



Are We Witnessing the Golden Age of Basketball?

Atharva Fulay
fulay@usc.edu

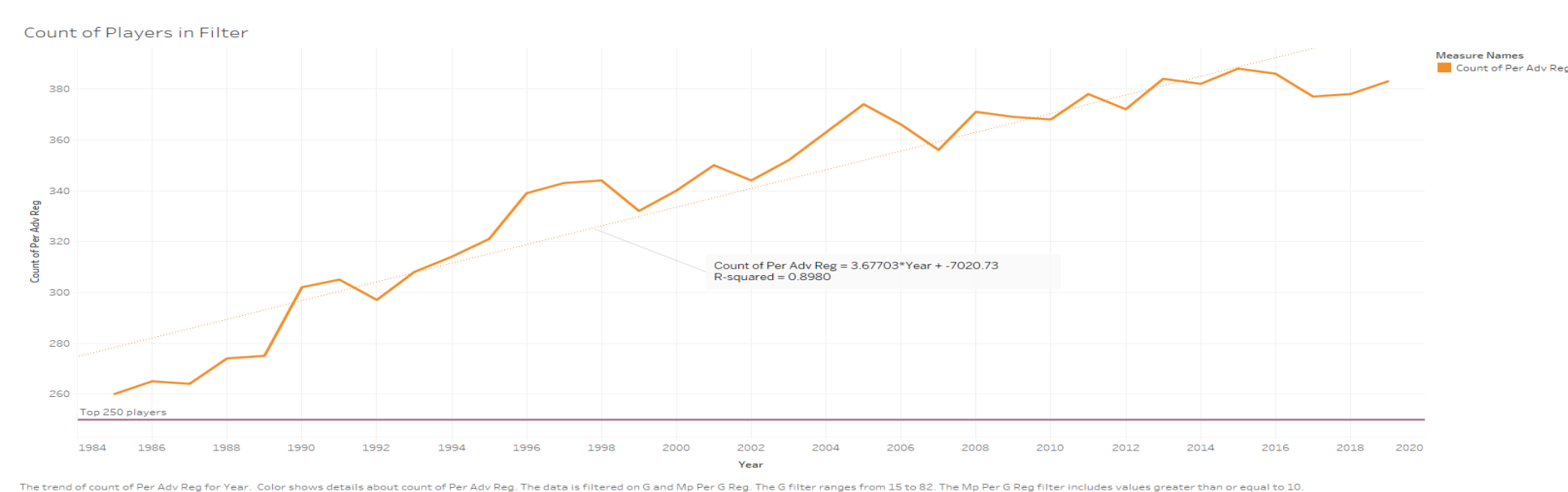


Introduction

In today's NBA, we are constantly seeing impressive records being matched or broken from Russell Westbrook averaging a triple double for a season or the Warriors going 73-9. Possibly from recency bias, it seems that the past five years of NBA basketball have produced at a higher level than previous years. Therefore, I aimed my analysis to see and compare the **production of NBA players today to those of previous years going back to the 1985 season**. As a part of this analysis, I look at shooting along with some that measure **efficiency and other performance scores**.

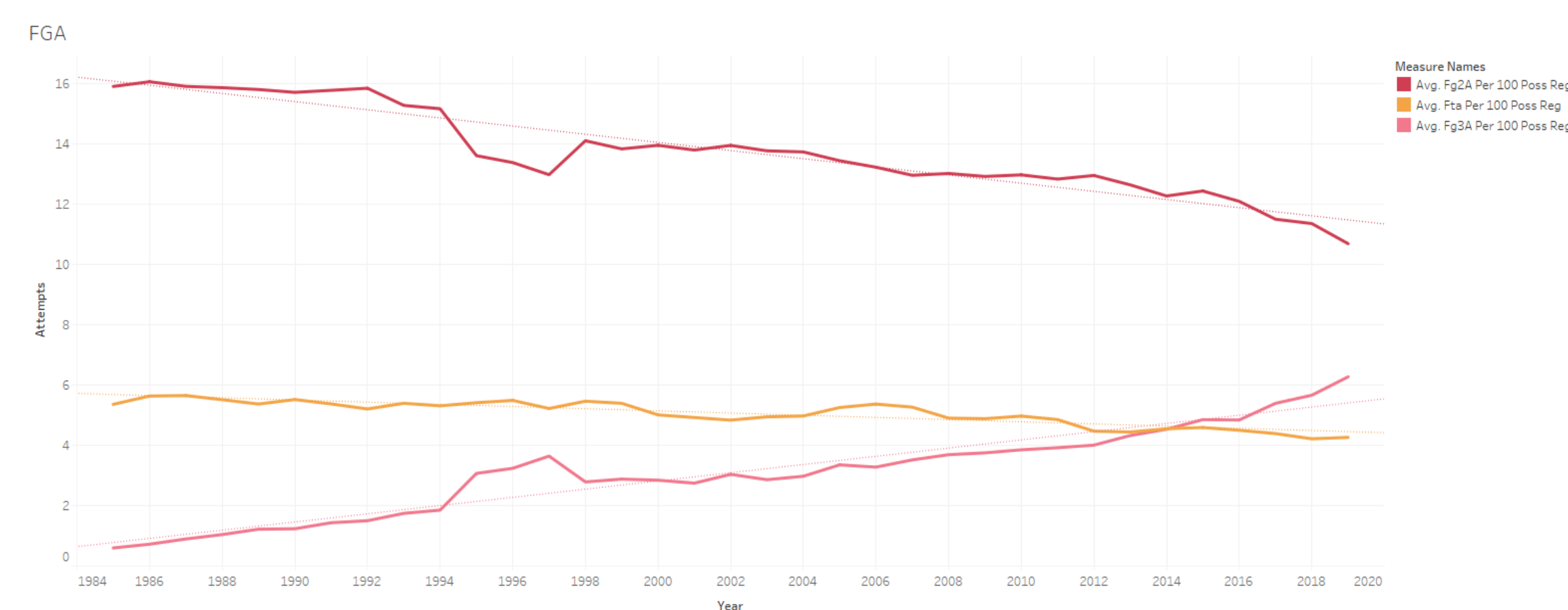
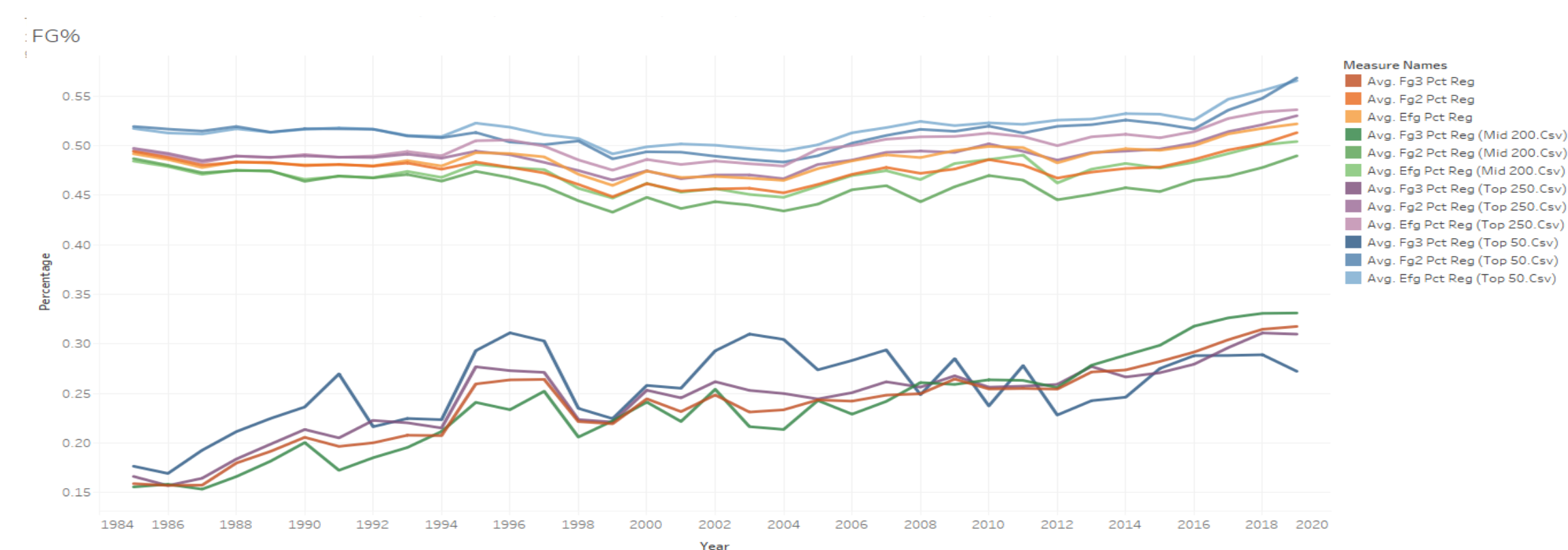
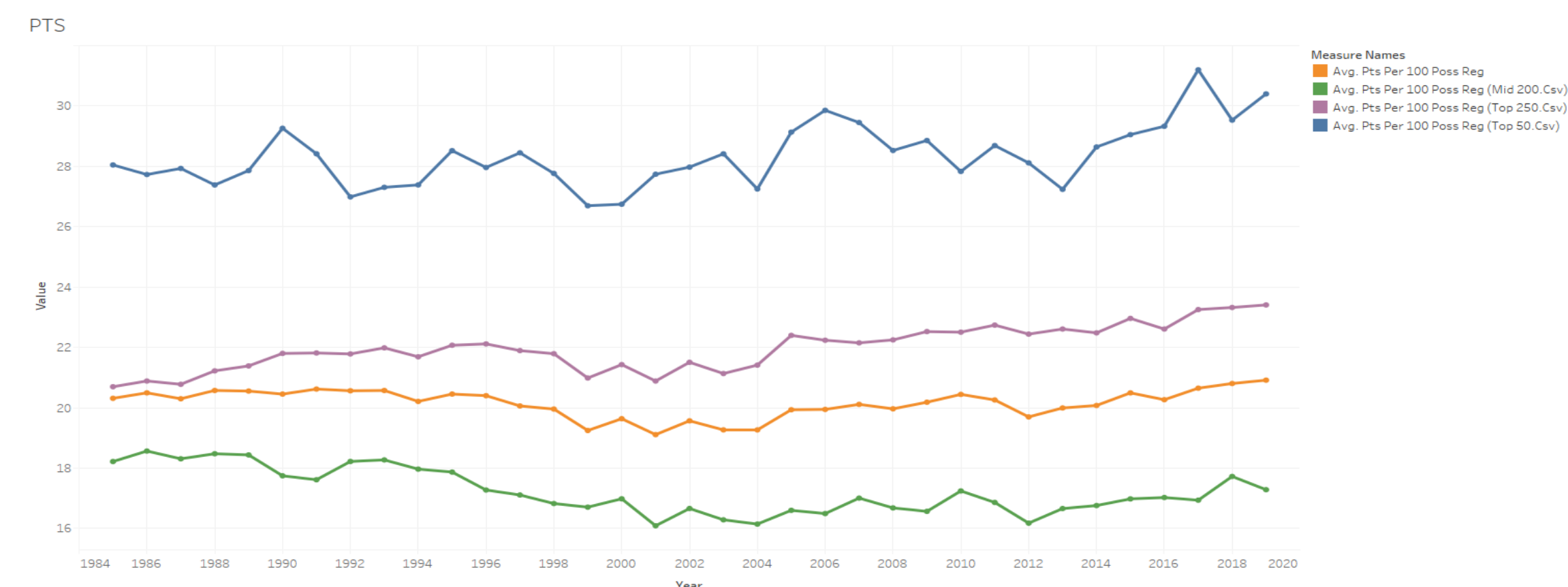
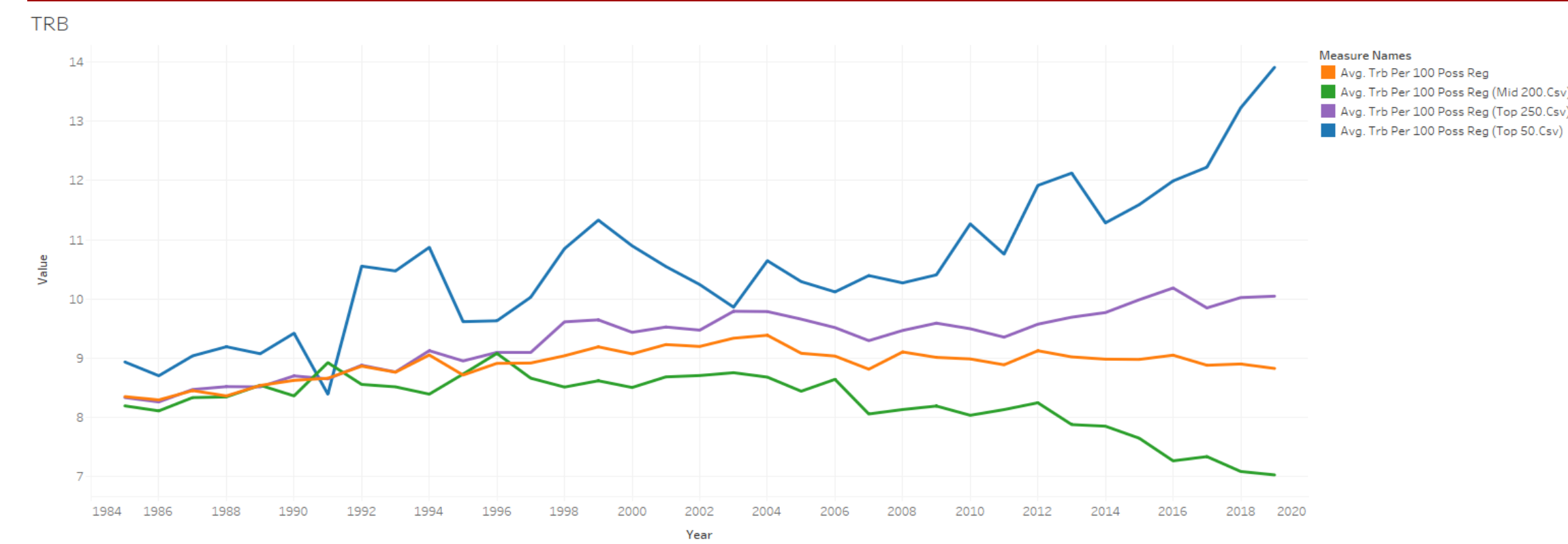
Data and Methodology

- All of the data is sourced from basketball-reference.com. Data set contains 13,396 players records each with at least 105 attributes, and up to 204 if the player's team made the playoffs.
- Since the speed of the game has a huge impact on the statistics that players can product. The **“per 100 possessions”** is the best normalization we can use to compare players and team performances year-over-year (YoY).
- One caveat that introduces, though, is players who play relatively few minutes, but perform well in those minutes. I've included players who averaged at least **10 minutes per game and who played 10 games in the season**. The figure below shows the number of players who pass this filter.
- To have further consistency, instead of looking comparing a different number of players every year, I looked at the top 250 players (based on PER) as well as all players who pass the filter.
- I look at raw **points, rebounds, assists** averaged by players and teams YoY. I included **field goal shooting percentages, PER** (player efficiency rating), and **VORP** (value over replacement player)

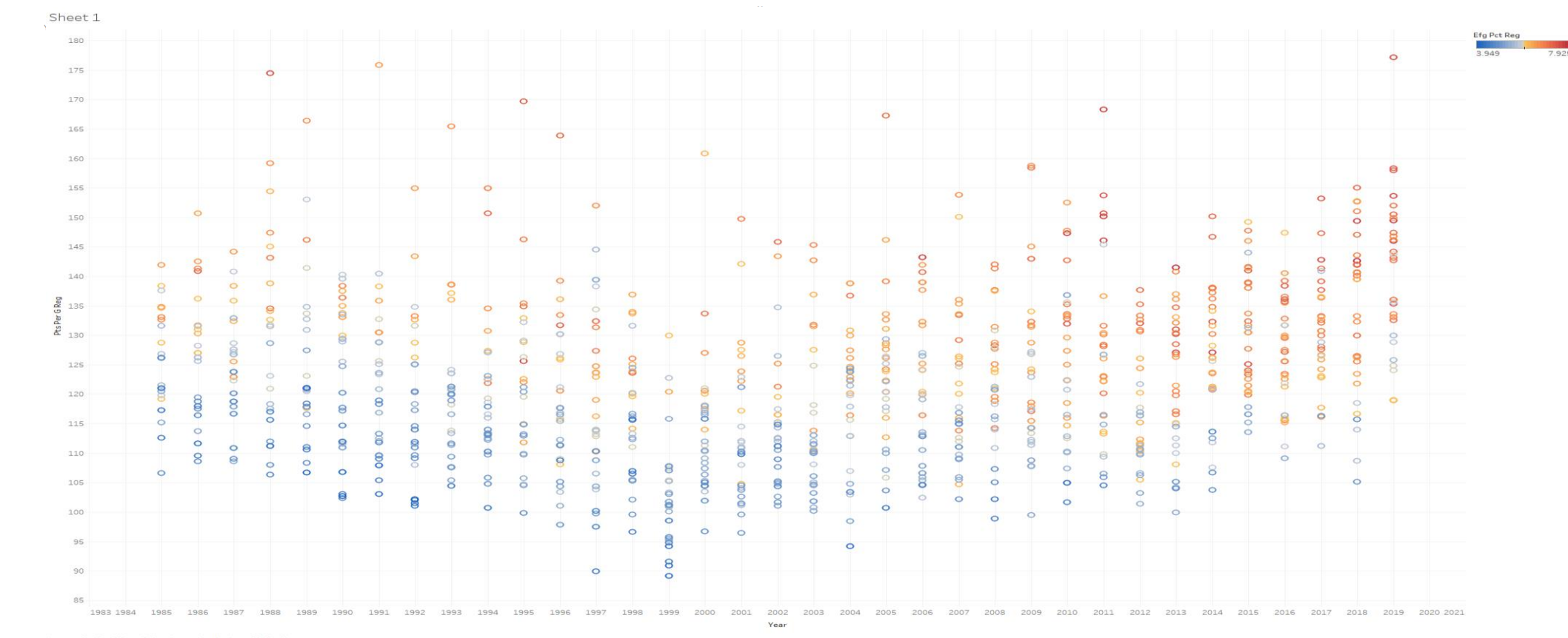
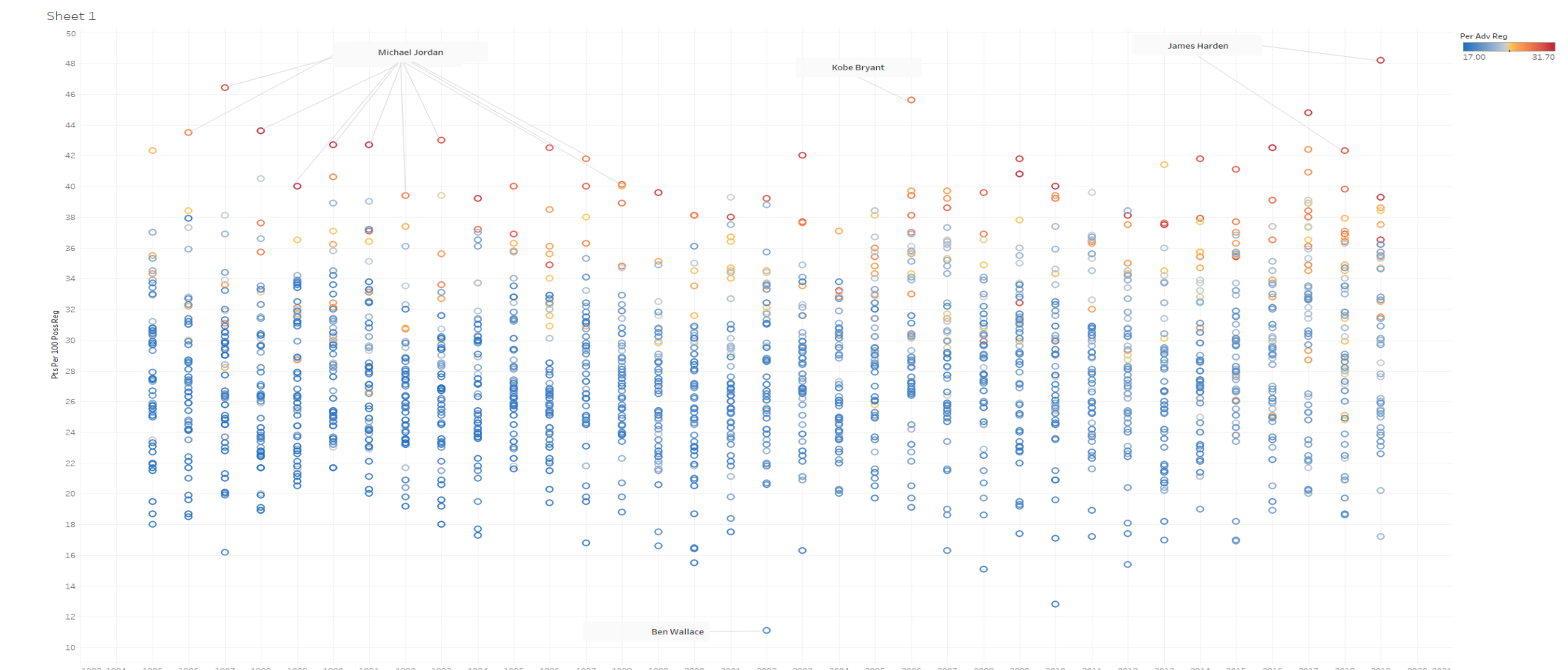


The trend of count of Per Actv Reg Per Year. Color shows details about count of Per Actv Reg. The data is filtered on G and Mo Per G Reg. The G Filter ranges from 1.5 to 82. The Mo Per G Reg filter includes values greater than or equal to 10.

Analysis and Results



The trends of Avg. Fg2A Per 100 Poss Reg, Avg. Fg1A Per 100 Poss Reg and Avg. Fg3A Per 100 Poss Reg for Year. Color shows details about Avg. Fg2A Per 100 Poss Reg, Avg. Fg1A Per 100 Poss Reg and Avg. Fg3A Per 100 Poss Reg. The data is filtered on G and Mo Per G Reg. The G Filter ranges from 1.5 to 82. The Mo Per G Reg filter includes values greater than or equal to 10.



Conclusion and Future Work

- After analyzing the past 35 years of NBA data, my conclusion that we aren't yet seeing the Golden Age of Basketball. Rather, it makes more sense to frame the early-to-mid 2000s as a **“Dark Age”** of basketball. Now, players are taking and making strategic shots along with the uptick in pace
- However, it can be argued that the NBA is extremely **top heavy** in terms of players and teams. This accounts for the records being broken by individuals as well as teams.
- The largest piece of evidence that we may on the brink of seeing the Golden Age is the emphasis on **efficiency**, or strategies such as taking **more 3 point shots**. As can be seen in the last visual, more teams are shooting at better percentages since 2012.
- In the future, since all this analysis was all done on the regular season statistics, it would be interesting to compare results from the playoffs. Usually, **strategy takes a larger role, pace slows down** and the **better players see more playing time** in the playoffs, which could deliver different results.