

What stats should NBA
teams spend their
money on?



Problem

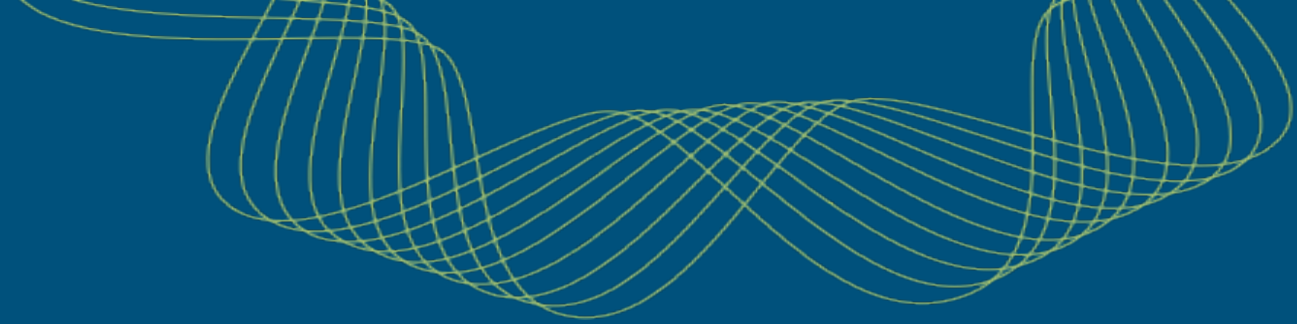


Figure out which of the following stats have a correlation to winning games and which do not:

Steals

Effective FG%

Blocks

Defensive Rebounds

Problem  Methodology  Results  Conclusion  Faults



Methodology

Every team-season from 2007-2008 to 2014-2015 seasons

Standardize relevant statistics by possession

Find zScore for steals

Ellipses with 95% confidence intervals

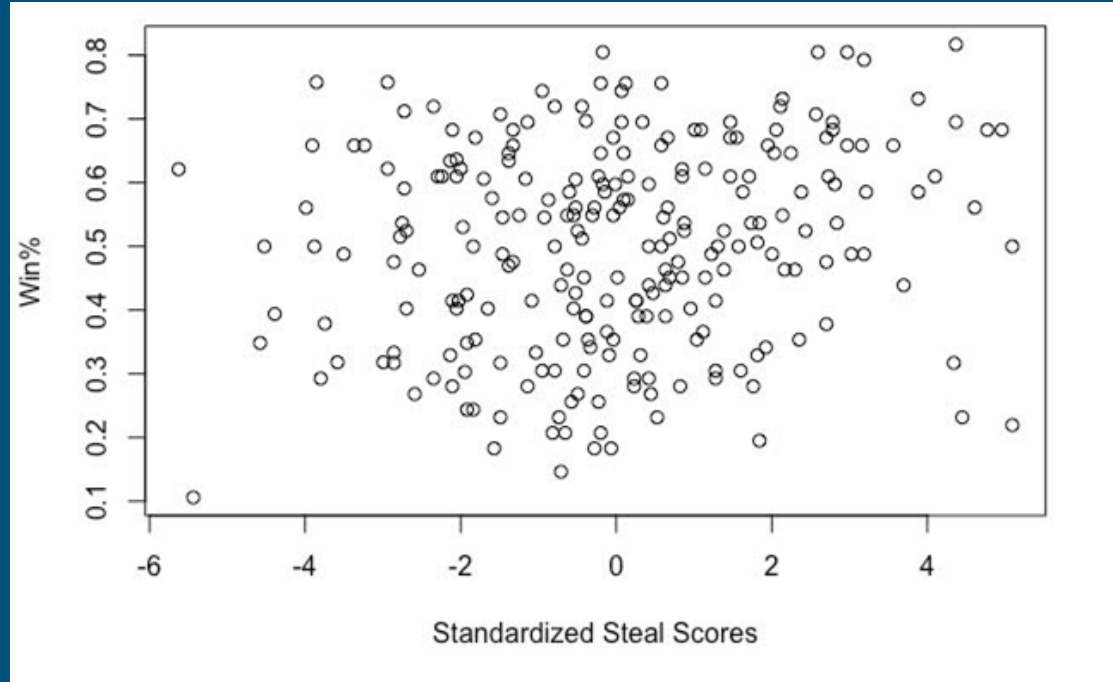
Use win % instead of total wins

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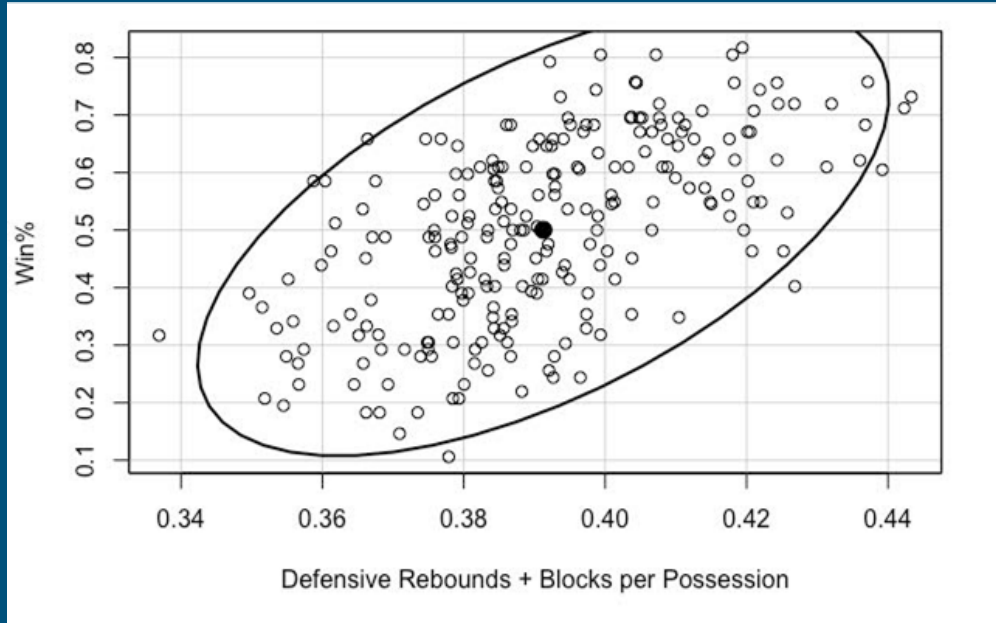


Results: Steals

- $R = .25$
- Little correlation
- Steals are overvalued



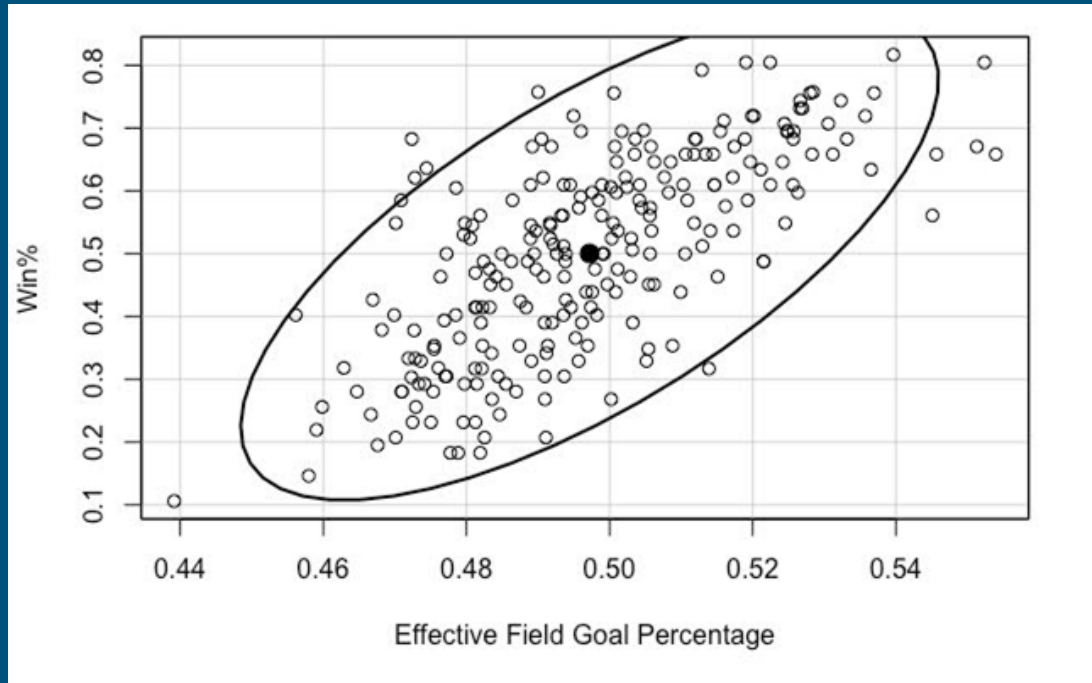
Results: BDR = *Blocks + Defensive Rebounds*



- $R = .65$
- Large effect on win percentage
- Misconceptions about data

Results: $eFG\% = (FGM + 0.5 * 3PM) / FGA$

- $R = .71$
- Largest correlation
- Shows new trend in 3pts





Conclusion

Teams should spend money on players who:

Take and make smart shots

Contribute on defense with blocks and defensive rebounds

Teams would be wasting their money on players who:

Produce steals and gamble on the defensive end

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Faults

Limited data set

Lack of advanced stats

Possessions

Limited sample size of lockout season

Historical changes in values of stats

Problem  Methodology  Results  Conclusion  **Faults**