Abstract

Market efficiency and existence of profitable strategy are the most frequent analysis in the research concerning betting on sport events. This thesis covers both these topics on the dataset (20 betting offices) of Czech ice-hockey league from 2004 to 2010. The theoretical part presents development of models of individual decision-making under risk and uncertainty, models of equilibrium on the betting market and several definitions of market efficiency (Fama and Sauer as authors of these concepts) on these markets. The statistical part is testing difference in margins of betting companies for 3 possible outcomes of game, convergence in quoted odds across betting offices, arbitrage opportunity and correspondence of quoted odds to the real probabilities (linear and non-linear). Simple model of perfect market might be by all these tests rejected, since there is no constant return from betting on all outcomes, betting offices differ in margins, quoted odds do not correspond to the real probabilities and arbitrage opportunity is not disappearing. Second empirical part is devoted to the search for profitable strategy. Using 14 explanatory variables and various statistical methods (linear probability model, logit model, multinomial logit model), author is trying to beat bias in odds and find long-term profitable betting strategy. Returns from strategies are usually positive, but for the second part of dataset are getting smaller. Still, hypothesis of efficient betting market might be rejected by this methodology as well. During the thesis, author suggests several improvements in analysis and potential properties of general model for this market.