

Abstract: The thesis is devoted to an analysis of ice hockey matches results in the highest Czech league competition in seasons 1999/2000 to 2014/2015 and to prediction of the following matches. We describe and apply Kalman filter theory where forms of teams represent an unobservable state vector and results of matches serve as measurements. Goal differences are identified as a suitable transformation of a match result. They are used as a dependent variable in a linear regression to find significant predictors. For a prediction of a match result we construct an ordinal model with those predictors. By using generalized Gini coefficient, we compare a diversification power of this model with betting odds, which are offered by betting companies. At the end, we combine knowledge of odds before a match with other predictors to make a prediction model. This model is used to identify profitable bets.