Ratings Glossary

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I try to measure skills based on the opportunities for those skills to be observed. On the team level, this often means ratings the offense (and defense) on points scored (and allowed) per possession. That is the basis for the ratings system. If you're looking for info on what the columns mean on the ratings mean, please continue. If you don't like the ratings, wonder why I have your team too low, or wonder why the ratings don't look like the AP top 25, go here. (For information on preseason ratings, see this and this and this.)

(For additional information on other advanced statistics, try this link or this one.)

Since we need to know things in terms of possessions and possessions is not an official NCAA statistic, it must be estimated. The formula I am using is:

Possessions = FGA-OR+TO+.475*FTA

This is a pretty standard computation that accounts for when possession is lost by a team. The only bit of uncertainty is the free throw portion, because we don't always know how a team got to the line. If they are shooting two, then the two FTA's account for one possession. But if they go to the line for one after making a shot, then the one FTA has no possession attached to it, because the previous FGA accounts for it.

The .475 multiplier estimates how many FTA's represent one possession. This figure has been derived using play-by-play data.

I do a tempo calculation based on each team's statistics in a game, average those two numbers and apply it to both teams for the game, since each team's total possessions should be nearly equal. The pace for each game is shown on each team's schedule (either actual pace, or for future games, predicted tempo).

From there, we can compute offensive and defensive efficiency. This is the number of points scored or allowed per 100 possessions. (You can also define it per single possession. Values on this site are per 100 possessions.) There are around 67 possessions for each team in the average college basketball game, so these numbers are higher that the points-per-game statistics you see used by the media.

Like tempo, I average each team's efficiency by game. The other way to do this would be to take a team's total points on the season and divide it by total possesions. But this gives some games more weight than others depending on the number of possessions in a particular contest, and I don't like that. Also, I only use games involving two D-I teams.

The raw numbers are computed from the data contained in a box score. But then there's the matter of adjusting for competition. The "adjusted" numbers (AdjO, AdjD as AdjT) are the results of these calculations.

AdjO – Adjusted offensive efficiency – An estimate of the offensive efficiency (points scored per 100 possessions) a team would have against the average D-I defense.

AdjD – Adjusted defensive efficiency – An estimate of the defensive efficiency (points allowed per 100 possessions) a team would have against the average D-I offense.

AdjT – Adjusted tempo – An estimate of the tempo (possessions per 40

minutes) a team would have against the team that wants to play at an average D-I tempo.

The other categories on the ratings page:

Pyth – The "pythagorean winning percentage". Just a fancy way of computing a team's expected winning percentage against an average D-I team. Derived from (AdjO^11.5)/(AdjO^11.5+AdjD^11.5)

Luck – A measure of the deviation between a team's actual winning percentage and what one would expect from its game-by-game efficiencies. It's a Dean Oliver invention. Essentially, a team involved in a lot of close games should not win (or lose) all of them. Those that do will be viewed as lucky (or unlucky).

Strength of schedule – The components here are similar to the team components. Because we're measuring a team's offensive and defensive ability, we can also assess its schedule in similar terms. The Pyth is derived from these components in the same way that is for a team rating. (This is also how I compute conference ratings.)