Baseball's Moral Hazard: Law, Economics And The Designated Hitter Rule

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LAW, ECONOMICS AND THE DESIGNATED HITTER RULE

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No subject prompts greater disagreement among baseball fans than the designated hitter rule, which allows teams to designate a player to hit for the pitcher. The rule increases the number of hit batters, and some have suggested this effect is a result of “moral hazard,” which recognizes that persons insured against risk are more likely to engage in dangerous behavior. Because American League pitchers do not bat, they allegedly are not deterred by the full cost of making risky, inside pitches—namely, retribution during their next at bat. Using a law-and-economics approach, this Article concludes that the designated hitter rule creates some moral hazard, but finds that recent structural changes to the game have largely overshadowed this effect. Moreover, the benefits of the rule—including increased offense and attendance—likely outweigh its costs in the American League. This is not necessarily true in the National League, however, due to differences in fan preferences. Thus, the current hybrid system (in which the American League allows designated hitters while the National League does not) best effectuates these fan preferences, maximizing social welfare.

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I. INTRODUCTION

For decades, Americans have vigorously debated baseball’s designated hitter rule, which allows teams to designate a player to hit in place of the pitcher.1 The American League’s adoption of the rule in 1973 represents a watershed moment for baseball, one of the most controversial rule changes in the history of the game. Indeed, “[p]robably not since the Roman Catholic Church switched from Latin to English Masses has any break with tradition caused more vigorous argument in this country.”2

Strong opinions exist on both sides of the debate. Proponents argue the rule brings much-needed offense to a sport that would otherwise resemble “a chess game for the terminally bored.”3 They contend fans “don’t enjoy watching pitchers at the plate, flailing away like kids trying to bust a pinata, making a mockery of the delicate art and precise science of striking a baseball.”4

1. Major League Baseball Rule 6.10(b) (“A hitter may be designated to bat for the starting pitcher and all subsequent pitchers in any game without otherwise affecting the status of the pitcher(s) in the game.”).

2. William Leggett, The Lights Go On Again, SPORTS ILLUSTRATED, Apr. 9, 1973, at 24, 26; see also Jim Murray, It's About Time That Baseball Plays Its Wild Card, L.A. TIMES, Oct. 20, 1983, at E1 (“The designated-hitter rule has caused a schism in baseball’s religion, as serious a breach in the dogma as an argument over the soul. I mean, can a designated hitter go to heaven?”).


4. Ostler, supra note 3.
Opponents counter that the rule eliminates managerial strategy, turning baseball “into something as predictable and monotonous as a violin recital at Carnegie Hall.”5 Particularly among fans in the National League, which has refused to adopt the rule, designated hitters “have earned approximately the same nationwide affection as acid rain, toxic waste and George Steinbrenner.”6 Summarizing these divergent opinions, columnist George Vecsey simply notes, “[s]ome fans love the rule; some hate it.”7

But is there something more sinister going on? The New York Times recently suggested that the designated hitter rule increases the number of batters hit by pitches in the American League.8 The article attributed this effect to “moral hazard,” an economic theory that recognizes that persons insured against risk are more likely to engage in dangerous behavior.9 Because American League pitchers do not bat, they allegedly are not deterred by the full cost of making risky, inside pitches—namely, the possibility of retribution during their next at bat.10 In other words, “[j]ust as a homeowner who has fire insurance is more likely to risk smoking in bed, . . . so, too, a pitcher who has a designated hitter batting in his stead is more likely to risk plunking an opposing player.”11 Several economists have tested this theory in recent years, but a

5. Jim Murray, New Thoughts on the Grand Old Game, L.A. TIMES, Feb. 20, 1983, at F1; see also Red Smith, Loathsome Ploy: D.H., N.Y. TIMES, Aug. 18, 1980, at C6 (“With the corruption called designated hitter, the balance is destroyed, the challenge to the manager eliminated. He pinch hits for the pitcher every time around, and it costs him nothing. National League managers have to think; American Leaguers don’t.”).

6. Ostler, supra note 3; see also Stephen Cannella & Jeff Pearlman, Inside Baseball: DH Dilemma, SPORTS ILLUSTRATED, July 19, 1999, at 68, 68 (quoting former Cardinals and Pirates outfielder Andy Van Slyke as saying, “It seems like Satan has thrown the DH into our game.”).


10. See Pink, supra note 8.

11. Id.
This Article uses a law-and-economics approach to analyze whether the designated hitter rule actually produces a moral hazard effect. Economic analysis of the law relies on empirical results and economic theory to determine whether existing rules provide proper incentives for private actors to engage in socially optimal behavior. In this sense, baseball and law and economics are an ideal pairing because “[b]aseball supplies a natural experimental laboratory for testing bedrock economic theories about how changes in the rules of the game affect human behavior.”

In addition to examining whether the designated hitter rule creates moral hazard, we ask a second, normative question: on balance, does the designated hitter rule promote conduct that is socially optimal for baseball and its fans? Part II of this Article examines the history of the designated hitter rule, implemented in the American League in 1973 to boost offense and attendance. This history shows that the rule dramatically increased offense,
bringing fans to American League ballparks. The National League has refused to adopt a similar rule, however, causing an asymmetry between the two leagues that has persisted for nearly four decades.

Part III of this Article examines the designated hitter rule through the lens of moral hazard theory. Moral hazard exists within our tort system when individuals are inadequately deterred from engaging in risky behavior because they do not bear the full cost of their actions. Empirical research demonstrates that the higher number of hit batsmen in the American League is partially (but not exclusively) the result of moral hazard. Interestingly, our research also demonstrates that recent structural changes to the game—including league expansion and adoption of the “double warning” rule in both leagues—have overshadowed the designated hitter rule’s moral hazard effect to some extent.

Finally, Part IV of this Article examines other costs and benefits of the designated hitter rule. Our analysis shows that the benefits of the American League’s designated hitter rule likely outweigh its costs, including any moral hazard effect. We note, however, that the cost-benefit analysis varies between the two leagues, due to differences in fan preferences. The current hybrid system (in which the American League allows designated hitters while the National League does not) best reflects these differences in fan preferences. Thus, we ultimately conclude that American and National League fans should agree to disagree on the designated hitter rule, and should celebrate and enjoy the unique rules, history, and culture of each league.

II. HISTORY OF THE DESIGNATED HITTER RULE

The American League implemented the designated hitter rule in 1973, with the goal of increasing offense and attendance. Pitchers had dominated baseball during the late 1960s and early 1970s, leading to low-scoring ball games and decreased attendance. To address these problems, Major League Baseball experimented with various rule changes, including adoption of the designated hitter rule in the American League. Despite increased offense and

15. See infra Part II.A.
16. See infra Part II.B.
attendance in the American League, however, the National League refused to adopt a similar rule.\textsuperscript{17}

A. Dominant Pitching and Decreased Attendance Create a Favorable Climate for Changing the Rules

The American League’s adoption of the designated hitter rule is rooted in pitching prowess and empty stadiums. In the early 1960s, the hitter was at the center of the game, and fans packed the seats to see home runs, not pitching duels.\textsuperscript{18} However, over the next decade, pitching and defense dominated,\textsuperscript{19} and offenses fell flat.\textsuperscript{20} Several factors contributed to the strong pitching witnessed through the 1960s and into the 1970s. Perhaps most importantly, some of the all-time greatest pitchers were in their prime during this era, including Sandy Koufax, Bob Gibson, Jim Bunning, Juan Marichal, and Don Drysdale.\textsuperscript{21} During the 1968 season alone, pitchers threw five no-hitters, Denny McLain won 31 games, and Bob Gibson threw 13 shutouts.\textsuperscript{22}

Various structural changes gave pitchers an even greater advantage. Major League Baseball enlarged the strike zone after the 1962 season, allowing pitchers ample room to vary the

\begin{footnotesize}
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\item See infra Part II.C.
\item See, e.g., Rex Lardner, The Pitchers Are Ruining the Game, N.Y. Times, June 16, 1968, at SM12 (noting that “[a]ll kinds of records were set” by pitchers during the 1967 baseball season—including 153 shutouts in the American League, 82 games in the National League in which pitchers gave up no more than three hits, and 1,189 batters struck out by Cleveland pitchers).
\item See, e.g., Leonard Koppett, Inertia Still at the Bat: Altering Rules to Aid Offense Resisted Despite Ever- Changing Face of Game, N.Y. Times, Apr. 14, 1968, at S4 (noting that there were 11.1 runs scored in an average game in 1930, 9.6 runs in 1940, 9.7 runs in 1950, and only 7.5 runs scored during the 1967 season); Lardner, supra note 19 (noting that in 1967, “[o]nly four batters in the American League hit over .300,” and “[t]he league batting average was .236—the lowest since 1908, when the ball resembled a large marshmallow”).
\item McKelvey, supra note 18, at 10.
\end{enumerate}
\end{footnotesize}
placement of pitches, making them harder to hit.\textsuperscript{23} Managers also made greater use of relief pitchers during the 1960s, forcing batters to contend with the different styles and repertoires of multiple pitchers during a single game.\textsuperscript{24} New, harder to hit pitches were invented, such as the “forkball” and the “slider.”\textsuperscript{25} And finally, new ballparks were being built around the country on a far larger scale, making home runs significantly more difficult to hit.\textsuperscript{26}

This favorable atmosphere for the dominant pitching of the 1960s smothered offense in baseball, directly causing a significant decrease in attendance. In both leagues, composite batting averages and the average number of hits per game plummeted, from .246 and 7.89 in 1963 to just .237 and 6.84 by 1968.\textsuperscript{27} That year, Carl Yastrzemski of the Boston Red Sox barely eked out a .301 batting average—“the lowest figure to win a batting championship in the history of the game.”\textsuperscript{28} Not coincidentally, attendance at major league baseball games slumped as well.\textsuperscript{29} Disgruntled players, fans, and commentators clamored for rule changes to save the nation’s pastime.\textsuperscript{30}

\textsuperscript{23} McKelvey, supra note 18, at 9.
\textsuperscript{24} Id. at 11; see also Lardner, supra note 19 (noting the greater use of relief pitchers by big league managers “allows the starting pitcher to throw as hard as he can as long as he can”; in late innings hitters face relief pitchers they have seldom seen, instead of a tired starting pitcher).
\textsuperscript{25} McKelvey, supra note 18, at 12. As Cal Hubbard, the head umpire in the American League, said in 1968, “Facing two pitches, you could guess right half the time. With five, you don’t stand a chance.” Lardner, supra note 19.
\textsuperscript{26} See, e.g., McKelvey, supra note 18, at 12; William Leggett, Baseball 1965: Immutable But Changing, SPORTS ILLUSTRATED, Apr. 19, 1965, at 42, 44; but see Jack Mann, A Farewell to .300 Hitters, SPORTS ILLUSTRATED, Sept. 26, 1966, at 42, 52, 55 (noting that although larger outfields will decrease home runs, they also increase the opportunity for hits).
\textsuperscript{27} McKelvey, supra note 18, at 10.
\textsuperscript{28} Leggett, supra note 22, at 23.
\textsuperscript{29} See, e.g., Fandell, supra note 3 (“[B]aseball attendance [during 1968] totaled 23.1 million persons, down from 24.3 million in 1967 and 25.2 million in 1966, the peak year. Meantime, pro football, basketball and hockey all have had sizable attendance gains.”). The attendance problem was especially noticeable in the American League. See Joe Gergen, New AL Image: It Aims to Please, L.A. TIMES, July 26, 1973, at C1.
\textsuperscript{30} See, e.g., Arthur Daley, Sports of the Times: Groping for a Solution, N.Y.
B. Baseball Adopts Various Rule Changes to Increase Offense, Including the Designated Hitter Rule in the American League

On December 3, 1968, the Major League Baseball Rules Committee met during the annual Winter Baseball Meetings, and considered proposals to “counteract the dominance of the pitchers” and reinvigorate the offensive side of the game. The Committee considered several radical ideas, including shortening the distance between the bases, increasing the size of the ball, and alleviating teams’ hectic travel schedules to allow batters more time to rest. It ultimately adopted three rules changes. First, the Committee lowered the pitcher’s mound from fifteen to ten inches, decreasing the pitcher’s advantage over hitters. Second, the Committee

TIMES, July 12, 1968, at 21 (quoting former ballplayer Tony Kubek as saying, “Whatever the rules committee does, it had better do something soon. The game is getting out of balance.”); Charles Maher, A Matter of Opinion, L.A. TIMES, Aug. 7, 1968, at D2 (quoting a senior at UCLA, who outlined several proposals to “make the game (of baseball) more exciting,” while lamenting that, “[a]s things stand now, the most stimulating part of a baseball game is sitting around and getting drunk on the beer, and since I’m not old enough to do that, by the sixth or seventh inning I’m usually sound asleep”); Jack Smith, Out at the Old Dull Ball Game, L.A. TIMES, Aug. 12, 1968, at C1 (“There seems to be much concern this season over the condition of baseball. Critics say the game is slow and dull and becoming slower and duller, especially in comparison with pro football.”).


32. See DAVID QUENTIN VOIGT, BASEBALL: AN ILLUSTRATED HISTORY 280 (1987). At the time, there was no shortage of ideas for increasing offense in baseball, from eliminating the force-out, to using one nine-man platoon for offense and a different platoon for defense. Koppett, supra note 20. The great Cubs slugger Ernie Banks even suggested that the leagues “[m]ake the pitchers throw the ball underhand, like in softball.” Banks Has Plan to Help Hitters—Make Pitchers Throw Underhand, L.A. TIMES, Dec. 15, 1968, at C13.

33. Vecsey, supra note 31; see also New Rules Tough on the Pitchers, supra note 22. The lower mound provided hitters with a tremendous advantage, “taking away some of the effect gravity has on the fast ball and curve and lessening the pitcher’s psychological domination over the batter.” Lardner, supra note 19; but see Murphy Says Changes Won’t Affect Baseball, L.A. TIMES, Jan. 2, 1969, at E13 (suggesting that lowering the mound will not affect pitchers). Interestingly, the height of the pitcher’s mound was not standardized until 1949; prior to that year, the rule set a maximum height of 15 inches, but
reduced the strike zone back to its 1950s dimensions. Third, umpires would begin enforcing existing rules governing illegal pitches.

These solutions worked relatively well in the National League, but brought only temporary relief to the American League, whose offense began to falter once again in the early 1970s. At that time, the National League led the junior circuit significantly in league batting average, home runs, and total runs. As attendance dropped, winds of change once again started blowing in the American League.

American League President Joe Cronin believed that offense brought fans to the stands. Cronin lobbied American League owners to experiment with a designated hitter rule to boost offense. On January 11, 1973, Cronin’s lobbying was finally
successful, as American League owners voted 8-4 to try the designated hitter rule on a three-year experimental basis. The National League chose not to join the experiment, voting down the proposed rule change.

C. The Designated Hitter Rule Increases Offense and Attendance, But the National League Refuses to Go Along

Needless to say, the American League’s bold move created a

Season, N.Y. Times, Feb. 1, 1969, at 34. The rule change had an immediate effect. “[C]ompared with the previous year, the number of shutouts dropped from 103 to 67, complete games rose from 311 to 362, home runs increased by 16, sacrifice hits decreased by 50 and intentional walks by 51. Run production was up 7%.” William Leggett, The 10th Man Cometh, SPORTS ILLUSTRATED, Feb. 5, 1973, at 12, 15. The experiment was a hit with fans as well—according to a survey conducted by the Rochester Red Wings, 59 percent of fans favored the designated hitter rule, with only 31 percent opposed. Id.

40. McKELVEY, supra note 18, at 24; see also AL Votes Trial of Designated Pinch Hit Rule, L.A. Times, Jan. 12, 1973, at D1; Leggett, supra note 37, at 27. The idea of replacing the pitcher with a designated hitter had been around for some time. Indeed, an issue of Sporting Life in 1906 outlined well-established arguments for and against the concept:

The suggestion, often made, that the pitcher be denied a chance to bat, and a substitute player sent up to him every time, has been brought to life again, and will come up for consideration when the American and National League Committees on rules get together.

This time Connie Mack is credited with having made the suggestion. He argues that a pitcher is usually such a poor hitter that his time at the bat is a farce, and the game would be helped by eliminating him in favor of a better hitter.

Against the change there are many strong points to be made. It is wrong theoretically. It is a cardinal principle of base ball that every member of the team should both field and bat. Instead of taking the pitcher away from the plate, the better remedy would be to teach him how to hit the ball.

Why the Pitcher Ought to Bat, SPORTING LIFE, Feb. 3, 1906, at 4; see also Wulf, supra note 38, at 47 (chronicling history of proposals to implement a designated hitter rule).

41. Wulf, supra note 38, at 48; see also NL Objections to New Pinch-Hit Rule Cited, L.A. Times, Feb. 3, 1973, at E4 (quoting National League President Chub Feeney’s reaction after the American League’s adoption of the designated hitter rule: “[W]e do not believe in change for its own sake. . . . We don’t think this is a good rule.”); On Deck in A.L.—dh, N.Y. Times, Apr. 1, 1973, at 248 (“The National League refrained from adopting the rule because it drew about 4-million more fans than the American last season and prefers the game as is.”).
storm of controversy among loyal baseball fans.\textsuperscript{42} Despite predictions that the new designated hitter rule would increase offense,\textsuperscript{43} fans and commentators lamented that “the era of the complete athlete” was “on the way out.”\textsuperscript{44} The great Ted Williams predicted that the designated hitter rule was “the forerunner of other things. More specialists. More substitutions.”\textsuperscript{45} National League President Chub Feeney predicted the rule would irreparably harm baseball strategy and deprive fans of dramatic moments in the game.\textsuperscript{46} Even players were skeptical. Orioles pitcher Jim Palmer worried that “[s]itting in the dugout, not going to bat, will make me feel like I’m not part of the game.”\textsuperscript{47} Likewise, sluggers were skeptical about remaining in the dugout while their teammates took the field. As Hank Aaron said, “[i]f I strike out with the bases loaded and two out, I want to be able to pick up my glove and try to redeem myself with a big play in the outfield.”\textsuperscript{48}

\textsuperscript{42} This was not necessarily a bad thing for the American League. As Cronin would later point out, “[t]he designated hitter gave us great publicity prior to the season that didn’t hurt any.” Gergen, supra note 29.

\textsuperscript{43} In particular, one computer scientist “ran 50 seasons of baseball through a computer, first in the old-fashioned (or National League) way, then with a designated pinch hitter in place of the pitcher,” and predicted that “team batting averages will rise nine points, . . . [t]eam on-base average will go up even more, about 12 points, and slugging averages about 22 points.” Robert W. Creamer, \textit{Scorecard, Sports Illustrated}, Jan. 22, 1973, at 11, 11.

\textsuperscript{44} Robert W. Creamer, \textit{Scorecard, Sports Illustrated}, Apr. 9, 1973, at 19, 19; but see Charles Maher, \textit{Commentary: Baseball Should Adopt Platoons, Use Specialists}, \textit{L.A. Times}, Mar. 19, 1973, at D1 (arguing that the demand for “the complete player” is “unreasonable” because “[t]here aren’t that many complete players around”).

\textsuperscript{45} Creamer, supra note 44, at 19; see also Frederick C. Klein, \textit{On Sports: The Lash of a Dying Breed}, \textit{Wall St. J.}, June 22, 1983, at 30 (“The rule alters baseball’s basic strategy and introduces a type of specialization better left to football.”).

\textsuperscript{46} \textit{NL Objections}, supra note 41.

\textsuperscript{47} Leggett, supra note 39, at 14. Other pitchers agreed. “Rollie Fingers, the spectacular reliever who also hit .316 for Oakland, agrees that ‘half the fun of pitching is being able to hit.’ Catfish Hunter of the A’s is annoyed, too. ‘It means I’ll have to face another good hitter, and what’s good about that?’” \textit{Id.} at 15.

\textsuperscript{48} \textit{Id.} at 14; see also Cannella & Pearlman, supra note 6, at 68 (quoting Chicago White Sox hitter Paul Konerko as saying, “If it’s between not playing
Cronin’s gamble paid off, however. On April 6, 1973, Ron Blomberg of the New York Yankees became the first designated hitter when he came to the plate and drew a first-inning walk with the bases loaded. Although the National League derided its American League colleagues for “making a mockery of the game,” the American League experienced a dramatic jump in batting average, runs, and home runs during the first four seasons of play under the designated hitter rule. The rule had other effects as well. Pitchers threw 33 percent more complete games, stolen bases increased by 29 percent, and intentional walks decreased 20 percent. Even doubters of the rule admitted that it restored offensive parity between the American and National Leagues.

This dramatic increase in offense brought fans to American League ballparks. While only four teams in the American
League had drawn more than one million fans in 1971, eight teams bested that same mark in 1973.55 Excited by the bolstered offense and attendance, the American League voted to make the designated hitter rule permanent, starting with the 1976 season.56

In light of the American League’s successful experiment, fans wondered whether the National League would follow suit. The leagues compromised on some issues involving the designated hitter rule. For example, shortly after the American League adopted the rule, the National League allowed its teams to use a designated hitter in spring training during road games against American League teams.57 Over time the leagues also settled on the “rule of the park” for interleague games (including the World Series), under which the designated hitter is used when games are played in American League ballparks, but not when games are played in National League ballparks.58

In 1984, Baseball Commissioner Peter Ueberroth attempted to settle the designated hitter dispute by polling fans, but backed down after polling showed that American League fans favored the

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55. MCKELVEY, supra note 18, at 42. However, it is worth noting that the National League’s attendance did not suffer from its refusal to adopt the designated hitter rule. See, e.g., Editorial, Strike Three!, L.A. TIMES, Nov. 27, 1984, at C4 (“National League teams consistently outdraw American League teams at the gate. Fans may say that they would rather see home runs than a pitchers’ duel, but they vote differently with their money than with their mouths.”).


58. See VOIGT, supra note 32, at 380–81; see also MCKELVEY, supra note 18, at 92, 143–44. The National League initially resisted any use of designated hitters in the World Series. See, e.g., Jim Kaplan, Some Extra ABs for DHs?, SPORTS ILLUSTRATED, Aug. 9, 1976, at 48, 48. However, in 1976, Baseball Commissioner Bowie Kuhn used his executive powers to allow the designated hitter rule in the World Series every other year “until the two major leagues reach agreement.” World Series Gets a Designated Hitter, L.A. TIMES, Aug. 13, 1976, at C1; see also Leonard Koppett, World Series Adds dh Rule, N.Y. TIMES, Aug. 13, 1976, at 21. Finally, the leagues adopted the rule of the park in 1986, and “the designated hitter was permitted every year in American League parks.” George Vecsey, Stupid Rule Still Mars World Series, N.Y. TIMES, Oct. 17, 1993, at S1.
rule, and National League fans opposed it.\textsuperscript{59} The National League continued its fierce resistance against adoption of the designated hitter rule.\textsuperscript{60} “If anybody thinks ultimately the National League will go to the D.H., they’re living in a fairy land,”\textsuperscript{61} concluded current Commissioner Bud Selig. “That’s not going to happen.”\textsuperscript{62}

III. EMPIRICAL RESULTS SHOW THE DESIGNATED HITTER RULE CREATES MORAL HAZARD

Two leagues with different rules begs the question: which league is better off? For nearly four decades, Americans have engaged in a spirited debate on the advantages and disadvantages of the designated hitter rule.\textsuperscript{63} This Article primarily focuses on a

\textsuperscript{59} Dave Anderson, \textit{Memo to Giamatti: Make It One Game, Not Two}, N.Y. TIMES, Apr. 2, 1989, at S13; \textit{Ueberroth Calls for Poll on Designated Hitter Rule}, L.A. TIMES, Nov. 8, 1984, at SD B6. Other polls at the time showed inconsistent support for the designated hitter rule. \textit{Compare D.H. Opposed In N.B.C. Poll}, N.Y. TIMES, July 17, 1985, at B6 (“Fifty-nine percent of the callers disapproved of the designated-hitter rule in a three-hour nationwide telephone poll conducted by NBC during last night’s All-Star Game.”), with Adam Clymer, \textit{Poll: Baseball Fans Side With Owners}, N.Y. TIMES, July 28, 1985, at S1 (“Support for the designated-hitter rule by 43 percent of fans, and opposition by 30 percent.”). If anything, these disparate results validate the opinion of those who thought Ueberroth erred by turning to popular opinion to resolve the dispute. After observing that Ueberroth’s “reign as baseball commissioner is already six months old and the wicked designated-hitter rule has not been repealed,” commentator George Will pithily concluded that “[s]ome judgments should be beyond the reach of majorities.” George F. Will, \textit{An April Sunrise Full of Delicious Surprises}, L.A. TIMES, Apr. 11, 1985, at C5.

\textsuperscript{60} See, e.g., \textit{Designated Hitter Strikes Out}, L.A. TIMES, Aug. 14, 1980, at D13 (“A move to incorporate the designated hitter rule into the National League was defeated Wednesday at baseball’s summer meeting.”); \textit{National League Rejects d.h.}, N.Y. TIMES, Aug. 14, 1980, at D20 (same); \textit{National League Says No to Designated Hitter}, L.A. TIMES, July 17, 1975, at D4 (“The National League voted Wednesday for the fourth straight year against adopting the designated-hitter rule currently in use by the American League.”).

\textsuperscript{61} Murray Chass, \textit{The D.H. is 25 Years Old, But Now the Question is Whether It Will Get to 30}, N.Y. TIMES, Apr. 5, 1998, at SP2.

\textsuperscript{62} Id.

\textsuperscript{63} Compare, e.g., Mike Bonfiglio, \textit{Letters}, SPORTS ILLUSTRATED, Feb. 19, 1996, at 8, 8 (arguing against the designated hitter rule; “[r]ather than using gimmicks to bring in new fans, baseball must concentrate on fans who truly understand the complexities of the game and hope that they will spread
particular facet of that debate—whether the designated hitter rule creates “moral hazard” by removing pitchers from American League lineups. Moral hazard exists within America’s tort system when individuals are inadequately deterred from engaging in risky behavior because they do not bear the full cost of their actions. In baseball, the designated hitter rule realigns the cost-benefit analysis of pitching inside, increasing the number of hit batters in the American League. Indeed, several studies demonstrate that this increase in hit batters is partially (but not exclusively) the result of a moral hazard effect caused by the designated hitter rule. In recent years, however, the effects of league expansion and the “double warning” rule largely have overshadowed the designated hitter rule’s moral hazard effect, reducing the hit-by-pitch disparity between the American and National Leagues.

A. The Tort System’s Goal of Deterrence and the Problem of Moral Hazard

The tort system in America has traditionally been justified by three policy goals: deterrence of undesirable conduct, fairness or corrective justice, and compensation of victims. In comparison,
economic analysis focuses primarily on the deterrence goal, which also can be thought of as incentives-toward-safety. 69 The deterrence rationale is achieved in two ways. First, requiring an injurer to pay for harm caused by his or her wrongful conduct provides a strong incentive to avoid undertaking that wrongful conduct in the first place. 70 Second, “even when no wrongdoing is involved, imposing liability for accident costs provides an incentive to reduce injuries not currently preventable by due care by lowering the level of activity, or by seeking innovations that result in new, more cost-effective safety measures.”71

As an initial matter, it is important to note that not all injuries can or even should be deterred. Rather, economists and lawmakers should attempt to maximize social welfare, which involves making tradeoffs between benefits and costs. 72 Thus, behavior that is beneficial may be enjoyed even if there is some social cost or possibility of injury as long as the benefit outweighs that cost. 73 Deterrence of risky or dangerous activity is achieved

69 See Steven Shavell, Foundations of Economic Analysis of Law 268 (2004) (noting that economic analysis views the role of tort law as serving the goal of deterrence, because the compensation function of law can be achieved in other manners, namely through insurance); see also W. Kip Viscusi, Reforming Products Liability 89–94 (1991) (arguing that “tort liability ideally should address situations in which there is believed to be some shortcoming in the market” for insurance, “either because of a lack of voluntary trade or a failure to fully appreciate the risks that are present”).

70. Hubbard, supra note 68, at 445.

71. Id. at 445–46.


73. See, e.g., Mark A. Geistfeld, 44 Wake Forest L. Rev. 899, 904 (2009) (noting that, under a law-and-economics approach, “[a]n allocatively efficient tort rule creates social costs that are less than the associated social benefits, and so an efficiency-oriented court would limit liability whenever the social costs exceed the social benefits”); Richard H. Seeburger, Book Review, 50 U. Pitt. L.
by ensuring that the cost of an action—i.e., the liability that will be imposed if the actor causes injury—is high enough to ensure that only those who obtain more utility from the action than the harm created will engage in the action.74

However, individuals are often risk averse and do not wish to bear the full costs of their conduct.75 Loosely defined, a risk-averse individual is “one who, starting from a position of certainty, is unwilling to take a bet which is actuarially fair.”76 In other words, “[a] risk-averse person would pay to avoid a risk, such as

74. Professor Shavell provides an illustrative example, in which he examines three different levels of care (no care, moderate care, or high care) that an injurer could take to prevent accident losses valued at 100. Shavell, supra note 69, at 179. First, if the injurer exercises no care, the cost of care is 0, the probability of accident is 15%, and thus the expected accident losses are 15 (because there is a 15% probability that a harm of 100 will occur). In this scenario, the total social cost of the injurer exercising no care is 15 (cost of care of 0 plus expected accident losses of 15). Second, if the injurer exercises a moderate level of care, the cost of care is 3, the probability of accident is 10%, and the expected accident losses are 10. The total social cost of moderate care is 13 (cost of care of 3 plus expected accident losses of 10). Third, if the injurer exercises a high level of care, the cost of care is 6, the probability of accident is 8%, and the expected accident losses are 8. The total social cost of high care is 14 (cost of care of 6 plus expected accident losses of 8). Thus, the socially optimal level of care is moderate, not high, because the total cost of moderate care is 13 and the cost of high care is 14. As this hypothetical shows, “the optimal level of care may well not result in the lowest possible level of expected accident losses.” Id.

75. See, e.g., James W. Henderson & J. Allen Seward, Risk Aversion and Overcompensation From the Risk Free Discount Rate, 8 J. LEGAL ECON. 25, 28 (Fall 1998) (noting that “most investors are risk averse,” and the market risk premium “is never zero in the risk averse world where most of us live”); Diane Klein, Distorted Reasoning: Gender, Risk-Aversion and Negligence Law, 30 SUFFOLK U. L. REV. 629, 655 (1997) (noting that “most judges accept that most people are risk averse” (citing Eljer Mfg., Inc. v. Liberty Mut. Ins. Co., 972 F.2d 805, 809 (7th Cir. 1992); Price v. Marshall Erdman & Assocs., Inc., 966 F.2d 320, 327 (7th Cir. 1992)).

one involving a 50 percent chance of losing $1,000 and a 50 percent chance of winning $1,000."77 Injurers who are risk averse will purchase liability insurance to protect themselves from the potential costs of liability. 78

At first blush, allowing the purchase of insurance appears to create the ideal situation—the victim receives compensation for her injuries, while the injurer is protected from paying the full cost of the liability by virtue of having purchased the insurance. But the existence of insurance may itself influence the incentives of injurers to avoid accidents, and may increase the probability that harm will occur. 79 Once an injurer has insured against a particular risk, she may become less careful about avoiding the risk because she has already paid all that she will have to pay by purchasing the insurance up front.

This problem is commonly known in the field of law and economics as “moral hazard,” defined as “the tendency for an insured party to take less care to avoid an insured loss than the party would have taken if the loss had not been insured, or even to act intentionally to bring about that loss.” 80 A moral hazard is

77. SHAVELL, supra note 69, at 258.

78. See, e.g., Stephen G. Gilles, The Judgment-Proof Society, 63 WASH. & LEE L. REV. 603, 669 (2006) (“Given that individuals are likely to be quite risk averse when it comes to the risk of a large personal tort liability, then, it is rational for many people to purchase proportionate amounts of liability insurance.”); Peter Siegelman, Adverse Selection in Insurance Markets: An Exaggerated Threat, 113 YALE L.J. 1223, 1265 (2004) (“A standard result in insurance demand is that any risk-averse person will always choose to purchase full insurance if it is priced at the actuarially fair premium—that is, at the expected value of the loss itself.”).

79. SHAVELL, supra note 69, at 261; see also Tom Baker, On the Genealogy of Moral Hazard, 75 TEX. L. REV. 237, 238–39 (1996) (discussing “the tendency for insurance against loss to reduce incentives to prevent or minimize the cost of loss”).

more than a mere psychological or ethical risk; it is a significant hazard that would influence the conduct of a reasonable person, causing them to “suffer less by a destruction of the property than would ordinarily be the case.”

When a moral hazard exists, an insured party is less likely to avoid a risk because she knows that she will not bear the full cost of it materializing. This decrease in risk-averse behavior causes a corresponding increase in total costs to society, working against the deterrence goal of tort law. A common real-world example of the moral hazard problem is illustrated by the insured property owner who exercises reduced care over her covered property. For instance, when a car owner has theft insurance she may be more likely to leave her car unlocked or to park it in a high crime


81. Dayna Bowen Matthew, The Moral Hazard Problem with Privatization of Public Enforcement: The Case of Pharmaceutical Fraud, 40 U. MICHA. J. L. REFORM 281, 299 n.63 (2007) (quoting LEE R. RUSS & THOMAS F. SEGALLA, COUCH ON INSURANCE § 81:98 (3d ed. 2005)). It is worth noting that not all insurance leads to moral hazard. In instances where an insurance company can observe the level of care taken by a purchaser of insurance, the company can reduce the premiums to reflect the risk reduction that appropriate care creates. Shavell, supra note 69, at 262; see also Muhammad Masum Billah, Economic Analysis of Limitation of Shipowners’ Liability, 19 U.S.F. MAR. L.J. 297, 312 (2007) (noting that “insurers are able, by and large, to check the problem of moral hazard or under-deterrence through various strategies such as partial coverage, deductibles, and differentiating premium rates based on past loss experience”).


84. Matthew, supra note 81, at 299.
This same car owner would likely exercise greater care to prevent the theft of her car if she had to pay for the full loss of the car personally. The moral hazard created by the existence of her automobile insurance causes the car owner to exercise suboptimal caution in the use and protection of her car.

In sum, economic analysis attempts to align legal rules so that individuals have proper incentives to exercise an optimal level of care. However, the likelihood that risk-averse individuals will insure themselves against risk creates the potential for moral hazard.

B. The Designated Hitter Rule Realigns the Cost-Benefit Analysis of Pitching Inside, Increasing Hit Batsmen

Since the adoption of the designated hitter rule, players, fans, and commentators have suggested that the rule may create a moral hazard effect. Some have argued that the rule creates moral hazard because American League pitchers are not deterred by the full cost of making risky, inside pitches—namely, the possibility of retribution during their next at bat. Others have argued that

85. Id.
86. Id.
87. Id.
88. See, e.g., A.L. Pitchers to Toss More Beanballs?, L.A. TIMES, Jan. 28, 1973, at D10 (“There is a feeling that under the provisions of the designated pinch-hitter rule, [pitchers] will now be more dangerous.”); William Leggett, supra note 37, at 35 (“A man can show a ton of courage if he is able to knock hitters down without fear of finding something in his own ear.”); Ross Newhan, Beantown War? Designated Hitter Rule Could Bring More Brushback Pitches, L.A. TIMES, Mar. 7, 1973, at D1 (“Since American League pitchers no longer have to expose their own heads to retaliation, it is suspected they will not think twice about decker an opposing batter.”); William C. Rhoden, To Discourage Scrapping on the Field, Scrap the Designated Hitter Rule, N.Y. TIMES, Oct. 13, 2003, at D2 (calling the designated hitter rule “a coward’s rule that allows American League pitchers to intimidate batters, brush them back and hit them without fear of retaliation”); Neil A. Rube, Letter to the Editor, Cutting at the Core, N.Y. TIMES, Nov. 8, 1987, at S11 (“[T]he rule eliminates the deterrent effect of a pitcher’s fear of retaliation for brushing back or striking opposing batters with a pitch.”).
89. As Hank Aaron said a month before the rule went into effect, “What does a pitcher have to worry about? The league is going to wind up with a bunch of
the moral hazard effect of the designated hitter rule is greatly overstated, because retribution can (and does) occur against the offending team’s best hitter. 90

In order to analyze whether the designated hitter rule creates a moral hazard effect in the American League, we first must understand the costs and benefits involved. A pitcher accidentally hitting a batter is properly conceptualized as a “bilateral” accident situation, because “the expected loss is a function of both the injurer’s and the victim’s care.” 91 Both the injurer (the pitcher) and the victim (the batter) may take steps to prevent the accident from occurring. To avoid hitting the batter, the pitcher can throw more slowly, 92 aim for the center or outside of the plate, 93 and avoid throwing curve balls or split-finger fastballs that might get
away from him. On the other hand, the batter can stand further from the plate and “dig in” less to avoid being hit by an inside pitch. But in the end it is primarily the pitcher’s ability and responsibility to avoid hitting the batter.

When deciding whether to throw a pitch that is high and inside (and thus more likely to hit the batter), the pitcher faces a cost-benefit analysis. The primary benefit of throwing inside or even hitting a batter is that it lowers the probability that the opposing team will score runs. Intentionally hitting a batter makes him more reluctant to lean close to the plate, reducing his effectiveness against pitches that are low and outside and curve balls that appear to be inside the plate. It also discourages batters from digging in,

94. Curve balls deceive batters because “[t]he curve is smooth, but batters see the ball as if it is going straight and then suddenly changes direction.” Animation Shows Why Curve Balls Are Hard to Hit, NEW SCIENTIST, June 6, 2009, at 7, 7. Split-finger fastballs deceive hitters because pitchers use the same arm action as a fastball, but the pitch drops. Peter Gammons, By Any Name, It’s Hard to Hit, SPORTS ILLUSTRATED, Oct. 23, 1989, at 38, 38.

95. See Brian L. Goff, William F. Shughart II & Robert D. Tollison, Batter Up! Moral Hazard and the Effects of the Designated Hitter Rule on Hit Batsmen, 35 ECON. INQUIRY 555, 556 (1997). Hitters “dig in” by scuffing the dirt for better footing. New York Yankee shortstop Derek Jeter is a classic example of a batter who “digs in” and leans very close over the plate. See, e.g., Editorial, Jeter Does It, DAILY NEWS (N.Y.), Sept. 12, 2009, at 20 (describing Jeter as “[t]he hitter who digs in on every at-bat”).

96. See Major League Baseball Rule 8.02(d) (if the umpire believes the pitcher has intentionally hit the batter with a pitched ball the umpire may eject the pitcher from the game).

97. Of course, this cost-benefit analysis is highly situational. Pitchers are less likely to hit batters in close games, when runners are on base, and when there are fewer outs. See John Charles Bradbury & Douglas J. Drinen, Crime and Punishment in Major League Baseball: The Case of the Designated Hitter and Hit Batters, 45 ECON. INQUIRY 131, 136 (2007); Goff, Shughart & Tollison, supra note 95, at 556.

98. Goff, Shughart & Tollison, supra note 95, at 556. In addition to sending a message to the hitter and his teammates, pitchers may choose to intentionally hit batters in order to prevent extra-base hits. See Bradbury & Drinen, supra note 97, at 134 (noting that hitting a batter prevents that batter “from hitting the ball, which might generate more runs than simple base advancement”).

99. Goff, Shughart & Tollison, supra note 95, at 556; see also Bradbury & Drinen, supra note 97, at 134 (“noting that the benefits of hitting a batter include “decreasing the opposing team’s willingness to stand close to the plate to hit outside pitches”).
reducing their batting power. A second type of benefit is retaliation. Pitchers might choose to intentionally hit a batter in order to retaliate against beanballs thrown by the opposing pitcher in a previous inning, or to exact revenge for prior home runs by the other team.

Pitchers weigh these benefits against several costs associated with hitting a batter. First, hitting a batter automatically puts him on base and advances any runner already on first base. Second, the opposing pitcher may retaliate for the hit batter by throwing at the offending pitcher’s teammates. Third, the offending pitcher and his manager may be ejected from the game and fined if the umpire believes that the pitcher intentionally hit the batter. Finally, the offending pitcher may subject himself to direct retaliation (and possible injury) during his next at bat.

A pitcher’s assessment of this last cost is crucial to the moral hazard theory addressed in this Article. Having been replaced in the lineup by designated hitters, American League pitchers theoretically would be more likely to engage in risky behavior—

100. Goff, Shughart & Tollison, supra note 95, at 556. Indeed, “pitchers who gloat about their control of the inside part of home plate usually explain that this is necessary for success.” Id. at 556 n.3
101. See id. at 556; Bradbury & Drinen, supra note 97, at 134.
102. Bradbury & Drinen, supra note 97, at 134; Goff, Shughart & Tollison, supra note 95, at 556. One should note that the cost of putting a runner on first is not uniform for all batters in the opposing team’s lineup. In particular, “[t]his cost is greater when a weak batter (one who is relatively unlikely to reach base on his own) is hit.” Trandel, supra note 12, at 89.
103. Bradbury & Drinen, supra note 97, at 134; Goff, Shughart & Tollison, supra note 95, at 556.
104. John Charles Bradbury & Douglas Drinen, The Designated Hitter, Moral Hazard, and Hit Batters: New Evidence From Game-Level Data, 7 J. SPORTS ECON. 319, 322 (2006). Under the rules, when an umpire believes the pitcher has intentionally hit a batter, he may elect to expel the pitcher, or the pitcher and the manager, from the game or “may warn the pitcher and the managers of both teams that another such pitch will result in the immediate expulsion of that pitcher (or a replacement) and the manager.” Major League Baseball Rule 8.02(d). Additionally, the comment to this rule states that “pitch[ing] at a batter’s head is unsportsmanlike and highly dangerous. It should be—and is—condemned by everybody. Umpires should act without hesitation in enforcement of this rule.” Major League Baseball Rule 8.02(d) Comment.
105. Bradbury & Drinen, supra note 97, at 134; Goff, Shughart & Tollison, supra note 95, at 556.
i.e., throwing high and inside without fear of direct, physical retaliation (unless the batter charges the mound). If the designated hitter rule has indeed created a moral hazard effect, there should be a corresponding shift in the cost-benefit analysis on the mound, which would presumably lead to a significant increase in hit batsmen in the American League, relative to the National League.

Interestingly, that is exactly what happened. After the American League adopted the designated hitter rule in 1973, the number of hit batsmen increased dramatically. On average, American League pitchers are approximately 10–15% more likely to hit batters than their National League counterparts, representing an additional 44 to 50 hit batsmen per season. By 2004, the National League hit-batter rate had exceeded the American League only four times out of 31 seasons.

106. Statistics on charging the mound are not available, but such altercations are often a result of hits (or near hits) by pitches. See, e.g., Brawling Breaks Out in Beantown, HOUStON CHRON., Aug. 12, 2009, Sports Section, at 4 (“Boston third baseman Kevin Youkilis charged the mound Tuesday after he was hit by a pitch, tackling Detroit pitcher Rick Porcello as both benches and bullpens cleared.”); Fracas Mars White Sox-Royals Game, WASH. POST, Aug. 4, 2008, at E6 (“Miguel Olivo charged the mound after being hit by a pitch from D.J. Carrasco in the fifth inning yesterday in Kansas City, Mo., touching off a benches-clearing brawl between the White Sox and Royals.”); see also Bradbury & Drinen, supra note 97, at 134 (noting that the costs of hitting a batter include “physical retaliation via assault”).

107. Goff, Shughart & Tollison, supra note 95, at 558; see also Gregory A. Trandel, Lawrence H. White & Peter G. Klein, The Effect of the Designated Hitter Rule On Hit Batsmen: Pitcher’s Moral Hazard or the Team’s Cost-Benefit Calculation? A Comment, 36 ECON. INQUIRY 679, 683 (1998) (“[T]he AL hit batsman rate exceeds the NL rate by 7.5 per 10,000 at bats. Given the average (over the whole period) of about 60 plunks per 10,000 at bats, this indicates that the DH rule led the AL hit batsmen rate to exceed the NL rate by about 12%”); Bradbury & Drinen, supra note 104, at 319 (noting that the NL “has averaged a hit batter rate 15% lower than the AL since the introduction of the DH”).

C. Moral Hazard Likely Explains Some (But Not All) of the American League’s Increase in Hit Batters

The noticeable increase in hit batters in the American League prompted several economists to study the designated hitter rule. In 1997, economists Brian Goff, William Shughart and Robert Tollison released a ground-breaking study, examining whether the American League’s increase in hit batters reflected a moral hazard effect. They controlled for several alternative variables that might account for some of the difference in hit-by-pitch statistics between the two leagues, including pitcher control and ability, hitter ability, degree of competitiveness of games, the amount of reliance on relief pitching, and the financial rewards of winning. The results showed that “American League pitchers became much more willing to throw at batters after the DH rule went into effect,” creating “a classic moral hazard problem.”

This theory did not go unchallenged, however, and economists have offered several alternative explanations for the increase in hit batters in the American League. First, a “batter composition” theory suggests that there are simply more batters worth hitting in an American League game because talented sluggers have replaced weak-hitting pitchers in the lineup. Economists

109. See Bradbury & Drinen, supra note 97; Bradbury & Drinen, supra note 104; Goff, Shughart & Tollison, supra note 95; Goff, Shughart & Tollison, supra note 12; Steven D. Levitt, The Hazards of Moral Hazard: Comment on Goff, Shughart, and Tollison, 36 ECON. INQUIRY 685 (1998); E. Frank Stephenson, A New Test for Moral Hazard and Hit Batters, 32 ATL. ECON. J. 360 (2004); Trandel, supra note 12; Trandel, White & Klein, supra note 107.

110. Goff, Shughart & Tollison, supra note 95. The study analyzed data on the number of American and National League batters hit by pitches each year from 1901 through 1990, normalized by the number of at bats in each league during a given year. Id. at 557–58.

111. Id. at 559.

112. Id. at 555, 561. The study also examined the sub-periods 1920–1990 and 1947–1990 to take account of changes to the game, particularly the outlawing of “spitball” pitches in 1920, and changes following World War II, including racial integration. Id. at 558. Goff, Shughart and Tollison ultimately concluded that the effect of the designated hitter rule was statistically significant in each time frame.

113. Levitt, supra note 109, at 685; Trandel, White & Klein, supra note 107, at 683.
Gregory Trandel, Lawrence White, and Peter Klein argue that the net benefits of hitting a designated hitter are far greater than those of hitting the pitcher he replaced. Teams have little incentive to hit a weak-hitting pitcher, which puts the pitcher on base and sacrifices a likely out. As economist Steven Levitt notes, “[w]ith the adoption of the designated hitter rule, pitchers are replaced at the plate by designated hitters who are far more effective batters and therefore more likely to be hit batters.” As a result, “the aggregate increase in hit batters in the AL over the NL may be attributed to increased rewards rather than the lowered punishment for hitting batters.”

Statistics support this theory. Designated hitters are hit at about

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114. See Trandel, White & Klein, supra note 107, at 679 (“A less costly form of retaliation is to plunk the opponent’s best hitter, a batter far more likely to create runs for his team if pitched to normally.”).

115. The futility of pitchers at the plate is legendary. See, e.g., Steve Dolan, To Pitchers, Batting is Hit-or-Miss Endeavor—Mostly Miss, L.A. TIMES, Apr. 23, 1982, at SD B1 (noting that “everybody knows that pitchers can’t hit”); Leggett, supra note 39, at 15 (quoting Detroit Tigers scout Jack Tighe as saying, “[w]hen a pitcher comes to bat nowadays, the fans go out to the hot-dog stands”); Ostler, supra note 3 (“Personally, I would rather watch Reggie Jackson hit than Tommy John. Pitchers never took their hitting seriously, why should we?”); see also Bradbury & Drinen, supra note 104, at 320 (“Almost always, pitchers are poor hitters who represent easy outs.”); Levitt, supra note 109, at 686 (noting that “[p]itchers’ slugging percentages are less than half as great as other batters”).

116. See, e.g., Bradbury & Drinen, supra note 104, at 320 (“The punishment for hitting a batter is to advance the hit batter to first base, making the opposing team extra careful not to hit pitchers.”); Trandel, White & Klein, supra note 107, at 679 (“A National League team that plunked the opposing pitcher (in retaliation for his throwing at one of its players) would be putting the opposing team’s weakest hitter on base, sacrificing a very likely out.”).

117. Levitt, supra note 109, at 685; see also Bradbury & Drinen, supra note 104, at 320 (“[R]emoving the pitcher’s obligation to bat . . . removes a very weak hitter from the lineup . . . Hence, the hit batters differential between the leagues could also be the consequence of changing the composition of the batting orders . . . by adding a batter whom pitchers are more willing to risk hitting.”). Levitt has since come to enjoy enormous popular acclaim as the author of Freakonomics, one of the most widely read books of this decade in which he and his co-author Stephen Dubner deftly use economic theory to explain a myriad of everyday puzzles. See STEVEN D. LEVITT & STEPHEN J. DUBNER, FREAKONOMICS (2005).

118. Bradbury & Drinen, supra note 97, at 133.
110% of the rate of other batters, while pitchers are hit only about 40% as often as other batters. This difference alone likely causes a 4–5% increase in hit batters in the American League, and may account for more than 80% of the hit-by-pitch disparity between the two leagues.

Second, economists have argued that a turn at the plate for pitchers has very little (if any) deterrent effect, because pitchers are rarely the victims of direct retaliation. As Professor Levitt points out, “[f]or the moral hazard story to be empirically relevant, one would expect that pitchers who hit opposing batters must actually be punished.” And yet pitchers are approximately 55% less likely to be hit than other batters. For example, from 1993 to 1996, less than 13 pitchers were hit per year, representing only 2% of the total number of hit batters. Perhaps most telling, “even if every pitcher hit by a pitch was hit in retaliation, punishment would be administered only one in every 50 times a

119. Trandel, White & Klein, supra note 107, at 680; see also Levitt, supra note 109, at 685 (noting that “pitchers are only roughly one-third as likely to be hit by a pitch as are other batters”).

120. Trandel, White & Klein, supra note 107, at 680. Because designated hitters receive approximately 1/9 of American League at bats, their increased hit rate (over the average batter) likely accounts for 1% of the difference in hit battersmen between the leagues. Id. Because pitchers receive 6–7% fewer at bats than the average hitter (almost certainly the result of pinch hitters substituting for pitchers in National League lineups), their decreased hit rate (compared with the average batter) likely accounts for 3–4% of the disparity in hit-by-pitch numbers. Id. “Combining these two factors implies that having a DH bat rather than a pitcher (independent of any moral hazard effect) should cause the AL hit battersmen rate to exceed the NL rate by 4%–5%.” Id.

121. Levitt, supra note 109, at 685. Examining data from 1993–1996, Professor Levitt found that, “[e]xcluding pitchers, National League batters are hit by a pitch once every 115.4 at bats and American League batters are hit every 114.5 at bats, suggesting little if any moral hazard once compositional differences are eliminated.” Id.

122. Levitt, supra note 109, at 687.

123. Bradbury & Drinen, supra note 97, at 136.

124. Levitt, supra note 109, at 687; see also Trandel, White & Klein, supra note 107, at 680 (examining hit-by-pitch injuries between 1954 and 1984, and noting that “only three of 48 cases (from regular-season games in which a pitcher batted) involved injury to a pitcher” (citing BILL JAMES, THE BILL JAMES BASEBALL ABSTRACT, 131–40 (1987))).
pitcher hits an opposing player.”

Third, there appears to be no correlation between the number of batters an individual pitcher hits and the number of times that pitcher is himself hit by a pitch. “If retaliation is the motivation for hitting pitchers when at bat, as predicted by the moral hazard model, then there should be a positive correlation between those two variables.” Instead, the opposite appears to be true. For whatever reason, pitchers who hit opposing batters the most are hit less frequently than pitchers who hit batters the least, leading Professor Levitt to conclude there “is little evidence to support a retaliation motive to pitchers being struck by pitches, undermining the moral hazard argument.”

These alternative explanations show that moral hazard theory does not explain all of the hit-by-pitch disparity between the two leagues. However, two recent studies by economist John Charles Bradbury and mathematician Douglas Drinen confirm that some moral hazard effect does indeed exist. Unlike prior studies, which used yearly aggregate statistics for the two leagues, Bradbury and Drinen used game-level data, which allowed them to “examine the costs and benefits of hitting any particular batter at the time the pitcher chooses a pitch.” The results support both

125. Levitt, supra note 109, at 687.
126. Id.; see also Trandel, supra note 12, at 91 (concluding that “there is no significant correlation between the extent to which a team’s pitchers hit opposing batters during a given year and the extent to which that team’s batters are themselves hit”).
127. Levitt, supra note 109, at 687.
128. Id. To investigate this relationship, Professor Levitt divided pitchers into four groups based on the number of times the pitcher hit a batter. He discovered that pitchers who hit opposing batters the least were themselves hit 0.00078 times per inning pitched. Id. Interestingly, pitchers who hit opposing batters the most (six times as frequently as the group that hit batters the least) were hit only 0.00057 times per inning pitched. Id.
129. Id.
130. Bradbury & Drinen, supra note 97; Bradbury & Drinen, supra note 104.
131. Bradbury & Drinen, supra note 97, at 133. The previous reliance on aggregate data is problematic because it merely reveals “a quantity hit without regard to different situations where strategic incentives vary.” Id. As Bradbury and Drinen note, “[a] retaliatory flurry of beanball pitches in a single game may be lost in a 162-game season.” and “yearly statistics can mask the costs and benefits involved in hitting batters at any point in time.” Bradbury & Drinen,
the moral hazard and batter composition theories.\textsuperscript{132} Noting that the American League has experienced 15\% more hit batters than the National League,\textsuperscript{133} Bradbury and Drinen controlled for several variables—including batter quality.\textsuperscript{134} Even after controlling for these variables, the designated hitter rule still increases the likelihood of a batter being hit by nearly 8\%.\textsuperscript{135} In other words, moral hazard likely explains about half of the difference in the number of hit batters between the leagues.\textsuperscript{136}

Recent studies also have found evidence of retaliation. First, statistics show that teammate retaliation is a common response to hit batters. When a batter is hit, the odds that the offending team’s batters will be hit during the game increase by 10–15\%.\textsuperscript{137} Batters are 32\% more likely to be hit if they come to the plate

\textsuperscript{132}Bradbury & Drinen, supra note 104, at 321–22. By looking at game-level data, Bradbury and Drinen were able to “control for in-game strategic incentives for hitting batters.” Bradbury & Drinen, supra note 97, at 132.

\textsuperscript{133}Bradbury & Drinen, supra note 104, at 324.

\textsuperscript{134}Bradbury & Drinen, supra note 104, at 323–24. Bradbury and Drinen controlled for batter quality using seasonal runs scored per game for each team. Id. at 323. Additionally, because pitchers often hit batters accidentally, the study controlled for pitcher quality with two variables: seasonal average runs allowed per game (to control for poor overall pitching), and seasonal average walks per game (to control for wild pitches). Id. at 323–24. To discern a retaliatory motive on the part of pitchers, Bradbury and Drinen included two variables that might provoke pitchers to hit batters in retaliation: the number of batters hit by the opposing team’s pitchers in that game, and the number of home runs hit in the game by the opposing team. Id. at 324. Finally, they controlled for the difference in the game’s score. Id.

\textsuperscript{135}Id. at 325.

\textsuperscript{136}Id. at 325–26. Although Bradbury and Drinen identify moral hazard as the “most plausible explanation for this difference,” they also provide a caveat to this conclusion, noting that “it is possible that some yet unidentified factors unique to the AL may explain the sign and significance of the [difference in hit-by-pitch numbers] . . . . For example, differences in strike zones, stadium configurations, league traditions, etc. between leagues are competing but less satisfying explanations.” Bradbury & Drinen, supra note 97, at 137.

\textsuperscript{137}Bradbury & Drinen, supra note 104, at 326.
following a home run. Second, although pitchers are less likely to be hit than other batters, that fact alone does not disprove the existence of direct retaliation against pitchers. As Bradbury and Drinen point out, “it is possible that pitchers may be hit more than they ought to be, given their hitting abilities.” The evidence supports this notion. In particular, “a pitcher is four times more likely to be hit when an opposing player was hit in the previous half-inning.” Thus, recent studies using game-level data show that moral hazard likely explains some (but not all) of the hit-by-pitch disparity between the American and National Leagues.

D. League Expansion and the Double Warning Rule Mask the Designated Hitter Rule’s Moral Hazard Effect

Although the designated hitter rule likely causes moral hazard, this effect has been masked in recent years by a dramatic change in hit-by-pitch rates. Starting in 1993, “the number of batters hit by pitches soared in both leagues.” Additionally, the disparity in hit batsmen between the leagues began to narrow, and in 1994 the National League had more hit batsmen than the American League for the first time in the history of the designated hitter rule. From 1994 through 2000, the National League had more hit batsmen than the American League four times, casting doubt on

139. Id. at 134 (emphasis added).
140. Id. at 137. Bradbury and Drinen note that “[t]his is a phenomenon previously unidentified in the aggregate data” used in prior studies. Id.
141. Goff, Shughart & Tollison, supra note 12, at 689.
142. See, e.g., id. at 141 (noting that “[i]n 1994, the NL hit batsmen rate rose above the AL rate for the first time since the implementation of the DH, and the leagues’ hit batter rates began to fluctuate more closely than in the past”); Bradbury & Drinen, supra note 104, at 321 (noting that “the hit batter rate difference between leagues began to narrow in the mid-1990s”); Goff, Shughart & Tollison, supra note 12, at 689 (noting that the National League had more hit batsmen than the American League in 1994, 1995, and 1997, representing “a watershed in the time series of inter-league differences”); Levitt, supra note 109, at 686 (noting that the difference in hit-by-pitch numbers between the leagues during the 1993–1996 seasons “is somewhat smaller” than in earlier years); Trandel, White & Klein, supra note 107, at 682 (“[T]he pattern of inter-league differences in hit batsmen rates changed markedly after 1992.”).
the theory that the designated hitter rule creates moral hazard.\textsuperscript{143} Two structural changes may have (inadvertently) caused this realignment in hit-by-pitch rates. First, National League expansion in the 1990s led to an asymmetrical dilution of league talent.\textsuperscript{144} In 1993, the National League added two new teams.\textsuperscript{145} In 1998, each league added one new team, and the Milwaukee Brewers moved from the American League to the National League.\textsuperscript{146} As a result, expansion led to four additional National League teams, while having no net effect on the number of American League teams. The 1993 expansion draft rules also allowed American League teams to protect more players, "causing the NL to take on more of the burden of new fringe players who are more apt to hit batters and be hit by pitches."\textsuperscript{147} Thus, the effects of expansion (namely, an unusually high number of batsmen hit by inexperienced National League pitchers) likely masked the designated hitter rule’s moral hazard effect to some extent for much of the 1990s.

\textsuperscript{143} Bradbury & Drinen, \textit{supra} note 104, at 320–21 (noting that with the new parity in hit-by-pitch numbers between the leagues, “it appeared the moral hazard hypothesis might not be correct,” which “call[ed] into question whether the sustained difference of the preceding 20 years was real or simply a statistical run regressing to the mean”).

\textsuperscript{144} See \textit{id.} at 322; Bradbury & Drinen, \textit{supra} note 97, at 141–42; Goff, Shughart & Tollison, \textit{supra} note 12, at 690–91.


\textsuperscript{147} Bradbury and Drinen, \textit{supra} note 104, at 322, 328 n.4; see also Bradbury & Drinen, \textit{supra} note 97, at 142 (noting that “the expansion diluted the talent pool of both leagues but affected NL rosters to a greater degree than AL rosters”); Goff, Shughart & Tollison, \textit{supra} note 12, at 690–91 (“The expansion draft for these new franchises led to an influx of relatively inexperienced pitchers into the National League.”).
Second, Major League Baseball’s 1994 adoption of the “double warning rule” in both leagues appears to have had an unintended effect on hit-by-pitch rates. Under the double warning rule, the umpire warns both teams if he believes a pitcher has hit a batter intentionally. If a retaliatory hit occurs following this warning, the offending pitcher and his manager are immediately ejected. Ironically, implementation of the double warning rule probably led to a significant increase in hit batsmen in the National League, because pitchers in both leagues now have “one free hit” before both sides are warned. As a result, in recent years National League pitchers have acted like American League pitchers, and a moral hazard effect now exists in both leagues.

The convergence in hit-by-pitch statistics in recent years does not disprove the designated hitter rule’s moral hazard effect. Instead, the dramatic increase in hit batters in both leagues, caused by league expansion and the double warning rule, appears to have largely overshadowed the moral hazard effect of the designated hitter rule. However, moral hazard remains a very real

148. See, e.g., Bradbury & Drinen, supra note 104, at 322.
149. Major League Baseball Rule 8.02(d) (“If, in the umpire’s judgment, such a violation occurs, the umpire . . . may warn the pitcher and the manager of both teams that another such pitch will result in the immediate expulsion of that pitcher (or a replacement) and the manager.”).
150. Id.; see also Bradbury & Drinen, supra note 104, at 322.
151. See Bradbury & Drinen, supra note 97, at 142 (“With the double warning rule, pitchers can take risks that are more likely to result in hit batters than without the rule because pitchers know the opposition will be less likely to retaliate due to the increased penalty after the umpire issues a warning.”); Bradbury & Drinen, supra note 104, at 322 (noting that the rule “significantly raised the cost of opposing teams retaliating for hitting batters, thereby lessening the retaliatory fear among NL pitchers”); but see Leland S. MacPhail, Jr., Lee MacPhail on Brush-Back Wars: Some Attitudes Will Have to Change, N.Y. TIMES, Aug. 31, 1980, at S2 (disputing the notion that warning both teams allows “a free shot,” and noting that “[t]he alternative would be to also give the second team ‘a free shot’ and run the risk of a player’s being hurt”).
152. See Bradbury & Drinen, supra note 104, at 322 (“Consistent with the moral hazard hypothesis, NL pitchers now bear a lower cost for hitting batters and therefore ought to be expected to behave more like their counterparts in the AL.”). Interestingly, Japan’s two professional baseball leagues experienced a similar effect after increasing the penalties for hitting batters. Bradbury & Drinen, supra note 97, at 142–43 (citing Kawaura & La Croix, supra note 108).
153. Goff, Shughart & Tollison, supra note 12, at 690 (concluding that “it is
consequence of the designated hitter rule, even though it does not explain the entire hit-by-pitch disparity between the leagues and has been masked by structural changes to the game.

IV. BENEFITS OF THE DESIGNATED HITTER RULE OUTWEIGHT ITS COSTS, INCLUDING MORAL HAZARD

Although studies show the designated hitter rule is partly to blame for the increase in hit batsmen in the American League, this is not the end of our economic analysis. Like almost every rule or law, the designated hitter rule has both costs and benefits. Even if moral hazard is a disadvantage of the rule, an additional question remains: do the benefits of the designated hitter rule outweigh its costs, including any moral hazard effect?

We conclude that the benefits of the designated hitter rule likely outweigh its costs (at least for American League fans), for several reasons. First, the designated hitter rule has significantly increased offense and attendance in the American League. Second, the rule prolongs the careers of popular players and allows gradual recovery from injury. Third, although the designated hitter rule alters managerial strategy, it does not eliminate it. Fourth, the costs associated with hit batsmen and bench-clearing brawls do not appear to outweigh the rule’s benefits.

Our research shows, however, that this cost-benefit analysis will vary somewhat between the American League and National League, due to differences in fan preferences. Although a

the unusually large increase in the NL hit batsmen series that masks the DH effect”).

154. It should be noted that this sentence is particularly difficult to write for one of the authors, who fancies himself a National League fan and has been openly hostile to the designated hitter rule for years. For the other author, who has been a life-long American League fan, this represents the type of “I told you so” moment that is normally reserved for a late-inning rally. That said, both authors view the designated hitter rule debate as far from over. In the years to come, we encourage others to contribute meaningfully to the debate by weighing additional advantages and disadvantages of the designated hitter rule.

155. See infra Part IV.A.

156. See infra Part IV.B.

157. See infra Part IV.C.

158. See infra Part IV.D.
A vigorous debate on the designated hitter rule is good for the game, we strongly believe that baseball fans ultimately should celebrate the unique rules, history, and culture of each league. Thus, our conclusion that the benefits of the designated hitter rule outweigh its costs in the American League does not necessarily support the adoption of the rule in the National League. Rather, pitchers should continue to hit in the National League as long as the cost-benefit analysis in that league weighs against adoption of the rule.  

A. The Designated Hitter Rule Has Increased Offense and Attendance in the American League

The primary benefit of the designated hitter rule is that it has significantly increased offense and attendance in the American League. Prior to the implementation of the rule, the American League’s offense was anemic, especially in relation to the National League at the time. For example, in 1972 the American League hit 184 fewer home runs, scored 824 fewer runs, and had a batting average that was nine points lower than the National League. This lack of offense translated into fewer sales at the box office. During the 1971 season alone, the National League outdrew the American League by nearly 5,500,000 fans, and between 1955 and 1972, the American League had higher attendance than the National League only once.

This disparity between the two leagues changed dramatically
after the American League adopted the designated hitter rule. During the first four seasons after implementation of the rule, the American League averaged 1,640 more runs, 202 more home runs, and 19 more points in batting average, compared with the 1972 season. Indeed, the American League has led the National League in overall batting average every year since adoption of the rule. At the box office, the designated hitter rule allowed the American League to close the attendance gap with the National League. As previously noted, only four American League teams drew more than one million fans in 1971, but in 1973 eight teams managed to draw that many fans.

More recent studies have confirmed that the increased offense generated by the designated hitter rule has likely drawn thousands of fans to the ballpark. Economists Bruce Domazlicky and

165. In 1972 (the season immediately preceding the adoption of the designated hitter rule), American League batters scored 6,441 runs, hit 1,175 home runs, and had a .239 batting average. Ostler, supra note 48. In comparison, in the first four seasons after adoption of the designated hitter rule, AL batters maintained a .258 batting average, scored an average of 8,081 runs per season, and slugged 1,377 home runs each year. Id.; but see Koppett, supra note 37 (arguing that “all available measures indicate that the drastically different rules do not have a very great effect”); Tony Kornheiser, Sports World Specials, N.Y. TIMES, Feb. 13, 1978, at C2 (arguing that the designated hitter rule makes only a slight difference in offensive statistics).

166. Baseball Almanac, Batting Average League By League Totals On Baseball Almanac, http://www.baseball-almanac.com/hitting/hibavg4.shtml (last visited Feb. 8, 2010); see also Ray Corio, Question Box, N.Y. TIMES, Apr. 24, 1989, at C11 (noting the designated hitter rule has “been worth roughly 6 to 40 percentage points [in batting average], according to American League statistics”); Wulf, supra note 38, at 49 (“The American League has had a higher overall batting average than the National League in every year since 1973, and over the last 20 seasons the junior circuit has outscored the senior circuit by more than half a run a game.”).

167. Wulf, supra note 38, at 49 (“The American League has also closed the attendance gap, thanks to improved offense and the prolonged careers of such superstars as Hank Aaron, Reggie Jackson, Dave Parker, Dave Winfield and George Brett.”); see also Gergen, supra note 29 (noting that, through July 1973, “the Americans had drawn 7,714,805 fans, an average of 15,247 a game and an increase of almost 700,000 over the previous season”); Smith, supra note 54 (“In 1973, American League attendance increased substantially over 1972.”).

168. MCKELVEY, supra note 18, at 42.

Peter Kerr found that American League fans respond positively to increased offense, and that an estimated 2,211 additional fans per opening can be attributed to the designated hitter rule. And professional baseball consultant David Gassko estimates that each home run puts approximately 2,000 extra fans in the seats – yes, chicks do dig the long ball.

B. The Designated Hitter Rule Prolongs the Career of Popular Players and Allows Gradual Recovery From Injury

In addition to putting fans in the stands, the designated hitter rule allows popular players to extend the twilight of their careers, much to the delight of American League fans. For example, the rule allowed Hank Aaron to prolong his career by signing a two-year contract with the Milwaukee Brewers (an American League team at the time). Al Kaline of the Detroit Tigers admitted that

170. *Id.* at 67–68. Domazlicky and Kerr controlled for several non-baseball related variables, including the population of the metropolitan area in which the team played, average ticket prices, per capita income in the team’s home city, the existence of another Major League Baseball club in the same town, and the existence of non-baseball professional sports teams in the same town. *Id.* at 64. They also controlled for several baseball related variables, including team winning percentage, games back (from the league leader), runs scored per year, the number of All-Star players on the team, the age of the stadium, and recent performance in a division championship. *Id.* at 65.


172. MCKELVEY, supra note 18, at 23; see also Leggett, supra note 39, at 12 (noting that with the designated hitter rule, “[n]ew leaseholds on playing life will abound”); but see Ostler, supra note 48 (quoting Kansas City designated hitter Hal McRae as saying, “A lot of people say DHing will prolong your career, but I think you get old faster when you’re not playing. Your career is your legs, and when you don’t use them, they go faster.”).

173. Aaron Signs 2-Year Pact, N.Y. TIMES, Nov. 15, 1974, at 43 (“Henry Aaron, traded from the verge of retirement . . . said one of his reasons for asking to leave the Braves and the National League was to take advantage of the designated-hitter rule in the American League. He said his arm was no longer
he would not have achieved 3,000 career hits without the designated hitter rule.\(^{174}\) And Willie Mays, a twenty-two year National League veteran, insisted he could have extended his career a few more years if his league had adopted the rule.\(^{175}\) More recently, Giants slugger Barry Bonds was forced into retirement after suffering from a variety of physical ailments and failing to find an American League team interested in giving him a contract,\(^{176}\) while Ken Griffey, Jr. was able to arrange a curtain-call return as the Seattle Mariners’ designated hitter.\(^{177}\)

The designated hitter rule also provides an ideal role for hitters strong enough for full-time outfield duty."; see also John Hall, Around Town, L.A. TIMES, Apr. 16, 1975, at F3 (noting that Pete Rose defended the designated hitter rule in part by pointing to “all the American League fans who will get to see Henry Aaron this season.”).

174. George Minot, Jr., Tigers' Kaline Closes In On 3,000-Hit Mark, L.A. TIMES, June 29, 1974, at OC A7. The downside is that a stigma often attaches to players that achieve milestones while serving as designated hitters. See, e.g., id. (“There is no word whether an asterisk will be added to Kaline’s name in the record books; he will be the first 3,000 hit man to benefit from the American League’s designated hitter rule.”); see also Raymond I. Dingle, Letter to the Editor, Designating an Asterisk, Sept. 13, 1987, at 281 (arguing an asterisk should be added to Paul Molitor’s 39-game hitting streak, due to Molitor’s status as a designated hitter). Indeed, much controversy recently swirled around voters’ decision to pass on Edgar Martinez—considered by many to be the greatest designated hitter in the history of the game—during his first year of Hall of Fame eligibility. See Tim Booth, DH Denied: Martinez Falls Short in First Hall Vote, SEATTLE TIMES, Jan. 6, 2010, available at http://seattletimes.nwsource.com/html/localnews/2010718586_apbohalloffame martinez.html (last visited Feb. 8, 2010).

175. McKELVEY, supra note 18, at 44.


returning from injuries. After Mariners slugger Edgar Martinez suffered hamstring and knee injuries in 1993 and 1994, he came back as a designated hitter and made the All-Star roster in 1995, while batting an impressive .356 at the plate. Similarly, when legendary slugger Reggie Jackson pulled a tendon in his left knee in 1973, the Oakland Athletics were able to bring him back slowly, by allowing him to serve as the team’s designated hitter. Thus, the designated hitter rule allows big-name hitters to prolong their careers and ease their way back into the lineup after injuries.

C. The Designated Hitter Rule Alters Managerial Strategy But Does Not Eliminate It

Perhaps the most frequent complaint about the designated hitter rule is that it eliminates one of the key managerial decisions of the game. When the pitcher’s spot comes up to bat during the late

178. See, e.g., Dave Distel, Designated Hitter Rule Good News For Oliva, L.A. TIMES, Apr. 11, 1973, at G1 (noting that the designated hitter rule kept Twins slugger Tony Oliva in the game, despite knee problems); Leggett, supra note 51, at 31 (noting that the designated hitter rule had “saved” Red Sox hitter Orlando Cepeda, whose “knees are in such bad shape he goes to the trainer’s room at Fenway Park between innings, works out on an Exercycle and lifts weights with his feet”); but see Ostler, supra note 48 (stating that “[m]ost DHs say the toughest part of the job, physically, is keeping the muscles loose,” and reporting that Angels’ designated hitter Don Baylor “said that a series of minor muscle pulls this season and last are attributable to coming off the bench cold and sprinting around the bases”).


180. See Leggett, supra note 39, at 14 (noting that “if Reggie Jackson has not completely recovered from his leg injury he could be brought back slowly as a DPH”); Ron Rapoport, The DH: A Hit—Maybe, L.A. TIMES, Apr. 27, 1973, at D1 (quoting Jackson as saying that the designated hitter rule is “good for me” because it “keeps me in the lineup” despite injury).

181. See, e.g., James W. Davis, Letter to the Editor, Brickbats for Desis, SPORTS ILLUSTRATED, May 21, 1973, at 122, 122 (noting that “[p]art of the charm of baseball is in seeing the manager exploit the strengths and weaknesses of his players,” and arguing that “[t]he DH rule has taken much of this finesse out of the game, profoundly changing it for the worse.”); Vecsey, supra note 58 (“The designated hitter rule kills strategy by taking decisions away from managers. It has turned the American League into a vastly less interesting
innings of a close game, National League managers are often faced with a tough choice: whether to pinch-hit for the pitcher. On the one hand, the manager loathes the idea of his pitcher leaving the game, especially if the pitcher is throwing well from the mound. On the other hand, the odds of scoring a run are almost always better with the pinch hitter at the plate. Because pitchers do not hit in the American League, however, managers in that league “may leave their starters in until the poor fellows either lose their effectiveness or drop from exhaustion.” As a result, opponents of the designated hitter rule argue that the rule “relieves the manager of all responsibility except to post the lineup card on the dugout wall and make sure everybody gets to the airport on time.”

This criticism is somewhat off-base. Although the designated hitter rule eliminates the need to pinch-hit for pitchers (and the strategy behind that decision), the rule does not affect other components of managerial strategy. Making a pitching change in the American League still requires a great deal of skill, experience, and judgment. It may be even more difficult in

brand of baseball because the managers don’t have to fret about niceties like hitting for the pitcher.”

182. See NL Objections, supra note 41 (quoting National League President Chub Feeney as saying that “[m]uch of the real strategy of baseball revolves around the pitcher and pinch-hitting for him”).

183. See, e.g., Ron Fimrite, He’s Hired to Be Fired, SPORTS ILLUSTRATED, Apr. 13, 1981, at 52, 62 (noting that “[i]n the National League, a pitcher going well in a close game may get the hook if, in the manager’s view, a pinch hitter might perk up the offense.”).

184. See id.

185. Id.

186. Smith, supra note 5; see also Editorial, Strike Three!, supra note 55 (arguing that “the designated-hitter rule destroys a considerable element of baseball strategy, part of the precious balance that gives the game its unique hold on the American psyche”); Fimrite, supra note 183, at 62 (arguing that the strategic decision of pinch-hitting for the pitcher “makes managing in the National League more attractive”).

187. See, e.g., Leggett, supra note 39, at 15 (quoting Detroit Tigers scout Jack Tighe as saying that the designated hitter rule “doesn’t take that much strategy out of the game”).

188. See Michael Martinez, Lifting Pitchers: Baseball’s Second-Guessing Game, N.Y. TIMES, June 23, 1985, at S1 (“Replacing a pitcher—or leaving one
some respects than the same decision in the National League. As former Angels manager Bobby Winkles once said,

[it] was a great help when the pitcher used to bat because, even if you weren’t sure if he was tired, if he was up and you had a man on and were down by a run, you’d take him out. Now you try to make sure he’s tired and you might go just one man too long. 189

For this reason, the manager’s decision to remove a pitcher late in the game arguably has become more subtle and nuanced than it was before the American League’s adoption of the designated hitter rule. 190 And the designated hitter rule does not change what is perhaps the most essential part of the game—“[t]he fan, it would seem, has not lost his right to second-guess.” 191

D. Costs Associated with Hit Batsmen and Bench-Clearing Brawls Do Not Appear to Outweigh the Rule’s Benefits

Other benefits and costs aside, a serious question remains: by increasing the number of hit batsmen, does the designated hitter rule unnecessarily increase the risk of injury? Major League Baseball condemns throwing at batters 192 for good reason—

in—can be the most important decision a manager makes during the course of a game.”); Ostler, supra note 3 (arguing that American League pitching changes “require skill, judgment, insight and communication with the pitcher and catcher”).

189. Rapoport, supra note 180 (quoting Bobby Winkles); see also Leggett, supra note 39, at 14 (quoting former Minnesota Twins manager Frank Quilici as saying, “No question, the rule is going to keep a manager on his toes. It is going to be a more stimulating job, because investigation of other teams will have to be done in greater detail.”).

190. See, e.g., Rapoport, supra note 180 (“If anything, this aspect of the game has now become so much subtler than the mere use of a pinch-hitter for the pitcher was that the serious fan’s appreciation of the strategical considerations has probably been heightened.”).

191. Rapoport, supra note 180; accord Ostler, supra note 3 (noting that American League pitching changes still “can be second-guessed like crazy by any mentally agile fan wishing to match wits with the fat guy in the dugout”).

192. See, e.g., Major League Baseball Rule 8.02(d) Comment (“To pitch at a batter’s head is unsportsmanlike and highly dangerous. It should be – and is – condemned by everybody. Umpires should act without hesitation in enforcement of this rule.”).
“[t]here can be tragic results when a man is hit by a round, hard missile, thrown from 60 feet 6 inches at more than 90 m.p.h.” 193

In August 1920, Cleveland Indians shortstop Ray Chapman died after being hit in the head by a fastball. 194 Other players have seen their careers end after being hit by a pitch, including Tony Conigliaro of the Boston Red Sox in 1967. 195 Additionally, intentional hits can spark bench-clearing brawls as players engage in direct retribution against the pitcher on the mound. 196

These are serious concerns. On closer examination, however, hit batsmen sustain a low level of actual injury, and thus these concerns do not outweigh the benefits of the designated hitter rule. First, the modern helmet requirement 197 and the requirement that balls be replaced early and often if they become smudged 198 have

194. See Voigt, supra note 32, at 155; see also Chapman Services to Be Held Today, N.Y. Times, Aug. 20, 1920, at 13.
195. See Voigt, supra note 32, at 268. Baseball history includes a long list of tragic injuries resulting from hit batsmen. See, e.g., Arthur Daley, Sports of the Times: ‘Stick It In His Ear!’, N.Y. Times, May 13, 1951, at S2 (noting that “a baseball can be a lethal weapon,” and that “there have been more fractured skulls than anyone can tabulate”); Newhan, supra note 88 (“Don Zimmer, the former Dodger, was given last rites when he was beaned for a second time during the 1954 season.”); Pitched Ball Hits Cochrane at Stadium; Detroit Leader’s Skull is Fractured, N.Y. Times, May 26, 1937, at 1 (reporting that a high, inside pitch fractured Tigers player-manager Mickey Cochrane’s skull).
196. See, e.g., Dave Anderson, Sports of the Times: Why So Many Beanball Melees?, N.Y. Times, June 1, 1980, at S5 (noting that “brushback” pitches had “exploded into nine bench-clearing melees already this season”); Ron Dicker, Rodriguez and Varitek Lead List of Eight Suspended for Fight, N.Y. Times, July 30, 2004, at D1 (bench-clearing brawl occurred after Red Sox pitcher Bronson Arroyo hit Yankees slugger Alex Rodriguez); White Sox Win One, But Lose 7 to Suspensions, N.Y. Times, Apr. 28, 2000, at D6 (reporting that “[s]even members of the White Sox and nine members of the Tigers were suspended a total of 82 games, and nine others were fined for Saturday’s bench-clearing brawls, which resulted in 11 ejections”).
197. See Major League Baseball Rule 1.16(a) (“All players shall use some type of protective helmet while at bat.”); see also Major League Baseball Rule 1.16 Comment (“If the umpire observes any violation of these rules, he shall direct the violation to be corrected.”).
198. See Voigt, supra note 32, at 165. It is a violation of the rules to intentionally damage or discolor the ball; offenders shall be suspended automatically for 10 games. Major League Baseball Rule 3.02.
substantially reduced the risk of serious injury.\textsuperscript{199} Second, as noted above, the designated hitter rule’s moral hazard effect has been largely overshadowed in recent years by the double warning rule.\textsuperscript{200} Thus, to the extent that players are sustaining serious injuries from being hit at the plate, repealing the double warning rule would likely have a greater effect in reducing hit batsmen in both leagues.

Moreover, perverse as it may seem, many fans likely gain some utility from witnessing bench-clearing brawls, and perhaps hit batters as well.\textsuperscript{201} Though politically incorrect to admit, many people enjoy watching aggression and pain in sports—after all, how else would hockey survive?\textsuperscript{202} In the moments after a batter is hit by a pitch, the crowd holds its collective breath to see whether he will shake it off and take his base, or charge the mound to deal out immediate justice. There is little doubt that this lends a sense of drama and anticipation to the game.\textsuperscript{203} Of course, we are not suggesting that fan enjoyment automatically transforms hitting a batter into a “positive” action. Nevertheless, most hit-by-pitch incidents (including bench-clearing brawls) involve minimal or no

\textsuperscript{199} Players are still injured, of course, but generally not as severely. For example, Mets slugger Mike Piazza was hit in the head by a pitch in a 2005 game and suffered a concussion, but no apparent long-term injury. See Ben Shpigel, \textit{Piazza is Beaned in His First Game Back in Lineup}, \textit{N.Y. Times}, Sept. 11, 2005, at G2 (reporting that Piazza sustained a “slight concussion” after Cardinals pitcher Julian Tavarez “lost control of a 92-mile-an-hour fastball and struck Piazza in the helmet”).

\textsuperscript{200} See \textit{supra} Part III.D.

\textsuperscript{201} Of course, Major League Baseball would never admit to this, given that it strictly condemns violence in the sport. See, e.g., MacPhail, \textit{supra} note 151 (American League President Lee MacPhail emphatically stating that “‘throwing incidents’ are not part of our game. Baseball is not a game of violence, and we cannot permit anything that may cause needless injury and shorten a career.”).

\textsuperscript{202} See, e.g., \textit{Hockey Fans Like Fighting: Poll}, \textit{Toronto Star}, Apr. 5, 2007, \textit{available at} http://www.thestar.com/Sports/article/199905 (reporting the results of a National Hockey League fan poll, which showed that “[a] huge majority of people who describe themselves as avid fans—76 per cent—oppose a fight ban”) (last visited Feb. 8, 2010).

\textsuperscript{203} The popularity of altercations in baseball is perhaps best illustrated by a top-ten list created by SportsCenter, highlighting the ten best baseball fights caught on film. That video is no longer available on ESPN’s SportsCenter website, but is available at http://www.youtube.com/watch?v=RR9qCee4mvo (last viewed Feb. 8, 2010).
injury, and thus it is likely that on most occasions the enjoyment of thousands of fans exceeds the minimal costs associated with a hit batter or an altercation.

E. The Rule’s Costs May Outweigh Its Benefits in the National League, Due to Differences in Fan Preferences

Although the designated hitter rule’s benefits likely outweigh its costs in the American League, this does not necessarily mean the rule would have a net-beneficial effect in the National League as well. Instead, it appears the costs of the designated hitter rule may outweigh its benefits if it were adopted in the National League.

Attendance provides an illustrative example of how different the cost-benefit analysis is among fans in each league. Although Domazlicky and Kerr’s study concludes that the designated hitter rule brings thousands of additional fans to each American League opening, the study discovered that an increase in offense would not have the same effect on National League attendance. “AL fans respond to increased offense while NL fans do not.” As a result, “it seems unlikely that the use of the DH would have much effect on attendance at NL baseball games.”

As these empirical results demonstrate, the cost-benefit analysis will be different in each league because National League fans have different preferences than American League fans. Many of the “benefits” of the designated hitter rule are not seen as such by National League fans. For example, in the American League the designated hitter rule has made sacrifice bunts and stolen bases less important. Although this may not offend the sensibilities of

204. “Most baseball fights are harmless,” although there have been a few notable exceptions. Newhan, supra note 88. For example, “Joe Adcock, the former Milwaukee first baseman, chased Ruben Gomez from the mound to the clubhouse, where Gomez found a butcher knife and advanced on Adcock before being overpowered.” Id. Fortunately, such incidents are the exception to the norm.

205. Domazlicky & Kerr, supra note 169, at 67.

206. Id.

207. Id.

208. See Editorial, Strike Three!, supra note 55 (“[Sacrifice] bunts have become much less important in the era of the DH. American League teams [during the 1984 season] had an average of 45 sacrifice hits each. National League teams made 67 sacrifice hits each. Pinch hitting is more important in
most American League fans, National League fans would likely view this change as a cost, not a benefit.\textsuperscript{209} We encourage a vigorous debate on the designated hitter rule. But that does not (and should not) blind us to the fact that baseball is different in each league, and fans like it that way.\textsuperscript{210} The benefits of the designated hitter rule likely outweigh its costs in the American League. That does not mean, however, that National League fans should be forced to adopt a rule they do not like. Instead, all baseball fans should celebrate the unique rules, history, and culture of each league.

V. CONCLUSION

In sum then, it is crucial to consider all the benefits and costs in any responsible economic analysis of the designated hitter rule. Although statistical data indicate that the rule likely creates some moral hazard, structural changes to the game appear to have overshadowed the designated hitter rule’s moral hazard effect in recent years. Ironically, the double warning rule in particular appears to have created a moral hazard effect in both the American and National Leagues. As a result, elimination of the designated hitter rule likely would not cure the moral hazard effect but merely

\begin{quote}
the National League. So is base stealing.
\end{quote}

\textsuperscript{209} See Glenn Dickey, \textit{Park Size Affects League Differences}, S.F. CHRON., May 15, 1993, at D3 (“It’s an article of faith with National League fans that N.L. games emphasize speed and baserunning, while the American League, because of the designated hitter, plays games in which players simply wait on the bases until someone hits a home run.”).

\textsuperscript{210} See, e.g., Thomas Rogers, \textit{Scouting}, N.Y. TIMES, Aug. 5, 1983, at A14 (quoting Detroit Tigers Manager Sparky Anderson as saying that American League and National League baseball are “two different games . . . [l]ike soccer and rugby”); see also Anderson, \textit{supra} note 59 (noting that polling showed that American League fans favored the designated hitter rule, while National League fans did not); Tony Fabrizio, \textit{Realignment Idea Best for Football, Just Not Baseball}, AUGUSTA CHRON. (Georgia), Aug. 25, 1997, at C1 (“The AL has the designated hitter; NL fans prefer their baseball in a purer form.”); Paul Hoynes, \textit{Ex-Indians Help to Load Garner’s Slingshot}, PLAIN DEALER (Cleveland), Aug. 31, 1997, at 10C (quoting Cubs’ President Andy MacPhail as stating that “Cubs fans do not like the designated hitter”); \textit{All-Star Voter Fraud Early and Awful to the Ballot Box}, SPORTING NEWS, July 7, 2003, at 8 (noting that “[t]he American League uses designated hitters, and National League fans consider that a heinous act of heresy upon a sacred shrine.”).
change its source.

In the American League, teams and fans clearly benefit from increase in offense, but of course that must be weighed against the loss of some baseball strategy and the potential danger to batters. As we weigh costs and benefits, there is room for disagreement and experimentation. Just as American states provide experimental laboratories for a wide variety of laws, so too do the two major leagues provide an ideal place to try out new and different rules. There is no reason why both leagues should have to play by uniform rules.

American League fans enjoy the increased offense that the designated hitter rule provides. National League fans enjoy pitching duels and the chance to see the manager struggle with the decision whether to pinch-hit for the pitcher in close games. Thus, this may be an instance in which fans should agree to disagree—as long as fans in each league are satisfied with the game under the existing rules, let’s play ball (and pass the Cracker Jacks).

211. Supreme Court Justice Louis Brandeis is credited for being the first to regard the states as laboratories in need of the freedom to experiment. See New State Ice Co. v. Liebmann, 285 U.S. 262, 310-311 (1932) (Brandeis, J., dissenting).