How can Ohtani get \$700 million for 10 years?

Sangjun Han MICHIGAN STATE UNIVERSITY, CMSE 402, East Lansing, MI 48824

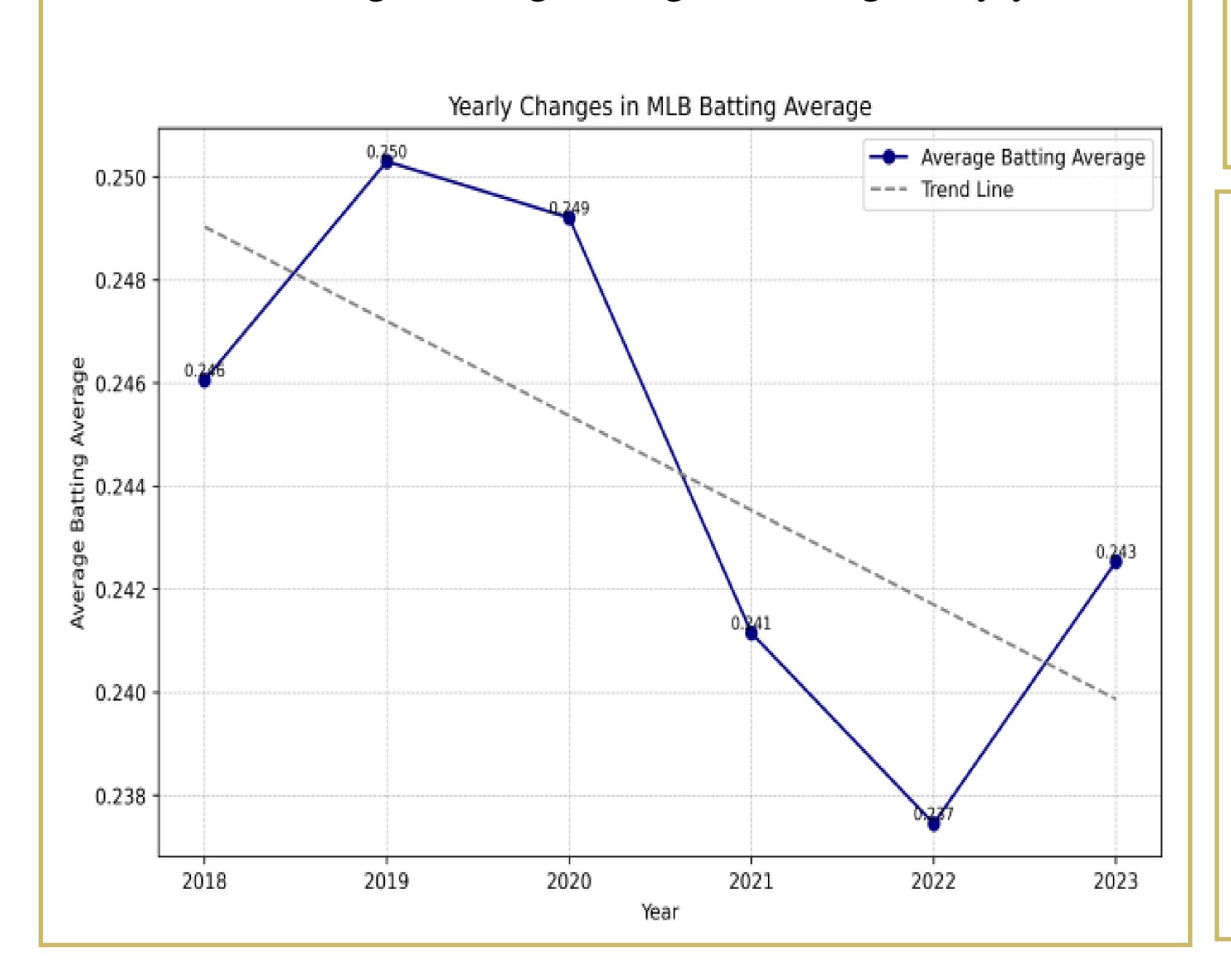


Introduction

Shohei Ohtani is a baseball player who signed a contract worth 700 million dollars for 10 years starting this year. He is a player who has won MVP twice during his 7th year in MLB.

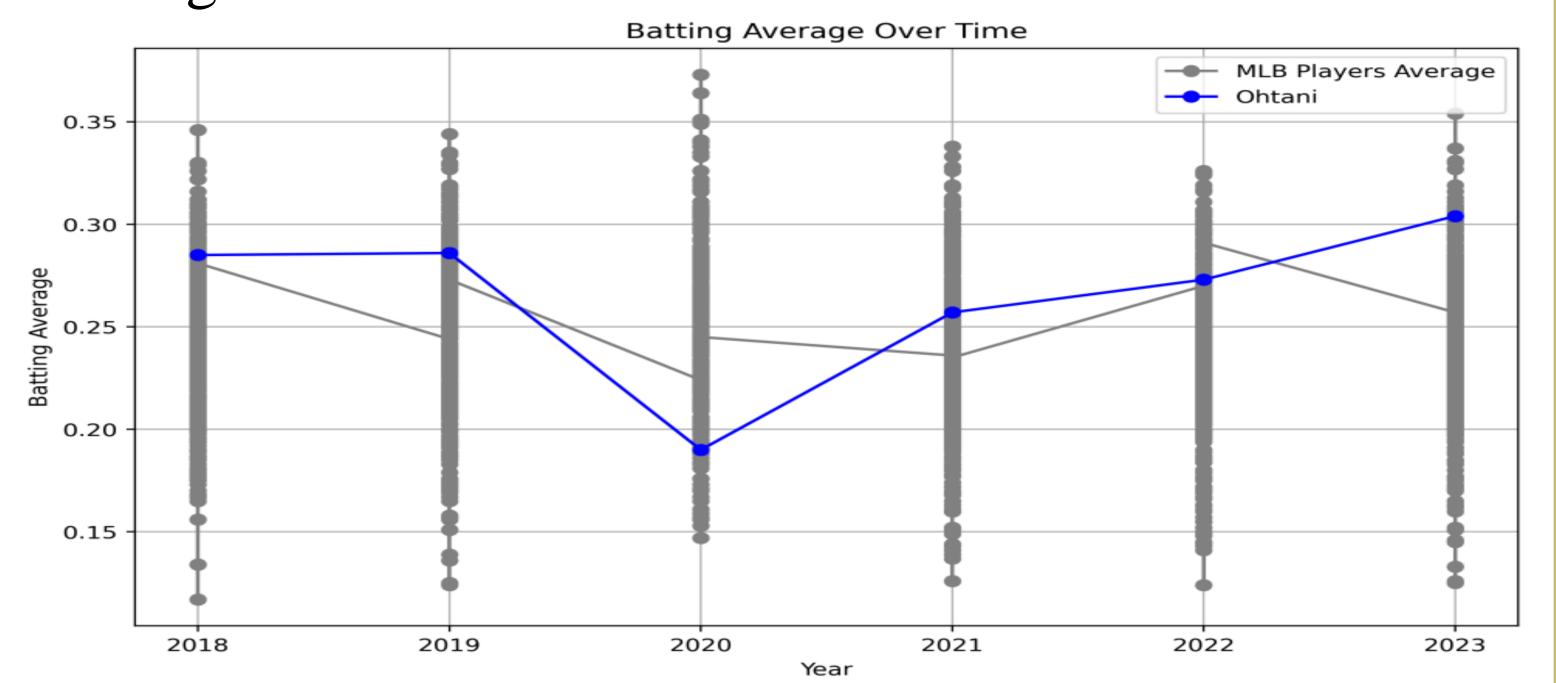
MLB Batting Average

- MLB's average batting average is falling every year.



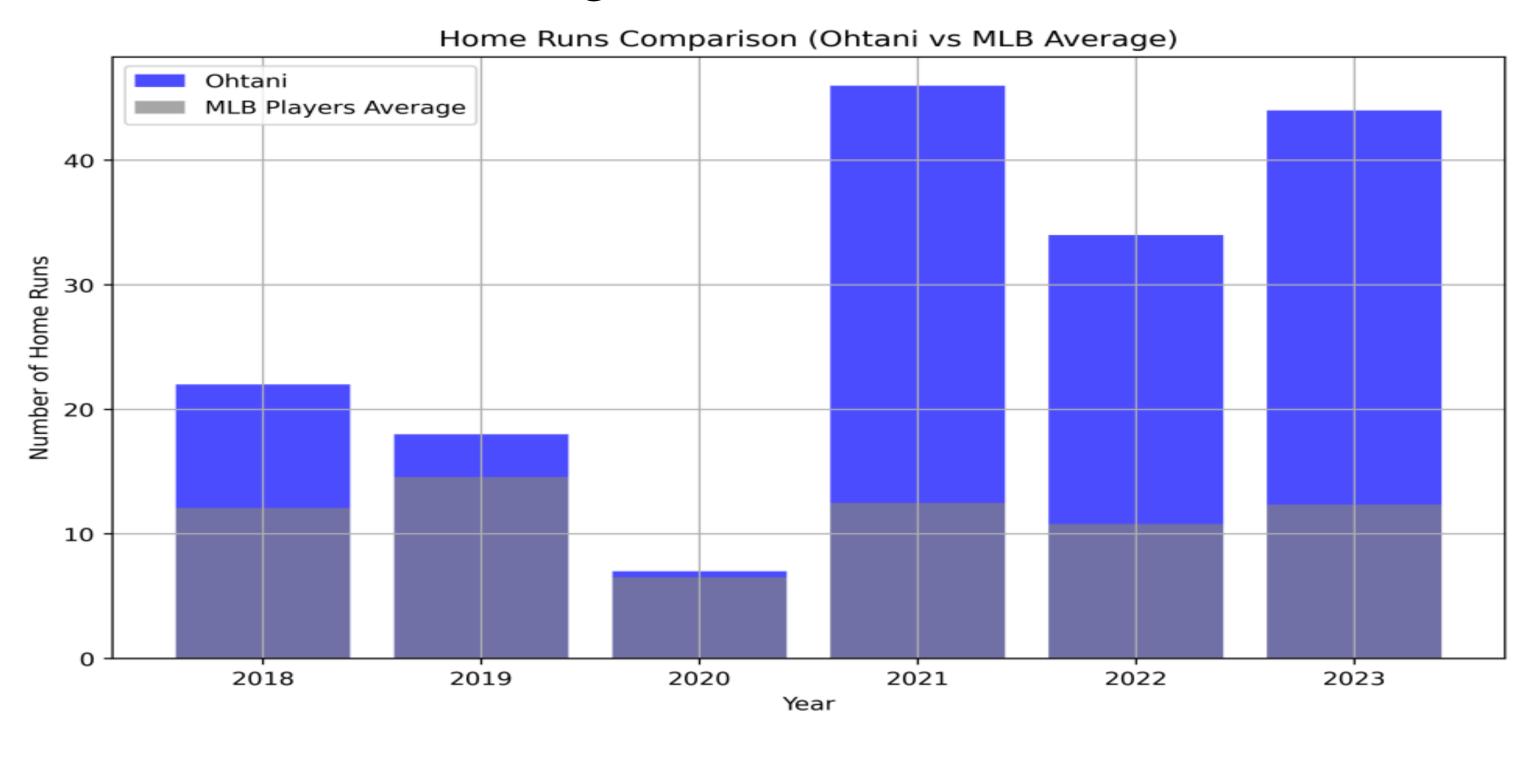
Ohtani's Batting Average

- His batting average is similar to MLB's average batting average.



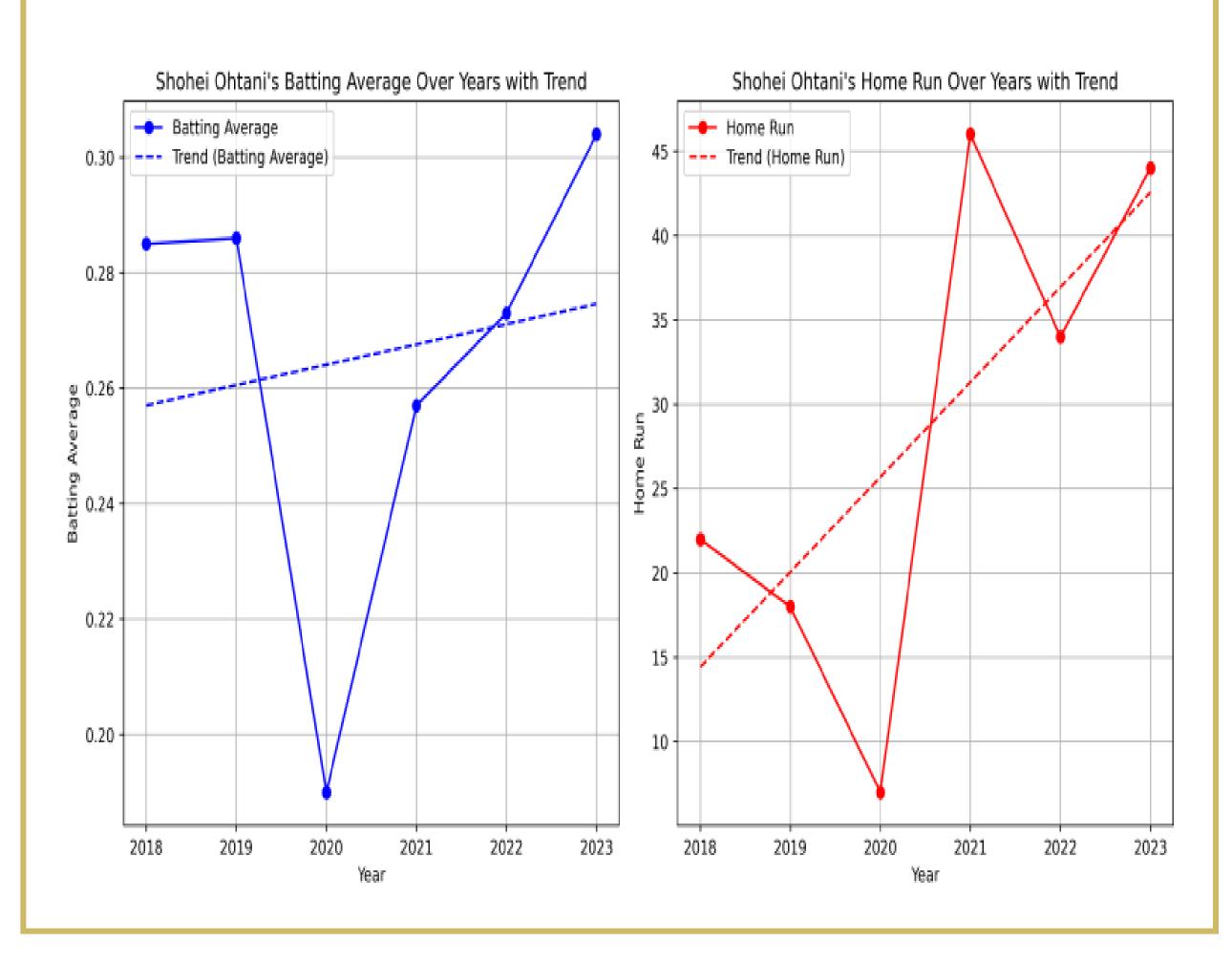
Homerun Average

However, his home run productivity is much higher than the MLB average.



Prediction

According to the linear regression method, his batting average and his home runs are rising every year, his predicted batting average in 2024 is 0.278, and the expected number of home runs is 48.2.



References

https://baseballsavant.mlb.com/leaderboard/custom?year=2023%2 C2022%2C2021%2C2020%2C2019%2C2018&type=pitcher&filte r=&min=q&selections=p_formatted_ip%2Ck_percent%2Cbb_perc ent%2Cp_win%2Cp_era%2Cwhiff_percent%2Cswing_percent&c hart=false&x=p_win&y=p_win&r=no&chartType=beeswarm&sor t=p_era&sortDir=asc