

This diploma thesis deals with modeling and forecasting of the daily series of currency in circulation, which is one of the main autonomous factors influencing the liquidity of financial markets. Reasons for its modeling are explained and three constructed stochastic models are presented. There are ARIMA and GARCH models based on Box-Jenkins methodology and STS model. STS model is structured time series model using Kalman equations. Forecasts of models are combined together and statistically compared. The results show that the combination of STS and ARIMA models is the best model for forecasting of the daily series of currency in circulation and it has the same forecasting performance as the current model-judgement practice in the Czech National Bank. The model might be also applied at least as a supportive tool for the liquidity management.