

KENYA TRADE BALANCE AND ITS DETERMINANTS: A COINTEGRATION ANALYSIS_ ARDL MODEL

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ABSTRACT

The purpose of this study is to investigate the long-run and short run determinants of trade balance for Kenya from 2009(q1) to 2020 (q4). An ARDL model was used to determine that there is a long run relationship between trade balance and real exchange rate, real GDP as a proxy for domestic real income, price level and Kenya World Uncertainty Index as a proxy for political uncertainty precipitated by terrorism alert/attack and presidential election disputes. The results of the error correction model, ECM, confirms the existence of equilibrium relationship and that any disequilibrium is corrected at a rate of 95% every quarter. Further the study confirms that the Marshall-Lerner condition holds in that devaluation/depreciation will improve trade balance. Hence the existence of a J curve. However, the relationship between trade balance and exchange rate is not strong as such a policy that advocates use of other instruments in conjunction with exchange rate such as controlling inflation, and restoring political institutions to minimize political uncertainty should be considered to lower trade balance.

Keywords: Kenya trade balance, world uncertainty index, ARDL model, cointegration analysis, long-run equilibrium relationship, short-run error correction model

1. INTRODUCTION

In many developing countries the 1980's saw reevaluate of fiscal and monetary policy with the goal of improving trade balances. Specifically, there was a concerted policy shift from fixed to flexible/ floating exchange rate. One underlying reason is the worsening of terms of trade and deterioration of the current account balance. The exchange rate liberalization was geared to improve terms of trade and economic growth especially in African countries (Senadza and Diaba 2017). The popular belief was that liberalization would reduce chronic trade deficits in many of the developing countries that heavily depends on the export of commodities and import of manufactured goods.

Some of the underlying factors that have exacerbated terms of trade is the developing countries' trade heavy dependence on export of commodities primarily to developed countries while importing finished goods. It should therefore, be expected that the commodities terms of trade: the price of exports to the price of imports will fall as it relates to developing countries. The decline of the terms of trade means the balance of trade for primary (commodities) exporting countries will tend to worsen overtime. On the other hand for developed countries, their terms of trade will continue to improve in relation to developing countries overtime. This lends to the argument that international commodity trade transfers real income from developing to developed countries reinforcing the concern for immiserizing growth by Bhagwati as noted by Pryor (2007).

The primary objective of this paper is to analyze the existence of a long-run relationship between the trade balance, the real exchange rate, the real domestic income of Kenya, price level changes and political uncertainty. Moreover, this study estimates the short-run dynamic effects of disequilibrium conditions due to exchange rate movements (appreciations and depreciations) and economic uncertainty fueled by terrorism alert/attack and the country constantly in election mode, on the long-run equilibrium relationship. Finally, this paper attempts to ascertain the validity of the argument that exchange rate depreciations improve the trade balance of a country as well as to test the Marshall-Lerner condition. In essence, the Marshall-Lerner condition states that for a positive effect of devaluation of the balance of trade, and for a