# Nonlinear Real Exchange Rate Behavior: Are the African Currencies Exceptional?

### **Emmanuel Anoruo**

Coppin State University 2500 West North Avenue Baltimore Maryland 21216 USA

## Venus Khim-Sen Liew

Labuan School of International Business and Finance Universiti Malaysia Sabah P.O. Box 80594 87015 Labuan Malaysia

#### Uchenna Elike

Alabama A& M University
P. O. Box 624
Normal
AL 35762
E-mail: uelike@aam.edu

Phone: 256-372-8487 Fax: 256-372-5310

#### Abstract

Upon the discovering of nonlinear behavior of exchange in developed countries, Middle East and Asian regions in the recent literature, whether or not the African region is an exception remains an interesting but unaddressed issue. In this respect, this study demonstrates, via formal linearity test, that all the 13 selected African real exchange rates are also nonlinearly behaved. Further investigation through nonlinear stationary tests reveals that 11 of them are nonlinear stationary. The major implications of these results include: First, that there is a long run cointegration relationship between the bilateral nominal exchange rates and their corresponding relative prices thereby validating the long reverting towards the PPP equilibrium positions. As such relative prices may be regarded as effective tool in evaluating the current alignment or misalignment of African exchange rate and hence forecasting and monitoring their future movements.

**Key words:** productivity, macroeconomic factors, sub-Saharan Africa, pooled **JEL classification:** F34 025 055

## I. Introduction

The issue surrounding the mean-reverting tendency of real exchange rate has been debated in the literature because of its policy implications. One of the methods extensively used to investigate the