

## Grand prizes might help induce sports 'hot streaks'

March 17 2009

Dangling a lucrative financial carrot at the end of a professional sport season can cause certain players to exert the effort necessary to put together a string of successful performances, sometimes known in sporting circles as a "hot hand" or "hot streak."

That's the result of a forthcoming study by North Carolina State University economists to be published in the *Journal of* <u>Sports</u> *Economics*.

The study examined the Professional Golfers' Association (PGA) Tour both before and after 1987 and the creation of its season-ending financial carrot, the <u>Tour Championship</u>. Participation in the big payday Tour Championship is limited to the top 30 <u>players</u> on the PGA <u>money</u> list - that is, the 30 players who have won the most money in that season's tournaments. All 30 players invited to the Tour Championship are guaranteed to earn money. During the remainder of the 45-event PGA Tour season, about half the players earn money in each tournament, based solely on performance.

The study showed that players who perform well early in the tour season have an incentive to continue to perform at a high level into the middle part of the season to secure a top-30 finish and an invitation to the Tour Championship. Once a top-30 money list position is in hand, players can be tempted to slack off a bit, causing their scores to increase - which in golf is a bad thing.



Conversely, players who are near or slightly below the top 30 on the money list must work extremely hard at the end of the season as they vie for a spot in the Tour Championship. These players fighting for a top-30 ranking exert more effort and play better down the stretch.

The study showed that during Tour Championship years, the top-ranked player was 0.13 strokes better per round than the 30th-ranked player about a quarter of the way through the PGA Tour season. But with just one tournament remaining in the season, the top-ranked player was 0.56 strokes worse per round than the 30th-ranked player.

The researchers found no similar relationship in the years before the birth of the Tour Championship in 1987 because incentives in those seasons were constant. That is, the only incentives were those during each individual tournament.

"Using a lucrative grand prize is a way to link together a series of tournaments," says Dr. Todd McFall, who wrote the paper as part of his Ph.D. dissertation and who now works at Welch Consulting in Texas. "Most research on the subject of <u>hot streaks</u> focuses on the psychological perspective. This study suggests that a large, season-ending financial incentive that links together competitions might be an economic explanation for hot streaks."

Dr. Charles Knoeber, professor of economics, and Dr. Walter Thurman, William Neal Reynolds Professor of Agricultural and Resource Economics, co-authored the study, titled "Contests, Grand Prizes and the Hot Hand."

Source: North Carolina State University



Citation: Grand prizes might help induce sports 'hot streaks' (2009, March 17) retrieved 25 April 2024 from <u>https://phys.org/news/2009-03-grand-prizes-sports-hot-streaks.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.