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Master Thesis

DEVIATIONS FROM COVERED INTEREST RATE PARITY DURING THE BREXIT

An Empirical Study

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Executive Summary

Problem and Aim

This thesis investigates the question if there was a change in the deviation from the covered interest rate parity (CIP) during the Brexit. The Forex market has been gaining increasing attention over the recent decades. Different currency pairs show that there were deviations from the CIP. And it is assumed that in turbulent times these deviations increase and may persist for a longer period. The subject of this Master thesis is the investigation how the deviation from CIP behaved, during the time of the Brexit referendum. The primary aim is to test the null hypothesis, which claims that comparing the months of the year 2016 did not led to significant changes in the mean deviations from CIP distribution for two different currency pairs. The hypothesis is additionally tested for the mean percentage change of the deviation from CIP. The thesis also investigates if the Brexit referendum has led to a different regime regarding the volatility of the deviation and its mean. The duration and the time of possible regime switches are reported.

Methodology

The data for this thesis are collected from the data provider Bloomberg for the one-year period between the 4th of January 2016 and the 30st of December 2016. For the investigation, the daily spot rates, interest rates and forward rates are used. The data is divided into four different samples. The one-week sample consists of the data with the one-week forward rates, the one-month sample consist of the one-month forward rates, the three-month sample consists of the three-month forward rates and the one-year sample consists of the one-year forward rates. To test the null hypothesis the data sets are divided into the twelve calendar months of the year 2016 and compared to each other with a double t-test. To test the hypothesis if a regime switch has occurred, two nonlinear model approaches were used. The first one is a Markov Regime Switching model (MSM) with two different states and different explanatory variables, namely the spot rates as well as the foreign and the domestic interest rates. The same model is used with constants as explanatory variable as a robustness test. The second