

Real Options in Sports Betting

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In fixed-odds sports betting markets, odds are set by bookmakers a few days before matches take place. These odds are invariant to both the bets placed on each outcome and to the arrival of new information. This paper proposes that the margin of bookmakers can be modeled as a call option held by bettors. In this sense, since it is always optimal to exercise the option to bet at maturity, when all information is available, the margin should contain a premium that is positively related to the uncertainty of new information. This approach implies a certain evolution for the subjective probabilities of match outcomes as the option to bet reaches the end of its life. We show that the expected return on the bet is a positive function of the odds posted, i.e., that returns on longshots are lower than on favorites, something that is consistent with the existence of the favorite-longshot bias. An empirical application using data on fixed-odds football betting supports our line of analysis.