

## **An Asymmetric Test of Monetary and real Business Cycle Hypotheses: Evidence from Nigerian Data**

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**Abstract:** This paper investigates asymmetric money-income relationship in Nigeria in order to test monetary and real business cycle hypotheses. We simulate critical values based on leverage bootstrapping and asymmetric causality test. The results are compared between the Granger asymptotic chi-square distribution, modified WALD test with leverage bootstrapped distribution and asymmetric causality test. The traditional Granger causality test and Toda-Yamamoto modified WALD test with leverage bootstrapped critical values reveal a neutrality of money based on rational expectation hypothesis. However, the asymmetric causality test reveals bidirectional causality between money and income. This supports both the monetary and real business cycle hypotheses for Nigeria. The result shows that positive and negative cumulative real money supply shocks influence positive and negative cumulative real income in the economy and vice versa. The growth of money supply in relation to expected wage rate at the point of long term negotiation leads to an increase in inflation which lowers real wages. The lower real wages results in higher output/income in the economy. Furthermore, the reaction of the Nigerian financial system to money demand causes changes in the economy's money growth in both good and bad times. The policy implication of this study is that the monetary authority of Nigeria can stabilize the severity of sudden shocks in the business cycle by manipulating both the real money supply and real income irrespective of good or bad times.

**Keywords:** *Asymmetric causality, Leverage bootstrap, Toda-Yamamoto, money, income, Nigeria*

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**Paper ID: MYMA203**