

Sports Analytics : An Analysis Into What Makes Football Clubs Successful

- Ashwin KV, Aaron G, Amal Mohan

Abstract

Gone are the days when football clubs used to be simply a collective of people kicking the ball around on a Sunday for fun. Modern day football clubs have evolved into profit making businesses. Success of a football club is not simply dependent on their on-field outcomes but also on their off-field performance. This football club as a business mentality has helped teams like FC Barcelona, Real Madrid to be successful multi-billion dollar corporations, still managing to succeed in majority competitions that they play in too. Through this paper we aim to analyse what are the factors that contribute to the success of a football club on and off-field. With a heavy focus on the off-field aspects. Initially our study focuses on the correlation between a club's transfer and wage spending to on field success. Clear correlation between wages and club success arose as a result of the study. Further, a review of the existing literature was done to see the present scenario in various leagues across Europe and Australia and their spending patterns were noted. Finally, the clubs were divided into two subgroups 'Buying Clubs' clubs predominantly involved in buying players from other clubs to enhance their squads as opposed to 'Selling Clubs' who develop homegrown talents and sell them to the 'Buying Clubs'. A case study was performed on two clubs falling in the aforementioned subgroups to determine the factors affecting their success. The major factors that contributed towards off-field success turned out to be player wages, transfer spending and stadium expenditure.

Keywords: Football Clubs, Wages, Transfers, Stadium Expenditure

Introduction

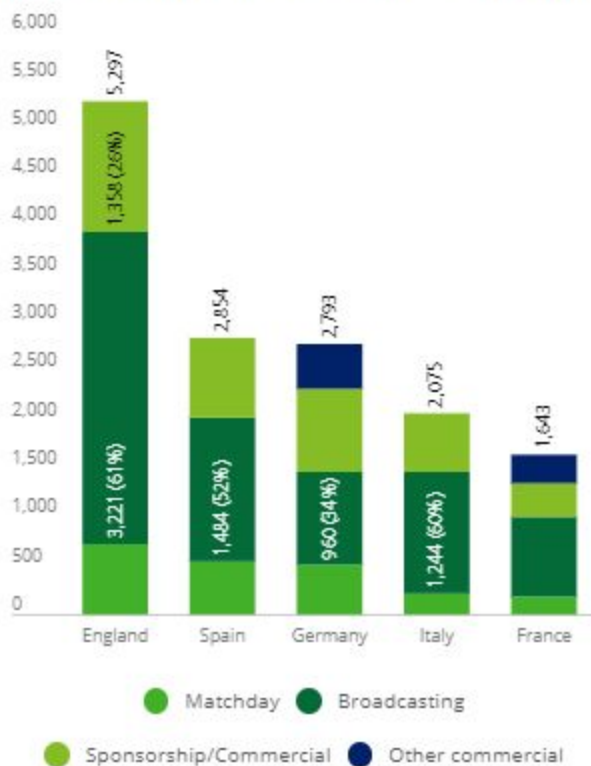
As of a 2018 report from 'Deloitte' European football is worth a whopping 22 Billion pounds. The big five European leagues generated a record €14.7bn (£12.6bn) in revenue in 2016-17, a 9% annual increase, according to new figures from Deloitte. It says the European football market is now worth some €25.5bn (£21.9bn). The English Premier League was the market leader, with record revenue of £4.5bn, as each of the 20 clubs set their own annual revenue record. In revenue terms, the Premier League is 86% larger than its nearest competitor, Spain's La Liga. Deloitte said the financial results of the 2016-17 football season reflected a new era of improved profitability and financial stability for European football clubs. It said the Premier League had benefited from the impact of its record broadcasting deals, as well as from operating in a regulated business environment, via Uefa Financial Fair Play regulations and

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the league's own cost control measures. Just a decade ago, 60% of Premier League clubs were making an operating loss, whereas in the 2016-17 season, all clubs were profitable. Outside the UK, the success of La Liga's collective sales approach saw broadcast revenue growth of 20%. That followed on from 26% growth in the 2015-16 season, has meant collective La Liga revenue grew to a record €2.9bn in 2016-17. The Spanish league has overtaken the Bundesliga to be the world's second-highest revenue-generating league. Meanwhile, the German Bundesliga remained the best attended European league, with average crowds of over 44,000. Bundesliga clubs collectively maintained their strong overall revenue growth, up 15% from 2015-16 to €1.4bn. Italy's Serie A saw revenue grow by 8% to more than €2bn for the first time. The majority of this growth came from commercial sources, with revenue increasing by €91m (17%) on 2015-16. More than three-quarters of this was solely attributable to Internazionale, following the club's acquisition by Chinese electronics retailer Suning in June 2016. France's Ligue 1 remained the lowest revenue-generating of Europe's "big five" leagues, at €1.6bn in 2016-17, despite entering a new four-year domestic broadcasting rights cycle.

Big five' European league clubs' revenue - 2016/17 (€m)



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Research Methodology

Identification of Problem

This rapid growth of the industry has resulted in big and small clubs trying desperate measures to maximize their off-field performance. Due to the highly competitive market clubs are looking for non-traditional revenue generating streams like broadcasting, kit sponsorship stadium sponsorship and all other means to channel as much revenue as possible. Although, clubs are still sticking to the older revenue generating streams as well. Through this papers we look into these various revenue generating streams for football clubs and what can they do to maximize those streams and churn a profit.

Objectives of Research

1. To identify factors which affect a football club's off-field performance.
2. To advise clubs on how to better their off-field performance by a clear understanding of these factors.
3. To devise tailored approaches to better off-field performance for clubs of varying Philosophies (Buying and Selling Clubs).

Present Literature

According to "The association between financial performance and sporting success" by 'Santeri Ahtainen, Aalto University School of Business, most important revenue sources are match day sales, and it is still main income source for clubs participating in smaller leagues.

From a sample consisting of 690 observations of 139 different clubs that have played in top-five leagues (English Premier League, German Bundesliga, French Ligue 1, Italian Serie A and Spanish La Liga) between years 2008 and 2016. Financial data consists of revenues and operating profit, and it's restricted through public availability.

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Thus, when acquiring match day revenue, clubs' objectives should be:

1. Maximizing the number of home games.
2. Building public's interest for the games and
3. Providing a good scale of hospitality services.

Revenue from broadcast rights has grown to be the main income source for clubs participating in Europe's largest leagues. Normally most of the income is distributed to clubs, but part of it might be also used to cover some running costs or for the benefit of other important stakeholders. For the largest competitions, distribution mechanism often consists of three different factors:

1. Equal share.
2. Facility fees and
3. Merit payments.

Third and possibly most significant revenue source for the clubs in the future, is usually referred as a commercial source. Most important commercial sources are sponsorship and merchandising. These two are highly dependent on club's popularity. When clubs are maximizing their on-pitch performance and revenues, they are at the same time maximizing their players' wages. These three things are tied to each other. The positive correlation between wages and sporting success has been acknowledged since the beginning of research in sports economics. Higher wages lead to more talented players, which in turn increases clubs' popularity and onpitch performance. These things again lead to greater sponsorship deals, merchandise sales and higher stadium utilization rates. One could picture European football clubs' business as a kind of vicious circle. Transfers are in the key role determining club's sporting performance and possibilities to success. As the club acquires new players, the end product of football game changes, and public is highly interested in these changes. In the media, there exists lots of speculation about possible transfers and how they could affect clubs' possibilities to success.

From this information, we decided to investigate the correlation between league position for a club as opposed to wage and transfer spending.

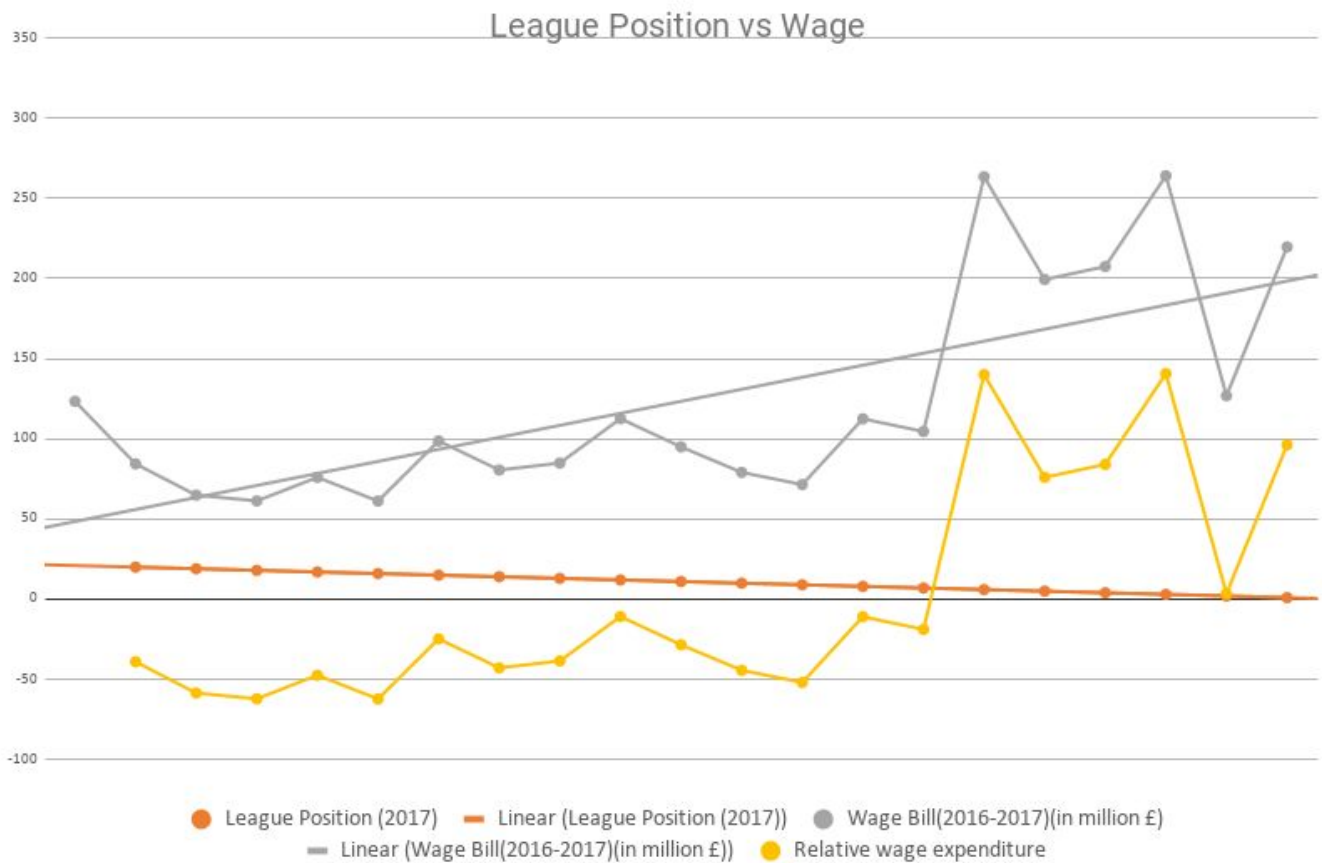
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League position Vs Wage and Transfer Spending

League Position vs Wage

In this section we look into the 20 premier league clubs and their relation between league position and relative wage spending compared to the league average.



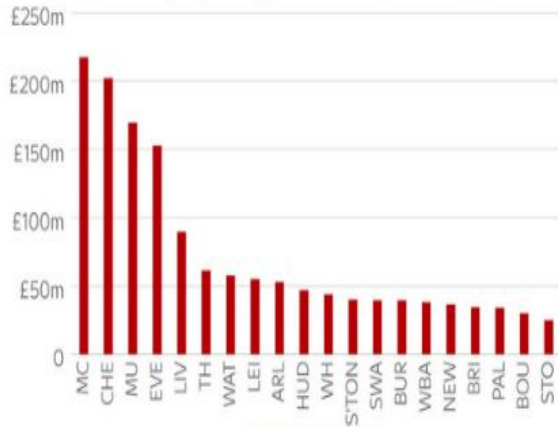
Transfer Spending

In this section we look into the 20 premier league clubs and their net spending pattern. Which is basically money spent on buying players minus the money earned from players sold in the 2017 transfer window.

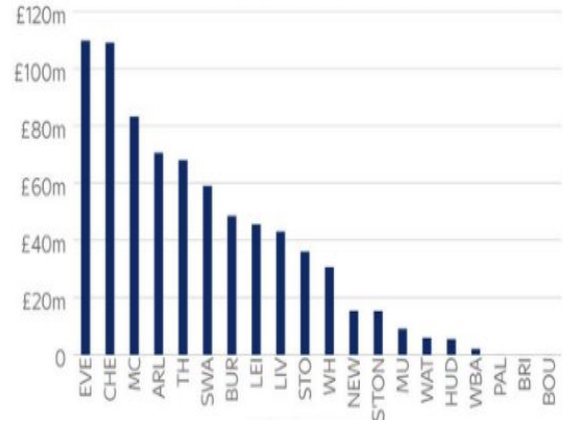
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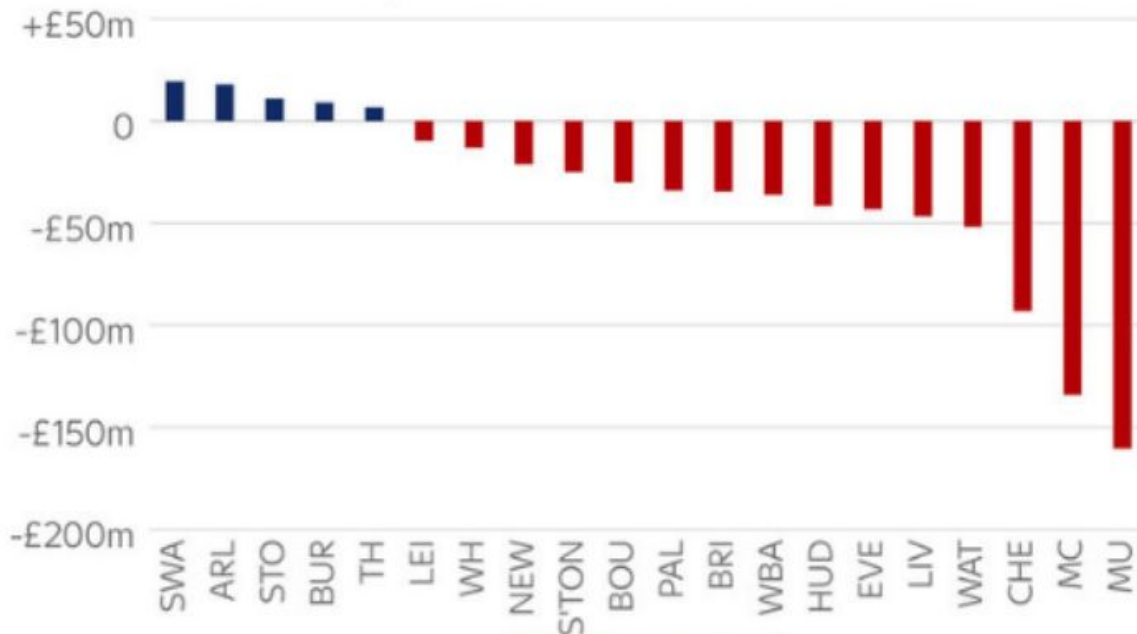
Total spent on players signed, 2017 summer transfer window



Total income from players sold, 2017 summer window



Net transfer expenditure, 2017 summer transfer window



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It is observed that clubs paying higher wages performed well in the season and that wage expenditure is a key factor in club's performance. Linearization of the plot was done in order to enhance and emphasize the linearity in the relationship among them. A similar analysis was performed for transfer expenditure (Net Spend) but a similar correlation could not be observed. It could be concluded that the net spend in the transfer market had relatively little impact on the league performance of the club.

Drawbacks to this analysis

1. The observations were made without considering the fact that different clubs have different financial conditions and capabilities.
2. The league position cannot solely be predicted or analysed by considering expenditures of a club. The performance of a club hugely depends upon a number of other factors.

Since it is unfair to compare clubs with different financial conditions and operating strategy, the clubs should be segregated on common ground and analysis performed on them should give concrete results.

Revenue, profit and other financial data are easier to analyse and draw conclusions upon rather than on-field performance or league position.

To avert the above mentioned limitations we decided to divide the clubs according their governing philosophies. The two main governing philosophies are 'Buying Club' and 'Selling Club' philosophies.

In the next section of the analysis we will be looking at these philosophies and trying to fit clubs into them. From that we will determine what factors should buying clubs focus on to better themselves and what aspects should the selling clubs focus on. A case study on 2 clubs fitting into these categories will be undertaken.

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Buying Club Philosophy

The main aim of this study is to understand and analyse the finances of clubs that look to get the best players in the transfer market by fully exercising their financial power over the other clubs and often does so by making a dent in their financial balance-sheet. Here we analyse some of the few clubs that have had no qualms in smashing transfer records when it comes to get the best in the business in their hunt for silverware.

Paris Saint Germain

The way things have been headed, the only deterrent to PSG's spending spree is only the Financial Fair Play(FFP) norms that they are bound by to stay in competition. Although they had some big signings like Ronaldinho and Pauleta in the past, their real resurgence came in 2011, with the arrival of new owners QSi Qatar Sports Investments (QSi), and new club president Nasser Al-Khelaifi. QSi established an extremely ambitious project to take the club to the summits of the European game. It started off with the signings of Zlatan Ibrahimovic and the club got into the limelight having had the honour of being David Beckham's final club. Several other big money signings like David Luiz, Thiago Silva and Edinson Cavani in the next couple of seasons.

But all of this big money spendings comes with its consequences as in May 2014, UEFA punished PSG for violating Financial Fair Play (FFP) rules. Most notably, FFP sanctions included a €60m fine, amongst other sporting and financial measures.

Despite these impositions, PSG seems to have managed to evade the policy and gone on to make record-breaking transfers with Neymar's 222 Million and Mbappe's 180 Million Euros transfer. But these transfers have come at a price of their own in keeping up with the regulations. PSG needed to generate nearly \$150M annually in order to match its 2015/16 financial statement that showed a net profit after tax of \$13.4M. Simply, PSG had to sell players in order to make the numbers work this year and for a number of years after.

The exodus started with Blaise Matuidi being sold to Juventus of Italy for \$23M; Jean-Kévin Augustin to RB Leipzig for \$15M; right-back Serge Aurier looks set to move to Tottenham Hotspur of the Premier League for \$30M right in the beginning of 2017-18. In June 2018, UEFA cleared the club of breaching financial fair play rules. A month later, however, UEFA's Club Financial Control Body (CFCB) announced it would review its decision. But as of now, PSG looks to get the best in the business, hoping to realise the vision of their President, to win that illusive UEFA Champions League crown that they have failed to win after all these years.

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Manchester City

For years, Manchester had always been red. Sir Alex Ferguson's knack for scouting and transfers in building what was undeniably one of Europe's best teams for over decade. From Eric Cantona to Cristiano Ronaldo, Manchester United had dominated football in England for years. The overwhelming success of Manchester United had pretty much pushed their neighbours Manchester City into oblivion. There had been a time not so long ago in Manchester City's history when they played in the third division of English football. All of their past failures were put behind them as the acquisition of the club by the Abu Dhabi United Group in August 2008, heralded a new era for the club.

A statement of intent was signalled by Manchester City on the deadline day of August 2008 when they signed Robinho from Real Madrid for a then club record fee of €30mn. More big name signings followed up in the next couple of seasons as they managed to rope in Sergio Agüero, Joleon Lescott, Gareth Barry and Vincent Kompany among others. The Abu Dhabi Group at the helm looked to build a squad that would challenge for titles at the highest level.

This culminated in what was their first Premier league title in 43 years, as they won it on the last day in 2011-12 season in what was described as the greatest PL title win in the history as Agüero's 93rd minute winner saw them pip United. Manchester was now Blue.

There was no turning back for City from here on. With the owner's deep pockets, the squad went from strength to strength, picking up the best from all over Europe. They picked Sterling for €63 mn in 2015-16, for what was then a Premier League Transfer Record.

One big insult thrown in the face of City's fans is along the lines of: "well, City have bought the league", implying that Pep Guardiola's men only won because the club had an open cheque book to throw around and sign whoever they want, regardless of the price.

In the early days of the Sheikh revolution, the wages/income percentage figures looked worrying, with City admittedly spending big money and often being made to over pay for players to tempt them to City, at a time when English domination was a dream rather than a reality. Now, City do not have to pay over the odds. Obviously, if they sign the best players, they still have to pay them big money. But now, it is more that players see the project at the Etihad and want to join regardless of the money. In the first five years following the takeover, City recorded a loss. Sheikh Mansour's strategy seemed rash, as he invested heavily at the start of his reign, but with successes on the pitch, many factors contributed to the fact that City are now a profitable organization. All of these results are pleasing for Manchester City, as this carefully crafted strategy seems to be thriving and the Sheikh's money has certainly not dried up. Manchester will be blue, for some time to come.

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Real Madrid

One club that has absolutely epitomised the buying club philosophy has to be Real Madrid. One of the most ambitious footballing projects of the recent times - The Galacticos; a bunch of super star footballers all coming together to be a part of what was undoubtedly one of the strongest squads in the history of football. The Dream Team of European Football.

Florentino Perez undertook the first leg of this ambitious project in 2000, when he managed to rope in 4 of the biggest stars of world football, Zinedine Zidane, David Beckham, Ronaldo and Luis Figo over the next two seasons, with two of them being world record transfers at that time. But the already successful Real Madrid side, which had already won the Champions League title twice in the last 3 years didn't deliver as expected. The only major trophy won by them in this time was a Champions League crown in 2002. Perez was often criticised for his policies in making the squad far too attacking, and not focussing enough on the defensive side of things. Following the end of Perez's first term, the Galacticos had grown old and promptly collapsed.

But with rivals Barcelona gaining their famous sextuple season of 2008-09, things looked dim at the Bernabeu. Enter Perez for a 2nd term, and he went about breaking transfer records again, signing Ronaldo for a record 94 Million Euros and roping in Kaka, Xabi Alonso and Karim Benzema in his first season at the helm. They got in Modric, Di Maria, Isco and Bale through the next four seasons, and the latter came in at a world record transfer fee. This time around, the project of his worked wonders, as they got 4 Champions League titles in 5 years from 2014-18 with what can only be described as a dream team.

So how exactly do they finance all these transfers?

Real Madrid is organised as a registered association. This means that Real Madrid is owned by its supporters who elect the club president. The club president cannot invest his own money into the club and the club can only spend what it earns, which is mainly derived through merchandise sales, television rights and ticket sales. The members of Real Madrid, called socios, form an assembly of delegates which is the highest governing body of the club.

Real Madrid is no longer merely a football club. It is a brand in itself. It is one of the most valuable professional sports organisation in the world, with a worth of around \$4.06 Billion, having generated a revenue of around \$746 Million in the year 2017. The supporters and fans of the clubs pay for them, and gives them the financial backing to splurge the moolah when it comes to the players.

Although the transfer of Ronaldo has brought a run of bad form to the Spanish capital, this season, the club's brand value has shown no sign of receding and hopefully, this would help in bringing the club out of their slump.

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Overview of Buying Clubs

In retrospect, most there are several football clubs out there today, who have seemingly utilised the large finances afforded them to by their owners. The entry of "Oil Money" into football has largely turned around the fortunes of several football clubs with Manchester City and PSG being prime examples that we looked into. But the glory and success of the big trophies help in generating a larger pool of revenue when it comes to football clubs, and that in itself can sustain the transfers and help in compensating for big-money signings. We have seen this in the case of Real Madrid, one of the richest fan owned clubs. Despite all the money being thrown into the transfer market by clubs, there is still more to the success of football club's success than merely spending it on the big signings. A deeper look into the revenue generated by clubs and the money they into development of facilities go a long way in the long run, instead of big signings.

Selling Club Philosophy

These clubs are known for generating income primarily from selling their prominent and highly valued player. The reality is that not all clubs are on the same financial level and thus most of them have become a breeding ground for talent for the top clubs in the world (sometimes forcibly). These clubs known as the feeder clubs or rather more appropriately the smart clubs always seem to be on the brink of success or may enjoy the glory for one season and then they happen to sell their prized assets to the bigger guns. The major focus will be on the top 5 selling clubs of Europe.

Liverpool

Liverpool were not actually falling in this category but the reality is that they have become one such club in the recent years. We can call them the, "selling club among the elite ones". The names that instantly pop up in my head are Suarez, Fernando Torres, and Sterling. The Scousers were left with little option other than selling them not because of financial difficulty but because there are other bigger clubs in the league.

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Sevilla

They are a club famous for buying players for peanuts and selling them off for millions. Their former sporting director, Monchi was a master at this task and the club gained a lot through this (winning Europa Leagues and 2 Copa Del Rays) but have never managed to become of the elite clubs. Dani Alves, Sergio Ramos, Alvaro Negredo, Ivan Rakitic, Carlos Bacca..That would have been a heck of a line up if Sevilla were able to hold on to them. They were sold to bigger clubs mainly because of financial reasons.

Borussia Dortmund

Well, they are the ones who help Bayern Munich to remain on the perch in Bundesliga. Lewandowski, Gotze (Back to Dortmund after a failed stint with Munich), Hummels are some of the high profile names who switched their allegiance to Munich because the Bavarians are the Elite club in Germany and Dortmund isn't close to them by any means. After the CL final loss to Munich a few years back under Klopp, they haven't been able to reach those standards because of regularly selling their top players to the big guns.

Benfica

The ever-increasing financial gap between the Portuguese league and other top notch leagues in Europe have ensured that the Benfica side will continue to be a feeder club. Di Maria, David Luiz, Ramires, and Matic are some of the marquee names who made a name for themselves in Benfica before packing their bags to move onto clubs which have a genuine chance of winning CL year after year. They are one of the best teams in Portugal but when it comes to Europe, they struggle because of not being able to hold onto their star players.

Southampton

The club where Liverpool digs into to buy players for itself. Surprisingly, coaches don't last at this club either and are changed after every 2-3 seasons. It is understandable that they can't compete with clubs like United, Liverpool but then nurturing the seeds and selling off the plant every year is a bit baffling. Bale. Walcott, Lovren, Lallana, Shaw were some of the players sold to the big teams.

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Overview of Selling Clubs

The success of the club cannot be generalized by the fact that they sell their best players to generate income in the transfer market. It is the ability of the club to find replacement to the player's sold that determines the success and stability of the club.

Liverpool have continually sold off all of their best players - Steve McManaman, Michael Owen, Javier Mascherano, Xabi Alonso, Fernando Torres, Luis Suárez & Raheem Sterling. On every occasion, they failed to make adequate replacements for their outgoing players and as a result have suffered. Djibril Cissé was a step below Michael Owen, Paul Konchesky was several steps below Xabi Alonso and Mario Balotelli, simply put it, is a million miles away from Luis Suárez. As a result, Liverpool constantly settling for mediocrity has hurt them in several ways:

- It has added to their league title drought (27 years and counting)
- They have barely won anything in the last decade, only a League Cup back in 2012 and that was against Cardiff City on penalties.
- On most occasions, they are completely overlooked by top class players in the transfer window.
- The Reds are usually absent from the Champions League (bar 2014/15)
- Only four top four finishes in the last 10 years.

Mid-level clubs like Sevilla need to be selling clubs in order to be able to compete, so success for them is their continued existence in the top league of their respecting nation. The fans of these clubs are happy with this arrangement.

Southampton may have failed to replace Sadio Mane well enough, but the manner in which they dealt with the departures of the likes of likes of Dejan Lovren, Adam Lallana, Rickie Lambert, Luke Shaw, Nathaniel Clyne, Morgan Schneiderlin and Victor Wanyama is remarkable. Alderweireld, who enjoyed a wonderful campaign in the 2013-14 campaign, too was replaced well enough by the club.

They are a club that now takes pride in scouting exactly the kind of players that they need. Be it Dusan Tadic, Graziano Pelle, Virgil van Dijk or the most recent example of Oriol Romeu, Southampton have proved that a club can do well and stand on its own two feet, despite selling its best players in recent times.

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Real Madrid Case Study (Buying Club)

BALANCE SHEET

ASSETS

€ THOUSAND	06/30/2018	06/30/2017
Sports intangible assets	316,787	366,246
Other intangible assets	7,479	8,788
Property, plant and equipment	341,215	332,700
Investment properties	11,920	10,654
Non-current player transfers receivable	23,812	16,893
Deferred tax assets	13,043	12,407
Other financial assets	20,301	9,784
TOTAL NON-CURRENT ASSETS	734,557	757,472
Inventories	3,671	2,551
Current player transfers receivable	52,305	19,754
Trade receivables	98,976	105,047
Current tax assets	5,743	6,726
Cash and cash equivalents	190,109	177,988
Accruals	3,664	5,124
TOTAL CURRENT ASSETS	354,468	317,190
TOTAL ASSETS	1,089,025	1,074,662

EQUITY AND LIABILITIES

€ THOUSAND	06/30/2018	06/30/2017
Social Fund and Reserves	458,912	437,540
Profit (loss) for the year	31,174	21,372
CAPITAL AND RESERVES	490,086	458,912
Grants received	4,420	4,564
EQUITY	494,506	463,476
Provisions for liabilities and charges	23,906	13,699
Bank borrowings	49,793	81,791
Non-current payables for player acquisitions	17,444	34,528
Non-current payables for stadium and Real Madrid Sport City works	1,229	320
Payables for repurchase of rights/other	902	946
Deferred tax liabilities	16,230	13,891
Accruals	24,227	16,952
TOTAL NON-CURRENT LIABILITIES	133,731	162,127
Provisions for liabilities and charges	1,920	1,745
Bank borrowings	10,151	216
Current payables for player acquisitions	38,307	54,845
Current payables for stadium and Real Madrid City works	17,138	14,749
Current payables for repurchase of rights	60	0
Trade and other payables	86,237	89,939
Wages and salaries payable	207,760	197,073
Accruals	99,215	90,492
TOTAL CURRENT LIABILITIES	460,788	449,059
TOTAL EQUITY AND LIABILITIES	1,089,025	1,074,662

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This is probably due to a psychological effect, where higher wages would improve the individual happiness of the players. This in turn, would essentially improve the success of the team, and ultimately the revenue of the team itself.

Transfer Spend: You could be a club with a really deep purse like Real Madrid, PSG or Man City, but splurging the big bucks in the transfer market has no guarantee on the fact that it would garner you success. Transfer values of players are often highly subjective and does not always represent the actual values of the players. Hence spending more on the market every season has never guaranteed success and profit for the club as Real Madrid has managed to do it, irrespective of having a negative spend.

Stadium: One of the most important revenue generators of a club is their stadium itself. The stadium is often run by the clubs like a shopping mall is, with multiple stores and sites within the complex being leased out to external agencies to set up shop. They would also look to improve facilities within the stadium to make it more hospitable for the members and spectators. A higher spending in improvement of the stadium facilities has had a positive correlation with the revenue generated. As a football club is essentially run like a financial institution, the stadium is right at the heart of its identity, and hence an expenditure on this, will contribute their commercial revenue.

Liverpool FC Case Study (Selling Club)

£455m Turnover	£125m Profit	£106m Profit After Tax
£220m Media	£154m Commercial	£81m Matchday

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2017 2018

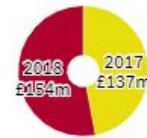
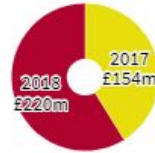
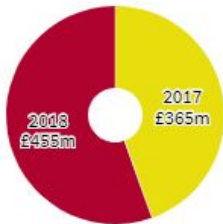
Turnover (£m)

Profit after tax (£m)

Media (£m)

Commercial (£m)

Matchday (£m)



There are certainly one off elements in this set of results - namely selling Coutinho and reaching the Champions League final. (All figure in euros)

Liverpool has been playing with the following financial strategy :

- Recruit key players particularly from low performing clubs like Southampton.
- Spend most of the money on wages
- Investing heavily (190 million) in new players
- Selling the player, the club invested on for a huge sum to top clubs.
- Reinvesting the money received on selling to the club

How Liverpool is able to achieve a spike in profitability particularly in the previous season?

- Selling Coutinho for about 142 million
- Boosting commercial performance by eight new partnerships, including the new shirt sleeve sponsorship with Western Union and global deals with Falken Tyres and Joie.
- Increase in match day revenue because Liverpool reached the Champions League finals. (7 million)
- The completion of the Main Stand which increased the capacity to 54000.
- Increase in digital media followers also added to the media profit.

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Key									
Amortisation = Amortisation Charge + Impairment									
Wages & Salaries = Wage for All Staff and Players									
Staff Costs = Wages & Salaries + Social Security & Pension Costs									
Player Cost = Wages & Salaries + Transfer Payable + Amortisation									
New Premier League TV Deal =									
IAPC = Inflation Adjusted Player Cost									
IATR = Inflation Adjusted Total Revenue									
IACoP = Inflation Adjusted Cost of Points									
Inflation is based on: https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator									
Season	Position	Points	Inflation	Player Cost	Total Revenue	IAPC	IATR	Cost of Points	IACoP
1997/98	3	65	1.00	£54,098,000	£45,457,000	£54,098,000	£45,457,000	£832,277	£832,277
1998/99	7	54	0.98	£73,291,000	£45,265,000	£71,825,180	£44,359,700	£1,357,241	£1,330,096
1999/00	4	67	0.96	£58,385,000	£46,609,000	£56,049,600	£44,744,640	£871,418	£836,561
2000/01	3	69	0.94	£86,308,000	£82,155,000	£81,129,520	£77,225,700	£1,250,841	£1,175,790
2001/02	2	80	0.92	£94,835,000	£98,668,000	£87,248,200	£90,774,560	£1,185,438	£1,090,603
2002/03	5	64	0.90	£91,114,000	£102,504,000	£82,002,600	£92,253,600	£1,423,656	£1,281,291
2003/04	4	60	0.87	£73,472,000	£91,576,000	£63,920,640	£79,671,120	£1,224,533	£1,065,344
2004/05	5	58	0.85	£107,461,000	£121,054,000	£91,341,850	£102,895,900	£1,852,776	£1,574,859
2005/06	3	82	0.82	£133,501,000	£119,499,000	£109,470,820	£97,989,180	£1,628,061	£1,335,010
2006/07	3	68	0.79	£167,449,000	£133,910,000	£132,284,710	£105,788,900	£2,462,485	£1,945,363
2007/08	4	76	0.76	£163,712,000	£159,052,000	£124,421,120	£120,879,520	£2,154,105	£1,637,120
2008/09	2	86	0.76	£193,893,000	£177,324,000	£147,358,680	£134,766,240	£2,254,570	£1,713,473
2009/10	7	63	0.73	£195,430,000	£184,542,000	£142,663,900	£134,715,660	£3,102,063	£2,264,506
2010/11	6	58	0.69	£245,799,000	£183,640,000	£169,601,310	£126,711,600	£4,237,914	£2,924,161
2011/12	8	52	0.67	£190,975,000	£168,998,000	£127,953,250	£113,228,660	£3,672,596	£2,460,639
2012/13	7	61	0.65	£223,382,000	£206,115,000	£145,198,300	£133,974,750	£3,662,000	£2,380,300
2013/14	2	84	0.64	£235,061,000	£255,647,000	£150,439,040	£163,614,080	£2,798,345	£1,790,941
2014/15	6	62	0.63	£302,533,000	£297,947,000	£190,595,790	£187,706,610	£4,879,565	£3,074,126
2015/16	8	60	0.62	£357,075,000	£301,765,000	£221,386,500	£187,094,300	£5,951,250	£3,689,775
2016/17	4	76	0.60	£339,833,000	£364,246,000	£203,899,800	£218,547,600	£4,471,487	£2,682,892

How the club spent compared to last year?

WAGES/SALARIES

Total wages and salaries remained static at £208m. The wage bill was still in fourth place within the Premier League with Chelsea (£220m), Manchester City (£264m) and Manchester United (also £264m) paying out more for their personnel.

Wages can have a sizeable effect on how much money can be spent on transfers. In 15/16 the club's wages to turnover ratio was 69% – a figure far too high for a major club.

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In 16/17 that ratio dropped to 57% and the club is looking to reduce that ratio further still, to 50% or less. That should be achieved for this season, meaning the club's ability to spend in the transfer market will be notably stronger (more on that later).

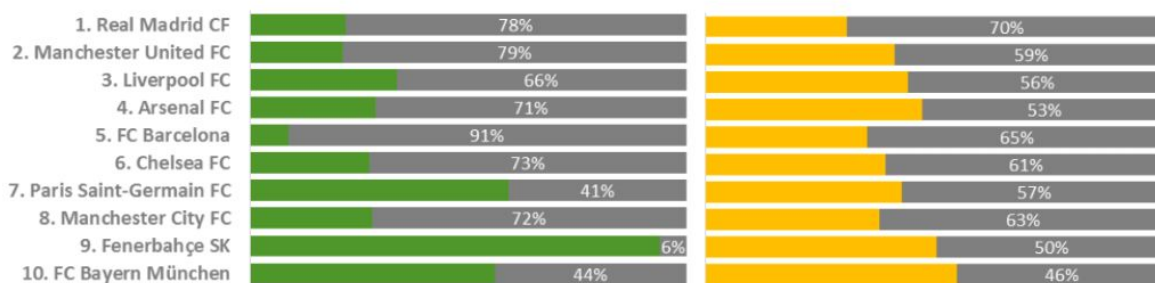
Despite the massive-to-the-point-of-eyebrow-raising increase between 14/15 and 15/16 – which saw a 25% jump from £166m to £208m – the wage bill was reassuringly static in 16/17, and though it's likely to have increased for the current season, it should be nowhere near the figures achieved by the Manchester clubs last season.

INFRASTRUCTURE AND TANGIBLE ASSETS

Delving deeper into the accounts, it's worth noting that cash flow towards the acquisition of tangible fixed assets was £150m over the three financial years covering 2014/15 to 2016/17. This perhaps explains why over the corresponding period transfer net spend was relatively low compared with previous seasons.

Indeed, during FSG's first four full seasons, net spend was approximately £40 m per season on average whereas over the three most recent full seasons the net spend was only £11m. Though some borrowing was required to fund the Main Stand expansion, cash flow requirements to fund the works appear to have affected the extent to which money could be spent on transfers. For the current financial year, however, spend towards tangible fixed assets should be less with the Main Stand work complete and only works to the new club store falling in the current financial year (costs for the Kirkby redevelopment should fall into the next financial year with the rumoured Anfield Road End expansion likely to fall into the 2019/20 and 20/21 financial years).

Distribution of website visitors



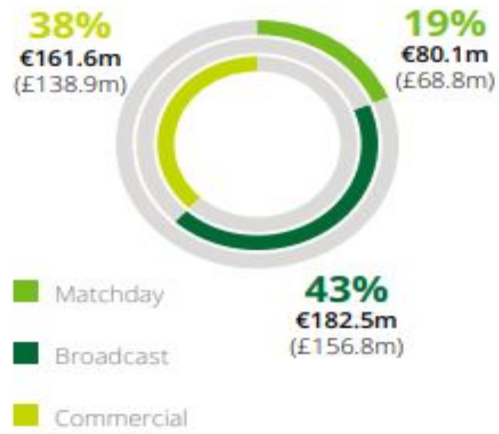
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Revenue 2013-2017 (€m)



Revenue profile 2017 (€m)



Correlation Analysis for Real Madrid

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Revenue(In million euros)				Expenditure(in million euros)				Profit
Year	Matchday	Broadcasting	Commercial	Net	Net Spend	Wages	Other Costs(Operational)	
2011-12	99.1	78.2		55.9	202	40.65	134.8	4.7
2012-13	114	74.5		52.1	241	14.17	118.7	1.1
2013-14	124.1	120.8		61	306	44.29	132.4	25
2014-15	153	163.8		75	392	53.29	168.2	64.647
2015-16	159.8	168.1		75.9	404	58.67	207.5	39.052
2016-17	161.6	182.5		80.1	424	38.54	208.3	73.5
2017-18	170.8	251.3		91.6	455	38.78	208	69

	Matchday	Broadcasting	Commercial	Net	Net Spend	Wages	Other Costs(Operational)	Profit
Matchday	1							
Broadcasting	0.9373851765	1						
Commercial	0.9489223264	0.9898810138	1					
Net	0.9949630499	0.9491516692	0.9558207441	1				
Net Spend	0.4459620762	0.4022266834	0.450631524	0.470449959	1			
Wages	0.9198415638	0.8809037549	0.9255879725	0.9079208767	0.5089219221	1		
Other Costs(Op	0.9149061343	0.8969946069	0.9234854638	0.9357140752	0.4432550567	0.8363297651	1	
Profit	0.578198664	0.6608724075	0.6050004027	0.5757976699	-0.2876353253	0.3442348169	0.5868608471	

Conclusion For 'Selling Clubs'

If you identify your team as a selling club, figures show that they perform really well when it comes to revenue. The reason being that the cash obtained by selling the key player is reinvested in the club to recruit fresh talent who mostly turn out to be highly priced assets to the club.

How should you spend the money to get your club up the ladder into the top clubs?

Wages: Evident from the correlation analysis is that wage spending is a key factor affecting revenue, profit and in turn the future of the club. Hence, it is obvious that one must spend majority of the income in increasing the wages of the current players.

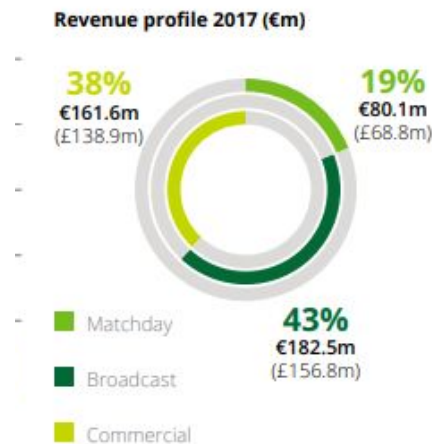
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Transfers: It is evident from football history that transfer market is very inefficient when it comes to money that is worth the transfer. The club that spends money wisely tend to perform better. Being classified as a selling club, one must be as eager as to sell players as to buy them. Selling and buying should be done at the right time to ensure an effective use of the club's money. Older and overrated players should be sold to get some quick cash to invest it in young talent who primarily in the early twenties. It must be made sure that the player to be sold is replaced before being sold which might otherwise lead to instability in the club.

Other expenses:

Stadium: As seen from the chart below for Liverpool that the match day revenue accounts for 19% of their total revenue in 2018. It must be noted that an upgrade in the stadium will essentially be of a benefit to the club in the long run because it impacts the revenue heavily. Although there are chances of cash crunch in other areas that require money, a stadium expansion will definitely account to be an asset that is constantly delivering cash to the club in the future.



Media and Brand building: Like any other club, it is important to get investors and sponsors to invest money in the club. This requires spending in the media, advertisements,

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and a strong approach in building a brand. This in turn affects the gameplay and revenue because of an increase in fan base that controls the matchday, broadcast and commercial revenue. When it comes the the approach of a selling club, the news of a key player being bought by a bigger club definitely adds brand value to the selling club. Hence, it is necessary for a decent amount of money to be spent on promotions, website, marketing, brand development,etc so that the club remains a favourite among the audience.

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