

# Reference Dependence and Monetary Incentive

-Evidence from Major League Baseball-

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# Abstract

- Empirical research that specifies the existence of reference point dependence observed in field setting:  
We pick up evidence of Major League Baseball (MLB)
- Players take some round numbers of the batting performance indexes as reference points, and adjust their effort level to meet the goals
- There are NOT observed any evidence for the monetary incentives that is paid to the players if they achieve these internal goals

# Introduction

- Reference dependence is one of the two main characteristics of the Tversky and Kahneman (1992)'s prospect theory: Individuals evaluate outcomes by the relative value to their internal benchmarks, or reference point, not by their absolute ones.
- Prospect theory enabled us to interpret some inconsistent empirical decision making with the traditional microeconomic theory, by applying additional assumptions.
- There are a lot of following researches that tests the reference dependence in field or laboratory settings.

# Literature

## Pope and Simonsohn (2011)

- presents three empirical evidences that verify the reference dependence, with the reference points “round numbers.”
- One of them picked up Major League Baseball (MLB) players, about the observed attitude to their performance indexes.
- MLB position players manipulate their batting-average (AVG), in order to meet their internal goals: .300
- As a results, there is observed excess mass, or “bunching” around .300 of AVG.

# Contribution

- Professional athletes receive monetary rewards according to the contracts they signed.
- Their contracts might include some incentivised parts, which pay them additional bonus when their AVG reaches a certain cutoff point.
- If so, the observed behavior might be caused by the discontinuity of their profit function, not by the reference dependence.
- The contribution of our research is to examine this: examine if there exists any monetary incentives that make players make effort to the cutoff point.

# Theoretical Frameworks

- Following

# Specification: Manipulation

# Specification: Contract Design



# Data

# Results: Manipulation



# Results: Contract Design



# Summary

# Considering Alternative Explanations





# Reference

