

Manchester United Transfers Expenditure and Season Performance for Last 10 Years

\*disclaimer this is only for my exercise purpose

**Purpose:** To compare Manchester United Transfer Expenditure with Team Performance each season for last 10 Years

**Transfer balance each season (in Million Euro)**

**Source:** Transfersmarkt.com

| Season    | Club       | Manager                                | Income | Expenditure | OverallBalance |
|-----------|------------|--|--------|-------------|----------------|
| 2012-2013 | Man United | Sir Alex Ferguson                      | 9,65   | 76,45       | -66,8          |
| 2013-2014 | Man United | David Moyes                            | 1,8    | 77,13       | -75,33         |
| 2014-2015 | Man United | Luis Van Gaal                          | 46,7   | 195,35      | -148,65        |
| 2015-2016 | Man United | Luis Van Gaal                          | 100,67 | 156         | -55,33         |
| 2016-2017 | Man United | Jose Mourinho                          | 47,25  | 185         | -137,75        |
| 2017-2018 | Man United | Jose Mourinho                          | 45,5   | 198,4       | -152,9         |
| 2018-2019 | Man United | Jose Mourinho<br>*Ole Gunnar Solskjaer | 30,55  | 82,7        | -52,15         |
| 2019-2020 | Man United | Ole Gunnar Solskjaer                   | 81,18  | 234,8       | -153,62        |
| 2020-2021 | Man United | Ole Gunnar Solskjaer                   | 19,5   | 83,8        | -64,3          |
| 2021-2022 | Man United | Ole Gunnar Solskjaer<br>*Ralf Rangnick | 30,7   | 140         | -109,3         |
| SUM       |            |  | 413,5  | 1429,63     | -1016,13       |
| Average   |            |  | 41,35  | 142,963     | -101,613       |

**\*Caretaker Manager**

## Season Performance

Source: Transfersmarkt.com

| Season    | EPL | FACup | EFL Cup | UCL | UEL | Performance Index |
|-----------|-----|-------|---------|-----|-----|-------------------|
| 2012-2013 | 1   | R6    | R16     | R16 | -   | 3,50              |
| 2013-2014 | 7   | R3    | SF      | QF  | -   | 3,23              |
| 2014-2015 | 4   | R6    | R2      | -   | -   | 3,26              |
| 2015-2016 | 5   | C     | R16     | GS  | R16 | 3,84              |
| 2016-2017 | 6   | R6    | C       | -   | C   | 4,41              |
| 2017-2018 | 2   | F     | QF      | R16 | -   | 3,64              |
| 2018-2019 | 6   | R6    | R3      | QF  | -   | 3,23              |
| 2019-2020 | 3   | SF    | SF      | -   | SF  | 4,28              |
| 2020-2021 | 2   | R6    | SF      | GS  | F   | 4,42              |
| 2021-2022 | 6   | R4    | R3      | R16 | -   | 2,91              |

\*Max Season Index is 5

\*Season Index is total performance indicator each season for each competition in which Man United competed during the season

To determine season index, I used this formula:

**1. If Man United competes at UCL**

=> (EPL position PI + FA Cup PI + EFL Cup PI + UCL PI) + 2 / 2

**2. If Man United competes at UEL**

=> (EPL position PI + FA Cup PI + EFL Cup PI + UEL PI) + 3 / 2

**3. If Man United competes at UCL, and then doesn't qualify from UCL Group Stage (pos 3 of 4, qualify for UEL R32).**

Then refer to condition no. 2 to determine season index

**4. If Man United doesn't qualify for Europe competition (UCL or UEL)**

=> (EPL Position PI + FA Cup PI + EFL Cup PI)

\*PI is Performance Indicator

The table below is table of performance indicator  
Table of Performance Indicator

| Competition | Position | Performance Indicator |
|-------------|----------|-----------------------|
| EPL         | 1        | 3,00                  |
|             | 2        | 2,85                  |
|             | 3        | 2,70                  |
|             | 4        | 2,55                  |
|             | 5        | 2,40                  |
|             | 6        | 2,25                  |
|             | 7        | 2,10                  |
|             | 8        | 1,95                  |
|             | 9        | 1,80                  |
|             | 10       | 1,65                  |
|             | 11       | 1,50                  |
|             | 12       | 1,35                  |
|             | 13       | 1,20                  |
|             | 14       | 1,05                  |
|             | 15       | 0,90                  |
|             | 16       | 0,75                  |
|             | 17       | 0,60                  |
|             | 18       | 0,45                  |
|             | 19       | 0,30                  |
|             | 20       | 0,15                  |

Note:  
1. EPL and UCL are competition tier 1,  
the multiplier is 3  
2. UEL is competition tier 2,  
the multiplier is 2  
3. FA Cup and EFL Cup are Domestic Cup,  
the multiplier is 1

To determine performance indicator, I used this formula

1. EPL (English Premier League)

=> ((21 - EPL position of the season)/20)\*3

2. UCL (UEFA Champions League)

=> (UCL stage of the season/6)\*3

3. UEL (UEFA Europa League)

=> (UEL stage of the season/7)\*2

4. FA Cup

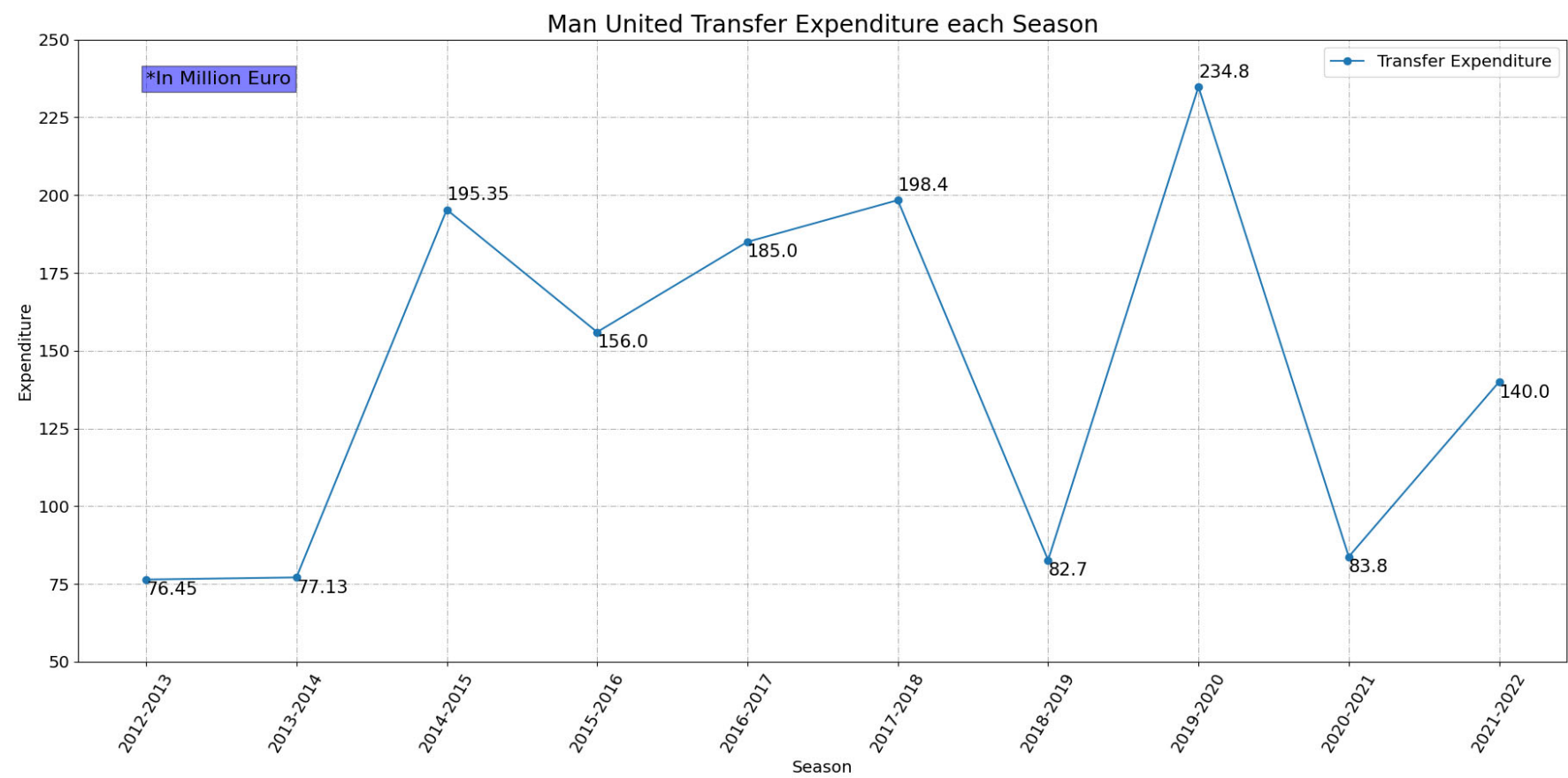
=> (FA Cup stage of the season/7)

5. EFL Cup (English Football League)

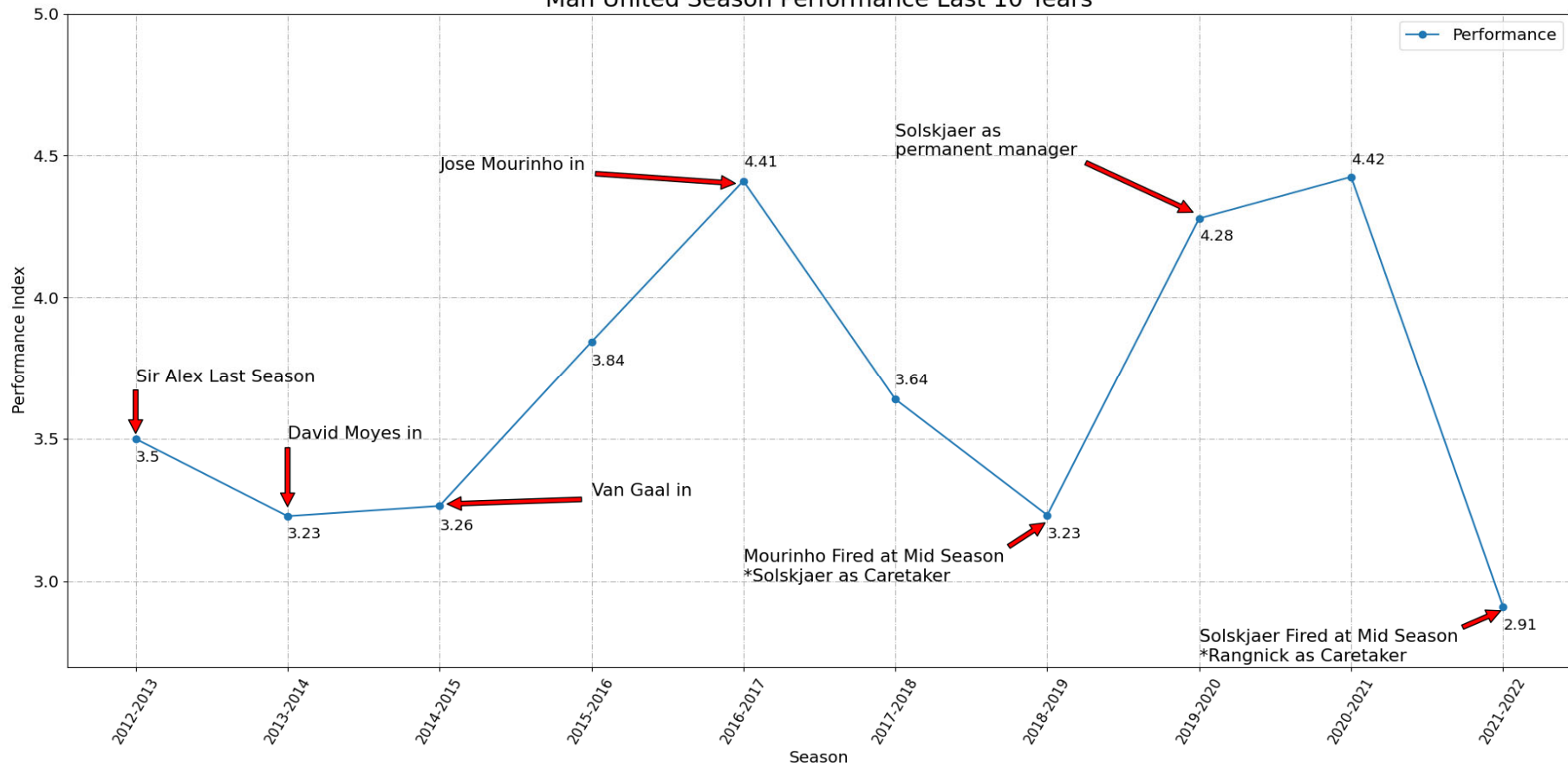
=> (EFL Cup stage of the season/7)

| Competition | Stage     |   | Performance Indicator |
|-------------|-----------|---|-----------------------|
| EFL Cup     | R2        | 1 | 0,14                  |
|             | R3        | 2 | 0,29                  |
|             | R16       | 3 | 0,43                  |
|             | QF        | 4 | 0,57                  |
|             | SF        | 5 | 0,71                  |
|             | F         | 6 | 0,86                  |
|             | Champions | 7 | 1,00                  |
| FA          | R3        | 1 | 0,14                  |
|             | R4        | 2 | 0,29                  |
|             | R5        | 3 | 0,43                  |
|             | R6        | 4 | 0,57                  |
|             | SF        | 5 | 0,71                  |
|             | F         | 6 | 0,86                  |
|             | Champions | 7 | 1,00                  |
| UEL         | GS        | 1 | 0,29                  |
|             | R32       | 2 | 0,57                  |
|             | R16       | 3 | 0,86                  |
|             | QF        | 4 | 1,14                  |
|             | SF        | 5 | 1,43                  |
|             | F         | 6 | 1,71                  |
|             | Champions | 7 | 2,00                  |
| UCL         | GS        | 1 | 0,50                  |
|             | R16       | 2 | 1,00                  |
|             | QF        | 3 | 1,50                  |
|             | SF        | 4 | 2,00                  |
|             | F         | 5 | 2,50                  |
|             | Champions | 6 | 3,00                  |

After processing the data, then I visualized the data using Matplotlib, Pandas, and Numpy libraries. Below is the data visualization



Man United Season Performance Last 10 Years



## Summary

Man United highest transfers spent was season 2019-2020 under Solskjaer. At the end of the season, Man United was 3rd in EPL, advanced to UEL Semifinal, FA Cup Semi-Final, and EFL Cup Semifinal with season index 4.28

Man United lowest transfers spent was season 2012-2013 under Sir Alex Ferguson. At the end of season, Man United won EPL, advanced to UCL R16, FA Cup R6, and EFL Cup R16 with season index 3.5

Man United highest Season Index was season 2020-2021, they finished 2nd in EPL and advanced to UEL Final, EFL Cup Semifinal, FA Cup R6, with transfer expenditures 83.8 Million Euro

Man United lowest Season Index was season 2021-2022, they finished 6th in EPL and advanced to UCL R16, EFL Cup R3, FA Cup R4, with transfer expenditures 140 Million Euro

Based on the data, the amount of transfer expenditures affects Man United's performance. However, there is a case in season 2020-2021 the transfer expenditures was decreased from last season but Man United performance increased from last season

Therefore, Man United should be more effective in transfer window