Abstract

Predicting football match outcome using a score-driven time series model

Assem Serikkazyyeva

Predicting the outcome of a football match is quite difficult but at the same time an interesting task. In this thesis, the score-driven time series model has been investigated for predicting the outcomes of football matches. There are two distinct approaches used in the modelling of match results: the direct and indirect methods. The direct method predicts the ordered response outcome: win, draw or loss. The indirect method examines the exact scores of games. In our study we consider the direct method.

Five different models have been developed with the goal of improving the model fit to data and its predictive ability. Compared to existing models, these ones take advantage of a number of data that previously have not been considered. The dataset contains of previous recorded matches from multiple seasons of Spanish Primera Division. Our results have shown that the score-driven football model with the effect of shots on target gives better prediction.

BME

2020