

Sabermetrics Final Project - Initial Description

Beat the Shift

This statistic will be a rating of how well a hitter is at “beating the shift.” In other words, I will be looking at how good hitters are at getting a hit even when the fielders are positioned in a non-standard alignment. This will be a rate statistic as counting statistics are mostly useless when comparing players. I am still deciding if I want to report this number as an average / percentage or as a rating on the same scale as wRC+ and other similar stats.

To construct this statistic, statcast will be my lifeblood. Statcast can filter batting events by infield alignment and by batted ball direction, both of which will be useful to me. Statcast has three categories of infield alignment: standard alignment, strategic alignment, and shift. Shift is defined as three or more infielders on one side of second base. Strategic alignment is essentially anything that cannot be defined as standard or shift, like a second baseman playing extra far back in shallow right field, but the shortstop remaining on the left side of second base, for example. If I have infield alignment for every at bat for a player, I can look at how many hits they got, or even how many total bases, out of each at bat where the infield was in a non-standard alignment.

There are some potential pitfalls (and reasons I’m not completely in love with this idea) I see right away. The biggest one being that managers call shifts on guys for a reason. Most likely, if the shift is on for a player, it’s because he hits very poorly when that shift is on. This means that everyone’s shift rating would be pretty small. However, I could adjust for this in some way and create a statistic that is adjusted to league average shift beating ability. Also, not every player gets shifted on, so the sample size might be small relative to the entire MLB. I feel that there is further complexity that could be added to this statistic as well. Overall, this statistic

could potentially give managers insight into players that they are over-shifting on, or into hitters in their lineup that are still valuable even against very dynamic infields.