Vol. 10(6), pp. 65-76, June 2018
DOI: 10.5897/JEIF2018.0898
Article Number: F56177757666
ISSN: 2006-9812
Copyright ©2018
Author(s) retain the copyright of this article
http://www.academicjournals.org/JEIF

ACADEMIC JOURNALS
expand your knowledge

Journal of Economics and International Finance

Full Lenghth Research

The effect of real gross domestic product (GDP) growth rate convergence on exchange rate volatility in search for the East African monetary union

Jane Kaboro*, Aquilars Kalio and Lawrence Kibet

Department of Economics, Egerton University, P. O. Box 536 Njoro, Kenya.

Received 19 March, 2018; Accepted 13 June, 2018

So far, the formation of a monetary union in the East African Community (EAC) has remained elusive. The EAC partner states therefore established set targets for macroeconomic convergence, with an aim to eliminate exchange rate variability within the bloc. Where countries are able to eliminate or reduce exchange rate adjustments to maintain external balance, the costs of a monetary union reduces, thus the more suitable it is for such a region to form a monetary union. Major macroeconomic variables need to be harmonized before establishing a monetary union such as real GDP, budget deficit/GDP, national savings, and inflation rate. However, empirical studies undertaken indicate that the rate of convergence of the member states economies to the set targets has been very slow, resulting into high exchange rate variability within the region. It is against this background that this study was carried out to determine the effect of convergence in real GDP growth rate on exchange rate volatility, of five EAC countries: Kenya, Uganda, Tanzania, Burundi, and Rwanda. The bloc was chosen for the study since it has scheduled to establish its common currency earlier than other African economic blocs, and thus its success will be a lesson to them. A panel data analysis was used over the period of 2000 to 2016. Sigma (standard deviation) was used in the study to establish convergence of variables. Levin et al. 2002) test for panel unit root was employed to test for data stationarity and it was found that real exchange rate and real GDP growth rate were stationary. Pedroni residual-based cointegration test was carried out to test for the long-run relationship between variables in the model and it was established that there exist a long-run relationship between exchange rate and explanatory variable. The study results showed that the entire explanatory variable had a significant and a negative effect on exchange rate volatility. This means that convergence in real GDP growth rate among the EAC countries reduces exchange rate variability within the region. Thus, the policy makers should ensure that the EAC countries harmonize their economies, which will help greatly to eliminate exchange rate adjustments within the region, in readiness for a stable and sustainable monetary union.

Key words: Convergence, exchange rate volatility, GDP, East African monetary union.

INTRODUCTION

Monetary integration is a process whereby two or more countries come together and subject themselves to a single monetary authority or central bank which is responsible for the issuance of legal tender currency and formulates financial policies on behalf of member countries (Guillaume and Starage 2000). It involves harmonization of policies among different countries which existed before they integrated. On the other hand, countries that accept the occurrence of monetary integration process or arrangement are said to be in a