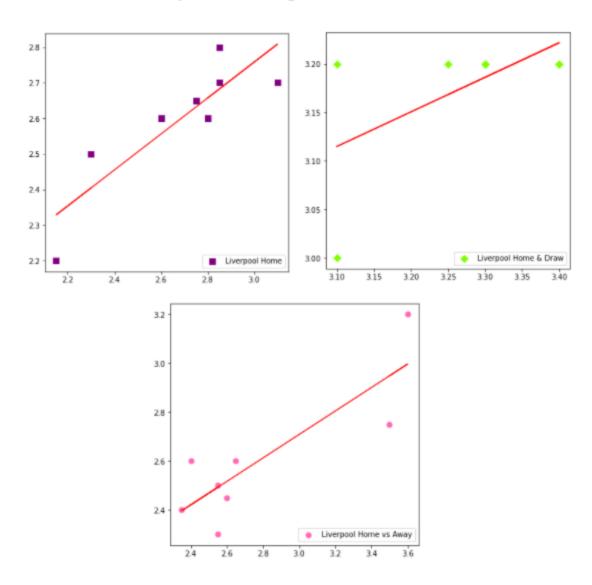
Review of Premier League Book Makers Markets Between Liverpool and Manchester United

- ESL Soccer Database via Kaggle from 2008 2016
 https://www.kaggle.com/hugomathien/soccer
 DB Notes: mysqlite, 298M, 26K match rows, 11 Countries, 11 Leagues, 11K Players, 299 Teams
- Refactored to PostgreSQL, maintaining relations and hosted in an Amazon RDS instance, sharing the connection string
- In that job I took interest in the Book making data in the set I wanted to see visually what that data said and I used Ordinary least squares linear regression to review the set.
 Not surprisingly all the slopes were positive
- GOAL!!!! Given this Rivalry Can we predict the next game
 Odds for Win Lose or Draw
- Liverpool and Manchester Played 16 Matches
 Liverpool Overall only won 37% of 16 matches over the 8
 year period. Manchester won 56% of 16 matches overall but
 the won a whopping 75% of home matches to Liverpool's
 50% of home matches
- The data represents the decimal odds that the Home or Away team will Win Lose or Draw
 A value of 2 plotted meant the bookie is showing a 50%
 Chance of the home team winning.
 A value of 5 plotted means the bookie is showing a 20%
 Chance of the home team winning. A 5 plot also suggests the odds could be called 4/1 in the fractional format.

- The sets are interesting in their difference both amongst themselves and between the two teams. The Liverpool odds of having a draw were usually considered to be at 30%
- 3 sets of Markets
 - a) Home team Odds to Win
 - b) Home team Odds to Draw
 - c) Home team Odds to Lose
- Seeing the Combined Overlays together for Either teams
 Odds when they are at home also tells a story I believe.
 Liverpool is clearly not as strong of a team as Manchester
 United but the odds also show over the years that DRAWs
 are rarely predicted with a high chance of probability.

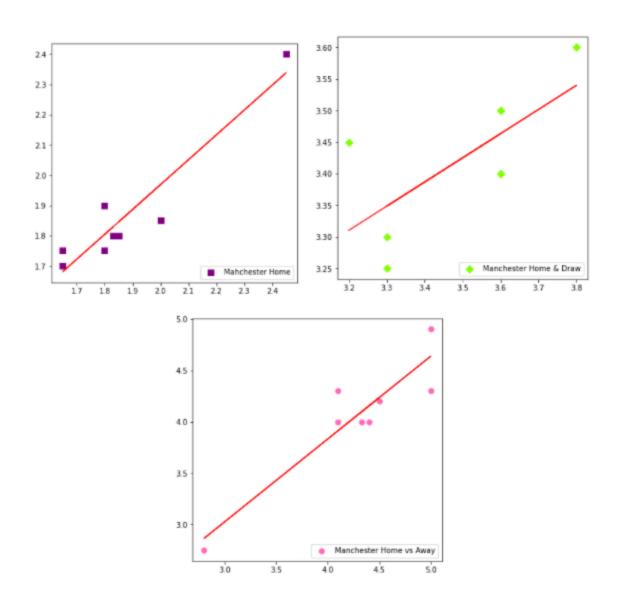
Review of Book Makers Predictions

Liverpool hosting Manchester United



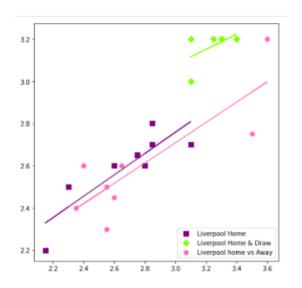
Review of Book Makers Predictions

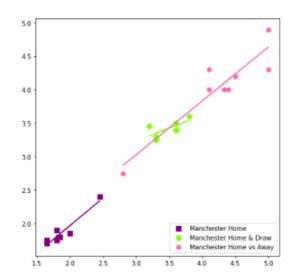
Manchester United hosting Liverpool



Combined Overlays Linear Regression of Bookmakers

Comparing Home v Draw v Away for Liverpool and Manchester United





Dan C. DS Bootcamp 8/5/2021