

Financial analysis of the transfer market in the big-5 European leagues (2010-2019)

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1. Introduction

Since its creation in 2005, the CIES Football Observatory has been monitoring the transfer of players through information published by clubs and the media. The 47th edition of the Monthly Report analyses from a financial perspective paid transactions having taken place since 2010 which involved teams from the five major European championships: the English Premier League, the Spanish Liga, the German Bundesliga, the Italian Serie A and the French Ligue 1.

In four chapters, the study analyses the sums paid in transfer indemnities by big-5 league teams, the clubs and championships who benefited from these investments, the net balance sheets for both teams and leagues, as well as inflation observed year by year since 2010. The latter is calculated on the basis of the exclusive CIES Football Observatory transfer value algorithm.

The figures published in this report include fixed indemnities for permanent transfers, eventual add-ons, as well as sums invested for paying loans. The amounts paid in the case of loans with an obligation to buy are computed for the year of the transfer. Within the limits of the information available, the data on the beneficiaries take into account the resale percentages negotiated by former clubs.

2. Investments

A new record for spending was recorded in 2019: €6.6 billion. This sum is almost a 10% increase over the previous record of 2017. In ten years, the investments in transfer indemnities carried out by big-5 league clubs have grown by more than four times. In only two cases, in 2012 and 2018, were the amounts paid out less than those for the preceding year.

In 2019, a new spending record was established in three of the leagues studied: the Liga, the Serie A and the Bundesliga. As for the previous nine years, English clubs invested the most for the recruitment of new players: €1.9 billion. Over the last decade, transfer indemnity investments of Premier League teams accounted for 35.8% of the total measured for the big-5. This proportion has decreased since two years in line with the decision to close the summer transfer window before the opening of the season.

Figure 1: big-5 league club transfer fee investments, € million

Year	Summer	Winter	Total
2010	1,394	148	1,542
2011	1,813	522	2,335
2012	1,668	287	1,955
2013	2,328	387	2,715
2014	2,514	390	2,904
2015	3,367	484	3,851
2016	3,733	501	4,234
2017	5,279	785	6,064
2018	4,766	1,040	5,806
2019	5,787	835	6,622

Figure 2: transfer fee investments by league, € million

	ENG	ESP	ITA	GER	FRA
2010	475	305	416	178	169
2011	834	431	646	217	207
2012	722	178	483	309	264
2013	922	457	579	311	447
2014	1,258	586	476	350	235
2015	1,504	629	849	499	370
2016	1,774	607	855	716	283
2017	2,093	795	1,262	797	1,117
2018	2,152	1,292	1,167	616	579
2019	1,908	1,503	1,500	880	830

The rankings of clubs having invested the most in transfer fees since 2010 demonstrate the incredible financial clout of a handful of dominant teams. While no club has spent as much as Manchester City, eight other teams have invested more than a billion euro over ten years. All of the Champions League finalists since 2005 are part of the twenty teams having spent the most over the past decade.

In 2019, three Spanish teams were at the top of the rankings for clubs having spent the most on transfer indemnities. This finding reflects a cyclical need for squad renewal, but also the availability of considerable financial possibilities linked to the establishment of the Spanish top division as the second most powerful league on the planet after the English Premier League.

Figure 3: transfer fee investments by club, € million (2010-2019)

1	Manchester City FC (ENG)	1,638
2	FC Barcelona (ESP)	1,525
3	Chelsea FC (ENG)	1,428
4	Paris St-Germain FC (FRA)	1,392
5	Juventus FC (ITA)	1,272
6	Manchester United FC (ENG)	1,265
7	Real Madrid CF (ESP)	1,236
8	Club Atlético de Madrid (ESP)	1,110
9	Liverpool FC (ENG)	1,075
10	Internazionale Milano FC (ITA)	968
11	AS Roma (ITA)	895
12	AS Monaco (FRA)	862
13	Milan AC (ITA)	853
14	Arsenal FC (ENG)	830
15	Tottenham Hotspur FC (ENG)	763
16	Everton FC (ENG)	752
17	FC Bayern München (GER)	727
18	BV 09 Borussia Dortmund (GER)	702
19	SSC Napoli (ITA)	693
20	Valencia CF (ESP)	611

Figure 4: transfer fee investments by club, € million (2019)

1	Club Atlético de Madrid (ESP)	329
2	Real Madrid CF (ESP)	324
3	FC Barcelona (ESP)	256
4	Internazionale Milano FC (ITA)	212
5	Juventus FC (ITA)	186
6	Milan AC (ITA)	183
7	Manchester City FC (ENG)	177
8	Aston Villa FC (ENG)	174
9	BV 09 Borussia Dortmund (GER)	173
10	Tottenham Hotspur FC (ENG)	170
11	Sevilla FC (ESP)	163
.	Manchester United FC (ENG)	163
13	Arsenal FC (ENG)	160
.	FC Bayern München (GER)	160
.	AS Monaco (FRA)	160
16	Paris St-Germain FC (FRA)	150
17	Everton FC (ENG)	147
18	Real Betis Balompié (ESP)	124
19	Chelsea FC (ENG)	118
20	SSC Napoli (ITA)	115

3. Receipts

The analysis of teams who have benefited from the transfer fees invested by big-5 league clubs over the last decade shows that most of the money stays within these championships: 66.0% of the total. A similar percentage was recorded in 2019. The high level of these percentages reflects the fact that the most expensive transfers generally take place between clubs of the five major European leagues.

With more than one billion euro received since January 2010, Monaco is the team having benefited the most from investments made by big-5 league clubs for the recruitment of new players. Chelsea and Juventus also received a lot of money. However, as with the other major clubs in this ranking, the amounts received are lower than those spent. Only three teams outside of the five major championships figure in the top twenty places: Benfica (4th, €780 million), Porto (11th, €592 million) and Ajax (14th, €513 million).

Figure 5: beneficiaries of transfer fees invested by big-5 league clubs

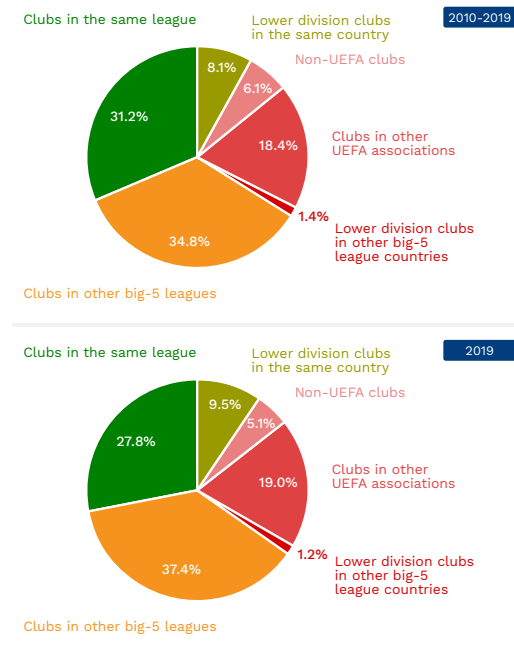


Figure 6: clubs having received the most transfer fees by big-5 league teams, € million (2010-2019)

1	AS Monaco (FRA)	1,029
2	Chelsea FC (ENG)	868
3	Juventus FC (ITA)	787
4	SL Benfica (POR)	780
5	Real Madrid CF (ESP)	763
6	Club Atlético de Madrid (ESP)	754
7	AS Roma (ITA)	726
.	FC Barcelona (ESP)	726
9	Liverpool FC (ENG)	716
10	BV 09 Borussia Dortmund (GER)	678
11	FC Porto (POR)	592
12	Sevilla FC (ESP)	582
13	Valencia CF (ESP)	539
14	AFC Ajax (NED)	513
.	Tottenham Hotspur FC (ENG)	513
16	Olympique Lyonnais (FRA)	497
17	Manchester City FC (ENG)	492
18	LOSC Lille (FRA)	483
19	FC Genoa 1893 (ITA)	472
20	Paris St-Germain FC (FRA)	453

4. Net balance

For an optimum understanding of the economy of the transfer market, aside from the amounts spent and the beneficiaries, it is essential to examine the net balance of operations. Over the past decade, the big-5 league clubs have recorded a cumulative deficit of €8.9 billion. English Premier League clubs alone have a total net negative balance of €6.5 billion.

Despite the considerable investments by Paris St-Germain (cumulative deficit of €901 million over the past decade), the French Ligue 1 is the only championship of the big-5 with a positive net balance (+€359 million). During the last two years, the net balance of transfer operations carried out by French top division teams have reached historic new heights (+€485 million overall).

Figure 7: net balances of transfers, big-5 leagues

	ENG	ITA	ESP	GER	FRA
2010	-263	-87	+23	-29	+18
2011	-311	-100	-104	-3	-17
2012	-338	+15	+46	-124	-59
2013	-568	-36	+65	-74	-141
2014	-508	-38	-6	-134	+31
2015	-720	-197	-156	+38	+100
2016	-1,038	+69	-19	-188	+151
2017	-767	-146	-62	-99	-209
2018	-1,213	-268	-220	+12	+333
2019	-762	-430	-367	-157	+152
Total	-6,488	-1,218	-800	-758	+359

The rankings of big-5 league teams with the most positive balance sheets on the transfer market since 2010 highlight again the exceptional case of the Ligue 1. Three teams of the French top division are in the first four positions of the rankings: LOSC Lille, Monaco and Olympique Lyonnais. In addition, ten of them are in the top twenty places.

Manchester City, Paris St-Germain, Manchester United and Barcelona have the most negative net balances regarding transfers over the past decade. Twelve teams from the Premier League are also in the top twenty rankings. Moreover, all of the clubs from this championship have a negative net balance. This reflects the importance of the financial resources available to all of the Premier League teams. This is a unique situation in comparison to the four other championships of the big-5.

Figure 8: most positive net balances for transfers, big-5 league clubs

	2010-2019	2019
1 LOSC Lille (FRA)	+249	+83
2 AS Monaco (FRA)	+215	-76
3 FC Genoa 1893 (ITA)	+193	+25
4 Olympique Lyonnais (FRA)	+174	+45
5 Udinese Calcio (ITA)	+169	+1
6 TSG 1899 Hoffenheim (GER)	+139	+94
7 Athletic Club Bilbao (ESP)	+114	-5
8 Montpellier Hérault SC (FRA)	+111	+22
9 Atalanta BC (ITA)	+109	+26
10 RCD Espanyol (ESP)	+95	+36
11 Sevilla FC (ESP)	+86	-52
12 AS St-Étienne (FRA)	+81	+45
13 FC Girondins de Bordeaux (FRA)	+77	+26
14 Toulouse FC (FRA)	+66	+2
15 Villarreal CF (ESP)	+65	+51
16 Stade Rennais FC (FRA)	+62	+8
17 OGC Nice (FRA)	+51	-31
18 Angers SCO (FRA)	+44	+23
19 Real Sociedad de Fútbol (ESP)	+37	-14
20 1. FSV Mainz 05 (GER)	+36	-7

Figure 9: most negative net balances for transfers, big-5 league clubs

	2010-2019	2019
1 Manchester City FC (ENG)	-1,091	-69
2 Paris St-Germain FC (FRA)	-901	-29
3 Manchester United FC (ENG)	-833	-61
4 FC Barcelona (ESP)	-720	-116
5 Milan AC (ITA)	-439	-153
6 Real Madrid CF (ESP)	-425	-175
7 Juventus FC (ITA)	-414	-1
8 Chelsea FC (ENG)	-395	+128
9 Internazionale Milano FC (ITA)	-391	-132
10 Arsenal FC (ENG)	-366	-81
11 FC Bayern München (GER)	-309	-83
12 Everton FC (ENG)	-297	-51
13 West Ham United FC (ENG)	-291	-33
14 Liverpool FC (ENG)	-285	+42
15 Aston Villa FC (ENG)	-269	-174
16 Brighton & Hove Albion FC (ENG)	-248	-87
17 Wolverhampton Wanderers FC (ENG)	-215	-81
18 Bournemouth AFC (ENG)	-212	-57
19 Leicester City FC (ENG)	-199	-12
20 RB Leipzig (GER)	-191	-67

5. Inflation

The algorithm estimating transfer values exclusively developed by the CIES Football Observatory allows for the calculation of inflation. Indeed, the statistical model includes a variable for the year during which the paid transfers included in the sample were carried out. The differences observed at the level of this variable thus reflect the annual variations of prices, all other factors being equal. This analysis shows that there was a +181% inflation since 2011 and that the average growth rate for the five last years was +25.8%.

The model was built on a sample of 1,852 paid transfers. The correlation between estimated values and fees effectively paid is very high: 86%. The correlation between transfers occurred during the last transfer window based on a model built on fee paying operations concluded between January 2010 and January 2019 was also very strong: 77%. This confirms the high predictive strength of the algorithm developed by the CIES Football Observatory.

Figure 10: inflation of transfer prices (2011-2019)

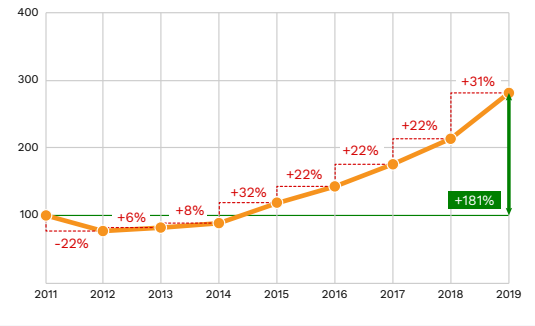
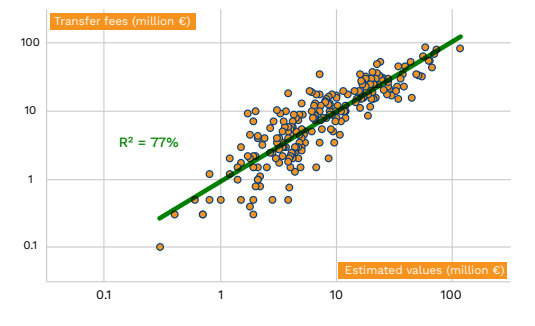


Figure 11: correlation between estimated values and fees paid, summer 2019



6. Conclusion

The amounts at stake on the football players' transfer market have strongly increased over the past decade. At big-5 league level, the investments in transfer indemnities have grown from €1.5 billion in 2010 to a new record of €6.6 billion in 2019 (+340%). The biggest increase in absolute terms was observed in the English Premier League (+€1.4 billion), while the most noteworthy growth in relative terms was recorded for the German Bundesliga (+395%).

The spatial analysis of net financial flows for international transfers concerning big-5 league teams illustrates the key role played by the Premier League. Since 2010, six out of the seven international relations with the greatest net monetary flows involved the English top division.

Despite the increase in spending and a strongly inflationary context, the growing recourse by clubs to payments spread out over several years shows that more and more teams are finding themselves at the limit of their financial capabilities. In an ever more speculative and unequal environment, an increasing number of clubs, even within the most powerful leagues, include the profits made on the transfer market into their financial model. This situation is not without danger for their stability, their independence and their competitiveness.

Figure 12: main cash balances (>100 million €) for big-5 league club international transfers (2010-2019)

1	Premier League → Ligue 1	1246
2	Premier League → Bundesliga	767
3	Premier League → Serie A	729
4	Premier League → Liga	658
5	Liga → POR	614
6	Premier League → POR	524
7	Premier League → NED	438
8	Liga → BRA	324
9	Premier League → BEL	304
10	Serie A → NED	284
11	Serie A → Liga	244
12	CHN → Premier League	225
13	Ligue 1 → POR	221
14	Serie A → BRA	212
15	Bundesliga → SUI	209
16	Ligue 1 → Serie A	201
17	Liga → Ligue 1	197
18	Serie A → ARG	185
19	Premier League → BRA	183
20	Serie A → POR	181
21	CHN → Liga	147
	Bundesliga → AUT	147
23	Liga → NED	146
24	Ligue 1 → BRA	138
25	Bundesliga → NED	124
26	Ligue 1 → BEL	114
	Serie A → CRO	114
	Bundesliga → UKR	114
29	Premier League → SCO	113
30	Bundesliga → Ligue 1	109
31	Liga → ARG	105