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Full Length Article

The effect of fiscal and monetary policies interaction on stock market performance: Evidence from Nigeria

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Abstract

This study examines the impact of the interactions between fiscal and monetary policies on stock market behaviour (ASI) and the impact of the volatility of these interactions on the Nigerian stock market. The study analysed monthly data using the ARDL and EGARCH models. The results show the interaction between monetary and fiscal policies influence on stock market returns in Nigeria. The ARDL results show evidence of long run relationship between ASI and Monetary-fiscal policies. The results from the volatility estimates show that the ASI volatility is largely sensitive to volatility in the interactions between the two policy instruments. The results suggest calibrating both the monetary and fiscal policies in a single model when formulating stock market policy as their interaction exerts significantly on stock market behaviour, thus both policies should be considered in tandem.

JEL classification: E52; E63

Keywords: Fiscal-monetary policy; Stock market; ARDL; EGARCH; Nigeria

1. Introduction

In recent years, the Nigerian economy has been and is expected to remain a source of great motivation for most emerging economies of the world. For about two decades now, the economy has witnessed tremendous growth with about 6.9% average growth rate. It has smoothly shifted from being an underdeveloped economy to a Global Growth Generator Country (3GC) (PWC, 2015). Nigeria is the largest economy in Africa; it is a lower middle income country with mixed economy. Its financial, service, information and communication technology as well as entertainment sectors are rapidly expanding every day. The economy ranked among the first twenty five largest economies (in term of GDP and PPP) in the world (IMF, 2016). The unusual growth experienced by Nigeria is largely associated with the impact of the capital market on the overall economy. For instance, the capital market capitalization grew to over 12 trillion naira in the year 2008 from less than 4 trillion in year 1996 (NSE, 2011). Being

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the largest economy in Africa, significant changes in her economies can impact on other African economies and of course other emerging economies in the world.

This paper attempt to investigate the impact of the interaction between monetary policy and fiscal policy and volatility of these policy instruments on stock market behaviour using data sourced from the Nigerian economy. Economics and finance literature shows that explaining comprehensively the behaviour of an economic system (stock market inclusive) as a whole or in partial form goes beyond explaining this behaviour from either monetary policy or fiscal policy stance alone, in that both their individual stance as well as their interaction play significant role in the economy. Bulk of the existing literature on stock market behaviour as induced by macroeconomic policy focuses on the impact of the monetary policy (see for instance Bjornland & Leitemo, 2009a, 2009b; Gali & Gertler, 2007; Conover, Jensen, Johnson & Mercer, 1999; Thorbecke, 1997; Patelis 1997; Jensen & Johnson 1995a, 1995b; Afonso and souse, 2011; Afonso and Sousa, 2012; Ajao et al 2015; Gertler and Gilchrist 1993; Fama and French, 1989) with very few on the impact of fiscal policy on the one hand (see for example Agnello and Sousa (2010); Darrat, (1988). Besides, we know of very few (Jansen, Li, Wang & Yang, 2008; Chatziantoniou, Dugft & Fillis, 2013) that examined the effect of the interaction of both policies on stock market.

Furthermore, existing literature that inquire into the interactive relationship between these policies as it affects the stock market mainly focus on advanced economies with very little or none on emerging economies especially the Nigerian economy. This study intends to contribute to literature by examining the impact of the interactions between the two policies as it affects stock market behaviour in an emerging economy with focus on African largest economy – Nigeria – for the study period 1985–2015. Chinazara (2011) observed that literature on the connection between stock market behaviour and the macroeconomic can be best be classified into two broad classes: first moments studies – that examined the connection at first strands using different techniques to establish a sound empirical connection between macroeconomic variables and stock market behaviour using data from different economies at different time with different estimation techniques such as VAR, multivariate cointegration, VEC among others; second moment studies- that extend the first moment studies by focusing on how risk/volatility of the macroeconomic aggregates affect stock market behaviour, based on the fact that the existence of a strong connection between the macroeconomic aggregates and stock market variables implies that any shock in the macroeconomic aggregates will serve as a source of unavoidable risk which will exert on any market portfolio regardless of their degree of diversification. It is generally believed that literature on second moment strands outweighs the first moment strands when policy formation and investment strategy decisions are in view (Chowdhury & Rahman 2004; Chowdhury, Mollik, & Akhter, 2006; Corradi, Distaso, & Mele, 2006, Diebold & Yilmaz, 2007; Atoi, 2014; Chinzara, 2011, Yu (2011)). This is premised on the fact that it is the volatility of macroeconomic variables that make stock market planning difficult. It is on that note that the second strand of this paper deals with the volatility of both the fiscal and monetary policies instruments as they affect stock market behaviour in Nigeria.

The question is what is the nature of the relationship between the two policy instruments and stock market returns in Nigeria? In other words, does the interaction between the two policies impacts on stock market behaviour in Nigeria? If yes, through what channel? Beyond knowing the nature of the relationship among the constructs, the study intends to examine the impact of the volatility of the interactions between fiscal and monetary policies on stock market behaviour in Nigeria as it is established that it is the volatility of macroeconomic variables that make stock market planning difficult. The study also intends to know if either of the policy alone is sufficient to influence the behaviour of stock market returns without the other. In an attempt to answer these questions, this study used the Autoregressive Distributed Lag (ARDL) to examine the nature of the relationship between the policies' instruments and stock market behaviour and the Exponential Generalised Conditional Heteroskedasity (EGARCH) models to examine the impact of the volatility of these policies' instruments on stock market based on monthly data sourced on Nigerian economy from 1985 to 2015.

Answering these questions is important to virtually all the various economic agents especially the market practitioners and the policy makers. Policy makers will find the results interesting as it will help offer polices that will take care of counterproductive effects on stock market where both monetary and fiscal policies go in opposite direction. It is important to know that when there is distortion in fiscal balance and monetary policy operation, investment in the real sector and by extension the stock market is discouraged. The market practitioners will find the study useful as changes in both policies can drive up interest rate which will have a negative effect on stock market returns. Thus understanding the nature of interaction between the two policy strands as they affect stock market will