

A CONTEST DESIGN RESEARCH CONCEPT PAPER

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1 INTRODUCTION

A contest refers to a widespread form of competition that has attracted a huge literature in Economics. In a contest, players expend costly effort that translate to some form of output, or score. Then they (or some of them) receive prizes associated with their ranking on output/score

1.1 Background to the problem

Contest design has got its roots in three models developed from the seventies to the eighties. These models include Tullock(1980) model of rent seeking, Lazear and Rosen (1981) rank-order tournament model and all pay auction(Hirshleifer and Riley 1978;).The most interesting thing about these models is that they can be well studied as games where different agents act as players with their respective efforts affecting their respective probabilities of winning. They have also been studied extensively by economic theorists in what has become known as the field of contest theory (Konrad 2009) In this research therefore, we are going to introduce contest design as games with contestants doing whatever it takes to win.

1.2 Problem Statement

The project would study a class of contests considered in a paper Ranking games that have competitiveness-based strategies.

1.3 Aim and Objectives

general objective

One aspect of the project would be to study the convergence properties of the Fictitious Play procedure, applied to these games.

Specific Objectives

We also envisage addressing, experimentally, the challenge of handicapping. Handicapping involves ranking the players on the values of monotonic functions of their outputs, rather than just raw outputs, in order to elicit greater effort; to choose the best functions

1.4 Research Scope

This research targets the economic, political and social environments which can be described as contests in which the competing agents have the opportunity to expend the scarce resources like money, time, etc. in order to affect the probabilities of winning prizes. The project is experimental, with some scope for analytical work (specifically, for the problem of optimal handicapping in the 2-player case).

2 Research Significance

This study is useful because it reviews studies investigating the basic structure of contests, including the number of players and prizes, spillovers and externalities, heterogeneity, risk and incomplete information. Second, we discuss dynamic contests and multi-battle contests

3 References

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