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Wavelet Leader and Multifractal detrended fluctuation analysis of market efficiency: Evidence from WAEMU market index

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ABSTRACT

The dimension of efficiency is of main importance in the financial markets, Fama (1965) considered as the father of this theory has defined the information efficiency in three forms (weak, semi-strong and strong). It is for this reason that the information finds its importance in this theory because the nature of the information (past, public, private) makes it possible to determine the form of efficiency. However, this theory of efficiency has long been a controversial and unresolved issue in the economic literature. Most of the work is done on developed country stock exchanges. This problematic of the informational efficient market is a hot topic and has been the subject of much study with different methods. In this paper we analyze the hypothesis of weak form informational efficiency of the market. Our empirical study focuses on the BRVM10 index of the WAEMU regional stock exchange over the period from 17/04/2000 to 23/08/2016. In this paper, we use the wavelet approach and the multifractal analysis (MF-DFT). The study revealed that the log returns of the index exhibits a persistent and multifractal procesus.

KEYWORDS Efficient market hypothesis; MF-DFA; Wavelet; Hurst exponent; BRVM10

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