Fingerprints of multifractality in the dollar-Brazilian real exchange currency market

Ary A. Perez Jr.[*]
Pontifícia Universidade Católica do Paraná – PUCPR
Campus Londrina
Centro de Ciências Jurídicas e Empresariais – CCJE
Av. Maringá 78, Jardim dos Bancários, CEP 86060-000
Londrina, Paraná, Brazil

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Abstract

The daily dollar-Brazilian real exchange currency market fluctuations are studied using the multifractal analysis method. It is found evidence of multi-affinity in the daily fluctuation since the qth-order Hurst exponent H_q depends nonlinearly on q. The market presents persistence in the sense that instabilities would propagate through the future market activities. The hierarchy, or spectrum, of Hurst exponents is obtained and discussed. The degree of intermitency C_1 has been estimated. Finally, some implications of these results on the market regulation is also discussed.

[*]E-mail: ary@rla01.pucpr.br