Projecting Free Market Values for World Soccer Players

Motivation

$3,584,310,100

The total spent on new players summer 2021 by Europe's top 5 leagues

Goal: Assess the relationship between a players value on the market and selected performance stats and characteristics

Jack Grealish's transfer from Aston Villa to Manchester City cost the club $129 million

Datasets, tools, and methods

- Estimated market values and positional data provided by:

   https://www.transfermarkt.us

- Player performance data provided by:

   https://fbref.com/en/

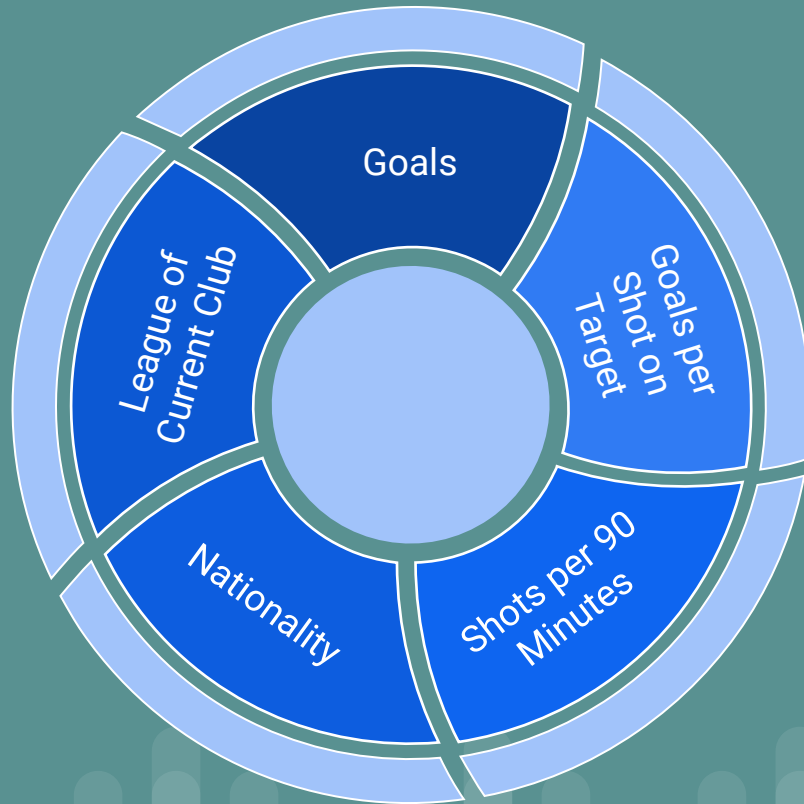
Kylian Mbappe
Estimated market value: $176 million

Datasets, tools, and methods

- Forwards vs Midfielders

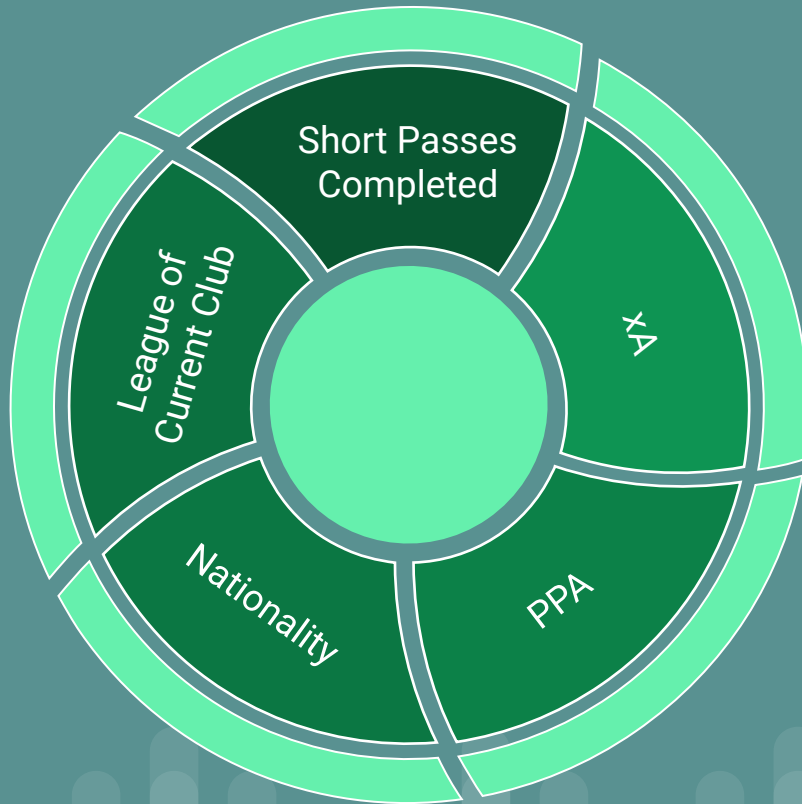- Universal Performance Feature?

- Model choices

Kevin De Bruyne
Estimated market value: $110 million

Key Features for Forwards' Market Value

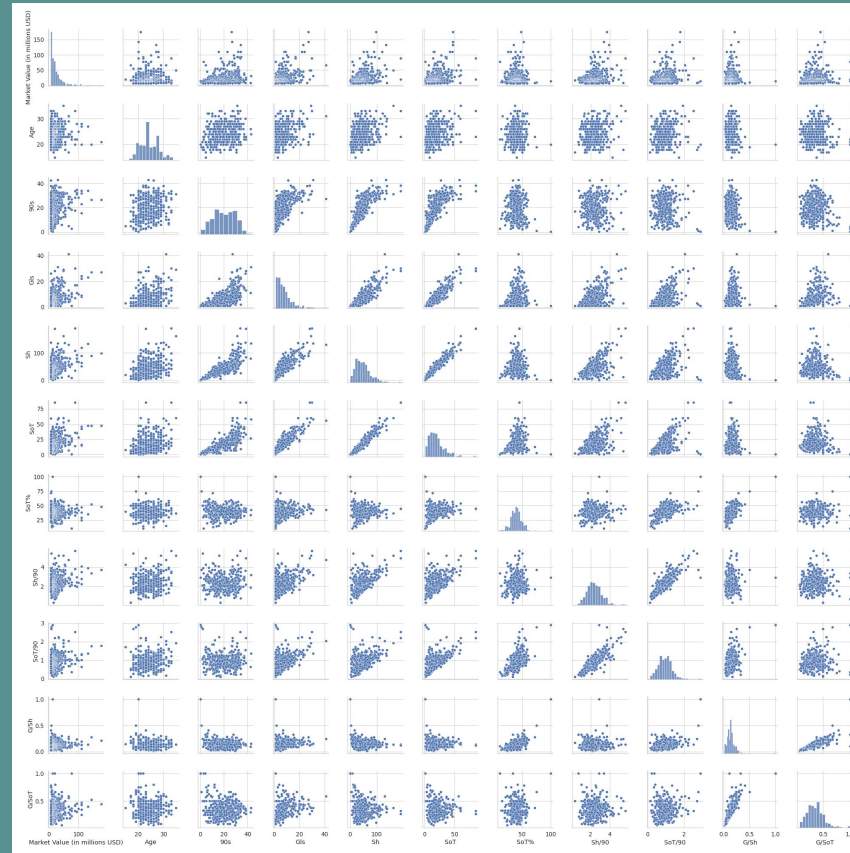# Key Features for Midfielders' Market Value

Conclusions

- A few features specific to position show potential to reflecting a player's value (Scoring goals is important!)

- Player values are not dependent on 1 or 2 key values

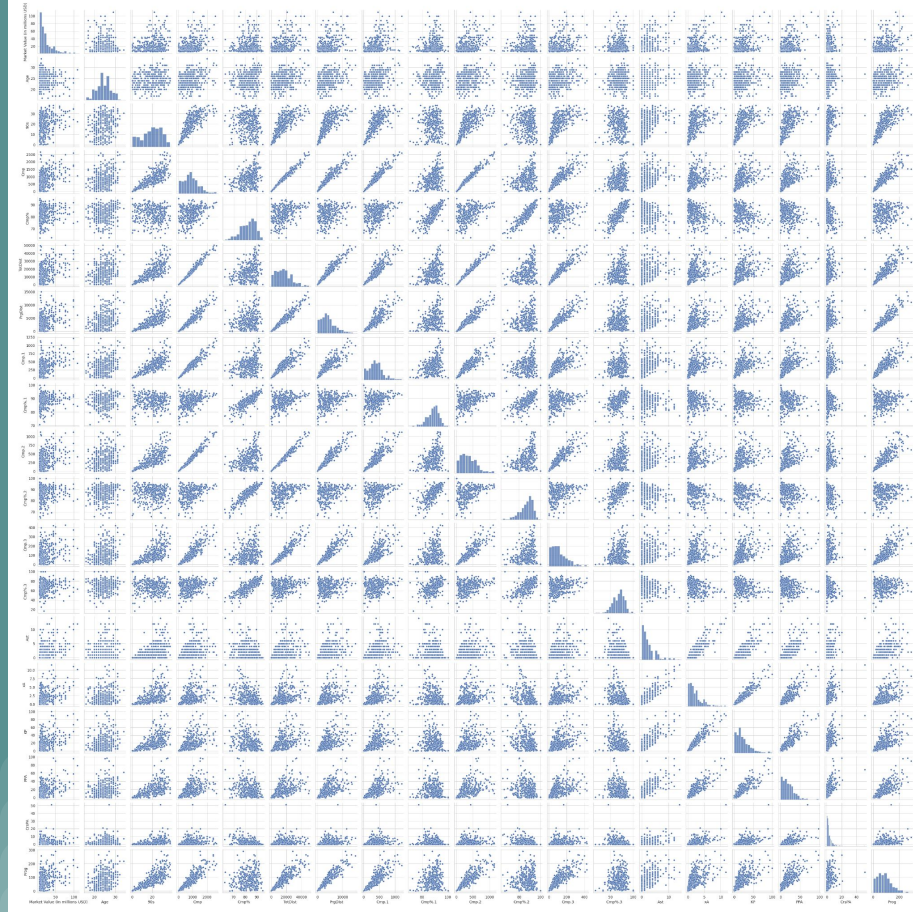- Pay a premium for players in established leagues from established footballing nations

Future work

- Features from a wider variety of situations (i.e., dribbling, shot creation, distance covered)

- WSL modeling to more accurately fit data
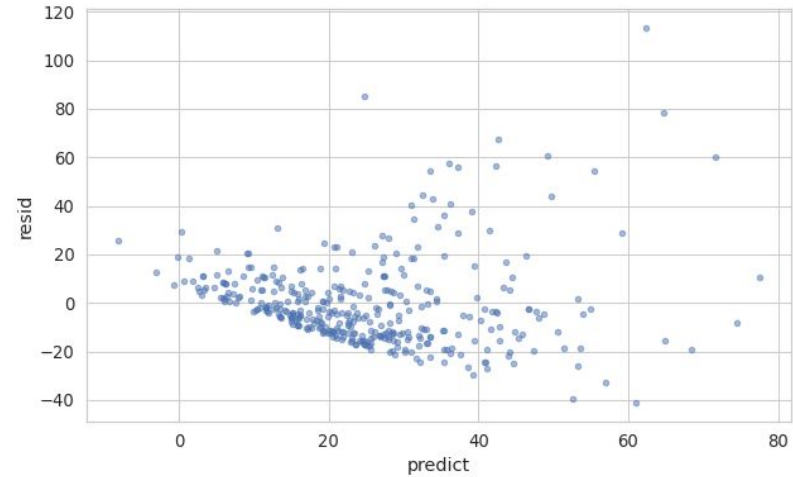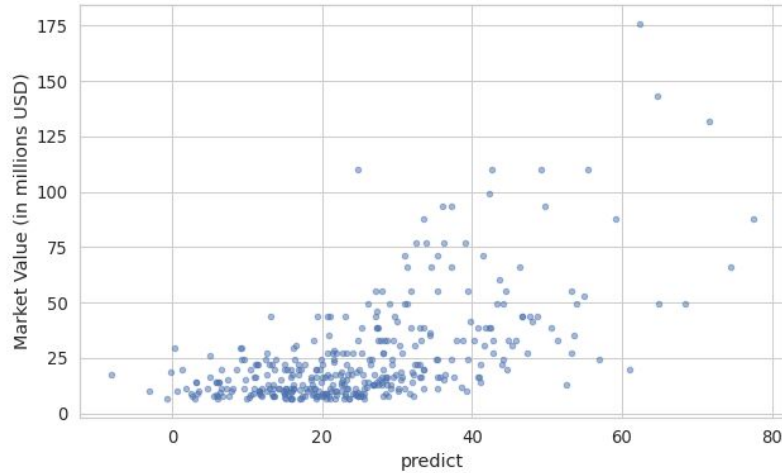
- More athletes over multiple years

Appendix-Forward pairplot

Appendix-Mid pairplot

Appendix-Forward residuals and predictions

Appendix-Midfielders residuals and predictions