NBA Efficiency Prediction

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Background

- Collected data from "2022-23 NBA Player Stats: Totals | Basketball-Reference.com"
- Data about 500 players (500 rows - 30 columns) from the NBA 2022-2023 season
- Predict the MVP of the season before the end of it
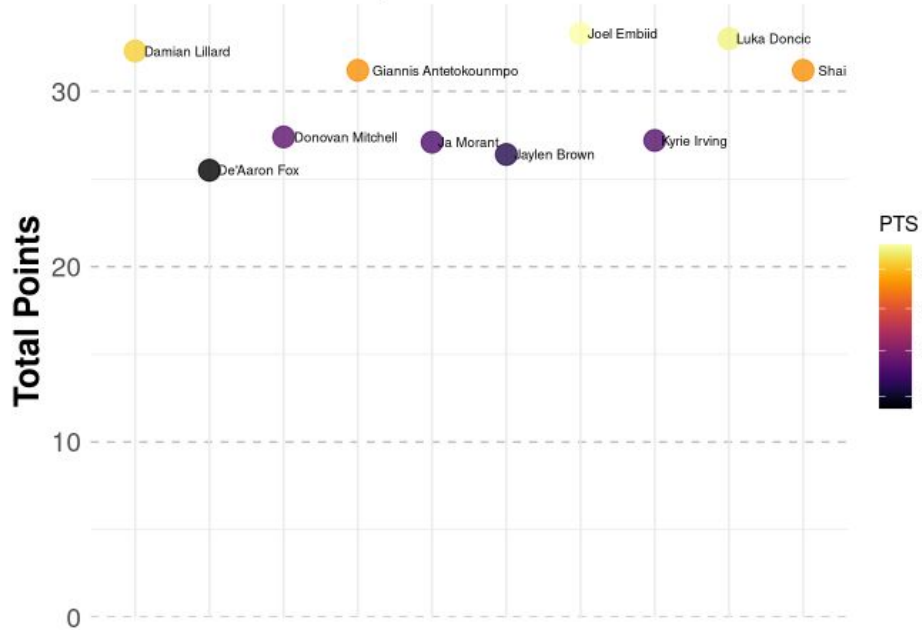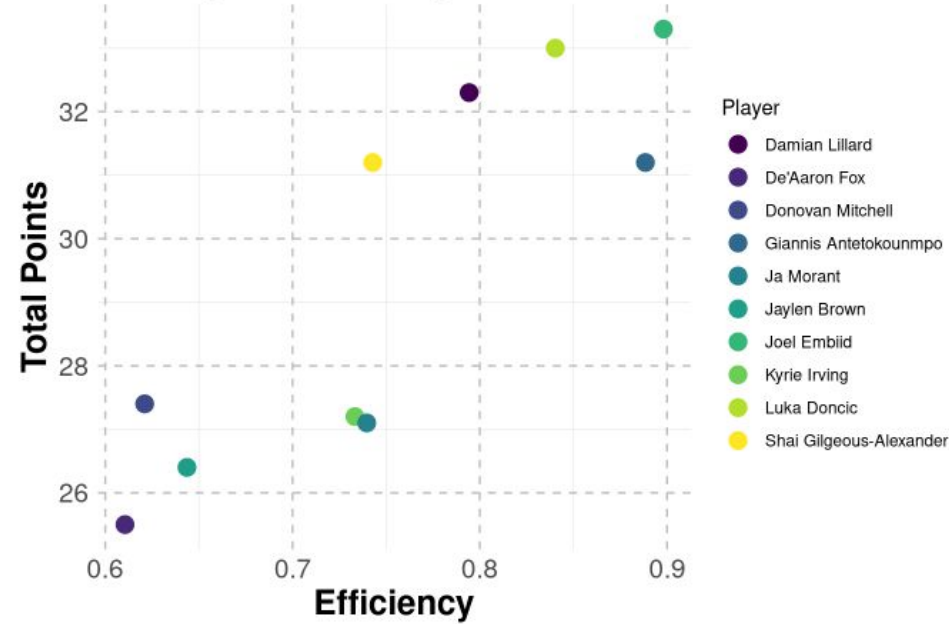- Looking at a few different categories and relationships with efficiency

Efficiency Formula

- EFF = (PTS + REB + AST + STL + BLK - TO) / GP
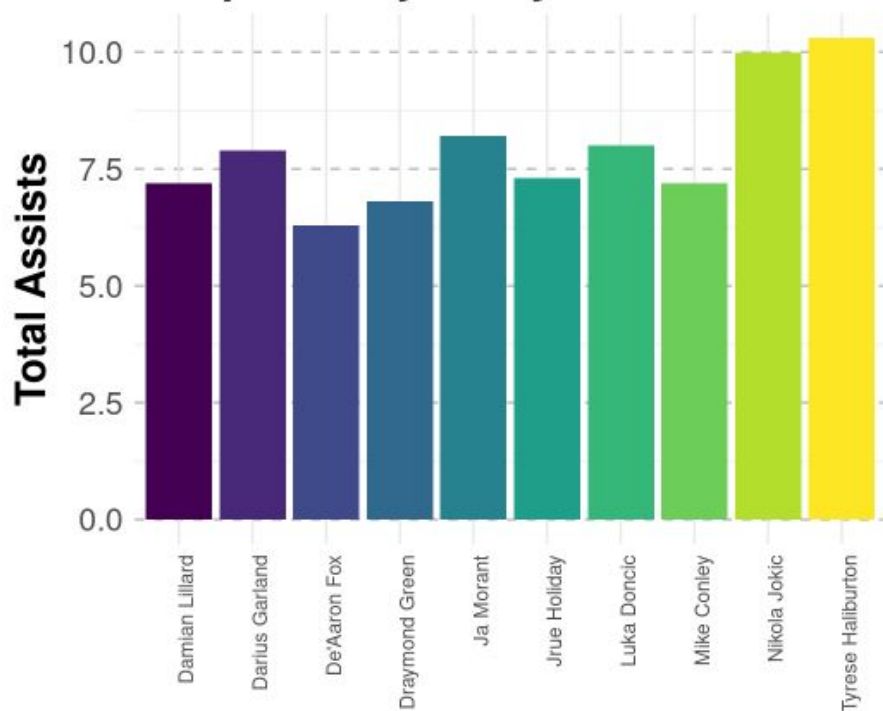
Points - Efficiency
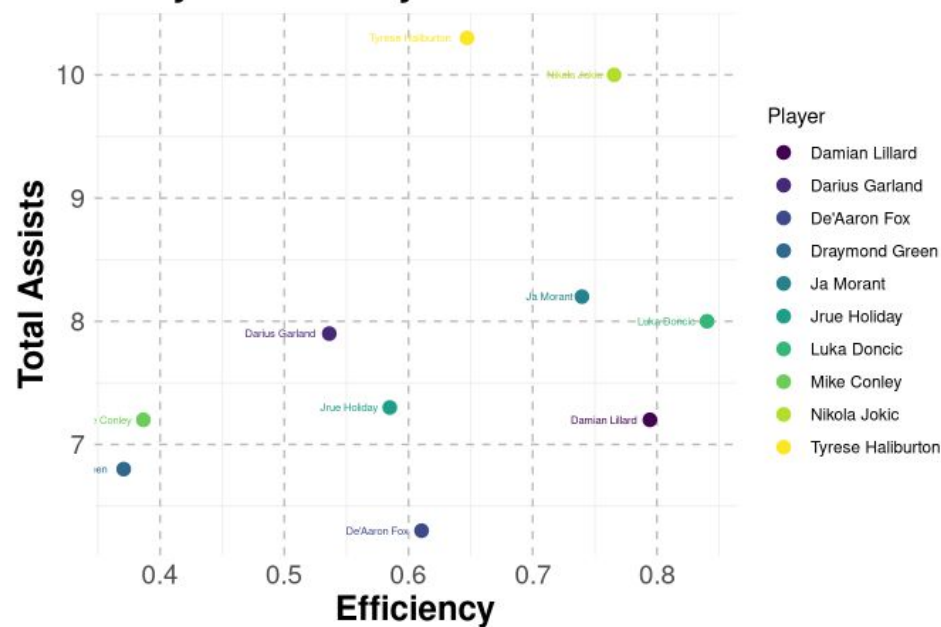

Top 10 Scorers

Player Efficiency vs Points

Assists

Efficiency

Top 10 Players by Total Assists
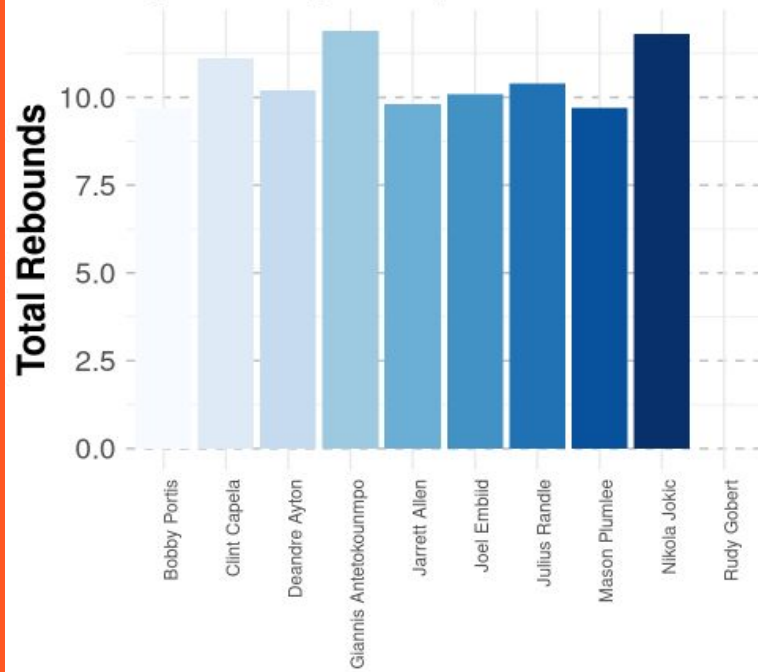

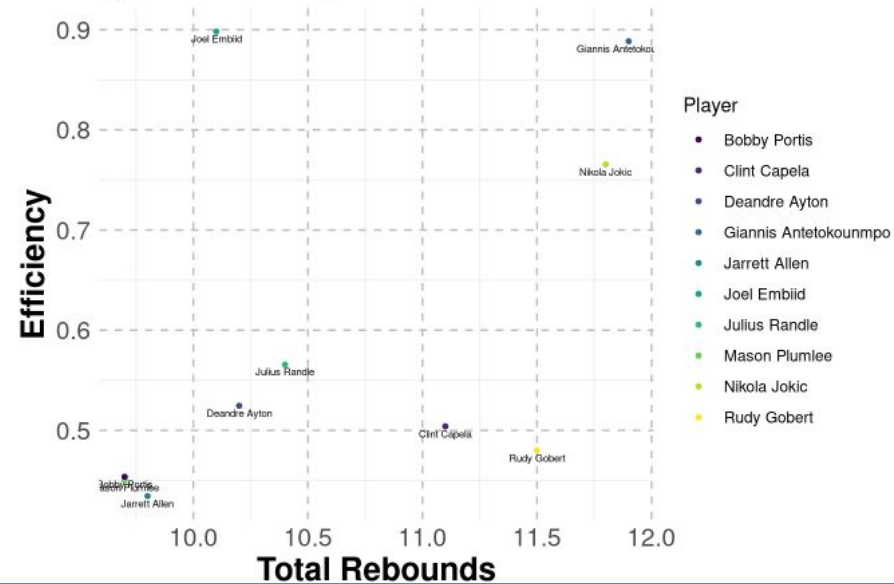## Player Efficiency vs Total Assists

Rebounds Efficiency

Top 10 Players by Total Rebounds
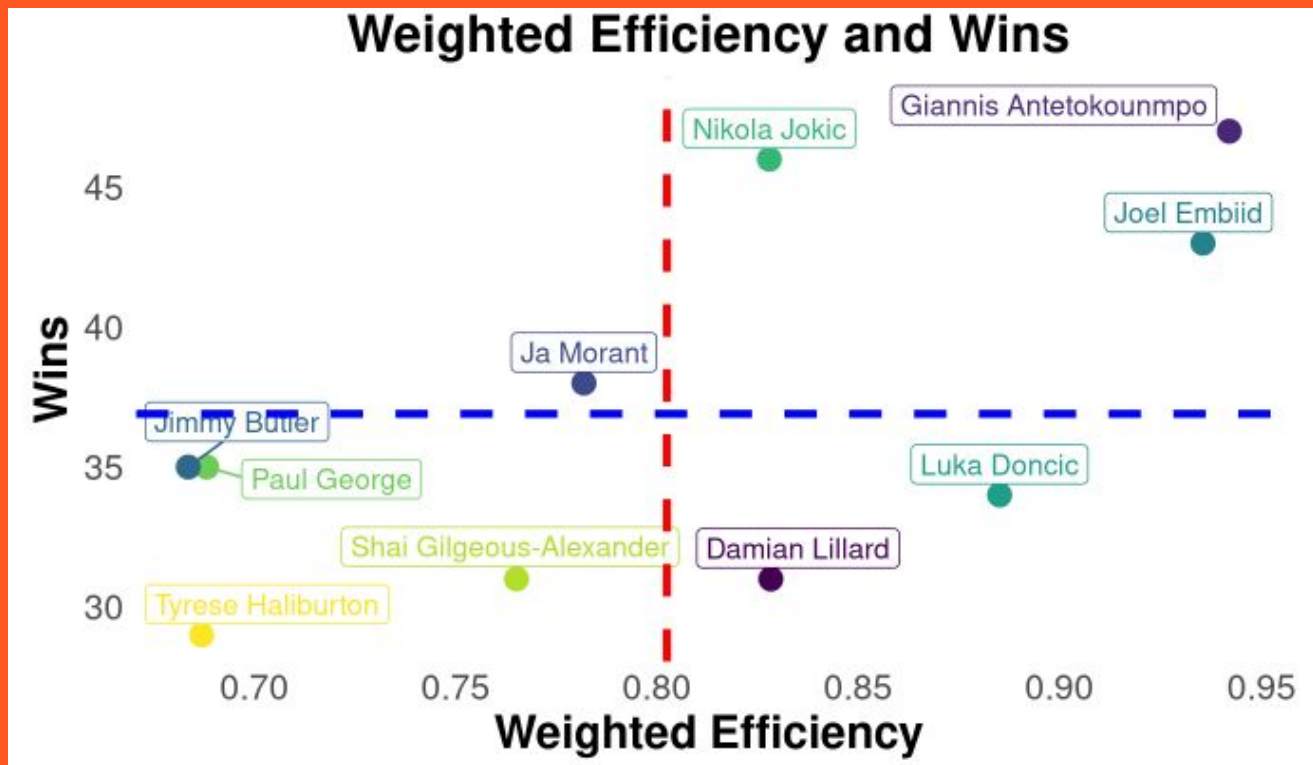

Player Efficiency and Total Rebounds

Weighted Results

- Adding Weight to each category
- Categories differ
- The importance differs
- Formula for weighted efficiency
  - WE = (PTS x 1 + REB x 1.2 + AST x 1.2 + STL x 0.8 + BLK x 0.8 - T/O x 1.1) / (Games Played)

Weighted Efficiency - Wins

Weighted Efficiency and Wins

MVP Award Winner

Giannis Antetokounmpo

Conclusion

- Data was collected before the end of the season
- Slightly different efficiency formula
- The prediction likely to be wrong
- The MVP race changed in the last few weeks of regular season
- Need more precise formula

Thank You!