“Suck for Luck?” Incentives and the Reverse-Order Draft System in the National Football League

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Exams the interplay between policy development and incentives is an important issue in the academic literature and holds important implications for sport researchers and practitioners alike. In short, policies are implemented and changed in order to elicit a desired response (e.g., through increased effort, levels of motivation, etc.); and as a result, create incentive-like situations for the individuals involved. The present study investigates the extent to which incentives (to both win and lose) are created and impacted by the current reverse-order draft system in the National Football League (NFL).

Central to the present study and developed through the seminal work of Lazear and Rosen (1981), tournament theory (TT) was conceptualized in order to better understand the impact of compensating individuals based on their “rank order” (i.e., relative) performance, as opposed to the more traditional, “per unit” (i.e., absolute) level of performance. Further, tournaments provide a framework for evaluating the incentive effects that result from the nonlinear pay structures (i.e., where individuals who have a “higher rank” are compensated exponentially greater than those finishing with a “lower rank”) that are often fundamental to tournament-structured systems.

Although originally developed to describe behavior in workplace settings, empirical analyses of TT in these settings have been limited. As a result, using sport-focused data to empirically examine tournament structures and incentive effects has become increasingly popular. As noted in the literature (Abrevaya, 2004; Carrillo, 2007), sports provide an ideal setting for studying incentives because: (1) rules are well-defined and uniform; (2) rich datasets are generally available and accessible for analysis; and (3) it is much easier to quantify effort (e.g., a golfer’s score) and relate it to compensation (e.g., prize money) within this landscape. For example, Ehrenberg and Bognanno (1990) examined data from the 1984 United States Professional Golf Association (PGA) Tour and their results indicated that the level and structure of prizes in the PGA tournaments significantly influenced golfer performance (i.e., lower/better player scores). Additionally, they suggested that higher tournament purses predicted an increase in performance. Similar to golf, other studies have been conducted that explored the incentive effects created by tournaments-structured systems in various racing settings including: foot racing (e.g., Maloney & McCormick, 2000; Lynch & Zax, 2000), auto racing (e.g., Becker & Huselid, 1992; Schwartz, Isaacs, & Carilli, 2007), and horse racing (e.g., Lynch & Zax, 1998; Lynch 2005).

In addition to evaluating relative performance and nonlinearities, tournament theory can offer a theoretical understanding for how policy structures create incentives for behavior, effort, and performance. Currently, the National Football League employs a “reverse-order” draft system for teams that do not participate in the playoffs (i.e., the team with the worst record from the previous season chooses first; the team with the second-worst record chooses second; and so on). Based on this system, it has been suggested, in both the academic literature and popular press, that incentives to lose intentionally are potentially created for teams in order to improve their future draft position if they have been eliminated from playoff contention. This phenomenon, commonly referred to as “tanking,” is often seen in professional sports where player quality is generally the higher towards the initial portion of the draft; and as the draft progresses, the talent pool decreases exponentially -- a factor consistent with TT predictions and nonlinear compensation structures.

Although the idea surrounding this phenomenon is not a new topic; to date, very few studies have been conducted to examine the incentive effects resulting from intentionally losing games in order to gain an advantage (through the draft-order system) in the following season. For example, Taylor and Trogdon (2002) investigated the outcomes of games under three different draft-order systems in the National Basketball Association (NBA). Their results demonstrated strong evidence that professional basketball teams were more likely to lose when the actual incentives to lose are present. More specifically, these changes to the draft-order system did deter tanking; however, it did not eliminate it. In short, losing (once a team was eliminated from playoff contention) created a positive incentive effect as the probability to attain a higher draft position was increased in the following season. Other
research in this literature include Price et al. (2010), who confirmed the findings of Taylor and Trogdon (2002) by suggesting that NBA teams were more likely to intentionally lose games towards the end of the regular season when the incentives to finish last were the largest; and Borland et al. (2009), who found no evidence of losing intentionally in the Australian Football League.

Therefore to extend the research in this area, the present study explores the impact of the NFL’s reverse-order draft system by examining the incentives associated with losing intentionally in order to improve a team’s draft position in the following season. Similar to the work of Taylor and Trogdon (2002), the tournament-like nature of the NFL’s reverse-order draft system is investigated by relating a binary win variable (the dependent variable) of a given football contest to four binary independent variables: (1) whether a team has been eliminated from playoff contention; (2) whether a team’s opponent has been eliminated from playoff contention; (3) whether a team has clinched a playoff berth; and (4) whether a team’s opponent has clinched a playoff berth. Further, this same binary dependent variable is then related to the probabilities that a team and their opponents have either been eliminated from playoff contention or clinched a playoff berth. Consistent with TT, it is predicted that the current reverse-order draft system in the National Football League creates an incentive for teams to lose on purpose in order to improve their future draft prospectus.

These predictions are tested using binary logistic regression on a pooled dataset of all NFL regular season games played during the 2006-2010 seasons (n = 2560) -- data from the 2011 NFL season will also be included into the final analysis. The preliminary results from the present study suggest that an incentive to intentionally lose exists for teams eliminated from playoff contention. In particular, under ceteris paribus conditions, teams eliminated from playoff contention were 2.3 times more likely to lose the game (p < 0.01). Additionally, teams participating against an opponent already eliminated from the playoffs were 1.9 more likely to win the game (p < 0.01).

The present study findings, many of which are consistent with tournament theory assumptions, potentially suggest that the current reverse-order draft system in the National Football League creates an incentive for teams to intentionally lose once they are eliminated from playoff contention in order to improve their draft position in the following season. Additionally, the results recommend the possible need for NFL league executives and policy makers to examine the current draft order system in order to maximize team effort throughout an entire season. In addition to contributing to the growing literature in sports economics, the present study suggests a number of future research directions -- such as examining the impact of the reverse-order draft system on gate revenue, media consumption, competitive balance, and consumer demand.