Application of a Modified TAR Model to CIP deviations in Asian Data

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Summary

This paper studies the behaviour of deviations from covered interest parity (CIP) between forward markets for foreign exchange. The estimation methodology is a non-linear three-regime maximum likelihood procedure. This paper modifies the classical threshold autoregressive (TAR) model to allow for progressive deviations from a stochastic regime, rather than simple jumps. We developed the modified TAR (MTAR) model that eliminates the jump data from estimation. This model was used in estimation on the Hong Kong and the Philippine data. These estimates can provide indicators for policy-makers of the market's expectation of crisis. They could also provide indicators for the private sector of convergence of deviations to their usual bands. The model has the potential to be applied to differentials between linked pairs of financial market prices more generally.