High value football transfers: a win or loss?

Correlation of high value football transfers, with

their subsequent performances

Shiv Mittal

New York University

Abstract

The study is based on the correlation of high value football transfers, and the change in market value of those transfers for their new clubs. Analyzing pre covid data, from seasons 2017/18 to 19/20, a comparison has been made for the change in market value of the top 10 valued transfers, for goalkeepers, defenders, midfielders, attackers over the course of 2 years from their transfer. There has been minimal previous research on this, however, there has been research on why football transfers do not work out well. A variety of reasons such as not fitting in the team, locational preferences, problems with the coach etc. it has always been of great interest as to why players who are bought for such amounts, tend to not live up to their potential. A club makes this incredible investment, so that the player plays well in the club and improves it, whereas it seems to be the opposite. Transfer fee seems to have an unexpected negative correlation with player performances, which has been verified by the results in this experiment also. We can also see that players with high value fees who transfer to Spanish clubs seem to have the greatest dip in performances. This study disrupts the common belief that players who are sold for more should live up to their potential, and shows each player does not have to play well for every club in the world. It explores different ways in which clubs can go about football transfers to make them successful, such as data analysis.

Keywords:

Correlation, Football transfers, Market value, Transfer market, Top transfers

Introduction

Football transfers have been a source of joy, disappointment, and upset for football fans around the world. There is a winter and summer transfer window, and these two transfer windows over the course of the year, can change a team's fortune in a good or a bad way. Mismanagement or smart decisions in the transfer window is what leads to clubs winning trophies over the course of the next few years and lead them to be competitive in even the most major competitions. There are many objectives' clubs have in a transfer window. Some of these are, to improve a weakness in the squad like when Manchester city signed Erling Haaland to get the finisher they desperately needed (McAleer, 2022), to increase position depth Barcelona signing Frack Kessie (Kennedy, 2022), to invest in youth Real Madrid signing Aurélien Tchouaméni (Parvizi, 2022), to sign a top player Bayern Munich signing Sadio Mane (Edwards, 2022). Whereas players are generally sold if they are playing well and a large fee can be demanded from them, the players want more game time and move to other clubs, or clubs want to get rid of excessive players in a position/player who aren't playing well. This all is possible after the transfer system was implemented by Bosman judgment in 1995. Whatever the circumstances or reasons for these deals are, the transfer window never seems to disappoint. Avid football fans religiously follow transfer stories written by reputed journalists (even though they may not have the complete details of this), and there are always those unexpected or marquee transfers which the entire world. Players can either be loaned, sold, bought from a club, free agents can be signed.

Furthermore, for a football transfer to be completed, two things need to happen. An agreement on the transfer price and other variables needs to be agreed with both teams (the club losing the player and the club gaining), and an agreement with the player and his agent on his contract (salary, length of contract, playing time). For example, for the transfer of Raphinha from Leeds United to Fc Barcelona, there is an agreement on personal terms but not on the fee with Leeds united, and the transfer cannot happen without that, hence other teams like Chelsea have swooped in(Childs, 2022)) For a free transfer there is no other club involved.

Majority of the time fans are often left in the dark about the salary, transfer fee of footballers, hence they have to believe the incomplete information of trusted journalists. But why do clubs buy new players? How do they earn after making this hefty investment? First is sponsorships. To help the club get better, win trophies so that more companies would pay more to have their name written on the club's kit, clubs have to buy players to improve their team. Barcelona have recently started rebuilding their team and it seems as though they are coming back into form, which upgraded

their 55 million a year offer from Rakuten to 280 million Euros over 3 years from Spotify (Byers et al., 2022). Naturally the biggest and best clubs in the world get the largest sponsorships. Secondly, even though this isn't a massive addition, top players who come to clubs have a huge fanbase, and they attract more fans to the club. This leads to more tickets being sold, and more shirts of the player being bought(even though the clubs get a royalty for this). Juventus sold 54 million Euros worth of Ronaldo kit in 24 hours (Joseph, 2018)) Clubs also get money after winning trophies, as well as more fans who will buy merchandise from the club. This also adds to the revenue of clubs.

During the covid pandemic this took a hit, but generally there is always a lot of money spent in the market, with teams revamping. In the 2018/19 transfer market, there was 6.13 billion dollars just in the summer, and premier league clubs spent about 180 million pounds on their own the entire season.

Speaking of spending, what all determines a footballers' transfer fee? (i) Talent. The way the player has been playing for his club, looking at his statistics for the past few seasons. So, the better the statistics, the more the fee. Statistics such as injuries also matter, as if the player is extremely injury prone, he would demand a lower fee. Even the current form of the player, like a player playing exceptionally in one season can lead to clubs spending even more money on this player, than one which has been performing consistently for a few years. It is deemed to be more important for a club while buying a player. (ii) Age. Clubs tend to invest more in the future, as those players have a lot more potential. They also generally have not hit their prime and have a lot more years to play at the top than players who are older. Hence the younger the player the more clubs spend on them. (iii) Popularity. The more popular the footballer is, the more fans he brings to the club, hence the club earns more revenue through his signing (Mahajan, 2020). Hence the more popular the footballer is, the more money it would take to bring him to a new club. (iv) Popularity of the club and contract with the club. The less popular the club is, the easier it is to lure a player from the club. The geography can also matter, as talents from non-footballing countries like India are cheaper to sign than players from England or Brazil. If the club is also not performing well, or is in the lower division of the league, they may need more money and would be more flexible in selling their top talents. In terms of contract, if the player has a few years remaining in his contract, the club would be less willing to sell him and so a higher transfer fee would be needed to make the club let go of the player. (Due to a contract till 2022, FC Barcelona had to shell out 142 million pounds to sign Coutinho in 2018 (McNulty, 2018)) If a player has a higher release clause due to his performances, his transfer fee would be more.

Neymar's move to Paris Saint Germain activated his release clause of 222 million euros (Simpson, 2017)). Clubs may also not want to negotiate a deal below the release clause of the player.

There are many determinants of a football transfer fee, these are just some of the more important, common ones.

As mentioned previously, geography of a player can increase his transfer fee, but it also has a direct correlation with the spending of the clubs. The players from well-known footballing nations, also means that clubs of those nations have a higher spending in the transfer market. For example, it is a well-known fact that the transfer of English players within the English premier league is a lot more inflated than those from non-English nations. This is commonly referred to as the "English tax". Harry Maguire joined Manchester United for 80 million pounds (BBC, 2021) whereas Victor Lindelöf joined for approximately 40 million (Crellin, 2017)

Currently EPL is the most popular league in the world, and this has also led to premier league clubs spending the most in the transfer market. Players prefer a move to the premier league due to its popularity appeal, and 5 out of the 10 highest spending clubs in the world are from the premier league. (Tripathi, 2021)

Methodology

Research Aim

The aim of this research paper is to find the correlation between high value transfers and their subsequent change in market value.

Data Collection

Transfermarket.co was used to find the change in market value of players over two years, based on the season they joined the club. The site was also used to find the data of the transfer fee for the 120 players used. The country they were transferred to was also found on this site. After this, the data of players' market change in market value was averaged out for each position, for each year and graphed. Then the change in market value was clubbed with the countries for each position, and the thirty players were divided on the basis of the country they were transferred to, and the average change in market value for the particular country. This was again graphed.

Results

The following results were obtained after analyzing the data obtained from the Transfer market.

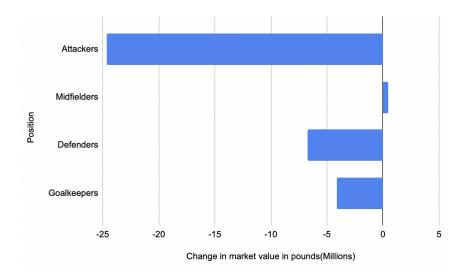


Figure 1: Average change in market value for top 10 highest spending for Attackers, Midfielders, Defenders, Goalkeepers transferred in 2019/20 season to 2022.

Change in attackers has obviously been the most, with their market value dropping by almost 25 million pounds, followed by defenders and then goalkeepers. Midfielders are an exception in this, due to a massive increase in market value of Bruno Fernandes (Manchester United, +37.8 million pounds), Youri tielemans (Leicester city, +29.7 million pounds), and Franck Kessie (AC Milan, +10.8 million pounds). (Football Transfer Values, and Play Market Values, n.d.)

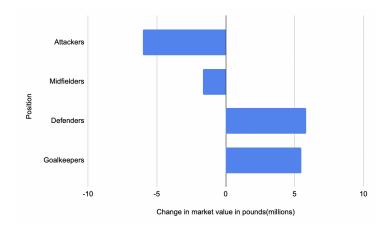


Figure 2: Average change in market value for top 10 highest spending for Attackers, Midfielders, Defenders, Goalkeepers transferred in 2018/19 season to 2021.

There was no change in market value for attackers, with midfielders being the most at -12.6 million pounds, followed by defenders and the goalkeepers. (Football Transfer Values, and Play Market Values, n.d.)

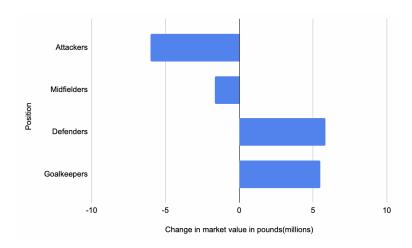


Figure 3: Average Change in market value for top 10 highest spending for Attackers, Midfielders, Defenders, Goalkeepers transferred in 2017/18 season to 2020.

In this case, attackers and midfielders' market value reduced, however the average change in market value was positive for defenders and goalkeepers, with defenders being more than goalkeepers. (Football Transfer Values, and Play Market Values, n.d.)

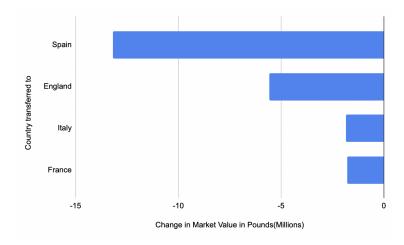


Figure 4: Average Change in market value of attackers for the club that bought them over the course of 3 years, with respect to the country they are transferred to.

The market value for attackers who went to Spain dipped the most, followed by England, Italy, France simultaneously. (Football Transfer Values, and Play Market Values, n.d.)

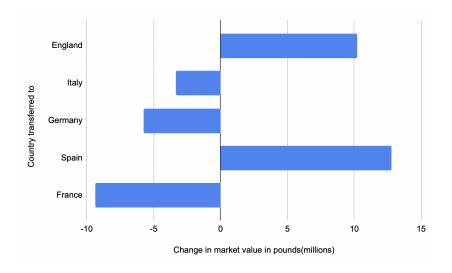


Figure 5: Average Change in market value of midfielders for the club that bought them over the course of 3 years, with respect to the country they are transferred to.

The market value for midfielders who went to France dipped the most, followed by Germany, then Italy. The market value for midfielders rose the most in Spain, followed by England. (Football Transfer Values, and Play Market Values, n.d.)

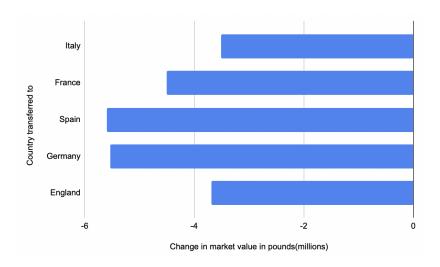


Figure 6: Average Change in market value of defenders for the club that bought them over the course of 3 years, with respect to the country they are transferred to.

The market value for attackers who went to Spain dipped the most, followed by Germany, France, England, Italy simultaneously. (Football Transfer Values, and Play Market Values, n.d.)

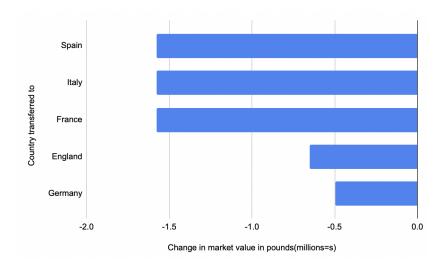


Figure 7: Average Change in market value of goalkeepers for the club that bought them over the course of 3 years, with respect to the country they are transferred to.

The market value for attackers who went to Spain, Italy and France dipped the most, followed by England, Germany. (Football Transfer Values, and Play Market Values, n.d.)

Discussion

The data used is for the 10 highest transfers for each position, for three seasons. 2017/18, 2018/29,2019/20. Seeing the difference in players market value over the course of 2 years, it is safe to say the players performances have reduced after the transfers. The market value of the players has generally decreased after switching clubs. When a club

invests big money in a player, they expect him to perform to a standard attached with that investment, with the hopes he will play better for the club. This obviously means there's been a dip in performances, and an extremely big one too. Barring 2018/19, the dip in attackers performances is generally the most. This is because attackers are generally bought for a higher price, as their statistics such as the goals and assists are far more valued than any defensive statistics. This leads them to get more popularity by the fans and media, and in the end due to them being hailed every time the team wins a match due to their goals and assists, their prices are far more inflated (X, 2013) Hence, except midfielders in the 19/20 season, and defenders and goalkeepers in 2017/18, all big transfers have led to player performances reducing. This means that clubs splurging massively on players have generally led to a worse performance by the team, which should not be the case. The main reason for this is that with a hefty price tag, comes a lot of responsibility. Players feel the pressure of being worth multi million dollars and see that the club has made an investment in them which they have to fulfill. They understand the club, trust their talent, and they have something to prove. However, coming under this immense pressure leads to a negative reaction on the pitch, as players start to feel the pressure on the field and are not able to express themselves on the pitch the same way (Williams & Wigmore, 2020). If they are unable to play like they used to, they tend to become worse and hence there is a dip in performance. The second reason is, one bad coach can ruin a player. If the player is unable to have an understanding with the coach, then the player will not be able to improve in training sessions, and he will start to be kept out of the squad, and as he is not playing his market value will dip (Edger et al., 2012). Third reason is that players take time to adjust to new teams. They have been playing in a system for a while, so to adjust to a new system could be difficult and may take a few years of patience from the player and club. Some players also never adjust to teams, so they generally must be

Furthermore, figure 4-7 reflects these transfers from 2017-2020 as a measure of the country they have transferred to. It's fair to say that for each country, the teams were not able to recoup the worth of the players they bought for a large sum. This is because moving to different countries means adapting to the playstyle of that country. The playstyle in each league is very different, hence proving successful in one league need not mean the players playstyle is suited to the other. This would mean that buying players from different countries for a large sum may be a gamble. Even moving to different teams in the same country is a huge gamble, as mentioned above due to the difference in playstyle and tactics of each team.

offloaded by the clubs.

However, overall, the value for players who were transferred to Spain, has reduced the most. This is because the best players are attracted to play for two iconic clubs like Barcelona and Real Madrid, hence when they want to sign players, they generally can. As the clubs are known for having the best players, they tend to buy the best players in the world. These transfers take place for an abnormal fee, without proper analysis, if the player will fit in the team. For example, Griezmann was sold to Barcelona to play as a left winger, even though his predominant position was as a center forward. Same for Phillipe Coutinho, being asked to play as a left winger being a center mid. So, the players don't always fit in the team, and even if they do as already discuss, transfer prices seem to have a negative correlation with players performances. 5 of the 10 highest transfers in football of all time, have been in the La Liga (Desk, 2022).

Limitations

- 1. Football transfer fees are generally hidden from the public and fans, hence the data for transfer fee is generally an estimate which reliable sources get, which everyone must trust. Hence the transfer fee may not be the same as what is known by the public, and what is mentioned in the data in this research paper.
- 2. Have not explored data for different factors such as age, and how different KPIs after the transfer affect the performance.

Conclusion

In conclusion, the data proves that the players with higher transfer fee, generally tend to perform worse than they were in the previous club. The players may have transferred to better clubs, with better players, which should mean that they strengthen the team more, however that does not seem like the case.

Clubs tend to buy players who are world class for a high price, assuming they will play at a similar level or better than the old club. In reality, that is not the case. These world class players generally have a system built around them, and a particular understanding with each player which may not be replicated in another club. Hence when a club buys a player, they should first confirm that the player fits their system before spending huge money on them. This can be done using data analytics, or Moneyball. Studying the team's play style seeing its weaknesses, and then finding suitable players to fit in the team perfectly is the future of football. Data driven transfers is an effective model, which all clubs

should use before buying any player, so that there is minimal chance of the signing being a flop. Liverpool uses this, and have been extremely successful in their transfers because of it (Andrews, 2021)

Acknowledgement

I would like to thank my parents, and my entire family for their support and guidance.

References

Andrews, C. (2021, August 19). *Data-driven transfers are football's new normal*. E&T Magazine. Retrieved July 23, 2022, from https://eandt.theiet.org/content/articles/2021/08/data-driven-transfers-are-football-s-new-normal/

BBC. (2021, August 5). On this day: Harry Maguire signs for Manchester United. BBC. Retrieved July 23, 2022, from https://www.bbc.com/sport/articles/c8zn5pdgkv3o

Bhatia, A. (2020). *Do Football Transfers Actually Improve Performance?* Harvard DASH. Retrieved July 23, 2022, from https://dash.harvard.edu/handle/1/37364729

Byers, J., Poindexter, O., Gentrup, A., & Perez, A. (2022, March 15). FC Barcelona Secures \$306M Deal with Spotify. Front Office Sports. Retrieved July 23, 2022, from https://frontofficesports.com/fc-barcelona-secures-306m-deal-with-spotify/

Carmichael, F., Forrest, D., & Simmons, R. (n.d.). *The Labour Market in Association Football: Who Gets Transferred and for How Much?* YouTube. Retrieved July 23, 2022, from https://onlinelibrary.wiley.com/doi/abs/10.1111/1467-8586.00075

Childs, D. (2022, July 2). Chelsea receive Raphinha transfer boost as Todd Boehly sets Barcelona deadline. Football.London. Retrieved July 23, 2022, from https://www.football.london/chelsea-fc/transfernews/raphinha-chelsea-transfer-barcelona-24381155

Cohen, J. (2016, August 24). *Transfer window: exposing the widely held myths about how clubs sign players*. The Guardian. Retrieved July 23, 2022, from https://www.theguardian.com/football/the-set-pieces-blog/2016/aug/24/transfer-window-market-myths

Crellin, M. (2017, June 15). *Manchester United sign Victor Lindelof from Benfica* | *Football News*. Sky Sports. Retrieved July 23, 2022, from https://www.skysports.com/football/news/11667/10915906/manchester-united-sign-victor-lindelof-from-benfica

Desk, F. (2022, July 19). What are the most expensive transfers of all time? Highest fees in history. FootballTransfers.com. Retrieved July 23, 2022, from https://www.footballtransfers.com/en/transfer-news/it-serie-a/2021/04/football-50-biggest-transfers-of-all-time

Edger, M., Bloom, A., & Smith, S. (2012, September 4). *How Bully Coaches Affect an Athlete's Mental Game* | *Sports Psychology Today - Sports Psychology*. Sports Psychology Today - Sports Psychology. Retrieved July 23, 2022, from https://www.sportpsychologytoday.com/youth-sports-psychology/how-bully-coaches-affect-athletes-mental-game/

Edwards, P. (2022, July 22). Sadio Mane left Liverpool for Bayern Munich to have a 'new challenge'. BBC. Retrieved July 23, 2022, from https://www.bbc.com/sport/africa/62267535

Football transfer values, and play market values. (n.d.). Football transfers, rumours, market values and news. Retrieved August 3, 2022, from https://www.transfermarkt.co.uk

Goal. (2020, January 29). How does a football transfer work? From Players to agents, clubs to leagues.

Goal.com. Retrieved July 23, 2022, from https://www.goal.com/en-in/news/how-does-a-football-transfer-work/130og8e76770I1dcqbne3jntx7

Joseph, N. R. (2018, July 24). *4 ways Juventus financially benefited from Ronaldo's big money transfer*. Sportskeeda. Retrieved July 23, 2022, from https://www.sportskeeda.com/football/4-ways-juventus-benefited-financially-from-ronaldo-big-money-transfer-ss

Kennedy, L. (2022, July 5). *Barcelona strengthen squad by adding Kessie, Christensen*. Arab News. Retrieved July 23, 2022, from https://www.arabnews.com/node/2116656/sport

Kidd, R. (2019, February 1). Europe's 'big five' leagues spend over \$6 billion in transfer window, reports Deloitte. YouTube. Retrieved July 23, 2022, from https://www.forbes.com/sites/robertkidd/2019/02/01/premier-league-transfer-spending-hits-1-8-billion-but-falls-in-january-report-finds/?sh=b48251715c07

Mahajan, A. (2020, July 15). *Economics behind The Transfer Window*. FootTheBall. Retrieved July 23, 2022, from https://www.foottheball.com/transfers/football-transfers-player-pricing/

Matesanz, D. (2018, December 19). Transfer market activities and sportive performance in European first football leagues: A dynamic network approach. PLOS. Retrieved July 23, 2022, from https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0209362

McAleer, B. (2022, June 14). Erling Haaland's ruthlessness will give Manchester City a new edge. The Guardian. Retrieved July 23, 2022, from https://www.theguardian.com/football/who-scored-blog/2022/jun/14/erling-haaland-player-manchester-city-need-pep-guardiola

McNulty, P. (2018, January 6). *Philippe Coutinho: Barcelona to sign Liverpool and Brazil midfielder in £142m deal.* BBC. Retrieved July 23, 2022, from https://www.bbc.com/sport/football/42580173

METELSKI, A. (2021, April 30). Original Article Factors affecting the value of football players in the transfer market. Journal of Physical Education and Sport. Retrieved July 23, 2022, from https://efsupit.ro/images/stories/aprilie2021/Art%20145.pdf

Parvizi, K. (2022, June 9). This is the ideal role for Aurelien Tchouameni at Real Madrid in his first season. The Real Champs. Retrieved July 23, 2022, from https://therealchamps.com/2022/06/09/role-tchouameni-real-madrid/

Reuters. (2019, September 3). Europe's 'big five' leagues spend over \$6 billion in transfer window, reports Deloitte-Sports News. Firstpost. Retrieved July 23, 2022, from https://www.firstpost.com/sports/europes-big-five-leagues-spend-over-6-billion-in-transfer-window-reports-deloitte-7278511.html

Simpson, C. (2017, August 3). Barcelona Confirm PSG Activated Neymar's €222m Transfer Release Clause.

Bleacher Report. Retrieved July 23, 2022, from https://bleacherreport.com/articles/2725494-barcelona-confirm-psg-activated-neymars-eur222m-transfer-release-clause

Tripathi, P. (2021, August 31). *Top 10 highest spending clubs in the previous decade*. Khel Now. Retrieved July 23, 2022, from https://khelnow.com/football/top-10-highest-spending-clubs-transfers-last-decade Williams, M., & Wigmore, T. (2020, November 5). *Under pressure: why athletes choke* | *Sport*. The Guardian. Retrieved July 23, 2022, from https://www.theguardian.com/sport/2020/nov/05/under-pressure-why-athletes-choke

X, M. (2013, July 30). Are Strikers Really Worth More Than Defenders in the Transfer Market? YouTube. Retrieved July 23, 2022, from https://bleacherreport.com/articles/1719218-are-strikers-really-worth-more-than-defenders-in-the-transfer-marke