investors can provide to achieve sporting success (for the relation between investments and sporting success, see Frick 2005). In case of English football, the background of the foreign owners includes billionaires (e.g., Chelsea London), multinational companies (e.g., Wolverhampton Wanderers) and state-backed investors (e.g., Manchester City) and, thus, at least indicates that these investors can provide high financial means for example due to their transnational operations and network. Higher spending power of foreign investors is also

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<sup>8</sup> First published in 1960 as Hymer's doctoral dissertation and in 1976 published in book form.

<sup>9</sup> Although multiple theories on FDIs exist (e.g., internalizing theory, oligopolistic theory), a detailed overview of the different studies exceeds the scope of this paper (Marandu & Ditshweu 2018 for an overview of other theories).

highlighted by Rohde and Breuer (2016b), who rely on the resource-based view in their study that uses the investor origin (i.e., foreign) as a proxy for wealth.

With regard to the effect of FDIs, several studies find a positive influence on productivity and wages. Arnold and Javorcik (2009), for example, show that higher investments as well as higher wages under foreign ownership lead to higher plant productivity in Indonesia. Results from other studies support the finding of a positive effect of foreign ownership on average wages (e.g., Aitken, Harrison, and Lipsey 1996; Huttunen 2007; Wang and Wang 2015). Thus, empirical findings from other industries suggest that foreign ownership is associated with higher investments for employees.

In summary, similar to hypothesis 1, club ownership allows foreign investors to control and exercise power on their investment and meet their objectives. However, in distinction to the first hypothesis, there are additional factors that suggest that foreign investors might pay higher transfer fees than their domestic counterparts. In addition to the empirical support for positive effects of FDIs on investments for employees from other industries, these factors include the potentially higher spending power of foreign investors (i.e., their competitive advantage), and the international objectives of foreign investors (for the international scope, Millward 2011, p. 49). Because international recognition benefits from sporting success, which is strongly related to team investments, we argue that foreign investors have a higher willingness to pay a premium for players than domestic investors do in order to outbid other teams when signing players. Supporting this line of argumentation, Wilson et al. (2013) find that clubs under domestic ownership show inferior performance compared to clubs under foreign ownership. While Rohde and Breuer (2016a, 2016b) confirm the existence of a positive effect of foreign majority ownership on *aggregated team wages* and *net transfer investments*, this paper analyses the effect on individual player transfer fees, which renders it possible to include player-specific control variables that have proven to influence a player's transfer fee (see Section 2).

**H2:** Foreign investors pay higher fees for individual player transfers than domestic owners.

Taking into account that the effect of higher control and higher willingness to pay by foreign investors can interact with each other, we combine hypotheses 1 and 2 and additionally test for a potential positive effect of foreign investors that are majority or single owners.

**H3:** Foreign majority or foreign single investors pay higher fees for individual player transfers.

## 4. Empirical analysis

### 4.1. Data and methodology

Our sample contains all transfers of the English Premier League for the seasons 2012/13-2018/19<sup>10</sup>. Applying property-rights theory, we categorize the ownership concentration into “distributed ownership”, which includes minority owners and corporations even if they own a majority share<sup>11</sup>. The reason is that corporations have internal control mechanisms that prevent single persons from making investment decisions on their own (Mintzberg 1979) and, thus, create negotiation costs (Buchanan and Tullock 1962). As an extension to the work of Rohde and Breuer (2016b), we differentiate between “majority” and “single owners” because even investors with a small share can demand some kind of representation and, thus, create costs. The origin of the largest shareholder is categorized as either “domestic” or “foreign”.

As a further extension to the studies by Rohde and Breuer (2016a, 2016b), player-specific control variables are incorporated. In addition to age, squared age, and the player position, we control for the sporting performance of a player by including the overall FIFA-Index provided by the software developers of the EA Sports video game “FIFA”. In order to reflect the most recent performance, the index is regularly updated with the support of thousands of volunteers around the world (Kirschstein and Liebscher 2019). We also control for the remaining duration of the player’s contract due to its effect on the bargaining power in transfer negotiations. As shown in previous studies, the closer the contract comes to its expiration the lower is the bargaining power of a selling club because the risk of not receiving a compensation at all increases (Muehlheusser, Frick, and Feess 2004). We also include the respective season to account for changes over time. Further, we include the league rank of a team in order to control for sporting differences between teams (Leach and Szymanski 2015; Dimitropoulos, Travlos, and Panagiotopoulos 2018). Because the league rank is highly correlated with the revenue ranking within a league, the league rank is also a proxy for higher spending power based on a better sporting performance<sup>12</sup>.

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<sup>10</sup> Excluding loans and internal youth player promotions: Due to the different contractual structure, various motives for loans, and the high fluctuation of players on loan compared to other players, loans should be analyzed separately. Youth players are (at least partly) promoted to the team roster for regulatory reasons and are therefore excluded.

<sup>11</sup> Families and spouses are treated as one investor, building on Becker’s (1981) assertion that one family maximizes its utility as a whole.

<sup>12</sup> Due to the high correlation with league rank, the position in the revenue ranking was not included as a control variable.



For collecting our data, we used multiple sources. Transfer fees, player age and the player's position are available on [www.transfermarkt.de](http://www.transfermarkt.de). FIFA-Index and remaining contract duration were gathered from the website [www.fifaindex.com](http://www.fifaindex.com)<sup>13</sup> while the remaining contract duration was also cross-validated with newspaper articles and press releases. The club's league ranking at the time of the transfer period is available on the website of the well-respected German sports magazine *Kicker* ([www.kicker.de](http://www.kicker.de)). The share of the owners as well as their nationalities were collected from the official club websites, press releases and widespread international newspaper articles (e.g., *BBC*, *Guardian*). Table 1 presents the measures and variables we used in our analyses.

**Table 1.** Overview of variables

Variable category	Variable	Description
Dependent variable	Transfer Fee	Transfer fee for individual player transfer (including inflation)
Independent variables	Inv_cluster	Stake of largest shareholder clustered into: (1) Distributed ownership: $\leq 50\%$ [Reference category] (2) Majority owner: $> 50\%$ and $< 100\%$ (3) Single owner: $100\%$
	Inv_origin	Origin of largest shareholder: (1) Domestic if from United Kingdom [Reference category] (2) Foreign if not from United Kingdom
Control variables	Age	Player age at the time of the transfer (squared influence is considered)
	FIFA-Index	Player skill level at the beginning of the season of the transfer [index ranging from 0 to 100]
	Position	Main playing position as indicated by <a href="http://transfermarkt.de">transfermarkt.de</a> : Goalkeeper, Defender, Midfielder, Forward [Reference category]
	Contract	Remaining contract duration with the selling club
	Rank	League rank of the buying club at the end of the previous season (summer transfers) or at the end of the first half of the season (winter transfers) – ranking from 1-17 for the teams staying in the league; 21-23 for the three teams being promoted
	Season	Dummy for respective season from 2012/13 [Reference category] - 2018/19

<sup>13</sup> Website providing an overview of the individual player assessments in the video game "FIFA".

As shown in Table 2, the average transfer fee (including inflation) was €13M. The median rank of the club at the time of the transfer (period) was 12. Players were on average 25 years old and had an average FIFA-Index of 75. The remaining contract duration was 2.2 years.

**Table 2.** Descriptive statistics for the entire sample<sup>14</sup>

	Mean/ Median	SD/ IQR	Min	Max
Fee [in €M]	13.0	14.2	0.1	108.8
Age	24.6	3.4	17	36
FIFA	75.0	5.8	51	89
Contract	2.2	1.1	0.5	7
Rank	12	11	1	23
Obs.	749			

Overall, the clubs acquired a total number of 1,124 players during the seven seasons. From this sample, free agents<sup>15</sup> were excluded. A full set of information was available for 749 transfers, which were therefore suitable for the analysis.

Majority owners accounted for 217 transfers in the data sample, single owners for 327, and distributed ownership for 205 transfers. Foreign owners accounted for 434 transfers (Table 3).

**Table 3.** Sample split by investor type

	Overall	Ownership concentration split			Investor origin split	
	Total	Distributed	Majority	Single	Domestic	Foreign
<b>Obs.:</b>	749	205	217	327	315	434

In order to test our hypotheses, we first estimate four different OLS regression models (with robust standard errors based on White 1980) by using log-transformed transfer fees as the dependent variable to account for the skewness of the transfer fees (similar approach used by Bryson, Frick, and Simmons 2013; Franck and Nüesch 2012 for salaries and market values). In a first model, we only include the investor cluster variable in addition to the control variables. The second model only includes the investor origin, while the third model includes both investor variables. In the fourth model, an interaction term between investor cluster and origin is added to account for a potential interaction between the two variables. The full model has the following form:

<sup>14</sup> Median and interquartile ranges for ordinal scaled variable (rank), mean and standard deviation for the other variables (fee, age, FIFA-Index and contract duration).

<sup>15</sup> Again, free agents were excluded due to their different contractual structure.

$$\ln(\text{Transfer Fee}) = \beta_0 + \beta_1 * \text{Inv\_cluster} + \beta_2 * \text{Inv\_origin} + \beta_3 * \text{Age} + \beta_4 * \text{Age}^2 + \beta_5 * \text{FIFA} + \beta_6 * \text{Position} + \beta_7 * \text{Contract} + \beta_8 * \text{Rank} + \beta_9 * \text{Season} + \beta_{10} * (\text{Inv\_cluster} * \text{Inv\_origin}) + \varepsilon$$

Similar to previous sport-economics studies (e.g., Frick 2011 as well as Bryson et al. 2013 for salaries; Franck and Nüesch 2012 for market values), we also conduct quantile regressions (Koenker and Bassett 1978; Koenker 2005) to analyze whether there are any differences within the (conditional) transfer-fee distribution with regard to the spending behavior of (foreign) investors. Following previous studies, we use bootstrapping with 1000 replications to compute robust standard errors (Lehmann and Schulze 2008; Franck and Nüesch 2012).<sup>16</sup>

Most of the changes to a team roster occur in the summer transfer window (597 summer vs. 152 winter transfers), whereas winter transfers usually include some opportunistic behavior (e.g., in case of the threat of relegation). Thus, we separately analyze sub-samples that only include the summer and the winter transfers. However, due to the major importance of summer transfers compared to winter transfers, we only show and discuss the results for summer transfers<sup>17</sup> besides the overall sample in this paper.

## 4.2. Results

The results of the different OLS models estimated for the entire sample are presented in Table 4. For the first two models neither the investor cluster nor investor origin show any significant effect when analyzed separately. However, the signs of the effects indicate a positive impact of majority investors while single investors surprisingly seem to have a negative effect. Foreign investors tend to have a positive effect on transfer fees. When including both investor variables (model 3), again no significance can be observed for the investor variables. Only in the fourth model, which includes the interaction effects, the negative effect of single owners turns out to be significant. Both interaction effects are statistically insignificant, but indicate a positive effect on transfer fees. While the positive effect of foreign ownership remains through all models as well as the negative effect of single owners, the positive effect of majority investors turns negative in models 3 and 4. The control variables have the expected sign with mostly significant effects. As shown in previous studies, goalkeepers and defenders are transferred for lower fees. Teams that are more successful pay higher transfer fees and a longer remaining contract duration increases transfer fees. Furthermore, the past seasons have brought higher transfer fees compared to the reference category 2012/13.

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<sup>16</sup> We used the statistics software R (R Core Team 2020) including the package “quantreg” (Koenker 2020)

<sup>17</sup> Results for the winter transfer window are available upon request.

For the summer sample (Table 5), the results for the investor variables are partly different. Foremost, the positive effect of foreign investors on transfer fees is significant at the 5% level in model 2 and 3 with a positive effect on transfer fees of 11% and 13.4%<sup>18</sup> respectively compared to domestic owners. However, this effect gets smaller and turns insignificant when including the interaction term. The effect of single investors is similar to the entire sample; majority ownership on the other hand shows a positive effect in models 1 and 3 that turns negative when including the interaction term. The control variables are fairly similar to the entire sample.

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<sup>18</sup> Calculated as  $\exp(\beta) - 1$ , where  $\beta$  represents the coefficient estimate (based on Halvorsen & Palmquist 1980; for an application to football, see Bryson et al. 2013; Kuethé & Motamed 2010).

**Table 4.** Results for OLS models (entire sample)

		Model 1	Model 2	Model 3	Model 4
Inv_cluster	[Ref. distributed]				
	Inv_major	0.018 (0.065)		-0.00006 (0.066)	-0.024 (0.087)
	Inv_single	-0.059 (0.056)		-0.086 (0.059)	-0.142* (0.083)
Inv_origin	[Ref. domestic]				
	Inv_foreign		0.049 (0.049)	0.072 (0.052)	0.003 (0.098)
Age		0.025 (0.101)	0.036 (0.103)	0.038 (0.103)	0.037 (0.103)
Age <sup>2</sup>		-0.003 (0.002)	-0.003 (0.002)	-0.003 (0.002)	-0.003 (0.002)
FIFA		0.141*** (0.007)	0.140*** (0.008)	0.139*** (0.008)	0.140*** (0.008)
Position	[Ref. Forward]				
	Midfielder	0.014 (0.056)	0.008 (0.056)	0.012 (0.055)	0.012 (0.056)
	Goalkeeper	-0.263** (0.112)	-0.269** (0.110)	-0.267** (0.112)	-0.267** (0.112)
	Defender	-0.209*** (0.061)	-0.214*** (0.061)	-0.215*** (0.060)	-0.214*** (0.060)
Contract		0.188*** (0.022)	0.186*** (0.023)	0.187*** (0.022)	0.187*** (0.022)
Rank		-0.016*** (0.005)	-0.017*** (0.005)	-0.016*** (0.005)	-0.015*** (0.005)
Season	[Ref. 2012/2013]				
	2013/14	0.088 (0.084)	0.092 (0.084)	0.088 (0.084)	0.083 (0.086)
	2014/15	0.372*** (0.090)	0.378*** (0.089)	0.375*** (0.089)	0.376*** (0.089)
	2015/16	0.349*** (0.090)	0.339*** (0.090)	0.348*** (0.090)	0.345*** (0.092)
	2016/17	0.345*** (0.093)	0.351*** (0.092)	0.340*** (0.092)	0.345*** (0.093)
	2017/18	0.620*** (0.084)	0.630*** (0.083)	0.621*** (0.084)	0.627*** (0.083)
	2018/19	0.596*** (0.093)	0.600*** (0.093)	0.593*** (0.093)	0.599*** (0.093)
Interaction	Major * Foreign				0.069 (0.132)
	Single * Foreign				0.115 (0.119)
Intercept		-8.033*** (1.150)	-8.150*** (1.154)	-8.140*** (1.163)	-8.129*** (1.160)
	Estimated R <sup>2</sup>	0.6801	0.6796	0.6809	0.6813
	Observations	749	749	749	749

Note: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ ; robust standard errors in parenthesis

**Table 5.** Results for OLS models (summer sample)

		Model 1	Model 2	Model 3	Model 4
Inv_cluster	[Ref. distributed]				
	Inv_major	0.073 (0.068)		0.0420 (0.069)	-0.037 (0.090)
	Inv_single	-0.020 (0.060)		-0.072 (0.065)	-0.149* (0.091)
Inv_origin	[Ref. domestic]				
	Inv_foreign		0.104** (0.053)	0.126** (0.058)	0.001 (0.106)
Age		0.090 (0.107)	0.112 (0.109)	0.121 (0.109)	0.123 (0.110)
Age <sup>2</sup>		-0.004* (0.002)	-0.004** (0.002)	-0.004** (0.002)	-0.004** (0.002)
FIFA		0.151*** (0.008)	0.149*** (0.009)	0.148*** (0.009)	0.148*** (0.009)
Position	[Ref. Forward]				
	Midfielder	0.031 (0.058)	0.021 (0.058)	0.025 (0.058)	0.022 (0.058)
	Goalkeeper	-0.279** (0.121)	-0.288** (0.120)	-0.289** (0.122)	-0.296** (0.122)
	Defender	-0.209*** (0.065)	-0.218*** (0.065)	-0.219*** (0.065)	-0.222*** (0.065)
Contract		0.171*** (0.025)	0.168*** (0.025)	0.170*** (0.025)	0.171*** (0.025)
Rank		-0.013** (0.005)	-0.013** (0.005)	-0.012** (0.005)	-0.011** (0.005)
Season	[Ref. 2012/2013]				
	2013/14	0.075 (0.083)	0.082 (0.083)	0.076 (0.083)	0.077 (0.084)
	2014/15	0.316*** (0.090)	0.322*** (0.090)	0.318*** (0.090)	0.326*** (0.090)
	2015/16	0.320*** (0.096)	0.309*** (0.096)	0.320*** (0.095)	0.325*** (0.096)
	2016/17	0.229** (0.100)	0.233** (0.100)	0.219** (0.100)	0.231** (0.099)
	2017/18	0.526*** (0.092)	0.543*** (0.092)	0.531*** (0.092)	0.542*** (0.090)
	2018/19	0.543*** (0.099)	0.551*** (0.098)	0.539*** (0.098)	0.559*** (0.098)
Interaction	Major * Foreign				0.182 (0.138)
	Single * Foreign				0.172 (0.129)
Intercept		-9.622*** (1.151)	-9.840*** (1.153)	-9.886*** (1.151)	-9.884*** (1.150)
	Estimated R <sup>2</sup>	0.7102	0.7109	0.7126	0.7136
	Observations	597	597	597	597

Note: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ ; robust standard errors in parenthesis

Looking at the results of the quantile regressions, we focus on model 3 and 4 of the summer sample, as this is the transfer window with the strategic planning where most transfers happen. Hence, including the winter transfers might dilute the results.<sup>19</sup> The results of model 3 and 4 are presented in Table 6 and Table 7. Both models show some variance over the (conditional) transfer-fee distribution. While the statistically significant effects of the FIFA-Index and remaining contract duration are stable among the control variables for all model specifications<sup>20</sup>, the main variables of interest (i.e., investor variables) show statistical significance for the upper quantiles.

Without considering the interaction term (model 3), foreign investors pay a premium for players with higher (conditional) transfer fees as the effect turns insignificant with the 0.25 quantile. The effect size on transfer fees compared to domestic owners increases from the 0.1 to the 0.75 quantile and then decreases slightly in the 0.9 quantile. The effect ranges from 6.1% (0.1 quantile) to 20.4% (0.75 quantile). Single investors, in turn, seem to have a significantly negative effect on the transfer fee for the players with the highest (conditional) transfer fees that increases from the 0.25 quantile to the 0.9 quantile (-12.9% for the 0.9 quantile compared to distributed ownership). Majority investors indicate a positive effect across all quantiles except for the 0.9 quantile without showing any statistical significance.

The quantile regressions for model 4 show changing signs for the effect of the investor origin along the distribution while remaining insignificant. For the 0.9 quantile, both majority (-22.8%) and single investors (-20.2%) have a significantly negative effect. The interaction effect of foreign majority investors and foreign single investors on the other hand consistently shows a positive effect on transfer fees that is statistically significant for the 0.9 and 0.75 quantiles in case of foreign majority owners.

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<sup>19</sup> The results for the entire and winter sample as well as for models 1 and 2 are available upon request.

<sup>20</sup> Although the effect size slightly decreases from the 0.1 quantile to the 0.9 quantile

**Table 6.** Results for Quantile regression: model 3 (summer sample)

Quantile		0.1	0.25	0.5	0.75	0.9
Inv_category	[Ref. distributed]					
	Inv_major	0.026 (0.162)	0.074 (0.110)	0.040 (0.076)	0.045 (0.071)	-0.001 (0.104)
	Inv_single	0.055 (0.138)	-0.051 (0.103)	-0.108 (0.074)	-0.131* (0.070)	-0.138* (0.084)
Inv_origin	[Ref. domestic]					
	Inv_foreign	0.059 (0.124)	0.121 (0.085)	0.163** (0.066)	0.186*** (0.056)	0.133* (0.079)
Age		0.337 (0.234)	0.071 (0.179)	0.248 (0.151)	0.159 (0.129)	0.108 (0.125)
Age <sup>2</sup>		-0.009* (0.005)	-0.003 (0.004)	-0.007** (0.003)	-0.005** (0.003)	-0.004 (0.002)
FIFA		0.181*** (0.018)	0.164*** (0.014)	0.139*** (0.008)	0.125*** (0.008)	0.107*** (0.009)
Position	[Ref. Forward]					
	Midfielder	0.140 (0.125)	0.075 (0.089)	-0.078 (0.062)	-0.044 (0.071)	0.040 (0.077)
	Goalkeeper	-0.576** (0.253)	-0.271 (0.197)	-0.388*** (0.142)	-0.184 (0.137)	-0.234 (0.146)
	Defender	-0.177 (0.162)	-0.167 (0.105)	-0.277*** (0.062)	-0.216*** (0.069)	-0.221** (0.086)
Contract		0.209*** (0.056)	0.200*** (0.038)	0.170*** (0.027)	0.151*** (0.027)	0.127*** (0.027)
Rank		0.0002 (0.011)	-0.014* (0.007)	-0.020*** (0.005)	-0.016*** (0.005)	-0.019*** (0.006)
Season	[Ref. 2012/2013]					
	2013/14	0.216 (0.168)	0.182 (0.125)	0.166 (0.112)	0.026 (0.091)	0.003 (0.098)
	2014/15	0.276 (0.203)	0.418*** (0.142)	0.325*** (0.121)	0.387*** (0.116)	0.482*** (0.117)
	2015/16	0.344* (0.188)	0.407*** (0.140)	0.415*** (0.108)	0.441*** (0.110)	0.450*** (0.108)
	2016/17	0.142 (0.242)	0.292** (0.124)	0.306*** (0.112)	0.301** (0.130)	0.480*** (0.108)
	2017/18	0.571*** (0.187)	0.573*** (0.148)	0.577*** (0.110)	0.576*** (0.115)	0.655*** (0.109)
	2018/19	0.386** (0.191)	0.567*** (0.179)	0.685*** (0.124)	0.618*** (0.100)	0.670*** (0.107)
Intercept		-15.977*** (2.942)	-10.989*** (1.933)	-10.657*** (1.613)	-8.109*** (1.686)	-5.840*** (1.527)
	Pseudo R <sup>2</sup>	0.4767	0.4828	0.5031	0.5116	0.5313
	Observations	597	597	597	597	597

Note: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ ; including bootstrapped standard errors with 1000 replications



**Table 7.** Results for Quantile regression: model 4 (summer sample)

Quantile		0.1	0.25	0.5	0.75	0.9
Inv_category	[Ref. distributed]					
	Inv_major	-0.161 (0.211)	0.089 (0.144)	-0.033 (0.094)	-0.153 (0.109)	-0.259* (0.134)
	Inv_single	-0.039 (0.195)	-0.053 (0.140)	-0.094 (0.120)	-0.282*** (0.105)	-0.225** (0.112)
Inv_origin	[Ref. domestic]					
	Inv_foreign	-0.007 (0.228)	0.090 (0.185)	0.080 (0.110)	0.012 (0.094)	-0.072 (0.110)
Age		0.370 (0.231)	0.093 (0.180)	0.254* (0.146)	0.191 (0.124)	0.037 (0.126)
Age <sup>2</sup>		-0.009** (0.004)	-0.004 (0.004)	-0.007** (0.003)	-0.006** (0.002)	-0.003 (0.002)
FIFA		0.181*** (0.018)	0.163*** (0.014)	0.140*** (0.008)	0.120*** (0.008)	0.110*** (0.010)
Position	[Ref. Forward]					
	Midfielder	0.098 (0.134)	0.070 (0.091)	-0.083 (0.062)	-0.036 (0.068)	0.027 (0.077)
	Goalkeeper	-0.609** (0.249)	-0.274 (0.201)	-0.394*** (0.145)	-0.200 (0.132)	-0.200 (0.144)
	Defender	-0.158 (0.163)	-0.165 (0.105)	-0.289*** (0.063)	-0.277*** (0.071)	-0.200** (0.087)
Contract		0.196*** (0.056)	0.202*** (0.039)	0.167*** (0.026)	0.154*** (0.027)	0.117*** (0.027)
Rank		-0.001 (0.011)	-0.014* (0.007)	-0.019*** (0.005)	-0.016*** (0.005)	-0.017*** (0.005)
Season	[Ref. 2012/2013]					
	2013/14	0.209 (0.170)	0.171 (0.131)	0.141 (0.115)	0.008 (0.089)	0.042 (0.102)
	2014/15	0.231 (0.206)	0.428*** (0.143)	0.320*** (0.123)	0.367*** (0.118)	0.478*** (0.113)
	2015/16	0.321* (0.193)	0.426*** (0.141)	0.411*** (0.115)	0.419*** (0.102)	0.438*** (0.110)
	2016/17	0.143 (0.239)	0.302** (0.126)	0.311*** (0.118)	0.353*** (0.129)	0.503*** (0.113)
	2017/18	0.619*** (0.186)	0.594*** (0.148)	0.533*** (0.110)	0.574*** (0.119)	0.674*** (0.107)
	2018/19	0.486** (0.207)	0.614*** (0.182)	0.681*** (0.125)	0.596*** (0.099)	0.685*** (0.103)
Interaction	Major * Foreign	0.278 (0.361)	0.018 (0.218)	0.178 (0.144)	0.277* (0.143)	0.408** (0.162)
	Single * Foreign	0.134 (0.310)	0.055 (0.221)	0.032 (0.156)	0.215 (0.137)	0.249 (0.153)
Intercept		-16.309*** (2.867)	-11.210*** (1.940)	-10.748*** (1.566)	-8.124*** (1.594)	-5.218*** (1.506)
	Pseudo R <sup>2</sup>	0.4773	0.4829	0.5040	0.5155	0.5356
	Observations	597	597	597	597	597

Note: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ ; including bootstrapped standard errors with 1000 replications

Overall, with regard to our hypotheses, the results show no consistent picture regarding a significant effect of ownership concentration and investor origin. In particular, we find no evidence supporting hypothesis 1. In contrast to what we expected, the results of most model specifications indicate that rather than having a positive effect on transfer fees, especially single ownership seems to have a negative effect on individual transfer fees. With regard to hypothesis 2, we find fairly consistent results for a higher willingness to pay by foreign investors especially for players with transfer fees in the upper quantiles in our sample. This tendency is especially observable for foreign majority investors as indicated by the significant, positive effect of the interaction term (hypothesis 3).

## **5. Discussion and conclusion**

Although no consistent picture emerges, the results of our study lend some support to the hypothesis that especially foreign investors that hold a majority share are willing to pay a premium compared to domestic investors for players with comparable player characteristics and performance. This effect is especially observable for the upper end of the (conditional) transfer-fee distribution. Thereby, for this subset of foreign investors, we (cautiously) confirm the findings concerning the effect of foreign ownership in other industries that also identify higher investments under foreign ownership. Similarly, the positive effect of foreign majority investors on aggregated wages and net team investments (Rohde and Breuer 2016a, 2016b) seems to be partly observable also for individual transfer fees while accounting for player characteristics. As we control for player characteristics such as the performance, the question arises if foreign majority investors experience a winner's curse (see Capen, Clapp, and Campbell 1971) when they pay a premium compared to their domestic counterparts. However, even if this is the case, these investors seem to be willing to do so in order to achieve their objectives associated with the club ownership.

This investment behavior of foreign (majority) owners touches on two main fears in European football. The first one addresses the financial competitiveness within and among the European football leagues, while the other concern is rather of an emotional nature associated with a club's identity.

The first aspect refers to the assumption that the investor's wealth is crucial for his or her investment behavior (Rohde and Breuer 2016b). In this context, it is important to note that with an increasing number of foreign investors, the variety found in the owners' backgrounds has also increased. Nowadays, there are not just wealthy private investors or corporations that own

football clubs, but also investors that have the financial support of entire states, which results in very different spending powers for the clubs (England and Ahmed 2019).

Attempting to control the high spending of football clubs, the governing bodies have adjusted their regulatory framework. In order to combat overspending and ensure competitive balance, UEFA tried to put limits on the clubs' spending by introducing the "Financial Fair Play" regulations (Franck 2014). Despite these regulations, transfer fees and wages (on the individual and aggregated level) still reached new dimensions almost every year – figures that are partly driven by foreign investors as shown in this study.

Based on this investment behavior, ethical discussions about the background and motivations of club owners have increased. As a reaction, the national leagues have introduced different complementing mechanisms such as owner tests and restrictions on multiple club ownership (UEFA 2020, p. 55) in order to exclude investors with questionable objectives.

From an emotional side, football fans regularly express the fear that (foreign) investors might have negative effects on the club's identity and traditions when the club is forced to follow the investor's financial or reputational objectives. The discussion leads to growing hatred, especially in the ultra-fan camp, which sometimes even manifests itself in death threats - for example, against the Glazer family and their affiliates (Ducker 2014; Wilson 2020). The main criticism focuses on the perceived objective of revenue maximization, as some fan groups argue that certain sponsorship deals and other commercial activities of the clubs are against the clubs' traditions (e.g., "Red Bull" in Leipzig). In the past, this has already led to fan groups quitting their support for the club and founding their own club in a lower division (Millward 2011). Therefore, one of the key concerns, especially for foreign club owners, should be to avoid tensions with a larger fan base as this might have negative consequences on their objectives (both financial and reputational). At this point, future research regarding the interface between the communication and marketing departments could give new strategic insights on how to solve the problem, especially in countries with strong fan bases.

While focusing on the English Premier League in this paper, the topic is equally important for other European leagues. Moreover, the English Premier League can be seen as a pilot project for foreign investors because English clubs were the first investment objects for those investors. On one hand, therefore, potential investors can learn from the activities of prior investors, and on the other hand, clubs can also gain important insights for their strategic decisions concerning opening their clubs for foreign investors. Among the five major leagues, investors have entered

all leagues at this point, although to different extents. Particularly in Germany, the country with the lowest number of investors, the entry of investors is a highly discussed topic (Franck 2010b; Lorenzen 2020). In particular the financial concerns of many German football clubs due to the COVID-19 pandemic may potentially fuel the discussion again, as investors might be beneficial for German clubs to consolidate their finances in case of an abolition of the “50+1” rule (on the economic impact of COVID-19 in European football, see Drewes, Daumann, and Follert 2020).

Part of the limitations of this study concerns the availability of data. While the wealth of the investors would be an additional interesting variable to consider, information about the wealth is not available over time. Although the information about the remaining contract duration used in this study is reliable, we could not account for special contract clauses such as fixed transfer fees or exit clauses in cases of relegation. When interpreting the results, it is important to note that this study focuses particularly on individual transfer fees and not on the total investments of a financial investor. While Rohde and Breuer (2016b) have already analyzed the impact on aggregated team wages, the impact of investors on other club-related investments (e.g., investments in infrastructure) should be subject to future research. Future research should also validate the results by analyzing other leagues - such as the Ligue 1 and Serie A - including an analysis whether (foreign) investors also have an effect on the income from transfer activities (i.e., player departures). Lastly, the interaction between player agents and club owners is of further interest, as agents have become key figures operating in the transfer market (Bergin and Bryan-Low 2019). Evaluating these topics will provide further empirical evidence on the effect of investors on team investments in football. Related to the COVID-19 pandemic, it will be interesting to observe how potential revenue decreases will affect the transfer fees and the financial support by investors.

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