Abstract

EXOGENEITY TEST AND ITS APPLICATION IN ANALYSIS OF RELATIONSHIPS OF FORWARD AND SPOT EXCHANGE RATES

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The forward rate unbiasedness hypothesis says that the time series of the future spot exchange rate depends on the time series of today quoted forward exchange rate. Expectation hypothesis in the forward rates means that the time series of today quoted forward exchange rate depends on today expected future spot exchange rate. To test these hypotheses the innovative econometric procedure based on testing cointegration and weak exogeneity was proposed. The forward rate unbiasedness hypothesis respectively the expectation hypothesis can be formulated as the hypothesis of weak exogeneity of the forward exchange rate with respect to the parameters of conditional error correction model for the change of the future spot exchange rate, respectively as the hypothesis of weak exogeneity of the future spot exchange rate with respect to the parameters of conditional error correction model for the change of the forward exchange rate. The weak exogeneity means that the relationship of the analysed time series can be seen as one sided where one variable has a character of condition and the second one of consequence which follows from the condition. The whole procedure can be modelled as an ANP (Analytic Network Process) model. Clusters in the model represent hypotheses, criteria, tools and testing activities. There are dependencies and feedbacks between clusters and between elements in clusters. The ANP approach helps to structure the problem and to analyse the appropriate procedure. From the empirical analysis made on the basis of data from the Czech Republic it follows that the forward exchange rate does not act as an unbiased estimate of future spot exchange rates. Instead, the expectation hypothesis that the time series of forward exchange rate depends on expected future spot exchange rate can be considered as accepted. But the long-run relationship promotes very weakly.

This paper was written with the support of the Czech Science Foundation project No. P402/12/G097 DYME - Dynamic Models in Economics.

Keywords: ANP, exogeneity, cointegration, forward and spot exchange rate, hypothesis