How Does Conference Affiliation Relate to March Madness Seeding?



A Statistical Analysis of March Madness Seeds

Overview

Research Question: To what extent does conference affiliation influence NCAA March Madness seeding during the post-COVID era (2022-2025) when also accounting for teams' regular-season performance? In other words, do certain conferences seem to get special treatment by the selection committee?

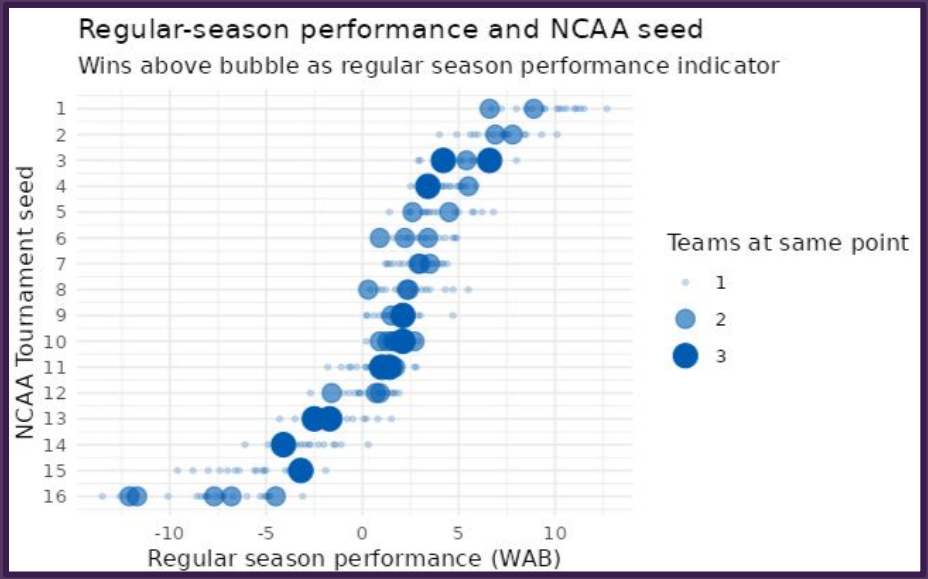
Key Variables

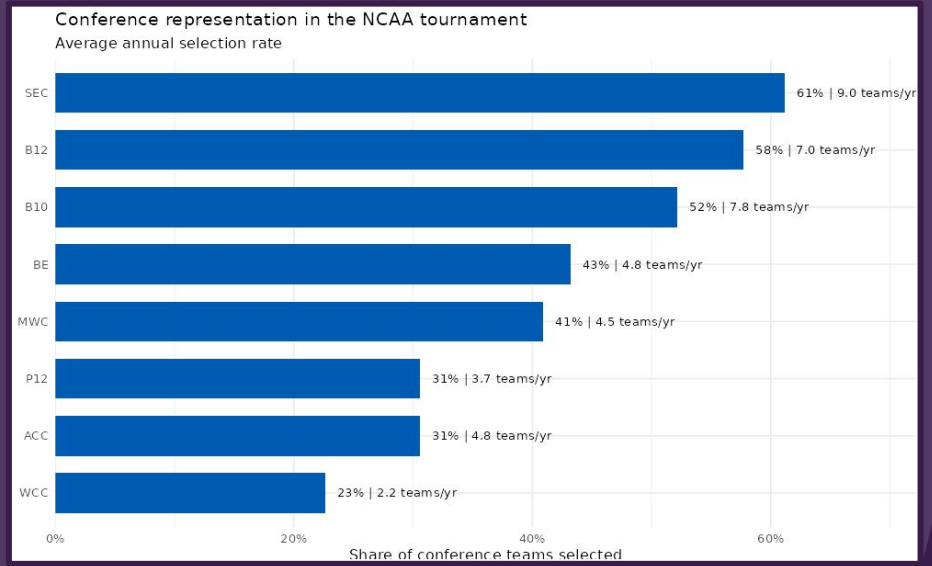
- Wins Above Bubble (WAB)
  - Measures a team's wins relative to an average "bubble team"
  - Positive vs. Negative WAB: Team performed better vs. worse than expected for a bubble-level team

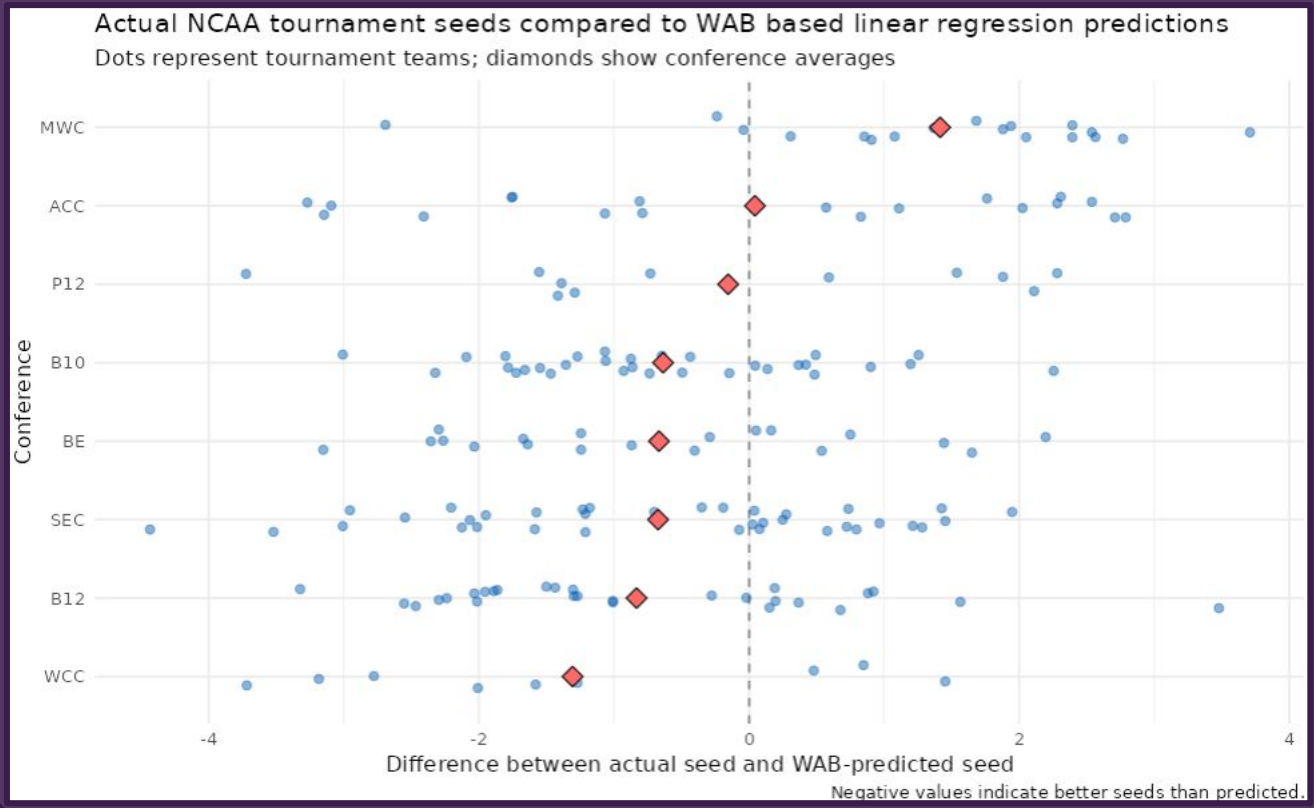
- Conference (CONF)
  - Group of college basketball teams competing against each other during the season (ACC, Big Ten)
  - Conferences vary in competitiveness, reputation, and overall team strength

- March Madness Seed (SEED)
  - Tournament ranking from 1 to 16 within each region
  - Determined based on regular-season performance, strength of schedule, quality of wins, etc.

Contextualization






Actual NCAA tournament seeds compared to WAB based linear regression predictions
Dots represent tournament teams; diamonds show conference averages
Conference
MWC
ACC
P12
B10
BE
SEC
B12
WCC
-4
-2
0
2
4
Difference between actual seed and WAB-predicted seed
Negative values indicate better seeds than predicted.

Conclusions



WAB and seed

Higher WAB generally corresponds to a better, lower-numbered seed



Conference differences

Among the conferences shown, the SEC and Big 12 had the highest tournament selection rates. Their teams also averaged more favorable seeds than WAB alone predicted. This pattern is consistent with possible preferential treatment, but it does not establish it.



Future Direction

The results of this analysis do not on their own *prove* that certain conferences get special treatment, and so further investigation should be done

Final Thoughts

Limited Scope

The analysis covers only four seasons, 2022–2025, and eight selected conferences

Complexity

WAB is one measure of regular-season performance; other factors potentially affecting seeds aren't included in the model

Potential Next Steps

Add more seasons and performance measures to the model, and consider how the selection committee explains their own reasoning

THANKS

Data from: https://www.kaggle.com/datasets/andrewsundberg/college-basketball-dataset
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