

MLB's American League and the DH Rule



Introduction

In MLB's American League, the addition of the DH rule allowed for one player to bat in place for the pitcher. The purpose of the implementation of the DH rule in the American league was to increase overall all attendance by making making the games more exciting through in an increase in offense. Our analysis provides insight into whether or not they were successful, as well as provides insight into what factors contribute to teams' overall attendance.

Thesis

In the American League in the MLB, teams with more home runs did not have a stronger correlation with total attendance after the designated hitter rule was implemented after controlling for number of games and population.

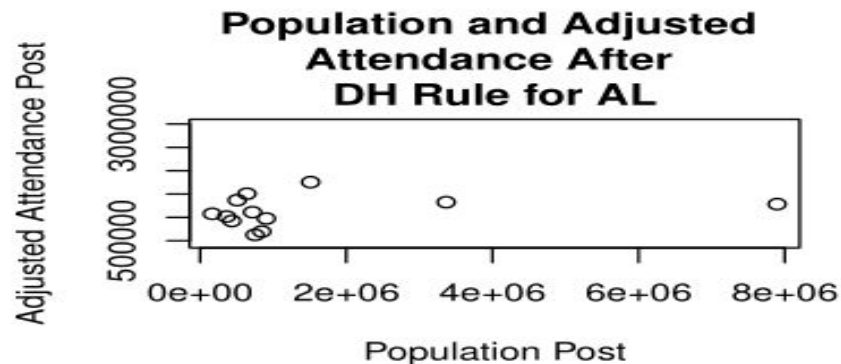
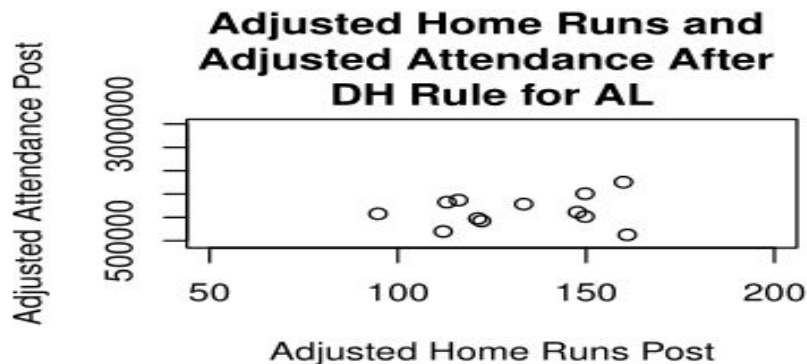
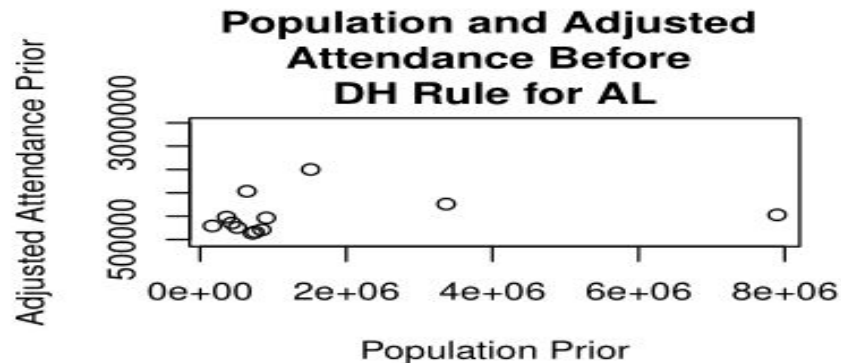
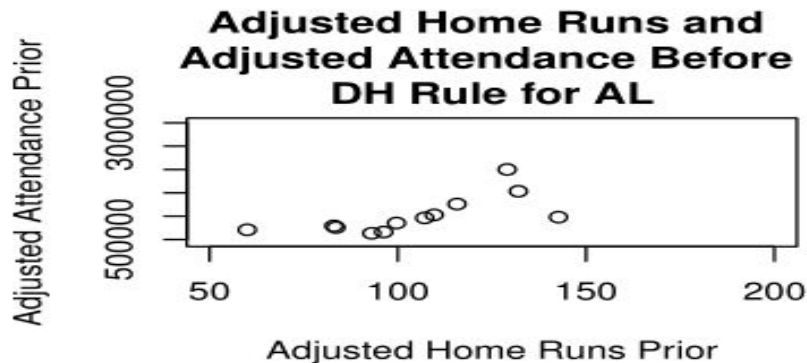
Additionally, teams with more home runs did not have a stronger correlation with total attendance, while adjusting for population, after the designated hitter rule was implemented while controlling for number of games.



Data Definitions

- City Population
- Total Attendance adjusted for 165 games
- Total Home Runs adjusted for 165 games
- Total Attendance/Population adjusted for 165 games

Figure 1.1



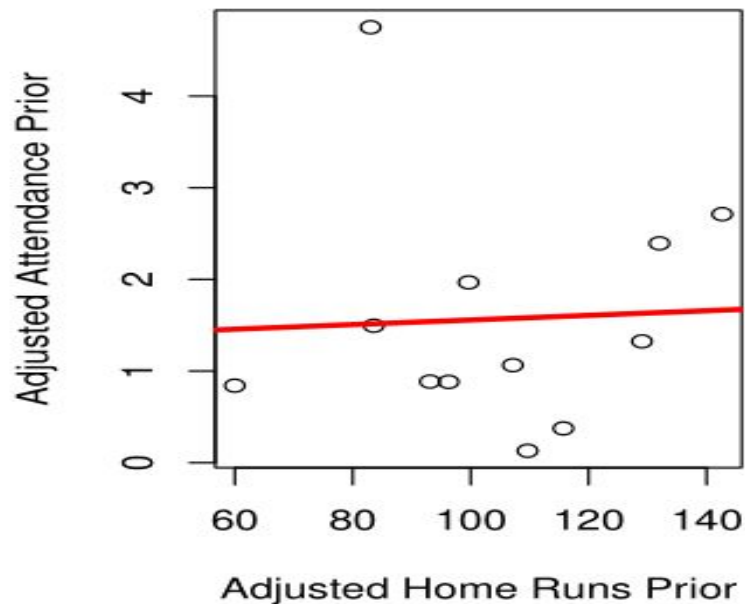
Model/Summary Table 1.1

Coefficients:					R Squared
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-2.158e+05	4.465e+05	-0.483	0.6405	.4715
adjusted_HR_AL_prior	1.161e+04	4.232e+03	2.744	0.0227 *	
pop_AL_prior	1.311e-02	4.562e-02	0.287	0.7803	

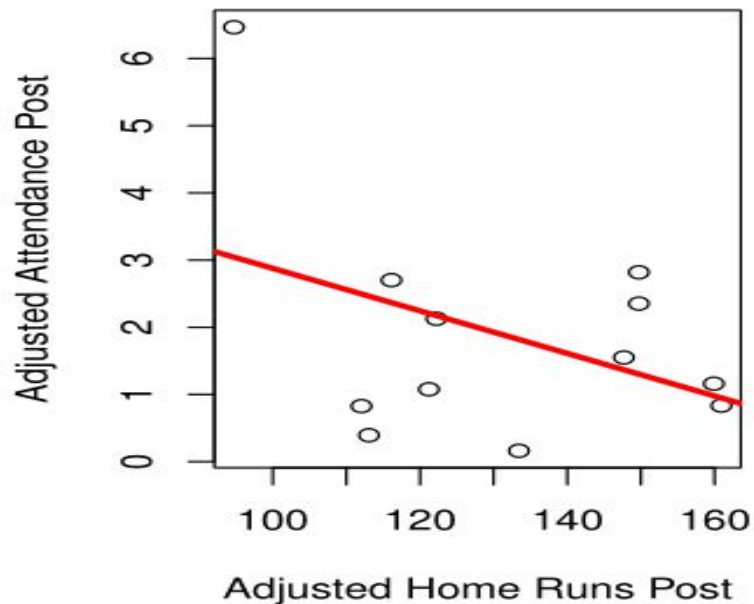
Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	7.136e+05	6.445e+05	1.107	0.297	.09819
adjusted_HR_AL_post	2.804e+03	4.804e+03	0.584	0.574	
pop_AL_post	3.794e-02	4.746e-02	0.799	0.445	

Figure 1.2

**Adjusted Home Runs and
Adjusted Attendance Before
DH Rule for AL**



**Adjusted Home Runs and
Adjusted Attendance After
DH Rule for AL**



Model/Summary Table 1.2

Coefficients:

R Squared

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	1.305937	1.812759	0.720	0.488	.002195
adjusted_HR_AL_prior	0.002519	0.016987	0.148	0.885	

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	6.04232	3.03183	1.993	0.0743	.1624
adjusted_HR_AL_post	-0.03165	0.02274	-1.392	0.1941	

Other Confounding

- Payroll
- Ticket Prices
- Stadium Size
- Other Offensive Statistics

Summary

Our data supports our theses:

Our analysis **does not show** that in the American League in the MLB, teams with more home runs had a higher total attendance after the designated hitter rule was implemented after controlling for number of games and population.

Additionally, our analysis **does not show** that teams with more home runs had a higher total attendance, while adjusting for population, after the designated hitter rule was implemented while controlling for number of games.

Questions?