# Abstract

The aim of this thesis is to analyze the performance of nonlinear threshold models in forecasting the exchange rate of Czech koruna against EUR.

Data for this study were obtained from Statistical Data Warehouse of European Central Bank (ECB) website, from Czech National Bank (CNB) Board decisions minutes and from the press releases of Governing Council of ECB. The data set was split into two periods - from 1999 until November, 2013 when CNB started to use interventions and from November, 2013 until April, 2016.

Models used in the thesis are Self-Exciting Threshold Auto Regressive (SETAR) models with one and two thresholds and two Threshold Auto Regressive (TAR) models with different threshold variables - meetings of CNB Board as dummy variable and average volatility over recent periods.

The forecasting results indicate that SETAR models did not outperform Random Walk in any period. TAR models offered promising results in the period before interventions and surprisingly failed in the period during interventions.

This study supports the general belief of exchange rates being difficult to forecast and that it holds in case of Czech koruna as well.



| | |
|---|---|
| **JEL Classification** | F12, F21, F23 H25, H71, H87 |
| **Keywords** | forecasting, exchange rate, time series, nonlinearity, SETAR, TAR |



| | |
|---|---|
| **Author's e-mail** | zaka.one@gmail.com |
| **Supervisor's e-mail** | josef.strasky@gmail.com |