THE NUMBERS

Why the AL Batters the NL at Home: The DH

Interleague Disparity Explained in Part by Talent Gap, but Also by the Designated Hitter

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Designated hitter David Ortiz of the Boston Red Sox bats during a game with the Houston Astros. *Getty Images*

Over more than 15 years of interleague baseball, the American League has had a bigger home-field advantage than the National League. A key reason may be the designated hitter.

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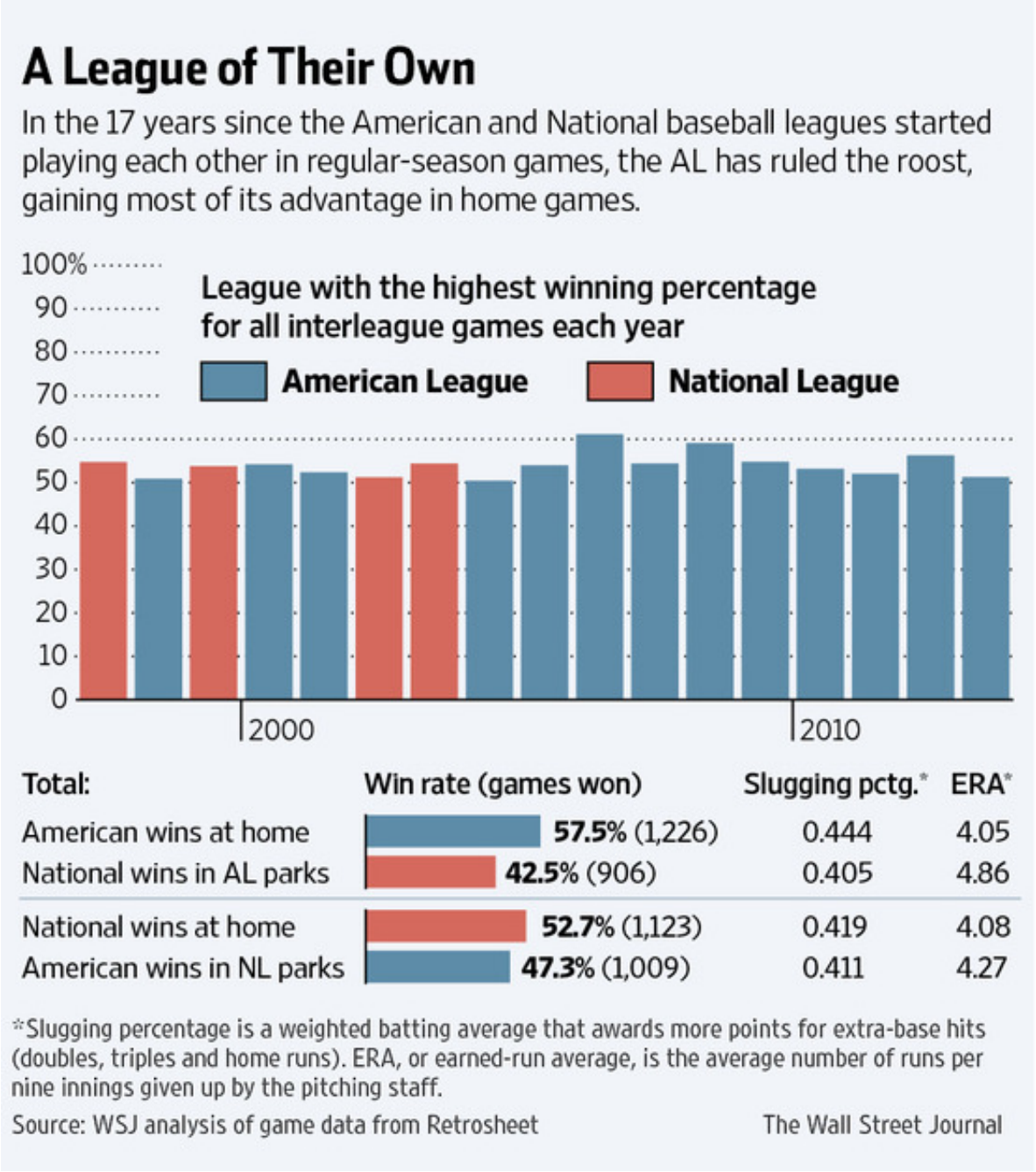
The rules governing the two leagues of Major League Baseball are identical with one exception: The National League requires its pitchers to take a turn at bat, while the American League, winner of this past week's All-Star Game, replaces its pitchers in the batting lineup with a designated hitter.

That difference gives National League pitchers an advantage because one in nine batters they face

is the opposing pitcher, who will usually make an out. Those easy outs lower the earned-run averages of the NL pitchers, making them appear sharper on the mound than their AL peers.

But that advantage evaporates in games when the National League visits AL parks and plays with the designated-hitter rule in effect. In those games—more than 250 each year—the gaping hole in the batting lineup, also known as the pitcher, is plugged by the big bat of a designated hitter.



That's a bonus for American League teams, which, as a matter of practice, employ a slugger just to be DH. But it's a hindrance for the National League, which must improvise, and the numbers highlight the difference.

AL teams won 57.5% of the 2,132 interleague games played in their parks from 1997, when interleague play was introduced, through 2013. They outslugged the NL teams .444 to .405. (Slugging percentage is a weighted batting average that credits batters for extra-base hits.) And

the AL pitchers' earned-run average was 4.05 vs. 4.86 for the National League. (Lower is better.) NL teams also benefited from playing at home, when neither team can use a DH, but not as much; they won 52.7% of the interleague games they hosted in the same period.

It's generally accepted that American League teams in this period were simply better, and Bill James, the baseball author and historian who pioneered sabermetrics—the advanced statistical analysis of baseball records named for SABR, the Society for American Baseball Research—believes that was the only factor that influenced the league records.

"The difference in winning percentages is explained by the quality of the leagues and has nothing to do with the DH rule," Mr. James said in an email.

A Wall Street Journal analysis by Rob Barry and Tom McGinty with guidance from Serge Sverdlov, a statistician at the University of Washington, also found that the AL teams were stronger overall but suggested the league partly owed its impressive record to the designated hitter.

Comparing teams across leagues is difficult because only about 10% of the games in this period were interleague, and before 2013, the games weren't played all season long. But the Journal used game data from Retrosheet to construct a statistical model that examined all games, controlling for batting prowess, home-field advantage, earned-run average and home-visitor league combinations.

The model indicates the designated hitter improved the American League's win rate in home interleague games by more than two percentage points, and other observers are persuaded that it gave the superior AL teams an additional bump.

"When I started looking at it, I was skeptical," said John Dewan, owner of Baseball Info Solutions, a company that analyzes data for major league teams. "Based on 57.5% vs. 52.7%, that to me is an important number. It shows both teams do better at home, but the American League teams are even better."

The difference begins with the way the leagues structure their teams. The American League builds its rosters around designated hitters whose greatest, and in some cases only, skill is power at the plate.

"Their bat is what they sell," said Bobby Ojeda, an SNY baseball analyst and former pitcher who played for several teams in both leagues. "When a National League team goes to an American League yard, they don't have that bat on their bench. It's not even close."

A National League team will use a position player as designated hitter. That player may be the team's star, or he may be a bench player who usually isn't in the starting lineup. If the star—a capable hitter—bats DH, a bench player will take over his position in the field. Either way, a less skillful hitter makes it into the National League's batting lineup.

"The bench guy in the National League is not a premier guy," said Manny Acta, an ESPN baseball analyst who formerly managed teams in both leagues. "He can't compete with the DH in the

American League."

Despite this apparent designated-hitter advantage, nearly everyone interviewed preferred the strategy and finesse required to play ball in the National League over what Daniel Okrent, who created Rotisserie League fantasy baseball, called the push-button style of the American League —and they emphatically didn't want to see the Senior Circuit adopt the designated hitter.

"I like seeing a big, strong dude go yard, too," Mr. Ojeda said, using a slang term for hitting a home run. "But I like the game better with the pitcher batting. It adds more intrigue."